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ROYALTY GAS SALES TESTIMONY!
~~BOOK II~~ (V.3 - V.6)

Royalty Gas Sales

TESTIMONY

Book II (v. 3-6)

DOCUMENTS 1 TO 1 PAGE = 1 OF 2
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CATEGORY 1977

TITLE JOINT PUBLIC HEARINGS OF THE ALASKA STATE LEGISLATURE ON SCR 3, 4, 5 AND HCR 11, 12, 13, THE PROPOSED SALE OF ROYALTY GAS, JANUARY 31, 1977 - FEBRUARY 7, 1977, JUNEAU, ALASKA

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Vol.1 appendix: Michael J. Scott, Institute of Social and Economic Research.

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0601 * END OF DOCUMENTS IN LIST - ENTER RETURN OR ANOTHER COMMAND.

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FILE 2B

SCOMM15
FILE 3

JOINT PUBLIC HEARINGS
of the
ALASKA STATE LEGISLATURE
on

SCR 3, 4, 5 and HCR 11, 12, 13

"THE PROPOSED SALE OF ROYALTY GAS"

January 31, 1977 - February 7, 1977

Juneau, Alaska

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Alaska; Manager Alaska Office
with: Joseph Henri

2/1/77 - 2/2/77

February 1, 1977

18 SENATOR RADER: The next series of witnesses will be those
19 of the purchasers. Tenneco, I believe, is prepared to
20 go forward. Would you introduce yourself for the record,
21 and also your associates?

22 MR. THOMAS: Thank you, Mr. Chairman. I'm Robert C. Thomas
23 representing Tenneco Alaska, and joining me here at the
24 table is Gared Carter acting as a consultant to Tenneco,
25 and behind me, Mr. Bob Hardig working with Tenneco, and

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1 Mr. Bill Thornhill.

2 SENATOR RADER: I'm going to ask the reporter, is it pos-
3 sible for -- I hate to have people keep repeating their
4 names for purposes of the recorded record. I assume
5 that you will be able to identify in your recording of
6 it.

7 COURT REPORTER: Yes.

8 SENATOR RADER: Would you proceed, Mr. Thomas? Mr. Thomas,
9 the question of answers, would you prefer that you make
10 a presentation or that we ask you questions as you go
11 or what is your suggested method of operation?

12 MR. THOMAS: Mr. Chairman, I have about twelve or fourteen
13 minutes of comments at which time then I would be
14 available for questions afterward. I think that would
15 be the more convenient way to go, if that is satisfactory
16 with you.

17 SENATOR RADER: Yes, that is satisfactory with me. How
18 about the committee? That would be fine. Thank you
19 very much.

20 MR. THOMAS: Thank you, Mr. Chairman. By way of further
21 introduction, I'm a Senior Vice President of Tennessee
22 Gas Transmission Company and I have responsibility for
23 energy supply for all of Tenneco's interstate transmission
24 companies. I am also a Vice President of Tenneco Alaska,
25 an Alaskan corporation, which has entered into this

1 royalty agreement with the State.

2 My purposes in appearing before you today is to
3 urge your early approval of the Royalty Gas Sales
4 Agreements, to explain why we believe these interests
5 are in the best interests of Tenneco and the State, and
6 to answer your questions.

7 The State yesterday presented to you the terms
8 of the agreements and the benefits that would accrue to
9 the State. For that reason I would start with the reasons
10 that Tenneco has signed the agreement.

11 Each day, Tenneco's interstate system supplies
12 an average of 3.2 billion cubic feet of natural gas to
13 their customers. This volume is now insufficient to meet
14 demands. As customer demands are growing, our reserves
15 in our traditional supply area of the Gulf Coast are
16 declining.

17 To meet this supply/demand situation, Tenneco is
18 working in many different areas to secure energy supplies
19 from non-traditional sources. These sources include
20 liquefied natural gas from Algeria, Trinidad, Nigeria,
21 the USSR and several other countries. We are also
22 pursuing synthetic natural gas to be manufactured from
23 domestic coal deposits and we're also searching for
24 additional natural gas from the Canadian Arctic Islands.

25 We are vitally interested in purchasing natural

1 gas in Alaska, not only because of the large volumes of
2 currently proven reserves, but because we feel Alaska
3 will be the most active area in the United States for
4 the exploration for major new energy supplies during the
5 next twenty to thirty years. We want to be a part of
6 this future exploratory activity. And we also believe
7 that there are substantial advantages in purchasing
8 domestic, as opposed to foreign, gas.

9 Now these few facts tend to explain our needs
10 but as you are all aware, the fulfillment of needs,
11 inevitably encounters obstacles and I'll assure you that
12 the securing of natural gas supply from Alaska was no
13 exception to that.

14 Tenneco looked at the obstacles from the viewpoint
15 of the largest natural gas transmission system in the
16 United States that was uncommitted to any of the competing
17 proposals for the delivery of Prudhoe Bay gas to the
18 lower 48 states. We recognized at that time that we,
19 as well as any other purchaser in the lower 48, could
20 transmit this gas to our customers through any of the
21 systems proposed. The State, however, made it very
22 clear that the primary condition in any sales agreement
23 would be support for the Trans-Alaska delivery system.

24 We considered carefully three fundamental
25 questions before determining that we could undertake such

1 a commitment. First, we had to answer would there be
2 sufficient reserves available, either now or in the
3 future, to justify our efforts in this project.

4 Secondly, if we committed our resources of time,
5 money, and people to the project, was there a substantial
6 likelihood it would succeed.

7 And third, would such an effort adversely affect
8 Tenneco's substantial business interests in Canada which
9 we intend to maintain and to further.

10 Our analysis concluded that we could not only
11 agree to support the Trans-Alaska route but could also
12 agree to condition our right to purchase the royalty gas
13 upon the eventual designation of that route by the federal
14 government and these terms are in the agreement before
15 you.

16 Our conclusion was based upon the belief that
17 with a strong, responsible team supporting the Trans-
18 Alaska project and making the objective arguments in its
19 behalf, the federal decision makers, after extensive and
20 careful analysis, would conclude that the Trans-Alaska
21 system would get North Slope gas to the lower 48 at the
22 earliest possible date. While early delivery, we feel,
23 is the most important element of national interest, and
24 the other issues such as jobs and taxes also clearly
25 favor the Trans-Alaska route, in our opinion.

1 It has always been our firm opinion that federal
2 acceptance of the Trans-Alaska delivery system and there-
3 fore the benefits to both of the parties to the contract,
4 depends upon prompt approval of the royalty sales agree-
5 ment by this legislature.

6 A major factor crucial to your deliberations is
7 the strength that Tenneco can add to the team that is
8 dedicated to the securing of a Trans-Alaska route. So
9 let me give you a brief summary of our technical
10 capabilities. We maintain a staff of approximately one
11 hundred forty engineers in our pipeline headquarters in
12 Houston. This department not only supervised the con-
13 struction of our fifteen thousand plus miles of interstate
14 pipeline system, but was also involved in the construction
15 of the existing Trans-Canada pipeline of which we were a
16 part at that time in the mid-fifties. Our operations
17 people routinely run an interstate system transporting
18 in the range of five billion cubic feet per day on peak
19 days.

20 Tenneco is dedicated to the conduct of its
21 operations within the proper environmental framework. To
22 that end the corporation maintains its staff of ap-
23 proximately sixty environmentalists.

24 Tenneco maintains a staff of cryogenic, process,
25 and LNG systems engineers plus the services of numerous

1 consultants with expertise in LNG projects. We have
2 had a great deal of experience in the planning of major
3 LNG projects.

4 As a corporation, Tenneco has annual capital
5 expenditures in the range of Five Hundred Million Dollars.
6 In the thirty-four years of our existence, our assets
7 have grown from zero to approximately Seven Billion
8 Dollars. The strength and the financial experience that
9 we gained through this evolution, we feel, is invaluable
10 in the planning and execution of multi-billion dollar
11 energy projects.

12 All of these areas of expertise that I have
13 mentioned are now being readied in preparation for our
14 participation in the Trans-Alaska project.

15 There has been a great deal of reference through
16 the negotiations of this agreement and in the presentations
17 yesterday to the "political influence" to be contributed
18 by each party. It is unfortunate that this gives some
19 people the impression that the purchasers control specific
20 votes in the Congress or in the Executive Branch which
21 can be used on behalf of the Trans-Alaska project just as
22 soon as this agreement is ratified. And this, of course,
23 is not true.

24 There is no amount of narrow so-called political
25 clout or pressure going to determine the federal decision

1 on this matter. We are convinced that the decision will
2 be made on the merits of the issues. Neither we nor the
3 new Administration have incentive to proceed in any
4 other way. This approach is also assured by the detailed
5 and comprehensive provisions of the Alaska Natural Gas
6 Transportation Act of 1976.

7 For these reasons, we think, it is essential
8 that all of the issues involved be thoroughly discussed
9 at both the regional and national levels with all parties
10 having input into the final decision. This will present
11 a monumental job of planning and coordination to insure
12 that knowledgeable staff, both technical and nontechnical,
13 are made available to discuss all of these issues with
14 the people requiring the information.

15 From a regional standpoint, it is essential that
16 the issues be reviewed and analyzed as they effect dif-
17 ferent parts of the lower 48 states and Canada. The
18 perspective and the needs of these different regions
19 vary and their views must be analyzed and their questions
20 effectively answered.

21 We feel that we are best qualified to present the
22 Trans-Alaska merits in our market area. This market
23 area covers twenty-five states in the general area of
24 New England, New York-New Jersey, Appalachia and the
25 Upper Midwest. These states embrace sixty-five percent

1 of the U.S. population and much of its industrial capacity.

2 We feel that Southern and El Paso will be most
3 effective in their market areas. We also feel that all
4 three companies will be effective on the national scene.

5 The combined facilities of Tenneco, El Paso and
6 Southern with minor modifications could deliver gas to
7 at least forty-two of the lower 48 states. We feel it
8 improbable, and probably impossible, that any other
9 group of three or more companies presently uncommitted
10 to any pipeline route could equal this coverage.

11 El Paso has made and is continuing to make a
12 tremendous effort on behalf of the Trans-Alaska project.
13 We feel more help is needed and we are prepared to
14 provide this help.

15 We believe it is essential that the legislature
16 act promptly to approve these agreements. The time
17 available to make all necessary contacts is becoming
18 extremely short. As mentioned earlier, the U.S.-
19 Canadian pipeline treaty was signed last Friday. This
20 morning the presiding Administrative Law Judge of the
21 FPC issued his decision and had expected that this decision
22 would favor the Arctic Gas proposal. All of the par-
23 ticipants before the FPC, of which we are one, will be
24 permitted to file comments on his decision, however, by
25 March 1st.

1 The Alaskan Transportation Act provides that the
2 full FPC must submit its recommendations to the President
3 by May 1. Federal agencies are now preparing their
4 comments to the FPC and federal and state officers and
5 agencies may submit their comments to the President by
6 July 1. Our views must be made known to all of these
7 people as soon as possible in order to have any effect
8 on their comments. The President's decision is due
9 September 1 and the Congress has sixty days in which to
10 approve this decision.

11 We feel there is much to be done and the federal
12 timetable leaves no time for delay. In anticipation of
13 your approval of these agreements, Tenneco has already
14 taken substantial efforts in preparation for the support
15 of this project. We have had many meetings with
16 representatives of the states, El Paso and Southern to
17 insure a maximum cooperation, coordination and effective-
18 ness in our combined efforts.

19 El Paso has given our engineering, environmental,
20 LNG and financial experts several detailed reviews of
21 their plans. We intend to work very closely with them
22 toward assuring the best possible project and to answer
23 the questions that will be raised throughout the U.S. and
24 Canada concerning the physical, environmental and financial
25 integrity of this project.

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1 We have designated a project manager within
2 Tenneco with authority to call upon and coordinate the
3 activities of all of our interested departments.

4 We have retained counsel in Alaska and in
5 Washington to assist in the planning and the execution
6 of our overall plan to insure adoption of the Trans-
7 Alaska delivery system.

8 We have communicated to the State of California
9 our reasons for supporting the Trans-Alaska project and
10 I believe that was the letter that was introduced as an
11 exhibit earlier by the Chairman.

12 These efforts are, however, only a beginning.
13 Further efforts to implement a detailed plan to secure
14 adoption of a Trans-Alaska route, however, will not be
15 credible if the State of Alaska does not act promptly
16 to approve the agreement which provides the basis and
17 the reason for our support.

18 In summary, Mr. Chairman, Tenneco is prepared to
19 invest their time, their money and their people in a
20 maximum effort to secure a Trans-Alaska route. We are
21 prepared to begin as soon as the agreement with the state
22 is approved by this legislature.

23 The state has retained the ultimate assurance of
24 our performance. If the Trans-Alaska route is not ap-
25 proved, the state has the right to terminate the agreement.

1 Should that happen, we will have wasted our manpower and
2 our money and our people.

3 The state has assembled a strong team, the contest
4 is well underway and in progress and we are ready to
5 participate when we receive your approval.

6 Mr. Chairman, that concludes my prepared remarks.
7 With your permission I would like to make a few other
8 comments concerning a matter that has been indicated to
9 be of concern to the members of both committees, concerning
10 at item that appeared in some of the Alaska newspapers
11 entitled "Questionable or Sensitive Payments by Tenneco."
12 I would like to point out that this information came from
13 an Eight K report that was filed by Tenneco with the
14 Securities and Exchange Commission over a year ago in
15 January, 1976, and has been a matter of public record
16 since that date. Tenneco themselves submitted copies of
17 that report to all of their stockholders which number over
18 three hundred and fifty thousand.

19 There are several points, however, concerning the
20 report that I would like to emphasize for the benefit of
21 the members of the committee. First, the report was a
22 voluntary disclosure by Tenneco of information that was
23 obtained as a result of an investigation initiated and
24 authorized by our own Board of Directors. The investigation
25 was done by outside independent accounting and legal

1 organizations. The relevant information was made available
2 to both the FCC and the IRS. The company has adopted
3 detailed procedures to implement and monitor compliance
4 with their business ethics policy. These procedures have
5 been disseminated to all employees and to all consultants
6 representing the company regardless of the area.

7 The Royalty Board and the Department of Natural
8 Resources were made aware of this report after it had
9 been filed early last year.

10 To summarize the current status of this situation,
11 Tenneco considers its internal investigation as closed.
12 Federal grand juries are conducting investigations in
13 Washington, D.C., Milwaukee and New Orleans. They are
14 presumably investigating matters referred to in this
15 8-K report. To our knowledge, no action has been taken
16 by these grand juries. The matters referred to in the
17 8-K report were subsequently investigated by the SEC,
18 although the company has not been informed that this
19 investigation had been terminated, no request for additional
20 information or for further interviews by any of our people
21 have been received for several months.

22 The IRS initiated an investigation in early 1976.
23 Voluminous documentation has been furnished to the IRS
24 concerning the matter and numerous present and former
25 employees have been interviewed. To our knowledge this

1 investigation is continuing. There have been stockholder
2 suits filed as a result of this disclosure. The actions
3 that have been instituted in the state courts have been
4 stayed pending disposition of actions filed in federal
5 courts. The federal actions have been consolidated
6 recently in the U.S. District Court for Texas. No
7 discovery has commenced nor has a trial date been set.
8 So, Mr. Chairman, this represents the history and the
9 current status of the matter. The general counsel for
10 Tenneco has advised me that there is no significant matter
11 of the type disclosed in the 8-K report in which such
12 an investigation is now pending.

13 I have a copy of the 8-K report which I'll be
14 happy to submit for the record of your committees.

15 SENATOR RADER: I'm sorry, I don't understand that. 8-K?

16 MR. THOMAS: 8-K.

17 SENATOR RADER: 8-K.

18 MR. THOMAS: Just the number of the government report to the
19 Securities and Exchange Commission.

20 SENATOR RADER: Please would you just hand that to the reporter
21 there and it will be exhibit number 9.

22 MR. THOMAS: All right, sir.

23 (Whereupon Exhibit 9 was duly marked)

24 SENATOR HUBER: Can we get copies of that for the members?

25 SENATOR RADER: Sir, how long is the report?

1 MR. THOMAS: Oh, it's about six pages with a bunch of signature
2 pages and endorsements and authorizations and I guess
3 about nine pages.

4 SENATOR RADER: I am certain that we can have copies of that
5 made. I don't know whether we can have them immediately,
6 Senator, but all of this information is going to be
7 widely disseminated, I'm sure.

8 SENATOR HUBER: I'd like to have it sometime while we're
9 meeting so -- have it if necessary for questions we
10 might want to formulate.

11 SENATOR RADER: I'll ask the staff to see if they could make
12 copies and have them here maybe by 1:30 when we convene.
13 It might help in the questioning while the witnesses are
14 there. I think your point is well taken, Senator Huber.

15 It is, by my watch, approximately 12:00 o'clock.
16 I think this would be a good place to break. We will
17 reconvene promptly at 1:30. Thank you very much.

18 (Whereupon the hearing was recessed at
19 12:00 noon and reconvened at 1:30 p.m.)

20 SENATOR RADER: The committee will come to order. I want
21 to again invite all legislators, if you wish, to take a
22 place at the table with the understanding that when a --
23 if a committee member shows up, that you will relinquish
24 your seat without a hassle to them.

25 Dr. Carl Swanson of Jensen Associates was hired

1 by the committee to give us an independent advice on this
2 matter. He has prepared two questions which he thinks
3 should be asked of the purchasers. If there is no
4 objection, I'll start off with those two questions.
5 Do you purchasers agree that Section 6.5 which provides
6 for annual redetermination of the price under deregulation
7 applies to Section 6.3 when deregulation occurs, before
8 first deliveries of gas, as well as to Section 6.4 which
9 applies when deregulation occurs after first deliveries?

10 MR. THOMAS: Mr. Chairman, I believe that was the intent at
11 the time that we negotiated contracts, so the answer is
12 yes.

13 SENATOR RADER: Now, what is the significance of that question
14 and your answer?

15 MR. THOMAS: The significance of the question is if under
16 the terms of the contract the section that applies to
17 deregulation occurring after the first delivery of gas
18 also references the next clause which talks about re-
19 determination. And, in writing the contract the previous
20 clause which talks about deregulation occurring before
21 the first delivery of gas, we did not reference that re-
22 determination clause.

23 SENATOR RADER: As I understand it then, the redetermination --
24 there will be a redetermination regardless in a regulation.
25 Is that what we are talking about?

1 MR. THOMAS: Well, in the event of deregulation whether it --

2 SENATOR RADER: Of deregulation, yes.

3 MR. THOMAS: Occurs either before first deliveries or after
4 first deliveries.

5 SENATOR RADER: Or after. Any committee members have any
6 questions, any further follow-up on that question? Dr.
7 Swanson had one additional question. Do you agree that
8 under Sections 6.2 that if the price is regulated, the
9 price paid by you purchasers to the state shall include
10 an amount equal to severance taxes if the regulation
11 allows an amount equal to revenue taxes to be paid to
12 working interest owners?

13 MR. THOMAS: It was our understanding at the time that the
14 contract was negotiated that the Alaskan Statutes did
15 not provide for a severance tax so that is probably why
16 it was not referenced in the agreement. But, our view
17 would be to the extent that the working interest owners
18 are charged that and their purchasers are allowed to
19 include it in their rates then of course we would be
20 willing to pay the same amount, subject to inclusion in
21 our rates.

22 SENATOR RADER: Dr. Swanson, it is a little bit unusual but
23 are you satisfied with the answers or did you wish to
24 pursue them further?

25 DR. SWANSON: My interpretation of the answer just given is

1 that Tenneco is stating that it is its interpretation
2 of the intent in negotiated contracts and of the contract
3 to pay an amount equal to severance taxes to the State
4 of Alaska if it pays that amount to the working interest
5 owner.

6 MR. THOMAS: That is correct.

7 DR. SWANSON: Which is a satisfactory answer to my question.

8 SENATOR RADER: Is that your answer?

9 MR. THOMAS: And it is subject to inclusion in the purchasers
10 of the working interest gas for rate purposes and in ours
11 also.

12 SENATOR RADER: Have we reached agreement on that, Dr. Swanson?

13 DR. SWANSON: I believe so. Its implication is that Alaska
14 will not lose an amount equal to severance taxes on its
15 royalty gas.

16 SENATOR RADER: Mr. Carter, I see you nodding your head
17 affirmatively. Is that correct? We are in agreement on
18 that then?

19 MR. CARTER: Yes. It's consistent with the general principle
20 that as Dr. Swanson stated, that the State incur no dis-
21 ability from what it would otherwise have received
22 because it elected to take its gas in-kind and sell it.

23 SENATOR RADER: Dr. Swanson, I forgot to ask you or neglected
24 to ask you, were you satisfied with the answer on the
25 first question?

1 DR. SWANSON: I was, yes.

2 SENATOR RADER: Any committee members -- Mr. Gruening,
3 Representative Gruening?

4 REP. GRUENING: I want to see if I understand the question
5 as well as the answer. Is it your answer in regard to
6 the severance tax that if we change the law, you have
7 no objection to paying a price which includes that
8 severance tax?

9 MR. THOMAS: What we are saying is that that is also charged
10 to the working interest owners and that is passed to
11 their purchasers and included in their rate. What we
12 are saying is that the State should get the same amount
13 as does the working interest owners, which is consistent
14 with the intent of the contract.

15 REP. GRUENING: But that is conditioned on the FPC allowing
16 it to be charged?

17 MR. THOMAS: Yes. I think all of the rates are consistent
18 with that inclusion.

19 REP. GRUENING: But it was your earlier statement that there
20 was no -- as you read the Alaska law, that there is no
21 charge.

22 MR. THOMAS: I believe there is no charge to the royalty
23 owners, that is correct. That is the current situation
24 with the statute, as I am told.

25 REP. GRUENING: Okay. But that doesn't affect your answer

1 to the question as to whether you would object to that
2 if the working interest owners are allowed to back that
3 out, that you have no objection?

4 MR. THOMAS: If that is the statute and it is applied to all
5 of the purchasers of the gas, working interest and
6 royalty, and is subject to inclusion in our rates, yes,
7 we would be happy to pay it.

8 SENATOR RADER: Any further questions on that item? All
9 right, we'll open up the questioning generally of the
10 Tenneco representatives.

11 REP. McKINNON: Mr. Chairman?

12 SENATOR RADER: Mr. McKinnon.

13 REP. McKINNON: The Administration has indicated that one of
14 their prime considerations in these contracts was the
15 political support that it might generate, and while no-
16 body is suggesting that Tenneco has so many Congressmen
17 and Senators lined up to go with them, they did indicate
18 that one of their objectives was to establish a national
19 constituency. I think that is the phrase they used. Now,
20 what I would like to know is what specifically your
21 company intends to do to help establish that national
22 constituency. For instance, what are you going to do
23 to convince the people of, say, Tennessee that it is in
24 their best interest to get their Congressmen to go with
25 the El Paso proposal?

1 MR. THOMAS: We see that once the contract is approved, that
2 there are several areas of activity and where contacts
3 need to be made, California, Washington, in Canada, and
4 in our market area. Within our market area, which is the
5 twenty-five states that we mentioned, we feel that contacts
6 need to be made there at the customer level that we have,
7 also at the state level which would include the energy
8 agencies in the executive offices within the state. And,
9 what we are interested in doing within the state offices
10 is contacting the staff people who work up the positions
11 for the agencies and for the state to let them know what
12 we feel are the merits of this particular project and how
13 we feel it will benefit us and benefit them. That's
14 generally how we intend to attack it in the market area
15 in Washington. We intend to talk again with the staff
16 people of the various committees within the executive
17 branch. Also with the staff people, the administrative
18 aides for people in the various Congressional Delegations.

19 We want to contact as wide a range of people
20 having input into the final decision as we possibly can.
21 And, we feel it is important that the merits on these
22 various issues will be readily understood by these people
23 but it's just the task of getting to all of the people
24 and making sure that this information is available to them.

25 REP. McKINNON: How do you intend to inform the public of the

1 merits of the El Paso proposal?

2 MR. THOMAS: Within the public itself, a lot of this we see
3 can be done through our market area in the form of our
4 customers dealing with the ultimate consumer which is
5 their customers. We sell to the distributing companies
6 who in turn sell to the direct users and they have
7 contacts in that way.

8 REP. McKINNON: Getting away from the topic of political
9 support for the El Paso proposal itself then. Political
10 support for the contract in general, do you intend to do
11 anything to influence Congress to say keep the take back
12 provision in the existing law?

13 MR. THOMAS: Really hadn't considered that. From the stand-
14 point -- my own view was I didn't think it likely that
15 they'd repeal it, or if they did, it would not be retro-
16 active. That's just my own view and I'll be honest, I
17 haven't given that that much thought. Gared, did you
18 want to respond?

19 MR. CARTER: Well, other than our commitment is to work with
20 the state to accomplish their purposes and ours under
21 this contract and that calls for working with all relevant
22 agencies. And if that issue would come up and it became
23 a matter of debate and attention in the Congress, I would
24 anticipate that we would see our obligation. We would
25 spend considerable effort in the direction of working

1 with the Alaskan Congressional Delegation to sustain the
2 Alaskan tradition. We understand that is a major con-
3 sideration to Alaska to be able to utilize its gas in
4 the state and that's our basic commitment, to make the
5 gas available to be taken back and to get whatever kind
6 of dealings are required to accomplish that purpose.

7 REP. MCKINNON: Even though that may be detrimental to you,
8 you see it as a contract obligation?

9 MR. CARTER: Yes, it is a contract obligation.

10 REP. MCKINNON: Political support of the provision in the
11 law isn't necessarily a contract obligation but --

12 MR. CARTER: No, but that's the essence of the -- what Alaska
13 is trying to acquire and we recognize that.

14 REP. MCKINNON: And that is almost true?

15 SENATOR RADER: Mr. Chatterton?

16 REP. CHATTERTON: Mr. Chairman, Sir, on that very subject,
17 if you are fully wedded to the all-Alaska gas line, you
18 would certainly be willing to do these things whether or
19 not there was a royalty gas sales contract in existence?

20 MR. THOMAS: Let me respond to that. There are a lot of
21 issues around the world that we think strongly about that
22 our primary purpose to our customers -- our obligation is
23 to get additional gas supply. And, regardless of the
24 size of any company there is still a finite limit of
25 resources. We try to direct those where the end result

1 is to get gas supply for our customers.

2 REP. CHATTERTON: I take it that you would continue to use --
3 shall we use the naughty word "lobbying effort" to get
4 Alaska gas to the south 48 via the all-Alaska line?

5 MR. THOMAS: Our intent is to get some gas -- make sure that
6 we have some gas when that line comes to the Lower 48
7 also.

8 REP. CHATTERTON: Thank you, sir.

9 MR. CARTER: And Mr. Chatterton, what that means is that the
10 short answer is no. That if we don't buy gas, we don't
11 get gas to Tenneco's customers simply because the all-
12 Alaska route is designated. That does not in and of
13 itself bring any gas to Tenneco's customers.

14 REP. CHATTERTON: Thank you.

15 SENATOR RADER: Any further questions? Senator Poland?

16 SENATOR POLAND: Mr. Chairman, I would like to ask Mr. Thomas.
17 If our needs for liquid gas should exceed the twelve and
18 one-half percent, just use an example, say fifteen percent,
19 would we be allowed to trade off to a producer owner some
20 of our methane for the additional two and one-half percent
21 more liquid and then withdraw that liquid from the pipeline,
22 thereby reducing the amount of methane available to the
23 buyers under the contract?

24 MR. THOMAS: I'm not sure I understand your question. Were you
25 talking about liquids?

1 SENATOR POLAND: Yes.

2 MR. THOMAS: Are you talking about once the methane is liq-
3 uefied?

4 SENATOR POLAND: No, I am talking about the liquids, the
5 butane, the propane, the pentane, the twelve and one-half
6 percent of those that we receive. If the state had need
7 for more than our twelve and one-half percent and I used
8 the example of fifteen percent, would the buyers under
9 this contract be willing to let us trade some of our
10 royalty methane to the producer owners to get those
11 additional liquids and would thereby reduce the methane
12 that the buyers under the contract would receive?

13 MR. THOMAS: The contract, I think, specifies that the state
14 can withdraw from our contract any gas that is to be used
15 within the state to the extent that this gas traded would
16 be used within the state. I think that would be entirely
17 within the state's contractual rights.

18 SENATOR POLAND: Yes, but if it reduced the methane that you
19 would receive for us to get additional liquids that we
20 needed from the producer owners, would you be willing to
21 allow the State of Alaska to do that?

22 MR. THOMAS: And you're saying then you are taking gas that is
23 contracted to us --

24 SENATOR POLAND: Right.

25 MR. THOMAS: And trading it to others and they will put that

1 gas in a liquefied form and export it?

2 SENATOR POLAND: Yes.

3 MR. THOMAS: No, ma'am, it would not be favorable.

4 SENATOR RADER: Senator Croft?

5 SENATOR CROFT: I'd like to ask several questions. First of
6 all it has to do with an Oil and Gas Journal article that
7 came out in the July 21st, 1975 issue under the headline
8 "The Big Scramble for North Slope Gas". I think probably
9 a lot of people at the table have copies of that. It
10 may have come from the House committee members. There
11 is a section there -- they're talking about the way in
12 which North Slope gas had been committed at that time
13 and they say "The figures are based on the assumption
14 that North Slope gas will flow through the proposed
15 Alaska-Canada pipeline route," meaning the Arctic route,
16 "which would move gas directly to both the Midwest and
17 West Coast. However, both producers and purchasers say
18 that if the rival El Paso project wins out", and then
19 they describe the El Paso project, "similar amounts would
20 be made available to midwestern and eastern markets
21 either through physical movement of the gas or through
22 exchanges." Now, isn't it true that whichever route
23 is selected of the three, that basically the various
24 sections of the United States will receive about the
25 same proportion of Alaska gas through one type of arrange-

1 ment or another?

2 MR. THOMAS: The gas can be transported throughout the Lower
3 48, or essential throughout, regardless of the route that
4 it takes coming from the North Slope. Where the gas is
5 ultimately going to go will depend upon who contracts
6 the gas and where their customers are located.

7 SENATOR CROFT: But are you going to tell your customers in
8 the various areas that you serve that only if the El
9 Paso route wins can they rely on getting any additional
10 gas?

11 MR. THOMAS: I think that I'd have to tell them that unless
12 the El Paso route, the Trans-Alaska route is certificated,
13 I have no valid contract to get the gas.

14 SENATOR CROFT: You don't, but there are other people that
15 could get gas to them, is that correct?

16 MR. THOMAS: There are other people that will be attempting
17 to buy gas and if they sell in the same area, yes, they
18 could get it there also.

19 SENATOR CROFT: But in the area that you cover, there are
20 other people that sell gas in that area as well, isn't
21 there?

22 MR. THOMAS: Yes.

23 SENATOR CROFT: So the real question is whether you sell the
24 gas or another company sells the gas, not whether a
25 portion of the gas is going to go into Alabama or not.

1 Isn't that basically correct?

2 MR. THOMAS: Well, I think to my customers it is more
3 important that I get the gas than some competing route
4 from whom they get no supply.

5 SENATOR CROFT: But there might be other people in the state
6 in that very same area that you service that would prefer
7 another company to have it?

8 MR. THOMAS: That would be possible, yes.

9 SENATOR CROFT: Mr. Chairman, are there limits to the political
10 activity that Tenneco can engage in in pursuing this
11 contract? Are there any written prohibitions that you
12 have signed with the state?

13 MR. THOMAS: I'm not sure that I understand the question,
14 the portion about the written prohibitions. I don't --

15 SENATOR CROFT: Are there any other agreements that you
16 signed with the state besides this agreement here?

17 MR. THOMAS: No.

18 SENATOR CROFT: Under this contract, are you prohibited from
19 doing anything of a political nature? Are there any
20 limitations on your political activity that are contained
21 in these contracts?

22 MR. CARTER: Yes, whatever legal limitations there are on
23 political activities in state or federal law are
24 incorporated of necessity into that contract. That is a
25 general rule of contract law. It would apply to this one.

1 MR. THOMAS: And I don't recall the contract itself specif-
2 ically mentioning political support.

3 SENATOR CROFT: All right. In furtherance of the contract
4 you have formed a committee though, have you not, you
5 and the other purchasers in the state to coordinate your
6 political activity?

7 MR. THOMAS: We have met many times to discuss how we are
8 going to coordinate our activities, yes.

9 SENATOR CROFT: And there is a formal political committee
10 that was organized, was there not, to coordinate those
11 activities?

12 MR. THOMAS: Not a formal organization, no.

13 SENATOR CROFT: All right. Have you kept records as to how
14 much has been spent by you already in furtherance of the
15 contract?

16 MR. THOMAS: No, sir, I have not. I haven't personally, no.

17 SENATOR CROFT: And has the state asked you to keep any
18 records?

19 MR. THOMAS: No, sir.

20 SENATOR CROFT: Do you know offhand how much you have spent
21 to lobby the Alaska Legislature to approve the contracts?

22 MR. THOMAS: No, sir.

23 SENATOR CROFT: Could you try and find that information out
24 and supply that to this committee?

25 MR. THOMAS: Senator, let me address one part and that is

1 concerning the amounts of money that will be committed
2 in support of the project. What we have undertaken to
3 do is to give maximum support to the furtherance of the
4 Trans-Alaska project. Since we don't know when this
5 contract will be approved, at what stage that the federal
6 decision will be in, I have no projection on what the
7 expenditure might be. Insofar as what is spent to date
8 since we have just gotten started and actually have no
9 formal approval of the agreement yet, I have not been
10 tabulating. It will be some time before I can get that
11 but I'll see what has been collected.

12 MR. CARTER: Senator Croft, I believe I'm correct, I don't
13 purport to really be fully apprised of your law, but I
14 believe that under your law and under the federal law and
15 under California's law and probably any other, whatever
16 expenses that we would incur in the form of fees for
17 people to assist or in the form of just out of pocket
18 expenses or whatever other costs, we are required to keep
19 and to make available to the relevant governmental body.

20 SENATOR CROFT: I assume then that it shouldn't take very
21 long to furnish us that information.

22 MR. THOMAS: Well, because of the timing, I'm not so sure
23 that we have received any statements from any services
24 that might have been rendered to date.

25 MR. CARTER: But another answer, Senator Croft, is that so

1 far those expenses have largely consisted of hotel bills
2 and things like that that have been the out of pocket
3 expenses involved and coming up for this hearing, unless
4 you want to include the airplane tickets and the hotel
5 bills for past meetings with representatives of the
6 Royalty Board and of the executive branch.

7 SENATOR CROFT: Mr. Chairman, could I ask on a different
8 subject. On page twenty-four of the contract and I'm
9 not sure which contract it is but my question relates
10 to Section 11.4, the switching provision with regard to
11 the route. Did Tenneco request the insertion of that
12 provision in the contract?

13 MR. THOMAS: No, sir, we did not request that. That was a
14 provision that was put into the negotiations by the state
15 and we're in a position of course now that we have
16 executed the contract, we support the contract and
17 obviously we support all the provisions of it, but that
18 was not put in at our request.

19 SENATOR CROFT: With regard to the question of LNG projects
20 in other areas of the world, Tenneco is involved with
21 an LNG project in Algeria and when you and I discussed
22 a portion of this in my office, we discussed the fact
23 that Tenneco, I think, got in at a later date after
24 El Paso had already started. But that project is behind
25 schedule and I wonder if you could describe the status

1 of that project?

2 MR. THOMAS: Our project with the Algerian was signed on
3 October 4th, 1976. It's not related to either of the
4 El Paso projects. The government of Algeria is attempting
5 to contract a substantial portion of their surplus
6 natural gas. Our project involves a billion a day of
7 natural gas in the form of LNG to be delivered to a
8 receiving firm at St. Johns, New Brunswick, about seventy
9 miles north of the main New Brunswick border, to be
10 regasified and to be transported down to our mainline
11 system by a new five hundred mile pipeline from St. John's
12 down to Albany, New York, and thereon into Pennsylvania.

13 We anticipate -- well, let me go back a step.
14 The application before the Federal Power Commission was
15 filed on the 20th of December of 1976, and before the
16 National Energy Board on the same date. We would expect
17 to have timely FPC approvals which would allow the first
18 gas to flow at the end of 1981 under that project.

19 SENATOR CROFT: With regard to Sections 3.7 of the contract,
20 those sections which relate to the state taking back a
21 certain amount of gas that's committed to you and your
22 right to obtain additional gas, some people have said
23 that those sections apply -- Sections (a) and (b) of 3.7
24 apply only to gas at Prudhoe Bay. Is that your inter-
25 pretation or is it your interpretation that it applies to

1 any gas that goes through the pipeline, whether it is
2 Prudhoe Bay or the Beaufort Sea or wherever? Is it just
3 Prudhoe Bay gas that you have the future claim on?

4 MR. THOMAS: Well, what we have contracted for now is
5 certainly Prudhoe Bay gas.

6 SENATOR CROFT: Right.

7 MR. THOMAS: To the extent that the state removes it and uses
8 it for intrastate needs, then to the extent that there is
9 additional gas becoming available which is also surplus
10 to the state's needs and comes to market through the same
11 pipeline project then this gas would be made available
12 according to the terms of 3.7(a) and (b).

13 SENATOR CROFT: Whether it is from Prudhoe Bay or new fields
14 in the vicinity of Prudhoe Bay and that gas is shipped
15 through the pipeline, is that correct?

16 MR. THOMAS: I believe that is correct, yes.

17 SENATOR CROFT: It would be the new gas as well?

18 MR. THOMAS: Yes.

19 SENATOR CROFT: All right. And one final question, the total
20 amount of gas that you are purchasing from the state, do
21 you know what percentage of the total gas that belongs to
22 the state do you feel you are purchasing?

23 MR. THOMAS: Our contract specifies that we have up to 1.3
24 trillion that would be committed to us.

25 SENATOR CROFT: All right. But my point is the state has

1 twelve and one-half percent of the reserves there at
2 Prudhoe Bay and obviously the total amount of gas at
3 Prudhoe Bay is larger than the recoverable reserves at
4 Prudhoe Bay.

5 MR. THOMAS: Yes, sir.

6 SENATOR CROFT: And my question is, what percentage of the
7 total reserves at Prudhoe Bay and the recoverable reserves
8 at Prudhoe Bay, what portion of the state's share of
9 that figure do you feel that you are purchasing? One
10 hundred percent of the state's recoverable reserve?

11 MR. THOMAS: No. It is estimated that the state's share of
12 the recoverable reserves at Prudhoe Bay are approximately
13 3.2 trillion. The total of the contracts to ourselves,
14 El Paso and Southern, total only 2.6 trillion.

15 SENATOR CROFT: All right. And your figure of 3.2 trillion
16 recoverable, that is based on what percentage of the total
17 the state reserves at Prudhoe Bay? What recovery rate are
18 you using in arriving at that 3.2 trillion cubic feet?

19 MR. THOMAS: That is assuming a total of 26 trillion by the
20 field which I understand may be a little conservative at
21 this point.

22 SENATOR CROFT: Okay, but what recovery rate does that assume?

23 MR. THOMAS: Oh, what deliverability rate?

24 SENATOR CROFT: What percentage of the reserves at Prudhoe
25 Bay are going to be produced, the gas reserves at Prudhoe

1 Bay? Forty percent, sixty percent or what? What do you
2 think out of the total gas reserves at Prudhoe Bay,
3 what percent is going to be produced? What is the
4 recovery rate?

5 MR. THOMAS: Do you mean what percent will be recovered out
6 of the total gas in place?

7 SENATOR CROFT: This is fine, we can start with that.

8 MR. THOMAS: I don't recall the percentage. I would defer
9 that question to state oil and gas people. I'm sorry I
10 don't recall all of the calculations of what the recovery
11 factors are for the gas.

12 SENATOR CROFT: That is all.

13 SENATOR RADER: Senator Sumner?

14 SENATOR SUMNER: Mr. Chairman, I need some clarification.

15 Sometimes attorneys place their position on the iceberg
16 theory, ten percent on the questions they ask and nine
17 percent on the questions they don't ask. Senator Croft
18 recently asked you that if your constituents didn't get
19 gas from you, they would get it from somebody else. If
20 we believe or if we subscribe to the theory that legis-
21 lators, be they on a state level or on a national level,
22 listen to their constituents don't you think that maybe
23 if they were assured by this contract that you would get
24 some gas, they would be more inclined to support your
25 position than they would on the theory that maybe some-

1 body else would get some gas, that maybe they would get
2 some of it?

3 MR. THOMAS: I think they would, yes, sir.

4 MR. CARTER: Let me supplement that just a little and say
5 Tenneco's customers, whether they are just getting gas
6 from Tenneco or whether they might also get some from
7 somebody else, should be influenced by the arguments in
8 favor of the Trans-Alaska route even if they are going to
9 buy from someone else because those arguments basically
10 boil down to the time in which the gas would come to the
11 Lower 48.

12 SENATOR SUMNER: How much time difference do you see that
13 being?

14 MR. CARTER: Probably at least two years.

15 SENATOR SUMNER: You heard the testimony yesterday from the
16 Commissioner. Do you feel that the state could get a
17 higher price for its gas and if not, why not?

18 MR. THOMAS: Realistically no, I don't think they could.
19 The questioning yesterday concerned whether or not the
20 state had gone out to talk with industrial users in an
21 effort to make a direct sale, which sale the exact price
22 is not controlled by the FPC. When you look at the
23 conditions that apply to such sales such as, first, there
24 are not very many industries that would use the amount
25 of volume or the volume that the state has available,

1 approximately two hundred fifty to three hundred million.
2 All of these industries would have a relatively low
3 priority in the nine priorities of usage in accordance
4 with the Federal Power Commission table. The duration
5 of the contract between a producer and a direct user
6 is two years and regardless of whether or not the price
7 is controlled by the FPC, the transportation is. So if
8 the FPC feels that the price is out of line, then they
9 wouldn't approve the transportation.

10 But in any event, the FPC has not allowed any
11 of these that did not have a high priority which is
12 getting in the range of priority two's, priority three's
13 and all of those. We are serving right now only
14 priority one's and when the weather gets warmer then
15 we supply some priority two's. So I don't think the
16 state could get a higher price.

17 SENATOR SUMNER: During the negotiations with the state,
18 did you ever discuss the possibility of advanced pay-
19 ment sort of thing?

20 MR. THOMAS: Yes, sir. As a matter of fact our original
21 offer included an advance payment. This advance payment
22 of course was payable over a period of time, was to be
23 recovered over another period of time and in the terms
24 of the proposal were very much different than the terms
25 of the agreements before us.

1 SENATOR SUMNER: This morning you stated that the Trans-Alaska --
2 if the Trans-Alaska pipeline is not approved that you
3 stand to lose a lot in the amount of dollars and effort.

4 MR. THOMAS: Yes, sir.

5 SENATOR SUMNER: Do you still consider the Alcan route as a
6 viable alternative?

7 MR. THOMAS: No, sir. I do not consider the Alcan route as
8 a viable proposal. One of the main reasons being in
9 looking at it from the Canadian point of view, as I see
10 the Canadian interest they are the first to ensure that
11 the Canadian users have sufficient future supply to
12 supply their own demand and secondly, to protect the
13 Canadian economy. In looking at the Alcan route, there
14 is no Canadian supply being made available. But with
15 the advent of a major construction project there would
16 be the resulting effect on the Canadian economy. So they
17 get no gas and they get the effects of the construction
18 of a major project which might preclude a second project
19 to get Canadian gas from the Arctic Islands, from the
20 Mackenzie Delta from going forward when that demand was
21 needed by the consuming public in Canada.

22 SENATOR SUMNER: Do you think that the Canadian routes, either
23 one of them can provide sufficient financing support.

24 MR. THOMAS: I question this can be done without necessary
25 governmental guarantees on both sides of the border.

1 SENATOR SUMNER: How do you think the El Paso or the Trans-
2 Alaska line will be selected on its merits after the
3 judge indicated this morning or yesterday -- this morning,
4 maybe, that it was a selfish approach on the part of
5 Alaska to endorse that line?

6 MR. THOMAS: I think from the standpoint of the FPC the
7 administrative law judge hears a great deal of testimony
8 and the rules of evidence are set out by the Natural Gas
9 Act and there is a prescribed order and a prescribed type
10 of information that is submitted and his decision is
11 rendered in accordance with those rules. We have now
12 gone into a new phase. We are now coming under the order
13 or the prescribed information that is set out by the
14 Alaska Natural Gas Transportation Act. We are now
15 deviating from the characteristic or the normal FPC rules
16 of evidence and procedure.

17 I think now that there are many other factors
18 that come into play. I think the trial examiner's decision
19 is but one bit of information that will go into the full
20 commission and help them make their decision or their
21 recommendation to the President.

22 SENATOR SUMNER: Mr. Chairman, my last question. Which of
23 the lines that you are aware of of the three do you think
24 would have the most positive benefit to Alaska, to the
25 guy that isn't privy to the sort of discussions we hear

1 in here today and something that he wouldn't have to have
2 be explained in detail that you have really got this
3 benefit and you have really got that benefit, which one
4 of the lines would without doubt convince most Alaskans
5 that it is the line they ought to support?

6 MR. THOMAS: I think without any question it is the Trans-
7 Alaska line. That makes the gas from the North Slope
8 available at tidewater to the general industry and the
9 consuming public in Alaska.

10 SENATOR SUMNER: Thank you, Mr. Chairman.

11 SENATOR RADER: Representative Parr?

12 REP. PARR: I have a number of questions. Mr. Thomas, I
13 believe you said awhile ago that your company served
14 twenty-five states, right?

15 MR. THOMAS: Yes, sir. I believe twenty-two directly and
16 three indirectly through another company.

17 REP. PARR: We had some information, I think yesterday,
18 which indicated that really you weren't serving very
19 much of the market in but about seventeen of those states.
20 Your percentage, I think, in one state was something like
21 one percent of the total gas usage in that state and so
22 forth. So is really very realistic to say that you have
23 much of an interest shall we say in all twenty-five?

24 MR. THOMAS: Well, sir, our entire percentage of the market
25 in each of those states varies from, I think, ninety --

1 REP. PARR: It was Maine and Vermont, I believe, or Maine and
2 New Hampshire or some such place.

3 MR. THOMAS: Right. New Hampshire, ninety-eight percent;
4 Maine, eighty-nine; and then we range down to some of the
5 peripheral states to our market area where we supply
6 a minor amount, that is correct.

7 REP. PARR: Remind you of that old phrase, that is, if Maine
8 goes, so goes Vermont?

9 MR. THOMAS: Or something like that.

10 REP. PARR: The second question, Mr. Thomas, is that also
11 according to the information we heard yesterday, that
12 if you got the gas under this contract that amounts to
13 about three and one-half percent of what you are now
14 supplying in your twenty-five state market. Is that
15 roughly accurate as you understand it?

16 MR. THOMAS: It is around four percent, I believe. A fraction
17 over perhaps.

18 REP. PARR: I also, if I understood you correctly, you said
19 that you did not at present have any commitment from the
20 producers. You said in answer to a question awhile ago
21 that if you didn't get this contract, you don't have any
22 gas committed to you. In other words, I assume that at
23 present Tenneco does not have a commitment from any of
24 the producers who have the seven-eighths on the North
25 Slope?

1 MR. THOMAS: That is correct. We have no commitment from any
2 of the producers.

3 REP. PARR: Okay, then I guess we come to my next question.

4 If I understood you correctly awhile ago, contrary to what
5 most of us had understood, you were not going to go into
6 grass roots constituent lobbying. You were not going to
7 try to influence the average homeowner, who is maybe
8 having trouble getting enough gas to keep his house
9 warm, to write to his Congressman to attempt to influence
10 his Congressman to vote for the El Paso or the Trans-
11 Alaska line. You were going to instead deal with oil
12 and gas people, people in energy offices, people in
13 state government offices of some sort who might be more
14 influential.

15 MR. THOMAS: I think my answer -- well, I have two parts in
16 response to your question. The first is, on a previous
17 question before I mentioned that we deal with the dis-
18 tributors, they deal with the ultimate consumers, the
19 homeowner, so they have a direct relationship and so we
20 feel that is the method to get to the grass roots.

21 The second part is that we have a limited amount
22 of time remaining before these decisions are going to be
23 made. I think that the time has come to determine how
24 can we best spend our time, where can we best spend our
25 efforts to get the maximum advantage from it and we feel

1 that that is the reason we will try this.

2 REP. PARR: In other words what you are saying is you think
3 that your time is better spent now by dealing with people
4 who would be more directly influential in determining
5 which route is selected?

6 MR. THOMAS: We'd like to deal with people that have input
7 into the final decision, yes.

8 REP. PARR: Almost my final question, Mr. Chairman. You said
9 awhile ago that you have not really spent any money or
10 organized really properly yet because the contract had
11 not been ratified and I think we all know that the
12 contract is very general in what it says you will do.
13 Has there been a budget set even though the money is not
14 yet spent or committed, a budgeted amount which will be
15 used to hopefully influence the selection of the Trans-
16 Alaska line?

17 MR. THOMAS: The problem with setting up a budget in our
18 organization is we didn't know when we were going to
19 start and our concern has been what is our starting date?
20 We know what the ending dates are and a lot of this is
21 a function of retaining people to assist us in the task
22 of the utilization of our own people and the effort to
23 contact the people. The amount of dollars is directly
24 related to the number of days or the number of weeks or
25 months you are involved. We have no prescribed budget

1 that says that we will spend only X dollars because we
2 didn't know what the starting date was going to be. That
3 has been our problem in anticipating what we would spend,
4 The provisions in the contract specifies that we will
5 support this route. Really the insurance that the state
6 has that we are going to give maximum effort, which we
7 intend to do, is that if we don't win, we don't get any
8 gas from this contract. And also from the standpoint
9 that we feel that we need to give a maximum effort and
10 will, is because we intend to be in business in Alaska
11 for the next twenty to thirty years because, as I mentioned,
12 this is where we see the activity coming in the exploration
13 for major new supplies of reserves. We also have a large
14 multifaceted company that I feel should be more involved
15 in Alaska and the opportunities that I see here. We also
16 feel like, perhaps erroneously, that having a contract
17 with the state will give us a better understanding of
18 what is going on in the field and perhaps a better basis
19 from which the contracts are working interest reserves.
20 We don't know if that is a fact or not.

21 REP. PARR: Well, you know, Mr. Thomas, the contract simply
22 says that you agree to actively support?

23 MR. THOMAS: Yes, I know.

24 REP. PARR: That could be anything from, I suppose, I am not
25 an attorney but I suspect that attorneys will confirm it,

1 could be anything from writing one letter which costs you
2 thirty-five cents or fifty cents worth of secretarial
3 time plus a postage stamp, to spending a billion dollars.
4 Now, of what you said awhile ago, you do five hundred
5 million dollars of business a year, you have got a seven
6 billion dollar capital business, right?

7 MR. THOMAS: Seven billion in assets and our capital expen-
8 ditures are in the range of five hundred million.

9 REP. PARR: And yet what you are saying is that you have not
10 really committed yourself even with a planning budget at
11 this point because we haven't ratified the contract. It
12 really --

13 MR. THOMAS: What you are asking me is if I had a dollar
14 figure for the --

15 REP. PARR: I said how much have you budgeted. All right, do
16 you have a planning budget of X number of dollars? Are
17 you planning to spend a million dollars, one hundred
18 thousand dollars or ten dollars?

19 MR. THOMAS: My budget is based upon activities and not on
20 the dollars I will spend on the activities. I'm sorry
21 but I can't quote you a number for that that would define
22 that. I'm more concerned about the activities and the
23 efforts that we are going to purport and whatever those
24 costs are then we will underwrite those costs.

25 REP. PARR: Thank you.

1 SENATOR RADER: Mr. Hayes?

2 REP. HAYES: Thank you, Senator Rader. In addition to
3 finding gas for your customers, I presume you have a
4 profit motivation.

5 MR. THOMAS: Yes, sir.

6 REP. HAYES: And I'm wondering if you have projected what
7 the profitability might be in dollars assuming you receive
8 this 1.3 trillion cubic feet over some period of time?
9 I'm sure that you must have projected some profitability.
10 I'm just wondering if you could give me some idea of what
11 that might be in dollars?

12 MR. THOMAS: In a regulated company we make no profit on
13 buying and selling the gas. We sell it for the same
14 price that we buy it. We get our expenses recovered
15 from our own pipeline system. We depreciate our system
16 and we earn a return on the amount of money we have
17 invested in our system. In a regulated entity the amount
18 you earn is strictly based on your rate base, the amount
19 you have in facilities and you recover that regardless
20 of the volume of gas that flows through it. So, to the
21 extent that any amount of gas coming into our system we
22 add no facilities. Our recovery is just the same as
23 what it would have been with a greater or lower volume
24 of gas.

25 REP. HAYES: So there really is no profit incentive in this

1 particular deal?

2 MR. THOMAS: What we are doing is ensuring that we are going
3 to be in business over a longer period of time and we
4 are continuing to supply our customers needs. And, there
5 is a definite advantage in staying in business over the
6 long term.

7 REP. HAYES: Just so I understand it, there is no anticipated
8 profit though other than just --

9 MR. THOMAS: We do not mark up this gas, no. We sell it for
10 exactly what we buy it for plus the transportation charge.

11 SENATOR RADER: I take it also though it might mean that
12 you would not have to abandon facilities because of a
13 shortage of gas and curtailment.

14 MR. THOMAS: Yes, sir, that could easily be the case. And,
15 of course, we see in our system the same as you see in
16 a national supply, a decline in availability from our
17 traditional sources and there will come a time when not
18 only ourselves, but other companies, if they can't get
19 non-traditional supply from other areas, they will have
20 to start abandoning parts of their system. That reduces
21 rate base, will reduce the earnings that you had.

22 SENATOR RADER: It is sort of a reduction of losses theory
23 instead of a maximization of profits, I suppose.

24 MR. THOMAS: Yes, sir. That is just the basis of regulated
25 companies profitability.

1 SENATOR RADER: Representative Gruening?

2 REP. GRUENING: If the Governor switches the support of the
3 state to the Alcan route and you agree to go along with
4 that, what, if anything, have you lost in terms of
5 profit?

6 MR. THOMAS: The amount of money that we would spend in
7 support of a Trans-Alaska route, if that route were not
8 certificated, we would not be able to recover those
9 costs.

10 REP. GRUENING: Well, we haven't been able to determine what
11 amount that is going to be. Do you have any idea?

12 MR. THOMAS: I don't know what amount that is going to be
13 because I don't know number one, when the Governor would
14 switch, if he would switch or when this agreement will
15 be approved but it would take all of those items and then
16 you could project.

17 REP. GRUENING: But other than that amount whatever that
18 amount be, be it ten or a billion dollars, other than
19 that on including in the rate base you don't see any
20 difference in your profit if the Alcan route is chosen
21 and you get the gas.

22 MR. THOMAS: Well, whatever that amount of money that you
23 would spend in support of a Trans-Alaska route, that
24 would not be recoverable. That would come out of our
25 earnings and would be a net loss to us. If your question

1 is could we get the gas to our customers if it went
2 through an Alcan route, yes, we could get the gas to our
3 customers as could most anyone else.

4 REP. GRUENING: That wasn't my question.

5 MR. CARTER: Let me supplement that answer a little bit,
6 Representative Gruening. Another thing lost is the time,
7 effort, manpower, in trying to get gas supply. Tenneco
8 is no different than any other person in that there is
9 only so many things you can do with the people and the
10 time that you have got available. And if you spend
11 your time and effort trying to get a Trans-Alaska project
12 certificated and that does not succeed then you have
13 foregone other opportunities to be placing those bets
14 and if you believe that a switch to the Alcan route along
15 with the Governor, if he should do that, is not a very
16 viable alternative for getting gas then you don't sit
17 back and say "I can rest on my oars and later switch to
18 Alcan" because that won't get you anything.

19 REP. GRUENING: Well, the point of my question was if you
20 rest on your oars and Alcan is chosen and the state
21 switches its support to Alcan and you choose to go with
22 that, what you are telling me is you lose nothing in the
23 profit that you make in transmitting the gas. Is that
24 it? Wherever you make your profit you haven't lost any-
25 thing, is that correct?

1 MR. THOMAS: Because unless you add facilities you are going
2 to make that same amount anyway from the volume you were
3 transmitting otherwise.

4 MR. CARTER: If Alcan is selected, that is another premise
5 of your statement,-- that Alcan has to be certificated
6 and built or else, yes, you will lose even if you switched
7 with the Governor.

8 REP. GRUENING: Now as I understand it -- may I follow up?

9 SENATOR RADER: Certainly.

10 REP. GRUENING: Your customers are distributors and not home-
11 owners?

12 MR. THOMAS: This is correct. We do not sell to the ultimate
13 consumer.

14 REP. GRUENING: Now, are these the people you are talking
15 about bringing on to help you with the lobbying efforts?

16 MR. THOMAS: No, these are the people that we will be talking
17 to in an effort to present the merits of the situation.

18 REP. GRUENING: Well why do you have to talk to them? In
19 other words if they understand you don't get the gas,
20 I mean isn't that self evident, what else do you have
21 to say to them other than the facts, you don't get the
22 gas if the El Paso route isn't chosen?

23 MR. THOMAS: Well, it is easy for those of us who have been
24 working on the problem as we all have for eighteen months
25 to two years to know all of the pros and cons of the

1 various competing routes. It is surprising when you
2 talk to different areas in the Lower 48 that they seem
3 generally unaware of what the merits are for the individual
4 routes and it's not enough, I don't think, to go to our
5 customers and say, "Look, this way I get the gas and
6 that way I don't." That is not going to be sufficient.
7 We are going to have to sit down and say here are all
8 the reasons why, here is the reason why that we will
9 get the gas. Not only will we get it but we will get
10 it faster through the Trans-Alaska route. Here are the
11 reasons we feel that is the case, here is the way that
12 gas will move, here are approximate time schedules, here
13 is how that will fit our availability of gas to you.
14 All of these things need to be discussed, not just the
15 fact that one way we get it and one way we don't.

16 MR. CARTER: And the time frame is that I think it is by
17 July 1, the states are to comment to the President on
18 what they favor for a delivery system for Prudhoe Bay
19 gas and if we are not out in the field trying to inform
20 the responsible state officials of what the ingredients
21 of that decision should be, then you won't have any state
22 input to the President.

23 My own view is that the President is going to
24 make this decision on what he sees to be the merits.
25 And if he receives no comments from states to the effect

1 that they believe the Trans-Alaska system will deliver
2 gas to the Lower 48 faster than these others, and if
3 he doesn't receive comments reflecting that the states
4 know they will get the gas in their states regardless of
5 which system is built, then the President is going to
6 continue to be bombarded with views to the effect that
7 the Midwest won't get gas unless the Trans-Alaska --
8 of I mean the Trans-Canada pipeline is built. And he
9 just won't get the benefit of input from governors and
10 states in our market area or in the market area of other
11 companies unless somebody goes out and does the ground-
12 work with those state officials.

13 REP. GRUENING: Okay, in that regard, what are you doing
14 between now and July 1st then?

15 MR. THOMAS: It depends on when the contract is.

16 REP. GRUENING: I have a real problem. If it is signed today
17 what would you do, and approved today?

18 MR. THOMAS: What we are doing is with the people that we
19 have retained we are setting out who are the responsible
20 people to contact, what type of people should we have
21 from our staff to make the contacts or from the staff
22 of others, and what is the best timing to do in in
23 relation to their needs and our needs and theirs to
24 have the information and ours to transmit it, not only
25 to them but to other people. That is what we are in the

1 process of doing now.

2 MR. CARTER: An example would be the letter that has been
3 attached as an exhibit that has been made available to
4 all of the concerned California agencies and follow-up
5 discussions with those agencies about the substance of
6 the views expressed in that letter are anticipated.
7 Now that kind of detailed work with about six or seven
8 responsible agencies in several states is a major under-
9 taking and it requires knowledgeable people spending a
10 lot of time.

11 REP. GRUENING: You would prepare, for example, a document
12 like this one and submit it to us by Tenneco?

13 MR. THOMAS: We intend to have fact sheets, data sheets,
14 probably not like that. We need one that we can revise
15 more easily as new time deadlines pass and new information
16 becomes available. That was made for a specific purpose
17 which was to supply the Royalty Board and members of
18 the legislature of what advances could be available to
19 Tenneco in supporting a Trans-Alaska route. They
20 probably would not be exactly in that form.

21 MR. CARTER: That document doesn't even really address the
22 merits of one of the routes versus the other ones.

23 MR. THOMAS: Because we knew we all believed in just one so
24 that wasn't --

25 REP. GRUENING: This is part of the lobbying effort towards

1 the State of Alaska then?

2 MR. THOMAS: Well, I think that was a part of the effort of
3 convincing the Royalty Board that we were one of the
4 parties that they should contract to.

5 SENATOR RADER: Senator Colletta?

6 SENATOR COLLETTA: Good. Yes, Mr. Chairman. Mr. Thomas,
7 there has been a great deal of discussion now on the
8 magnitude of the effort that you are going to put forth
9 on seeing that the Trans-Alaska route is selected. Would
10 it be correct to assume that this transaction for Tenneco
11 is no different than any other business proposal and that
12 you will in fact commit up to what is reasonable to make
13 certain that you do acquire this percentage of gas? What
14 I really want you to say is that that effort will be
15 whatever is required within reason, because certainly you
16 must reach a point where a further expenditure would no
17 longer be in your benefit to pursue something that you
18 couldn't make anything for thereby eliminating the pos-
19 sibility that you will head your bet on the one line to
20 hold back support for maybe an alternate route. I mean
21 that just wouldn't be good business sense, would it?

22 MR. THOMAS: Why it certainly wouldn't be good business sense
23 from us because we don't believe there is an alternate
24 route to the Trans-Alaska route that serves the best
25 interest of Canada, the Lower 48, the State of Alaska and

1 certainly as far as this agreement is concerned, to our
2 own best interest. So, we feel that this is the route
3 that is in the best interest of all so certainly we will
4 expend whatever is required to give our support to the
5 line within the reason that you mentioned. And, that is
6 where we will get our benefit.

7 SENATOR RADER: Senator Huber was asking for the floor a
8 moment ago.

9 SENATOR HUBER: I'll pass to somebody else for the moment
10 but I want to talk to them before they are finished.

11 SENATOR RADER: We have difficulty here, the fellows on this
12 side of the room are suffocating and the people on this
13 side are freezing so I suppose we will alternately open
14 the door until they freeze and then shut it until they
15 suffocate and then we will be all happy.

16 SENATOR HUBER: Mr. Chairman, may I suggest that being I don't
17 have a coat on when I shiver you close the door?

18 SENATOR RADER: We'll just try to work it out somewhat
19 cooperatively so that we can all walk out of here --
20 we all die together or live together, one way or the
21 other. Representative Meekins. I would like to so far
22 as possible, recognize first those Senators who have not
23 had an opportunity to examine particular witnesses,
24 recognizing that when a line of questions is going it
25 may be more convenient to keep that particular line going.

1 But to the extent that other Senators and Representatives
2 are trying -- try to spread the questioning as reasonably
3 as we can. So, it would be better if you didn't ask
4 for recognition the second time as long as you know that
5 other people are asking for recognition the first time
6 and I'm not keeping track of it. Representative Meekins?
7 REP. MEEKINS: Thank you, Mr. Chairman. I'm sort of interested
8 in the same line of attack -- well, not attack but sort
9 of questions. It seems to me that contracts are all about
10 promises or performance and sanctions, that if that
11 performance isn't given. We have been told that one of
12 the primary things that we are receiving in this contract
13 is some sort of an advantage or some sort of a gain in
14 the possibility that the El Paso line will finally be
15 approved and yet we are all stumbling around, I think,
16 in trying to find out exactly how we can quantify some
17 regards what we are going to be receiving. That is what
18 is stimulating the questions of what the budget is going
19 to be and those type of things and I think that is probably
20 fair. What I'm wondering is can you, is there some
21 monetary incentive for you -- can you, for instance, pass
22 through onto your rate base the costs that you might be
23 incurring for this effort if the El Paso line is finally
24 given approval. That would seem to me that that would
25 be an incentive that if you can include those in your

1 rate base if El Paso got approval and you couldn't if
2 Alcan did, that that would be some sort of an incentive
3 and we could have something substantial to look to.

4 MR. THOMAS: Essentially that is the way it goes in securing
5 new gas supply for a regulated company. If you are
6 successful they say "fine", then you have secured ad-
7 ditional supply for your customers so they can share in
8 the cost. But if you are unsuccessful, then obviously
9 you shouldn't have embarked on that course so your stock-
10 holders -- or you have to reduce your profit to that
11 extent. That is your cost, it is not passed on to the
12 customer. In general that is the way it goes. So what
13 you say is correct, that is real incentive and it is an
14 incentive to make sure that when you embark on a program
15 you feel like that you can be successful. And of course,
16 we looked very carefully at this when we started because
17 we had a choice of all of the routes because we were
18 uncommitted. So, before committing to the terms of this
19 agreement we had to answer to ourselves, is there enough
20 gas, can we win? And we analyzed and answered, we can.

21 REP. MEEKINS: Thank you. Thank you, Mr. Chairman.

22 SENATOR RADER: We have been at this approximately an hour.
23 I think this would be a good time for a ten minute break
24 and we will try to reconvene promptly in ten minutes.

25 (Whereupon the hearing was recessed at

1 2:30 p.m. and reconvened at 2:45 p.m.)

2 SENATOR RADER: Because of the fact that the capacity of
3 this room is exceeded by the number of people in it,
4 we adopted the no smoking rule and some persons who were
5 not here yesterday when that was announced perhaps were
6 not aware of that. We are asking you not to smoke in
7 the committee room here during deliberations and probably
8 even during the recesses if you would go into the lobby
9 so that this area has a chance to clear.

10 There has been questions as to whether or not
11 we are going to go into the night. You know we have
12 hearings scheduled for tomorrow to again commence at
13 11:00 o'clock and we plan on operating this afternoon
14 I would think until 5:30 or a convenient breaking time
15 depending upon how it breaks the witnesses. I would
16 prefer that we not schedule a meeting this evening and
17 hope that we can do all of our work tomorrow, then make
18 the decision tomorrow depending on how close we are to
19 being through, as to whether or not we should go over
20 another day or whether or not we should go into a night
21 session tomorrow evening. So, I think that we will plan
22 on no evening session today and tomorrow at around noon
23 perhaps we will try to judge our time at that time and
24 our witness schedule.

25 We have one other problem and that is Mr. Smith

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1 of Southern has a commitment and will have to leave in
2 the morning. We will interrupt Tenneco's testimony
3 after the next break if you are still testifying at that
4 time, with your permission and with the permission of
5 the committee, to take Mr. Smith of Southern out of
6 sequence so that he can leave tomorrow. That would
7 leave us perhaps an hour to an hour and one-half for
8 Mr. Smith. Is there any objection to following that
9 procedure by any committee members? All right, that
10 will be the plan then and we can adjust as we go along.

11 I understand that you are having difficulty in
12 hearing. Perhaps one way that we could solve that and
13 you can communicate that is if you are in the back of
14 the room and you cannot hear, if you will hold up your
15 hand or something, perhaps I will see it and I can advise
16 the Senator or the witness to speak up, whoever is having
17 difficulty. But as a general admonition, we don't have a
18 system here other than the mechanical one of our vocal
19 chords so everybody speak up as best they can.

20 I believe we are open for further questions on
21 the Tenneco witnesses.

22 SENATOR CROFT: Mr. Chairman?

23 SENATOR RADER: Senator Croft?

24 SENATOR CROFT: I have one that relates to the question with
25 regard to your building into your rate base the cost that

1 you might incur in developing public support for the
2 El Paso proposal and as I understood your answer it was
3 that if the El Paso proposal wins, you can put it in the
4 rate base, if the El Paso proposal doesn't win, that you
5 can't put it in a rate base. It's only if it is basically
6 successful and you used that as an argument that you
7 have a real incentive to go with the El Paso proposal.
8 Isn't it really an incentive to go with the winner and
9 that if the state shifts its position from El Paso to
10 some other position, it is in your best interest to go
11 with the system that is likely to win rather than to
12 stick with the El Paso system at all cost?

13 MR. THOMAS: As I understand the cost figures and generally
14 speaking you are able to put into your cost the successful
15 securing of new supply. To the extent that you expended
16 money on an unsuccessful route, then that would not be
17 allowed regardless of whether you switched on to a new one
18 later on. There would be a clear distinction, since these
19 are competing routes there would be a clear distinction
20 of these costs so I don't see that it would make all that
21 much difference.

22 MR. CARTER: Let me supplement that a little too, Senator.
23 Apart from the theoretical question, in planning what you
24 are going to do you have to think hard about probability
25 and our sincere view is for the reasons expressed in the

1 letter to the State of California, and for the reasons
2 outlined in the administrative law judge's opinion, we
3 don't see getting gas through switching to the Alcan route
4 as a way that has any significant probability of getting
5 gas for Tenneco. So there is no incentive to sit back
6 and wait to switch to that route because it is not going
7 to wind up accomplishing the purposes that bring us here.

8 SENATOR CROFT: The Alcan route or the Arctic route would not
9 produce any gas for Tenneco if the state switched its
10 position to support one or the other of those routes?

11 MR. CARTER: If it won, only if it winds up being designated
12 by the President as the method for delivering gas and we
13 don't think there is a significant possibility that the
14 President is going to designate the Alcan route.

15 SENATOR CROFT: And you do think there is a significant
16 possibility he will designate either Arctic or El Paso?

17 MR. CARTER: Yes.

18 SENATOR CROFT: Equal chance on both?

19 MR. THOMAS: Well, obviously we feel that if we can get out
20 and get our work done, we have a better chance to get
21 the Trans-Alaska route because we feel it is in the best
22 interest of the contract.

23 SENATOR CROFT: Okay. Your major concern is to make sure
24 that your purchasers have this additional gas, is that
25 correct, that is the reason you are in this to extend,

1 as I think you answered Representative Hayes, to extend
2 the life of your operations and your customers operation?

3 MR. THOMAS: That is right, that we transport it through our
4 system to our customers.

5 SENATOR CROFT: There isn't any question but what if the
6 state switched to another route that you thought might
7 win, that you would go along with the state in order to
8 get the gas for the customers, is there?

9 MR. THOMAS: Yes, there is a question because we spend a lot
10 of time in the country in support of many different
11 supplemental projects and all of these are important to
12 us and we can't support, in this case as an example, the
13 Trans-Alaska route up to day twenty and do our best to
14 convey all of the issues and the merits of the cause
15 and then on day twenty-one go in and tell the same people
16 all that we have told you for the first twenty days,
17 forget it, we are now off on a new route. I think we
18 would destroy our credibility, which not only affects
19 this project but many others that we are working on.
20 So, I see a very definite problem to us switching the
21 route simply because the state might elect to switch.
22 I think there would be a very serious question of whether
23 or not we would be able to.

24 SENATOR CROFT: You would rather go back and tell your pur-
25 chasers you are not going to get anymore gas because we

1 decided not to switch, than to switch if you thought that
2 it might produce the gas?

3 MR. THOMAS: I think I would have to tell my customers what
4 all the fact situation was at the time the state switched
5 and what our reasoning was at the time to not support,
6 if in fact that were the case. It would be difficult for
7 me to anticipate simply because I don't think the Alcan
8 route is a viable route and I can't see the possibility
9 of the state switching to that route. Neither do I see
10 the state switching to support a gas Arctic route. So
11 I don't see much likelihood of this ever occurring.

12 SENATOR CROFT: All right. In that regard you indicated
13 July 1, 1977 was the date in which the states started
14 making their comments to the President.

15 MR. THOMAS: It must be concluded by July 1.

16 SENATOR CROFT: All right. So that -- are you saying that
17 any switching that occurs after July 1, 1977 probably
18 you wouldn't play any role in what happens. If the state
19 switches after that time, you are sort of out of the
20 picture by then, is that correct?

21 MR. THOMAS: I say that we may be out of the picture just a
22 very few days after this contract is executed. In fact,
23 we may be out of the picture already because we have
24 already made our views known in several different places
25 as to our support of a Trans-Alaska route and the reasoning

1 behind it. It might even be difficult for us to switch
2 today. We would have to look very carefully at doing it.
3 Again, I think these are theoretical questions because I
4 don't see any reason for the state to switch.

5 SENATOR CROFT: So that anybody that says if the state switches
6 it is going to carry Tenneco with them is simply mistaken?

7 MR. THOMAS: I think that they could have a real serious
8 problem on their hands.

9 SENATOR CROFT: Thank you.

10 SENATOR RADER: Senator Sumner?

11 SENATOR SUMNER: I have a dilemma. Yesterday in the testimony
12 before the committee we talked about integrity, today we are
13 talking about integrity. If the administration supporting
14 this contract decide, dedicated to El Paso as they are,
15 decides that it is the best interest for Alaskans to
16 sometime in the future when they decide or it is determined
17 that the El Paso line is no longer feasible, if the state
18 then switched its support to the Alcan line, would you
19 see that as any violation of the state's integrity? And,
20 would you if you thought at that time, sometimes we get
21 smarter a month later, if you found that the Alcan line
22 had a possibility and in your view it served to benefit
23 your clients and your customers more to support that line,
24 would you then switch and not consider that a violation
25 of your integrity?

1 MR. THOMAS: I find that difficult to answer. I guess I am
2 looking at contractual terms where the state has the
3 right to switch, they have reserved that right. I guess
4 it is difficult for me to say that the state would be
5 guilty of any violation of integrity if they did what
6 they have allowed themselves to do under the terms of
7 the contract and if they felt that that was indeed in the
8 best interest of the population.

9 Now, from our point of view I guess because the
10 state switches we don't have the contractual obligation
11 to switch with them. At that time we get to look and
12 say "all right, what are the facts, what is the situation
13 at this time, what have we done, what are our feelings?
14 Do we feel that that is a good switch, can we honestly
15 support it?" This I can see as integrity, whether or not
16 we would switch contrary to what we have said before.

17 SENATOR SUMNER: But you aren't at this time preempting the
18 option of switching to a second line?

19 MR. THOMAS: The contract allows us to switch.

20 SENATOR SUMNER: Thank you, Mr. Chairman.

21 MR. CARTER: What we are doing is telling you that's not an
22 option that means very much and that there would be a lot
23 of real life problems for the company to exercise the
24 option.

25 SENATOR SUMNER: And conversely you are stating at this time

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1 that you are not committing to switch but that is
2 essentially what your position is and that your options
3 are open just like the state's options are open?

4 MR. CARTER: We don't think they are as open as the state's
5 options may be because Tenneco has many things up before
6 people that make decisions on these kind of energy
7 questions and whether they get the results they want
8 depends to a great deal on whether people believe their
9 testimony. And so you can't really be in a position of
10 telling them different things on different days about
11 the same project and hope to maintain the kind of
12 credibility that is necessary to be believed.

13 SENATOR SUMNER: If the Alcan project lost -- let me ask you
14 this. I asked you this morning if it was a viable
15 alternative and you don't think it is at this time?

16 MR. THOMAS: No.

17 SENATOR SUMNER: Is there any real evidence to support that
18 basis or that fact?

19 MR. THOMAS: Well, I think the trial examiner, just in my
20 brief reading of his press release, said there was no
21 chance for a certificate.

22 SENATOR SUMNER: But, of course, in the same brief he stated
23 that his support largely was for --

24 MR. THOMAS: Was for Gas Arctic. He also said the Trans-
25 Alaska route was a viable route, he did not say the same

1 thing on Alcan.

2 REP. GRUENING: Mr. Chairman, I don't have a question but
3 if I could get from the court reporter the log numbers
4 there of this last dialogue, the last couple minutes
5 so we could have that transcribed ahead of time if we
6 want it. Just get an idea of where we are at. That
7 is all I have.

8 SENATOR RADER: Fine. Representative Hayes?

9 REP. HAYES: Thank you, Senator Rader. I would like to
10 pursue a line of questioning that I started yesterday
11 and I lightly touched on today and that is whether
12 in selling our royalty gas for the FPC regulated price
13 plus lobbying efforts, we have in doing so, given up
14 the opportunity of getting some front-end money, better
15 known as a premium. Yesterday we had a little bit of
16 this in questioning Commissioner Martin. I believe he
17 testified that it wasn't possible to get a premium
18 because of a recent ruling that said the premium couldn't
19 be included in the rate structure. Then I got on to a
20 question about maybe it was possible to get the gas
21 companies as an incentive to have the opportunity to
22 purchase the gas to give up some of their profit in
23 the form of a premium and I believe that the testimony
24 was that it probably wouldn't have been very much
25 money. Whatever very much money is, I don't know, but

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1 anyway, as I understood from my questions a few minutes
2 ago that the way the gas company recovers or makes a
3 profit is through a recovery of cost plus profit for the
4 transmission system. And during the recess I talked to
5 Mr. Thomas about what kind of daily capacity they had
6 in their system and I believe he gave me a figure of
7 about 3.6 billion cubic feet per day and I divided that
8 into the 1.3 trillion which gives you three hundred
9 sixty-one days or about a year's operation. And I know
10 that is not the way to figure the value but anyway it is
11 a horseback way of saying that maybe it might allow them,
12 if they are successful in other areas to stay in business,
13 to recover -- Let's see, the negative way of making
14 money, reduce their losses for a year longer so that we
15 could put a dollar value on that. I mean there could be
16 some sort of a quantity put on that.

17 And then the other question that I asked him was
18 in view of that was there a possibility of the state
19 collecting a premium and I believe he mentioned and I
20 believe there was testimony on that earlier today that
21 initially they had offered the state some premium but it
22 was in the form of an advance payment which would be
23 returned over a period of time so the net benefit would
24 just be the money now instead of later. I did ask him
25 what he thought about the possibility of a premium in

1 the form of deferred profit and the answer -- I'm
2 bringing this out in testimony so I can just get your
3 confirmation and get it on the record, that that was a
4 possibility I suppose if you would agree to it, but it
5 would require FPC approval inasmuch as they do have some
6 concern about the profitability and viability of this
7 type of corporation as it affects stockholders.

8 Now just so that I can put that aspect to rest,
9 is that essentially what --

10 MR. THOMAS: If I might add one more thing. Any money paid
11 to a producer is really in the form of a price for gas.
12 The FPC now regulates the price so they would not allow
13 whatever you might call it, an advance payment, a front-
14 end bonus, anything that would in effect have you paying
15 more gas than a price that they allow to be paid at the
16 wellhead. So, they very definitely would have control
17 and the contract would have to be approved and they would
18 reject it.

19 SENATOR HAYES: They would reject you paying the state part
20 of your profit?

21 MR. THOMAS: Yes, because that in effect is paying more for
22 gas than what they say the wellhead price should be.

23 SENATOR HAYES: If you don't pass it on to the consumer though
24 why you wouldn't think -- it wouldn't seem logical they
25 would want to enter into a business transaction as long

1 as it didn't affect the consumer.

2 MR. THOMAS: Sometimes we think they do a lot of things
3 that don't appear too logical.

4 MR. CARTER: Well one consideration there is that the company
5 stay in business so that the consumers can continue to
6 get service. The American public is not served if you
7 get a bunch of dummies running the company that spent
8 to make it go bankrupt and then the consumers no longer
9 have gas. So that is the argument --

10 MR. THOMAS: That is the other argument that he was pointing
11 out.

12 REP. HAYES: Okay, but if we are talking about whatever you
13 recover in one year for the use of your facilities and
14 the Commissioner yesterday said, "I don't have any idea
15 what that is, maybe that's a billion dollars, maybe it's
16 ten billion dollars and if the state could get a little
17 bit of that", how much is a little bit, is that one
18 hundred million or one million? We are just trying to
19 get an idea of what we might be foregoing for the op-
20 portunity of having the lobby effort. We are just trying
21 to put a price on it which I am not able to do apparently.
22 If someone else can think of a different way to approach
23 it --

24 SENATOR RADER: To the extent possible, I hope that we will
25 all keep our comments in the nature of questions rather

1 than an exposition of our individual positions. I know
2 I am tempted to do that at times but I appreciate the
3 fact that you were trying to get a conversation that was
4 not on the record on the record. But to the extent that
5 we are discussing and convincing each other here, I hope
6 we will keep that to a minimum because we will never,
7 never conclude these hearings and we will also have that
8 opportunity to do that on the floor of the House and on
9 the floor of the Senate in other committee meetings. And
10 so let's try to pick the brains of our witnesses here as
11 far as we can and not each others to the extent that that
12 is pretty slim pickings perhaps.

13 Senator Huber?

14 SENATOR HUBER: I waited a little bit here, most of the things
15 I had in mind got asked, Mr. Chairman, which makes me
16 happy for a change. There has been a couple other
17 questions raised, however. The question that Mr. Hayes
18 just put in regard to adding front-end payments --

19 SENATOR RADER: Would you speak up, Senator? We are having
20 difficulty hearing you.

21 SENATOR HUBER: I sure will. The question that was asked by
22 Mr. Hayes in regard to adding in front-end payments,
23 would this be academic if the Congress does indeed de-
24 regulate the gas? If they deregulate it, you would be
25 able to add it in then wouldn't you?

1 MR. THOMAS: Senator, I think you have to come to the point
2 that first when you say deregulation -- you and I might
3 both say deregulation but we wouldn't really know what
4 the other is talking about. It would depend upon what is
5 the form of deregulation, is that only for new gas or
6 old gas, what is Prudhoe Bay gas?

7 I guess what you are saying is in the event
8 there was completely no regulation, there were no
9 restrictions on what you could pay for gas, then would
10 anyone be interested in making a front-end payment?

11 SENATOR HUBER: What you are telling us is that we're not
12 likely to get an uncomplicated decision on deregulation?

13 MR. THOMAS: I do not believe it will be uncomplicated.

14 SENATOR HUBER: My next question is relatively simple. You
15 went into yesterday's testimony and this is because of it.
16 We were talking about your customers and yesterday we
17 also talked about contracts to industrial users and you
18 tried to clarify that awhile ago. And I think the question
19 that needs to be asked is, these distributors that you
20 sell to, is there cases where those distributors have you
21 or somebody else transport the gas for them where they
22 buy directly from producers?

23 MR. THOMAS: Not the distributors. The distributors cannot
24 do it, an individual industry or corporation can, that
25 is the ultimate user. Then they would contract directly

1 with the producer for whatever volume they have but for
2 a maximum of two years. Then they would make arrange-
3 ments with us and with the distributor to transport the
4 gas to them.

5 SENATOR HUBER: But a distributor is precluded in the inter-
6 state market from becoming a customer of a producer?

7 MR. THOMAS: Yes.

8 SENATOR HUBER: Okay, that helped me there. Mr. Chairman,
9 my next question if you will bear with me on it, goes
10 back to -- I interpreted something that you said earlier
11 this morning, Mr. Thomas, if I can steal a term from an
12 old friend who will recognize it. But originally if the
13 state had chosen any one of the three proposed routes,
14 they would be can do routes as far as you were concerned
15 in being able to get the gas to you. That was the note
16 I made.

17 MR. THOMAS: Insofar as physically being able to get gas
18 through any of the three systems to our customers in
19 our market place, we could have done so, yes.

20 SENATOR HUBER: Okay. And then I also understood you to
21 say that there was not a deal currently -- there was not
22 a deal right now between you and any producer from the
23 Prudhoe Bay area to have the gas.

24 MR. THOMAS: We have no contract with any of the producers.

25 SENATOR HUBER: Do you have anything on the back burner with

any of the Prudhoe Bay people set aside?

MR. THOMAS: Well, we are in the gas buying business and we try to maintain contact with everybody that has gas available that is not already committed. We have no commitment from them, from any of the producers that says wait another thirty days and we will contract with you.

SENATOR HUBER: Here is how I framed the question a little bit earlier. I realize that I'm getting into a legal area and I might be getting into an area that you may not want to answer. But have you, Tenneco, any negotiations underway or on the back burner from any of the producers either in the Prudhoe Bay or the Mackenzie Delta area or also the proposed route of the Arctic Gas proposals?

MR. THOMAS: Senator, that is a pretty broad question. I guess I could answer it this way, somewhat like I did before. We are in the gas buying business and we make it our business to contact and maintain conversations with anyone that has gas available. Now we have, I'm sure, talked to every working interest owner in Prudhoe Bay about the possibility of contracting their gas. I don't think that we have talked to any of the people in Mackenzie Delta but I can't be sure about that. I guess my answer is that we try to make it our business to talk to everyone and I have no contracts in hand, I have no

1 promises that I am going to have a contract and I guess
2 that is about the extent that I could go into that. As
3 a policy we don't discuss who we are negotiating with
4 or what the terms of the negotiations are at the time.

5 SENATOR HUBER: Mr. Chairman, I certainly thank Mr. Thomas
6 for being so candid and I would like to ask one more
7 thing. If you get the information that Mr. Croft asked
8 about costs up to now in getting a state contract that
9 you would certainly include that in that, at least I
10 would want you to include in it your costs from the time
11 when about two years ago when I first noted you coming
12 to our meetings with the idea of selling the gas. I
13 would want to see that.

14 MR. THOMAS: That may take more time to dig up.

15 SENATOR RADER: Any further questions?

16 SENATOR HUBER: Thank you very much.

17 REP. GRUENING: Mr. Carpenter had his hand up.

18 SENATOR RADER: Mr. Carpenter?

19 REP. CARPENTER: Mr. Thomas, if eventually the El Paso route
20 is certificated, does Tenneco have any plans to acquire
21 an equity position in that pipeline?

22 MR. THOMAS: We have not committed ourselves to taking an
23 equity position in the pipeline. My own personal views
24 are that it is going to probably take all the people
25 who buy any of the gas on the North Slope to make the

1 project go. Everybody is going to have to participate.
2 It's too big of a project for any one company or any
3 three companies. It is going to take many more but that
4 is the next stage once we determine what the job is.
5 But, we have made no commitments at this time.

6 REP. CARPENTER: Earlier in your testimony this afternoon in
7 response to --

8 SENATOR RADER: A little bit louder, Mr. Carpenter.

9 REP. CARPENTER: Earlier in your testimony this afternoon in
10 response to questions from Senator Sumner you said -- you
11 were enumerating the reasons why the all-Alaskan route is
12 superior and paraphrasing you perhaps weakly here, you
13 said the all-Alaskan route makes it possible for state
14 royalty gas to be available to Alaskans at tidewater.
15 What is the significance of the phrase "at tidewater"?

16 MR. THOMAS: I guess the significant phrase is that to compete
17 with a product that is made from natural gas, whether it
18 be petrochemicals or whether it is LNG in a direct form,
19 any other product using that as a feed stock, transportation
20 is probably the biggest single element of competition from
21 that point on. The first point would be the price of the
22 feed stock and the second is what does it cost to transport
23 it from that point to wherever your market is. Being at
24 tidewater gives you access to the lowest cost transportation
25 to then transport the product to wherever you might want

1 to sell it and I think that most anywhere in the world
2 that is one of the essential items -- is low cost
3 transportation and among the lowest is transport by ship
4 by sea.

5 MR. CARTER: But that does not exclude the gas being available
6 anywhere along the Trans-Alaska line for any in-state
7 use.

8 MR. THOMAS: Oh, no, not at all.

9 REP. CARPENTER: This is my point, nothing that we are looking
10 at excludes a camp at Fairbanks.

11 MR. THOMAS: No, sir.

12 SENATOR RADER: Would that conclude your questions, Mr.
13 Carpenter? Mr. Chatterton, I believe you had --

14 REP. CHATTERTON: Yes, Mr. Chairman, I will have a series of
15 questions in the arena of daily deliverability, gas
16 reserves, things like that. I would be happy to yield
17 to anyone that has questions before we get into this new
18 arena.

19 SENATOR RADER: Senator Poland?

20 SENATOR POLAND: Mr. Chairman, I just have one very brief
21 question I would like to ask Mr. Thomas.

22 SENATOR RADER: Fine.

23 SENATOR POLAND: I understand that you sell to distributors.
24 Do you have any idea of the percentage of customers of
25 your distributors that are homeowners and those that are

1 industrial?

2 MR. THOMAS: I believe that the approximate break out we have
3 is between the FPC priority one and priority two. And
4 priority one is residential and small commercial, so that
5 would be the nearest number we would have and forty-four
6 percent of our gas on the average day goes to that
7 priority. Forty-two percent goes to priority two and
8 the remainder goes to the higher priority. I should
9 point out that right now, in the wintertime, all of our
10 gas is going into priority one because their demand has
11 increased and if their demand increases you automatically
12 shut off the next higher priorities.

13 So we are supplying, to my knowledge at least as
14 of a few days ago, we were supplying only priority one.
15 We did not have sufficient gas for any of the higher
16 priorities.

17 SENATOR POLAND: Thank you.

18 SENATOR RADER: Any other questions before we go to Mr.

19 Chatterton's line of inquiry? Senator Huber?

20 SENATOR HUBER: We might clarify one thing from which I'm
21 pretty sure I have got the answer but from some of the
22 questions around here I am not sure that it is common.
23 The pipeline gas which you purchase and transport is only
24 the two top fractions, C-1 and C-2, ethane and methane or
25 methane and ethane, isn't that correct?

1 MR. THOMAS: It is essentially methane because most of the
2 liquids have been extracted or are extracted at different
3 points.

4 SENATOR HUBER: And the ethane also can be used, it can be
5 transported?

6 MR. THOMAS: Yes, in with the methane, right.

7 SENATOR HUBER: But the other factions -- I mean we seem to
8 have some confusion on a roundabout where they can take out
9 the liquefactions and so forth. They can't be trans-
10 ported in the type of gas lines that are proposed, isn't
11 that correct?

12 MR. THOMAS: Well, propanes and butanes can be injected into
13 the system and transported in with the methane and
14 extracted at other points.

15 SENATOR HUBER: In a high pressured gas line?

16 MR. THOMAS: I can't define what the carrying capacity is of
17 the different pressures in the line. Frankly I am not
18 conversant with that, I don't know. But I know that in
19 many areas where there is no market for propane and butane
20 you merely reinject in back into the methane supply and
21 it enriches the gas, it makes for a higher BTU count, you
22 just don't sell the liquids. And since you are above one
23 thousand you are paid for -- or in most contracts you are
24 paid for the BTU content, that's the value that is
25 received.

1 SENATOR HUBER: Well, I had understood that in a high pressure
2 line you can't transmit them because they become liquids
3 and the line is made to handle gaseous material rather
4 than liquid material.

5 MR. THOMAS: Senator, I can't answer that. I can't address
6 that. I just don't know the answer.

7 SENATOR HUBER: Okay, I'll get the answer from someone else.

8 SENATOR RADER: Representative Gruening?

9 REP. GRUENING: Mr. Thomas, can you tell us what advantage
10 would you have as a part owner of our royalty gas and as
11 a sponsor of the successful pipeline route in obtaining
12 other Prudhoe Bay gas or North Slope gas?

13 MR. THOMAS: I think as I have mentioned before we hoped that
14 that might give us an advantage. I don't know if it
15 would or not. I guess from my own view that when you
16 are involved in a project and you have an active interest,
17 you have an ownership or you have a contract, you tend
18 to stay up with it more. You stay up-to-date on what are
19 the new developments, what are the new discoveries, what
20 is the activity level, what is going on with the other
21 people within the project. You don't have that where you
22 are on the outside and you have no involvement in it,
23 contractual involvement, financial involvement. And I
24 think from that standpoint alone we would be more aware,
25 and we would be more active perhaps. That would be my

1 only view. Certainly there is nothing tangible, that is
2 purely a subjective one, perhaps that is a wish on my
3 part that it would give us a better competitive aid.

4 REP. GRUENING: Is there a financing aspect to that that works
5 in your benefit as well?

6 MR. THOMAS: A financing aspect?

7 REP. GRUENING: Financing the pipeline. In other words by
8 having that one portion the tendency in order to put the
9 project together would be to -- and the producers, of
10 course, would want the project to be put together in the
11 best manner possible and the tendency to have other
12 commitments of gas could accrue to your benefit.

13 MR. THOMAS: I think you could probably argue that either way.
14 The working interest owners -- as I understand your
15 question, your question is, as people are contracted gas
16 then they would be more likely to take an equity position
17 in the pipeline and therefore is it more advantageous
18 to contract more gas to a company or to spread the gas
19 out in smaller packages to a bunch of companies. I think
20 that it is going to take a lot of companies with financial
21 strength and credibility in the financial market to ensure
22 that any of the systems are financed and built.

23 Certainly we think it can be done but not by any
24 one company or two companies. It is going to take several.
25 So from the standpoint that we feel with our financial

1 strength that we should be contracted more and the working
2 interest owners should contract us more, I don't know if
3 they would view that the same way or not. I think they
4 could look at it either way.

5 SENATOR RADER: Any more questions along this line before we
6 go to Representative Chatterton's line of questioning.
7 Representative, why don't you pursue your line?

8 REP. CHATTERTON: Thank you very much, Mr. Chairman. Mr.
9 Thomas, earlier today you made a comment about entering
10 into an agreement involving LNG in October of '76 and I
11 think you referred to Algeria. I think there was a
12 little more dialogue on it. Who did you enter into the
13 contract with, Sonatrach?

14 MR. THOMAS: Yes, sir, Sonatrach.

15 REP. CHATTERTON: Okay. Now for the liquefaction will Algeria
16 be doing the processing of this?

17 MR. THOMAS: No, that is a completely separate process.

18 REP. CHATTERTON: Completely separate, thank you very much.
19 You also earlier this morning said something about -- or
20 today anyway, said something about you had done quite a
21 bit of study and so forth and so on before you entered
22 in this contract with the State of Alaska on royalty gas
23 and part of your consideration was the terms -- I think,
24 using your very term, sufficient reserves available. Am
25 I to gather that you feel the 1.3 trillion cubic feet or

1 the 2.6 trillion cubic feet is sufficient reserves
2 available to make a viable project?

3 MR. THOMAS: Well, I think the total project will depend upon
4 all of the reserves in the North Slope. What we were
5 looking at were essentially two things, one is -- well,
6 three I guess, to consider more. What are the presently
7 proven reserves total that are recoverable in Prudhoe Bay,
8 what is the potential for all of that area for the reserves
9 that might come to market through the same pipeline, the
10 same system and then we looked at it from the standpoint
11 of how much of that might we be able to contract, because
12 again we must compare that with other projects where we
13 might get X quantity of gas and we compare what is the
14 cost, what is the amount of time, money and people that
15 you put into each one. And if you are going to get a
16 little amount of gas and the probability of success is
17 low, then you may opt for something else, but we look
18 at them from all the points of view.

19 REP. CHATTERTON: In other words, I hear you say that eight-
20 eighths of the gas reserves at Prudhoe Bay is necessary
21 to make a pipeline project viable, is that correct?

22 MR. THOMAS: Well, I think you are looking at the total
23 reserves --

24 REP. CHATTERTON: Eight-eighths is total.

25 MR. THOMAS: As far as the question of could the state do

1 something with one-eighth, I think there has been dis-
2 cussion about that before but from our standpoint we
3 looked at the total reserves, the eight-eighths.

4 REP. CHATTERTON: Thank you very much. Now, what do you
5 visualiize as the minimum daily throughput in cubic feet
6 that would be required for a viable economic pipeline?

7 MR. THOMAS: We have not run the sophisticated models that
8 either the state has or any of the other direct advocates
9 in the cases. I can't answer that. I don't have the
10 reservoir models that they have used and I don't know --

11 REP. CHATTERTON: I'm sorry, Mr. Thompson, I'll rephrase my
12 question or restate it. What daily throughput in cubic
13 feet of gas do you consider necessary for a viable
14 economic pipeline project?

15 MR. THOMAS: Do you mean regardless --

16 REP. CHATTERTON: It has nothing to do with the reservoir.
17 You are going to put out a bunch of money and build a
18 pipeline. What do you need for a throughput per day,
19 daily rate?

20 MR. THOMAS: In any of the ranges that we have seen mentioned,
21 from two billion to some three and one-half. We think
22 it could be economic within that range, within the total
23 range.

24 REP. CHATTERTON: Let's take your two billion as a minimum
25 and anything on top of that, of course, is advantageous

1 to you I realize. Now, over how long a calendar time
2 period do you need to be assured of that rate?

3 MR. THOMAS: I think that the lenders of money will be the
4 ones that would have to be assured and depending upon
5 what terms they have, whether this is a twenty year or
6 what type of a loan or mortgage that you would have,
7 you would have to have sufficient supply to maintain that
8 throughput for that period of time, normally for two years.

9 REP. CHATTERTON: Lenders of money, thank you, Mr. Thomas. I
10 will use that term in my next question. In view of the
11 Royalty Gas Sales Contract, as I am told and as I have
12 read in my layman knowledge, the State of Alaska has a
13 two year figure off date, or upon notice can terminate
14 their share of the gas sales and shuck that off. Or for
15 that matter let's go beyond the contract, supposing that
16 our State Conservation Department says that we will not
17 be able to give you your two billion cubic foot per day
18 throughput. Do you believe with that staring you in the
19 face that you could get any money lenders to come forth?

20 MR. THOMAS: I think what the money lenders and the equity
21 contributors are going to have to have before them when
22 their decision is made is what is the deliverability rate
23 that is currently projected for this system, for what
24 duration is that projected to be available and what are
25 the ultimate reserves in this area and what is the promise

1 of additional reserves in the area. I can't answer how
2 they are going to view whatever those numbers are but I
3 can assure you they will look at them very closely and if
4 there is not enough deliverability and if there is not
5 enough assurance over the term then there will be a problem
6 raising the money for any project.

7 REP. CHATTERTON: Coming back from what the money lenders
8 might do, you as a prudent businessman would want to be
9 assured of a deliverability rate for over a period of time
10 beyond any reasonable doubt excepting an act of God that
11 it would continue. Is that correct?

12 MR. THOMAS: I think we would want to have an assurance that
13 the supply would be available, yes, sir.

14 REP. CHATTERTON: All right, sir, thank you very much. Do
15 you as a transmission company have any great feeling or
16 care about either the wellhead -- and under present legal
17 and regulatory situations of the FPC, do you as a gas
18 transmission company have any particular concern about
19 either wellhead price or city gate price?

20 MR. THOMAS: Absolutely.

21 REP. CHATTERTON: In what way, sir?

22 MR. THOMAS: A main competitor for natural gas is fuel oil and
23 we market primarily -- the biggest share of our market
24 along the eastern seaboard where fuel oil is readily
25 accessible. When we project into the future the rise of

1 natural gas prices, we make sure that we do not get non-
2 competitive with fuel oil. We very definitely have a
3 concern there. Our customers very definitely have the
4 ability to switch, a lot of them, and there they have
5 alternate fuel capacity in some cases and they will
6 switch to an alternate form if it is available and if it
7 presents an economic savings. So we very definitely have
8 an interest in it. The Federal Power Commission also
9 has a very definite interest in us looking after it
10 also.

11 REP. CHATTERTON: Then if you do have an interest and I
12 gather that the competitor in this is based on the price
13 per British therm or something like that. All right, so
14 we are into energy. If you do have an interest in the
15 city gate picture then you are certainly most interested
16 in any system that will get the lowest city gate cost
17 to the South 48, aren't you?

18 MR. THOMAS: I think at this point in time you look at many
19 requirements and I come back to the primary requirement,
20 and it is even more accentuated right now, its avail-
21 ability. If the people in Ohio right now had a choice
22 of not having enough to eat or paying a nickel more, I
23 think they would be willing to pay the nickel more.

24 REP. CHATTERTON: Five bucks more, I think.

25 MR. THOMAS: Yes, that is correct.

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1 REP. CHATTERTON: One last question unless it engenders some
2 more. As a transmission company you certainly are, you
3 may not be personally but your company is always involved
4 contractually and I know what our contract says. Could
5 you give me a rough cut as to the quality gas that you
6 will accept for the entrance into your pipeline and I'm
7 thinking of one, the normal H₂O dew point to the hydro-
8 carbon dew point, three percentage CO₂, nitrogen and for,
9 of course, percentage sulfur.

10 MR. THOMAS: Let me be just a bit facetious with what one of
11 our pipeline people told me. He said it used to -- we
12 told people we would buy their gas if they would take
13 the crud out of it. Now he says we tell them we will
14 take the crud if there is some gas in it. That is about
15 the situation that our quality requirements have gone.
16 We used to have very stringent ones and then we exacted
17 just very meticulous care that everybody met it. That is
18 not as possible as it once was. We now take it so long
19 as it just doesn't completely tear our system up and that
20 we can get it in. We have a long list of quality require-
21 ments which I would be happy to provide you.

22 REP. CHATTERTON: You certainly would not take gas that in any-
23 way would give you a two phase flow, is that correct?

24 MR. THOMAS: We have taken some offshore Louisiana that was
25 two phase flow. We didn't want to but we came back to

1 that same situation. We took the crud because it had
2 gas in it.

3 REP. CHATTERTON: Thank you, sir. Thank you, Mr. Chairman.

4 SENATOR RADER: Representative Meekins?

5 REP. MEEKINS: Could you explain what that is, two phase flow?

6 Is that when you have some --

7 MR. THOMAS: Liquid and gas.

8 SENATOR RADER: Any further questions? Senator Butrovich?

9 SENATOR BUTROVICH: Mr. Chairman, maybe this doesn't have too
10 much bearing on the matter before us but I was reading
11 here in this little book that --

12 SENATOR RADER: Could you speak up, Senator, they are having
13 difficulty hearing you in the back of the room.

14 SENATOR BUTROVICH: In the back of the room?

15 SENATOR RADER: That is what they indicate.

16 SENATOR BUTROVICH: I was reading in this book here, it says,
17 "Tenneco is a widely and carefully diversified company
18 which employs 78,300 people and has major operations in
19 manufacturing integrated oil, chemicals, package and land
20 management, and agriculture in addition to natural gas
21 pipelines." And I notice in another one of your booklets
22 here you have "Package Incorporation of America" and it
23 says here they do business in every state except Alaska.

24 MR. THOMAS: We hope to correct that one of these days.

25 SENATOR BUTROVICH: Well, that is the point I was getting

1 around to. I'm sure that I not only speak for myself
2 but I speak for a lot of legislators, our concern is not
3 primarily with getting the revenues from the gas that
4 goes down below to the consumers in the south 48. The
5 concern of a lot of Alaskans is the development of
6 industry in Alaska. And if I were, I'm not, I'm just
7 peanuts but if I were a corporation interested in
8 acquiring Alaska gas and I were a conglomerate and I were
9 in a position where I could utilize some of that gas for
10 Alaska in some type of manufacturing -- on tidewater we
11 do have a lot of timber, accessibility to a lot of timber,
12 we have a couple of pulp mills, a lot of the pulp goes
13 to Japan and I just wonder if anywhere along in your line
14 of thinking and before you came to dickering with the
15 State of Alaska for the gas, there was any possibility
16 anywhere along the line that any of your subsidiaries
17 might be able to do something in Alaska along that line,
18 and whether or not those subsidiaries buy any appreciable
19 amounts of gas from Tenneco. It is a long question.

20 MR. THOMAS: Yes, I'll answer the last part first. Tenneco
21 Chemical Company buys some gas from an intrastate --
22 small intrastate pipeline that we have in the State of
23 Texas for processing fuel for some of their plants. I
24 don't think they buy any intrastate market from us. I
25 don't recall that any of our other divisions do buy from

1 us in any of the other areas.

2 But now to your question of a large integrated
3 conglomerate having an interest in Alaska. My personal
4 interest and I emphasize this as my personal interest,
5 I think that there are many opportunities for Tenneco
6 in Alaska. I see many opportunities here and I see this
7 as a by-product for us to get this large multifaceted
8 organization we have with a closer relationship to the
9 opportunities in Alaska. I would hope very much that
10 there would be something come of that. That is my
11 personal view.

12 SENATOR BUTROVICH: We are interested in providing a market
13 for Alaska labor and there are some of us who are naive
14 enough to think that if we do not get an Alaska line, we
15 do not provide that market but there are some of us who
16 want to go beyond that. We would like to think that we
17 would be developing industry up here for by-products.

18 MR. THOMAS: I would encourage you because you look at the
19 model of the Texas Gulf Coast and industry is there
20 because there was energy available and because there was
21 labor available and because they were close to a ready
22 transportation system where they could move it. I see
23 some of the same promise here.

24 SENATOR BUTROVICH: It does seem to me that if I were out
25 there seriously trying to make a deal with the State of

1 Alaska that that would be one of the considerations that
2 I would have taken into consideration because I think it
3 is quite important to the Alaska Legislature. We know
4 that bang, when this stuff goes through a pipeline and
5 hits the south 48 why it is fine temporarily but we'd like
6 to see a little industry develop from it.

7 SENATOR RADER: Senator Croft?

8 SENATOR CROFT: Why wasn't there some commitment made in these
9 contracts by Tenneco to do what Senator Butrovich is
10 talking about? Why didn't Tenneco through one of its
11 subsidiaries agree to construct or to use some of that
12 gas in the state here?

13 MR. THOMAS: Well, there are probably many reasons why some-
14 thing like that does not tie to a gas sales agreement.
15 The first is, the divisions of Tenneco operate independently.
16 They are independent profit centers, they have their own
17 areas of activity and their own financial resources
18 allocated to them. In many cases we work with them in
19 different areas where they evaluate from their own point
20 of view what is the potential of doing business in Alaska
21 and in California and in other areas. From the standpoint
22 of the natural gas coming to the line, since we couldn't
23 project what the wellhead price was going to be and there-
24 fore what price feed stock would be available, this becomes
25 very difficult for a chemical company to look and determine,

1 all right, what is available. The primary petrochemical
2 type of business is not one that we are in. We are more
3 in the secondary type from the chemical standpoint,
4 thinking primarily of petrochemicals. Our chemical
5 company deals in polyvinyl chloride, polyurethane foams,
6 definitely in the secondary. We are not in the large
7 ethylene complexes and that sort of thing which is the
8 first stage of the development of a petrochemical project.
9 So it did not fit exactly our type of business in
10 chemical. We did not go beyond that point of locking
11 into our other areas.

12 SENATOR CROFT: So you refused to do that when requested to
13 negotiate on that subject by the state?

14 MR. THOMAS: Senator, we were never asked. We didn't refuse
15 at any time. We reviewed the potentials of a chemical
16 company involved. Petrochemicals we are not in from that
17 definition of the word, from the ethylene.

18 SENATOR CROFT: You were never asked by the state to make
19 any commitment for use of any of that gas in the state
20 during the course of the negotiations?

21 MR. THOMAS: That was not a --

22 MR. CARTER: I think we asked to look at that possibility --

23 MR. THOMAS: Which we did.

24 MR. CARTER: And everybody else was too, as I recall. It was
25 determined that the state would be better able to review

1 that record.

2 MR. THOMAS: But it was never a condition of negotiations
3 that you had to do that.

4 SENATOR CROFT: With regard to some of the questions that
5 Representative Chatterton asked and a comment that
6 Commissioner Martin made towards the end of the hearings
7 yesterday, the state has the right to withdraw, under
8 certain conditions and with certain notice to you, up
9 to all of the gas that they have committed to you. And
10 Commissioner Martin said that it was his feeling that
11 you expected that the state would never ever really
12 withdraw a substantial amount and it was his feeling
13 that the state would. Is that correct, that you feel
14 that the state won't be withdrawing a substantial amount
15 under those contracts?

16 MR. THOMAS: Our projection in what work we did which is
17 primarily based upon what some of the state agencies
18 have done on projecting population increase, that sort
19 of thing, our views were that the state would not require
20 nearly as much gas for the intrastate market as did the
21 Royalty Board or the Department of Natural Resources.
22 Obviously we felt there would be more gas flowing to us
23 than they did.

24 SENATOR CROFT: So I take it you feel reasonably confident
25 in telling your buyers in the lower 48 states that over

1 the course of this contract you will be able to deliver
2 to them 1.3 trillion cubic feet.

3 MR. THOMAS: I think that as far as the 1.3 trillion, I
4 don't know that I would tell them exactly that but I
5 would tell them that based upon what we have in the
6 contract and what we project withdrawing, together with
7 the state's replenishment of that from future supplies
8 that we were securing the range of 1.3 trillion.

9 SENATOR CROFT: What are your projections as to what the
10 state will withdraw?

11 MR. THOMAS: I don't recall all the numbers. This is very
12 much a sliding scale because there is no demand that
13 exists in a vacuum. First there has to be a supply, then
14 a demand is created, then a system has to be built to
15 accommodate that new demand. All of this takes time.
16 So the day the gas starts to flow, most likely there
17 will not be any immediate demand for that gas. Over a
18 period of years this will build, both for residential
19 market along the pipeline and with industry that will
20 build up once they see the supply is there, once they
21 know what the price is going to be and once they have
22 assurance that it is going to be there all the time.
23 And all of this builds up over a period of time, not
24 instantaneously and normally, not very rapidly.

25 So, we see a slower building than does the state

1 and coming to the latter part of the contract life, we
2 feel from our studies, that there will be sufficient new
3 discoveries that there will be additional gas available
4 so that if the state takes part of this gas back for
5 utilization in the industry, there will be new gas
6 available to make it up, or they could just utilize the
7 new gas that is available. We see that there will be
8 more than enough gas to supply the needs for the industrial
9 intrastate demands.

10 SENATOR CROFT: What is your estimate of the amount that the
11 state will withdraw?

12 MR. THOMAS: Senator, I don't remember the exact numbers
13 because they do vary so much with the time.

14 SENATOR CROFT: Well, what about the percentage? I'm sure
15 you could give us a ball park figure.

16 MR. THOMAS: Oh I think at one time we projected that the
17 state would probably not require more than in the range
18 of twenty-five to thirty-five percent of the flow.
19 That is very much an average number, it would vary with
20 time.

21 SENATOR CROFT: Thank you.

22 SENATOR RADER: Any further questions? Because of our commit-
23 ment to Southern, are we about through with this witness?
24 If we keep our questions short then perhaps we can get
25 through with this and then go to Southern. And also,

1 gentlemen, so far as we are able to, let's try to stick
2 as close as we can to our problem here and that is the
3 ratification of this sale. I know that there are a lot
4 of interesting things going on here but let's try to
5 stick to that point as closely as possible.

6 Senator Huber?

7 SENATOR HUBER: Yes, Mr. Thomas. As I recall, correct me if
8 I'm not because my question will change. I recognize
9 that you are one of the early supporters, maybe almost
10 a couple years ago, of an all-Alaska Trans-Alaska gas
11 line by El Paso, is that correct? Were you one of the
12 early supporters of such a route? Tenneco, I mean.

13 MR. THOMAS: We have been negotiating with the state now for
14 about two years. If that is what you mean, that is
15 correct.

16 SENATOR HUBER: And I have in the past at some meeting asked
17 you questions based upon that?

18 MR. THOMAS: Yes.

19 SENATOR HUBER: All right, in that case what route would
20 Tenneco support if you failed to gain legislative approval
21 of the present sale?

22 MR. THOMAS: Do you mean if another route were certificated?

23 SENATOR HUBER: No, sir. I mean if -- you have at present a
24 document from the state to purchase fifty percent of our
25 royalty gas for Tenneco?

1 MR. THOMAS: Yes, sir.

2 SENATOR HUBER: If that achieves legislative approval after
3 these hearings and the proper legislative process. If
4 it doesn't get approved, what route will you support?

5 MR. THOMAS: I doubt seriously if I would support any route.

6 SENATOR HUBER: That is a good fair answer, thank you.

7 SENATOR RADER: Representative Meekins?

8 REP. MEEKINS: Thank you, Mr. Chairman. I am making a list
9 here as we are going through these hearings and trying
10 to summarize anyway on sort of a cost benefit analysis
11 of what we are giving up and what we are getting. I was
12 wondering if you could just summarize for me, as briefly
13 as possible, because I have been listening to you, I don't
14 need the explanations, what you think we are getting from
15 your company.

16 MR. THOMAS: Well, I think I would have to say what the state
17 is getting from the contract. There are many provisions
18 in the contract but basically it looks to me like the
19 state is committing less than all of their gas. They
20 have an almost unprecedented right to take back what they
21 have contracted. I have not seen that in any other
22 contracts in existence. They are getting assurance of
23 the maximum price that is going to be paid for any of the
24 gas from that area that goes in interstate commerce.
25 They have the right to all of the liquids that come out.

1 The term of the contract is for twenty years and that is
2 normally a term that is common in an area that has many
3 pipelines available and certainly it would be the minimum
4 term here where we are talking about a major new project.
5 I think the state is getting the support of two companies
6 that have not previously been involved in the active
7 support of the project on the national scene. Quickly
8 and briefly I see those. Do you have something to add?

9 MR. CARTER: And I think that that support that those two
10 companies bring is not only kind of argumentative kind
11 of support and manpower but that it also will over time
12 improve the very viability of the project because the
13 two companies are major participants in LNG projects and
14 they do bring not only personnel and expertise, but the
15 financial backing that is going to make this project a
16 more credible and viable project just on the merits. It is
17 quite apart from the fact that the guys are going to get
18 out and support it.

19 SENATOR RADER: Representative Meekins?

20 REP. MEEKINS: I understand what you are saying. I am more
21 interested and perhaps you would repeat yourself but the
22 question I am getting to is not exactly all the things
23 that are included in the contract, some of which are
24 sort of reinforcements or guarantees of our rights that
25 we currently think we have and I certainly wouldn't want

1 a contract where we were abrogating those rights. But
2 what are we achieving in the contract that we wouldn't
3 otherwise have? In other words, 13(b) in existence
4 right now gives us -- sort of indicates that we have
5 the ability to take our royalty oil, I mean royalty gas
6 and use it for in-state purposes, at least to transport
7 it and things. It seems to me that this contract is
8 consistent with that but does it reinforce that, does it
9 change it to any degree? I want to know what is the
10 marginal benefit just from this contract.

11 MR. THOMAS: It looks to me like the overriding benefit that
12 the state gets from this contract, their very primary
13 purpose is to secure a route and a pipeline across the
14 state. That must be the primary purpose and that is the
15 benefit that this contract makes if you want to put it
16 all in one thing. And in detail it does those other
17 items that I mentioned, but hopefully it will secure
18 that route.

19 MR. CARTER: But on 13(b) too, Representative Meekins, unless
20 you enter a contract and unless that contract is approved
21 by the FPC, 13(b) as I understand it at least, doesn't
22 give you anything. In other words, if you don't sell
23 your royalty gas before the producers start producing
24 and selling this royalty gas then it isn't clear under
25 the combination of the leases and 13(b) that you have

1 that option beyond that date. That is my interpretation
2 and something you may want to ask the state to verify.

3 REP. MEEKINS: That would be exactly what my question speaks
4 to, that kind of a thing. I mean, if we can in the
5 future contract and get the same provisions in it, then
6 we are really not gaining those because we are not losing
7 them. We have them and we can have them in this contract
8 and we can have them in the future. But, what we need
9 to know is what opportunities are we foregoing, what
10 are we losing in the contract and what are we gaining
11 that we can't get in the future?

12 MR. THOMAS: I think the one thing that you must consider
13 is whether or not in the future you are going to have
14 a Trans-Alaska route. Will that decision be made in
15 favor of Gas Arctic, in which case then you don't have
16 the same set of circumstances.

17 REP. MEEKINS: Thank you.

18 SENATOR RADER: Any further questions? Thank you, gentlemen,
19 very, very much. We will take a ten minute break and
20 then we will have Southern.

21 (Whereupon the hearing was recessed at
22 3:50 p.m. and reconvened at 4:05 p.m.)

23 SENATOR RADER: As the day goes on we may lose Representatives
24 and Senators and other interested parties but we do have
25 the representatives here of Southern with us who want

1 very badly to finish their testimony this evening. I,
2 of course, have no idea what their testimony is going
3 to be nor the extent of questioning that we all have.
4 To the extent though that we can make our questions
5 brief and try to limit to the precise subject matter
6 before us, I think it will be appreciated. Certainly I'll
7 appreciate it and I know that the witnesses will.
8 Although Mr. Smith has assured me that this is an important
9 matter and that their schedule -- they will stay over
10 tomorrow if it is necessary or whatever the committee
11 seems to think in that regard.

12 Mr. Chatterton?

13 REP. CHATTERTON: Mr. Chairman, in the interest of expediency
14 would you be willing to ask these gentlemen if they were
15 present during the entire testimony by the preceding
16 company and if so, my thoughts are running along the
17 line of rather than going through all the details of
18 the multiple questions that we the committee did before,
19 maybe we can ask if they also support us.

20 SENATOR RADER: Mr. Chatterton, I had planned on doing
21 expressly that, particularly on Dr. Swanson's questions
22 because I think that he wanted to have the interpretation
23 of all contractors as to what their interpretation of
24 those provisions were. I think it would be fair to let
25 the record reflect that Mr. Smith and your associates

1 were here during the complete testimony, starting this
2 morning, of Tenneco, and we will expect you to point out
3 any differences in interpretation at least as to the
4 contract. I don't want to be too general with you.

5 First of all, as to those questions propounded
6 by Dr. Carl Swanson. Do you disagree with the answers
7 that were given by the Tenneco representatives?

8 MR. SMITH: No, sir, we concur in those answers. We agree.

9 SENATOR RADER: Is there any feeling here that we need to
10 pursue those questions any further?

11 Now, Mr. Smith, how would you like to proceed?
12 Would you like to make a presentation first and then
13 questions?

14 MR. SMITH: Would you permit me, I hope I can do it in about
15 five minutes, to introduce myself and my associates to
16 you and then subject myself to the mercy of the court,
17 okay? I am --

18 SENATOR RADER: Excuse me, Mr. Smith, you have, I think, a
19 very extensive prepared statement to be entered into
20 evidence, is that correct? You would like to have it
21 be made a part of the hearing?

22 MR. SMITH: I hate to burden your record with it, sir, but
23 we did provide it to you and I guess it is probably
24 appropriate that it be made a part of the record and I
25 trust that every member of the joint committee has received

1 a copy of it.

2 SENATOR RADER: Unless there is objection, we will make the
3 Statement of Southern Natural Gas before the Special
4 Committee of the Alaska Legislature, hearings held
5 January 31 to February 2nd, exhibit number 10, although
6 we may or may not reprint the -- if you particularly want
7 us reprint particular portions, we will, but probably may
8 not reprint the whole statement unless you think it is
9 necessary.

10 MR. SMITH: I don't think it is necessary. I will leave it
11 to your discretion, Senator. Certainly the attachments
12 were put in there for the information of the committee
13 and I don't really think they go to the substantive
14 issue involved.

15 SENATOR RADER: All right, probably then, so it is reflected
16 in the hearing in the minutes of this meeting, if Exhibit
17 10 is not reproduced in full, that copies will be held
18 on file in the office of the Secretary of the Senate and
19 the Clerk of the House of Representatives for any interested
20 party to examine. Is there any objection to that procedure?

21 (Whereupon Exhibit 10 was duly marked)

22 SENATOR RADER: Mr. Smith, you have the floor, sir.

23 MR. SMITH: Thank you, sir. Senator Rader, Representative
24 Gruening, ladies and gentlemen, my name is Peter Smith.
25 I am President and also Chief Executive Officer of

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1 Southern Natural Gas Company. Sitting on my immediate
2 left and I guess your right is Mr. John M. Van Dyke,
3 who is a vice president of our company in charge of gas
4 supply for us. Mr. Van Dyke has been in Alaska, in
5 Juneau, essentially since the opening of your legislative
6 session and he will stay here for some period of time,
7 I would hope until there is a resolution of the matter
8 relating to our contract with the state to purchase some
9 of the royalty gas. He is an executive of our company
10 and will be here to speak and talk with you informally,
11 answer questions of fact or questions of policy with
12 respect to our company.

13 Mr. Henry Pratt is sitting somewhere and he is
14 working with us on this matter. And the gentleman im-
15 mediately behind me is Mr. David Hendrickson, who is an
16 attorney with our company.

17 I will try to condense, in the interest of time,
18 what remarks I wanted to say but I did want to identify
19 our company for you as the major supplier of natural gas
20 in the southeastern part of the United States. Our
21 markets cover the territories of Louisiana, Mississippi,
22 Alabama, Georgia, South Carolina, we serve a small portion
23 of Tennessee, we serve a small portion of northern Florida.

24 Southern Natural Gas Company is a diversified
25 energy natural resources company. Its stock is publicly

1 held. We have stockholders in all fifty states. I might
2 say that our yellow statement which was introduced to you
3 indicated -- correction, failed to indicate that our stock
4 is listed on the New York Stock Exchange which is a fact
5 and I think we have made that correction in everybody's
6 booklet. If not, that correction, I hope, will get into
7 the record.

8 Southern Natural Gas Company constitutes more
9 than half of the total assets and accounted in 1976 for
10 more than half of the net income of its parent, Southern
11 Natural Resources. What is our interest in the Alaskan
12 gas and what do we bring to the state? Our interest
13 essentially, gentlemen and ladies, is that we need the
14 gas supply. For the last several years Southern Natural
15 has consumed more gas than we have been able to purchase
16 under new gas purchase contracts.

17 Our average purchases in the last seven or eight
18 years have averaged about two hundred billion cubic feet
19 per year. Our average sales requirements during that
20 same period have been about six hundred billion cubic feet
21 per year so that we have been not able to place under new
22 gas purchase contracts as much gas as we have been
23 consuming in our area. And the question was raised
24 yesterday about this being a relatively minuscule quantity
25 of gas. Well, gentlemen, six hundred and fifty billion

1 cubic feet of gas, which is what the state has contracted
2 to sell us, subject of course to the contractual with-
3 drawal rights and so on, is approximately three times
4 the amount of gas we have bought in any other year for
5 about seven years. So, this is a very significant purchase
6 to us and that is the reason that I have come to talk to
7 you about it.

8 I think it might just be worth mentioning very
9 quickly a significant thing about our gas supply, that
10 we are involved in a project to bring Algerian natural gas
11 to the United States. That project will go on stream
12 sometime late in 1977 or early 1978. We are in the final
13 stages of completion of a huge LNG receiving terminal
14 near Savannah, Georgia. And I mention that to indicate
15 to you that we have a great deal of familiarity and I
16 think expertise in the general area of LNG and the
17 particular context of the construction of an LNG receiving
18 terminal.

19 In the situation of the Alaskan gas, let me say
20 that we think the state has worked out with us a contract
21 which we think is rather tough but it has been bargained
22 our fairly, it has mutuality, it is a contract, gentlemen,
23 that we are comfortable living with and supporting and we
24 have discussed it with our customers which are distribution
25 companies scattered across the southeastern part of the

1 United States. I am confident that they understand its
2 terms and provisions and that they too are interested in
3 our having -- having us consummate the contract and they
4 will support us in our efforts to get the Trans-Alaskan
5 project approved.

6 What do we offer to the state? Well, Southern
7 Natural Gas and Southern Natural Resources are both
8 financially sound and extremely stable companies. As I
9 said before you have an assured market for this gas, we
10 need it and we are going to give it wide geographic
11 distribution across the southeast. On a more technical
12 basis perhaps, we think we have, as any natural gas company
13 does, significant engineering capabilities which will be
14 of assistance in the project and we certainly have great
15 expertise, we think, in the construction of an LNG receiving
16 terminal. We have sound environmental capability and an
17 outstanding track record, I submit. And our concerns for
18 and our approaches to and our solution to environmental
19 and ecological problems. We have a deep familiarity and
20 a large comfort factor with LNG, this is not something
21 new to us so that we are comfortable with it and all its
22 aspects.

23 And finally I think I should say that a major
24 thing that we feel that we bring to the state in connection
25 with this contract is support of the all-American Trans-

1 Alaskan pipeline project.

2 The Governor's speech or comments to you yesterday
3 referred to the endeavor to create a national constituency
4 and we think that we can contribute to this with respect
5 to the commitment of the southeast towards the project
6 which the State of Alaska favors. In fact, that effort
7 is really underway already and we are involved in efforts
8 at various levels, including what I would refer to really
9 the grass roots level.

10 Now, gentlemen, we sell gas to distribution
11 companies in the southeast so essentially we don't have
12 contact with the ultimate consumer of the gas but we have
13 already started going around giving speeches to Kiwanis
14 Clubs, Rotary Clubs, civic clubs of that kind, about
15 this situation and about our interest in the Alaskan
16 gas.

17 We have discussed the matter, as I said before,
18 with our distribution company customers who do ultimately
19 have the contact with the person at the burner tip and
20 they are involved in helping in this area. We have the
21 Chambers of Commerce in our area involved and familiar
22 with it. We have been talking to significant state
23 legislators in the various legislatures in our market
24 area. We have been talking with the public service or
25 public utility commissions which regulate the local

1 utliities in the various states which we serve, they are
2 familiar with it. We have talked with virtually all of
3 the southern governors, we have a couple more on our list
4 but local governors or lieutenant governors either are
5 or shortly will be familiar with it. Last but not least,
6 we have talked with our Congressional delegations through-
7 out the southeast in Washington and that effort certainly
8 will continue.

9 I submit to you, gentlemen, that we have plenty
10 of credibility in all of these areas. These people know
11 us, I think they believe us and they like us. And, I
12 might emphasize too, that this cold weather that we have
13 had, particularly in the southeast, has made believers
14 of some of the heathens and they really understand, more
15 than they ever did before, the imperative necessity of
16 our getting additional gas supplies and getting them as
17 soon and as quickly as we can.

18 You gentlemen know, I am sure without my saying
19 it, we have strong and effective delegations in Congress
20 from the southeastern part of the United States in both
21 the Senate and the House and we have good relationships
22 and good communications with those people and we have
23 already talked with them as I said. And naturally we
24 are supporting the El Paso project, so-called, before
25 the Federal Power Commission.

1 So, gentlemen, in summary we are delighted that
2 we are a party to a contract with the state for a share
3 of its royalty gas. We are proud to have been chosen
4 as a partner of the state in this effort. We think it
5 will be mutually helpful, to us obviously -- essentially
6 it means more gas supply, to you we think that obviously
7 we will provide the benefits from the sale of the gas
8 and other benefits in terms of the kind of support that
9 we can give your state for the project which you would
10 like to have. We hope you are going to approve the
11 contract and I respectfully urge you do so.

12 I will answer your questions or try to.

13 SENATOR RADER: Any questions? Senator Huber?

14 SENATOR HUBER: Thank you, Mr. Chairman.

15 SENATOR RADER: Senator, would you please speak up?

16 SENATOR HUBER: I only thanked you so far, Mr. Chairman.

17 SENATOR RADER: I know but everybody wants to hear what you
18 have to say.

19 SENATOR HUBER: The provision in the contract about the
20 change of route should the El Paso not be approved.
21 You have heard them ask the other ones whether that was --
22 Tenneco if that was one of the provisions they wanted
23 in the contract and they said they support the contract
24 but it was not something they asked or had put in the
25 contract. I place the same question to you. Did you

1 want it or have it -- request it placed in the contract,
2 or was it put in by others?

3 MR. SMITH: We did not request it, Senator Huber. I think
4 it was (Mr. Van Dyke was involved in the negotiation of
5 the contract) really put in at the suggestion of the
6 State.

7 SENATOR HUBER: I understand that is correct.

8 MR. SMITH: Yes, we didn't request it.

9 SENATOR HUBER: Some of us question that particular one and
10 we want to know the stand of the companies. I realize
11 you support the contract. Thank you, Mr. Chairman.

12 SENATOR RADER: Any further questions? Representative Parr?

13 REP. PARR: Yes, sir. Mr. Smith, since you heard the previous
14 colloquies with Tenneco, as you remember, there was a
15 little problem that Tenneco had with that switch. What
16 would your reaction be if you were going along and all of
17 a sudden between day 25 and day 26 you are supposed to
18 switch to this alternate route?

19 MR. SMITH: Representative, I think I would have something
20 of a problem with it but, frankly, and without any dro-
21 gation at all of what my friends from Tenneco have said,
22 I don't think I would have the same problem with it that
23 they did. Our objective, sir, is truly and simply and
24 candidly to acquire the gas supply. And if the State
25 should make a decision that a different route than the

1 so-called all-Alaskan route is a preferable one from the
2 state's point of view and they invoke that provision of
3 the contract and say will you support this other thing,
4 I think we would. I think we would in fairness and
5 candor we would have some problem explaining that switch
6 of position to the various constituencies, if you will,
7 to whom we have been explaining our support of the El
8 Paso-Alaska project. But at the risk of an inconsistency
9 and without, sir, any feeling that I would be jeopardizing
10 my personal or my company's integrity, I would have no
11 great problem, I believe, if the state said this is the
12 way you should go, in explaining this to the people with
13 whom we have been talking and say, "gentlemen, the
14 signals have switched and this is the way we should go."

15 REP. PARR: May I continue, Mr. Chairman?

16 SENATOR RADER: Certainly.

17 REP. PARR: This is a question on a different subject but it
18 is again one you heard me asking the Tenneco people, and
19 that is the contract provides no standard of performance
20 by your company in terms of obtaining support for the
21 Trans-Alaska line.

22 MR. SMITH: Yes, sir.

23 REP. PARR: And you heard, I think, the Tenneco representatives
24 say they didn't even have a planned budget. They would
25 do whatever they felt was necessary and they would pay

1 the costs. Now, what is your company's position on that
2 same issue?

3 MR. SMITH: Well, I tried, sir, to indicate first that we
4 are already making an effort, which I consider part of
5 the ongoing effort that we always have in terms of public
6 affairs and public relations. In that sense we are not
7 planning to add staff within the company to accomplish
8 the support of the Trans-Alaska project, but we are
9 expecting to divert greater efforts on the part of our
10 existing staff towards support of that -- of the Trans-
11 Alaska project.

12 We do not have, sir, a specific -- I'm sorry to
13 say I am like Tenneco in this respect, a specific dollar
14 budget which says we will spend this much or some other
15 amount of money. Just sort of a rule -- not really a
16 rule of thumb, sort of a little hypothetical to myself,
17 and I think I came out that it probably would not be un-
18 reasonable to expect that within the next year or so we
19 very well might spend, not counting the efforts of the
20 internal staff, something in excess of one hundred thousand
21 dollars. I am unable to say how much more it would exceed
22 that amount and we haven't specifically allocated that
23 amount for this project at this point.

24 REP. PARR: If I might continue, Mr. Chairman, with one more
25 question, I think.

1 SENATOR RADER: Certainly.

2 REP. PARR: You also heard the questions asked of Tenneco
3 as to what has already been spent in this whole attempt
4 with the contract. Do you have a figure for that by any
5 chance?

6 MR. SMITH: On the whole attempt for the contract, this would
7 include the trips we have made to Alaska in negotiating
8 sessions and so on?

9 REP. PARR: Whatever is involved at this point.

10 MR. SMITH: Well, the answer is no, sir, I really do not have
11 that number and I guess it could be generated with some
12 difficulty. We would be glad to do it for you if you
13 would like.

14 REP. PARR: Thank you.

15 SENATOR RADER: Well, following that same line, I assume for
16 you to develop such a figure you would have to take a
17 proportion of your own salary and the salary that is
18 attributable to your office and the days you are out of it,
19 plus those of your associates, plus those of your legal
20 staff. It would be quite a cost accounting problem,
21 wouldn't it?

22 MR. SMITH: It really would, Senator, because we don't charge,
23 for example, Mr. Van Dyke's time in that kind of way. He
24 is our vice president in charge of gas supply and all of
25 his efforts are devoted to gas supply and I think I would

1 have a dickens of a time saying that ten or twenty or
2 fifty percent of his time in the last year had been
3 devoted to this. We can say and it is true that we have
4 had people back and forth in Alaska, as I like to say in
5 our offices, almost on a shuttle basis for the last year
6 and one-half and we can isolate without too much trouble
7 those expenses but that wouldn't get to the individual
8 salaries, the proportions attributable to this particular
9 project or the overhead related to those. It would be
10 a monumental accounting job which I am not volunteering
11 to perform but will do if it will help your committee.

12 SENATOR RADER: Representative Gruening?

13 REP. GRUENING: Would you have that same problem of accounting
14 if you were trying to include it in your rate base? In
15 other words, you might have heard Tenneco's comments that
16 if El Paso is successful to charge all that off. So, I
17 imagine you could also come up with the figures.

18 MR. SMITH: It could ultimately be done. I imagine,
19 Representative Gruening, I would do my best very honestly,
20 sir, to say that this is part of Mr. Van Dyke's ongoing
21 activities and the whole thing can be charged to our
22 customers, likewise the legal expenses and so on.

23 REP. GRUENING: You would take a percentage -- for purposes of
24 establishing what is includable in a tariff then you
25 would figure out some percentage that was allowed by the

1 FPC then?

2 MR. SMITH: I would state it a little differently. The next
3 time we file a rate base I would have Mr. Van Dyke's
4 salary for three hundred and sixty-five days in that rate
5 base. I would have his travel expenses to Alaska,
6 similarly for the other people on the staff. If somebody
7 challenged that and put Mr. Van Dyke or me on the stand
8 and said "how much time did you really spend on the
9 Alaskan project", we would have to make an estimate, I
10 guess.

11 REP. GRUENING: Okay.

12 SENATOR RADER: Any other questions? Mr. Carpenter?

13 REP. CARPENTER: Mr. Smith, I am sitting right down here with
14 him, it always makes it sound like I am shouting at him.
15 I don't mean to be shouting at you.

16 MR. SMITH: You wouldn't be the first one.

17 REP. CARPENTER: Three questions. One, I am beginning to
18 think that Mr. Parr has a point here and my background
19 is in public relations in advertising and promotion and
20 you don't go into something like that seriously unless
21 you in fact do have a budget. I am certain you are
22 perfectly aware of that. And to tell us that you are
23 going out and do a promotional job on this route and tell
24 us you are just going to spend whatever it takes I don't
25 think it is really a fair response to it.

1 MR. SMITH: Well, I can only say that we are in the early
2 stages of this situation, Representative Carpenter, and
3 I think at some point we clearly will have to determine
4 how much money we will spend over and above our normal
5 salaries for public affairs and public relations people.
6 But we haven't reached that point yet, sir. The contract
7 is not -- I hate to keep rubbing this in, but the contract
8 hasn't yet been approved by the Legislature so that we
9 do not have such a budget at the moment, and that is just
10 a fair statement of the facts.

11 REP. CARPENTER: Apparently though what we are selling here,
12 the primary purpose is the support that we are going to
13 get from you so we don't know -- we can't place any quali-
14 tative or quantitative measure on that support, can we?

15 MR. SMITH: I don't know how you can in terms of dollars and
16 cents, Representative Carpenter, at this particular point.
17 As I said to you, I think it is conceivable that we might
18 spend as much as One Hundred Thousand Dollars this year
19 in addition to the normal expenses that we have.

20 What for? Let's stop and think about that for
21 a moment. As I said before, we are not in touch with the
22 ultimate consumer at the burner tip, we are in touch with
23 distribution companies and I think what we might do is
24 try, for example, to prepare fliers for our distribution
25 companies to send out with their billings. I think we

1 might consider, although we have trouble with our
2 customers in doing this, some kind of advertising
3 campaign. I have seen an awfully good brochure which
4 I know that the El Paso Company has prepared relating
5 to this project which it is using for P.R. purposes and
6 I don't know how much that thing costs, Representative
7 Carpenter, but something like that appealed to me
8 greatly and I think we could use it in many ways.

9 It really seems to me though, sir, that a
10 major effort and the thing that we are going to be most
11 effective with in fact is our contacts with our customers,
12 with our governors, with our legislators, with our
13 Congressional delegations and Congress. And this, as
14 I said before, is really part of an ongoing process
15 that we have with the staff that we have at the moment.
16 We are simply going to direct the emphasis in essence
17 in this direction, in my view. I don't know that it
18 will be helpful, gentlemen, but it might be of interest
19 to you to know that we had a management meeting, I guess
20 most companies do, with about thirty-five of our top
21 people a couple of weeks ago that do our strategic
22 planning for the next year and five years. We gave
23 these people a list of about twenty-five issues and
24 said pick the four or five that you think we should be
25 spending the most time on in the next year and these

1 related to things like deregulation of gas and investment
2 tax credits and all kinds of things. The Alaskan gas
3 matter was on the list and in every case it came out
4 number one. So I think this says we have a commitment,
5 sir, on the part of our company and on our management to
6 move this project forward the best we possibly can because
7 the gas supply is so important and so significant to us.

8 REP. CARPENTER: I have to follow this with one more question.

9 I think what you are telling me and what I believed all
10 along in which I don't really see anything wrong with,
11 is that what we are buying or what we are getting in
12 exchange isn't in fact a typical promotional campaign or
13 advertising campaign or public relations campaign. We
14 aren't in fact going to send you out there to build a
15 constituency, a phrase that has been used all along. We
16 aren't doing that at all, we are buying your ability to
17 influence people in places that count. That is what we
18 used to call building an influence with and that doesn't
19 require a brochure, that involves contacts that you as a
20 business have established over a number of years and that
21 in fact is what you are going to do because this is a
22 political matter and it will be decided in Congress.

23 MR. SMITH: I would say that that is certainly an effort that we
24 will be making, yes, sir. I don't disagree with your
25 statement.

1 REP. CARPENTER: Okay. I just want to set aside that building
2 of a constituency in talking about the consumers in the
3 southeast or throughout. That isn't really what we are
4 talking about.

5 MR. SMITH: Well, I guess I would say I would hope, gentlemen
6 and ladies, that the results would be the same whichever
7 way it went.

8 REP. CARPENTER: The other question was, to borrow your words,
9 Mr. Smith, what do you find tough for you in this contract?

10 MR. SMITH: Well, I think there is really one, from our point
11 of view, awfully tough provision. The major provision
12 which is tough very honestly is the -- I would call it
13 and refer to it as the call-back provision under which
14 the state can withdraw its gas. We need the gas supply
15 and this is, as Mr. Thomas said, a most unusual provision.
16 I have never seen anything like it in any contract I've
17 ever seen our company enter into before. Then when you
18 need gas supply and you run into a contract where somebody
19 says "here's the gas supply but I can take it back." That
20 is pretty difficult but okay, that is the deal and we have
21 accepted it willingly and we'll support it; that is what
22 the state wants and we accept that. I made this argument
23 before the Royalty Board and I'll repeat it to you. I feel
24 this very sincerely. If we get this gas for one day, just
25 one day, and I hope we get it for a lot longer than that,

1 we'll be better off than if we never got it at all because
2 we are short of gas supply and it will be helpful. But,
3 that's a tough, really a tough, tough provision for people
4 who are short of gas.

5 REP. CARPENTER: Is that the only tough provision, really
6 tough provision?

7 MR. SMITH: There is one that is a little more cryptic and I
8 think hard to come to grips with which I think is also
9 kind of tough, which is the provision relating to the
10 situation where the state might have to pay to the working
11 interest owner some costs for gathering or maybe processing
12 its gas and we are obligated to reimburse the state for
13 those amounts. I'm not stating that very artistically but
14 that in essence is what the provision is. And that again
15 is not essentially so tough except the provision says that
16 we have got to pay the state those costs even if we are
17 not able to recover them in our rates. So to the extent
18 that that provision might apply, we are subjected to some
19 risk as far as our stockholders are concerned and I think
20 that is a tough provision, Mr. Carpenter.

21 REP. CARPENTER: You don't know the section, do you?

22 MR. SMITH: Well, I don't know it out of my head but maybe Mr.
23 Van Dyke does.

24 REP. CARPENTER: Maybe I could get that from Mr. Van Dyke.

25 MR. SMITH: If you can find it, I have read it a lot of times,

1 I'll tell you that.

2 SENATOR RADER: You still have the floor, Representative
3 Carpenter.

4 REP. CARPENTER: The final question is, some people have said
5 that we are selling you awfully cheap ethane because as
6 Senator Butrovich was talking about awhile ago and
7 Representative Meekins and so forth have brought up from
8 time to time, there has really been nothing in here to
9 kind of sweeten the kitty for Alaska in terms of industry.
10 And that ethane you are picking up at Prudhoe at methane
11 prices, aren't you?

12 MR. SMITH: If there is ethane in the gas stream which could
13 be removed and it is not removed, I guess the answer to
14 the question is yes.

15 REP. CARPENTER: You don't place a value on that ethane for
16 petrochemicals in the lower 48?

17 MR. SMITH: We do not have any -- that is not correct, what
18 I just said -- started to say. We sell gas to our
19 customers and it is my understanding, sir, that they sell
20 gas to their customers on the basis of the number of
21 BTU's in the gas stream. If ethane in the gas stream
22 should contribute to the BTU's, I guess essentially we
23 get the benefit of it if the BTU exceeds a certain number
24 per cubic foot, which is one thousand and fifty, if my
25 recollection is correct. I don't know of anywhere and I

1 hope I'm being helpful, I'm not trying to be evasive
2 when I say this, I don't know of anyplace once the gas
3 enters our pipeline where somebody is taking ethane out
4 and selling it as a product.

5 REP. CARPENTER: You won't have any valuable liquids trans-
6 ported to the lower 48 out of this purchase of the gas?

7 MR. SMITH: If the ethane is an effective part of the gas stream,
8 sir, I just think it is part of the stream. I'm not a
9 chemist or really an engineer and I'm not sure I'm being
10 responsive to your question. John, do you know the
11 answer to that?

12 MR. VAN DYKE: No, there will not be, especially from the
13 process up here to take those products out.

14 REP. CARPENTER: Everything that you are taking out of the
15 state on these cryogenic tankers, your intent is to have
16 somebody burn it off someplace?

17 MR. SMITH: Yes, sir, that would certainly be my expectation
18 and understanding and intent and I will tell you that is
19 what is going to happen with that Algerian LNG, there is
20 nobody going to take anything out of it after it lands
21 in Savannah, Georgia.

22 REP. CARPENTER: Or any other means of transportation out of
23 the state of any --

24 MR. SMITH: Okay.

25 REP. CARPENTER: Thank you.

1 SENATOR RADER: Representative Meekins?

2 REP. MEEKINS: I have got a couple questions, one just on
3 that last point. I don't know where I read it, maybe
4 it wasn't in the contract but I was under the impression
5 that if the BTU content is increased because of inclusion
6 of ethane and other types of gas in the flow, if it is
7 over a certain amount that the state is compensated for
8 that. That is what my understanding was, is that correct?

9 MR. SMITH: The price is adjusted upwards, yes, sir.

10 REP. MEEKINS: Over a thousand or something like that BTU?

11 MR. SMITH: I don't know whether it is a thousand or a
12 thousand and fifty but that is a fairly typical provision,
13 yes, sir.

14 REP. MEEKINS: Okay, I must have misunderstood. Somebody
15 said that wasn't true, I just want to remember that.
16 The other thing, you said one of the provisions that is
17 tough on you is the take back provision. I understand
18 what you are getting at there but just to be completely
19 clear on that, it seems to me that only in the situation
20 that the state starts taking one hundred percent of its
21 royalty gas at some point, not just the Prudhoe Bay gas
22 but the other gas, will that limit the total amount that
23 you receive because you'll of course be able to -- if
24 there is another field that opens up and we don't take
25 one hundred percent of it, if there is some surplus that

1 is not used for in-state, that you have the right to
2 have that gas, isn't that correct?

3 MR. VAN DYKE: Only if it comes into this line.

4 MR. SMITH: If it comes into this line, says John.

5 REP. MEEKINS: If it comes into that line, right.

6 MR. SMITH: And we are like Mr. Thomas, we are very bullish
7 on the prospects of your finding more gas in Alaska
8 but in a sense in dealing with gas supply I have to deal
9 with present day realities and all I am looking at is
10 Prudhoe Bay.

11 REP. MEEKINS: Right. And that comes back to what Commissioner
12 Martin was saying, people are betting on different
13 contingencies arising. You are sort of betting on that
14 happening so that you would -- and he might be betting
15 that it doesn't but in any case there is a possibility
16 of your achieving the full 1.3 --

17 MR. SMITH: Six hundred and fifty billion in our case.

18 REP. MEEKINS: Six hundred, oh, yes. All right.

19 MR. SMITH: We are the little boy, I understand.

20 REP. MEEKINS: And the last question now. If, as it might
21 appear, if you extend the logic of today's decision by
22 the FPC judge and some of the other things we have heard,
23 if you extend that sort of tendency out, and I'm not
24 sure you should, but if you did, it would look like --
25 there is a possibility at some point of the Alcan route

1 not being a real factor and that perhaps the decision
2 in Congress and with the President comes down to a real
3 fight between El Paso versus the Arctic route, if that
4 were the case and if the state went to the wire with the
5 El Paso route, which it might very well do in that
6 situation and if Arctic then won, unfortunate for us,
7 this contract would not be in effect. Isn't that correct?
8 That you would not have any --

9 MR. SMITH: That is the way I read the contract, yes, sir.

10 REP. MEEKINS: So in that contingency you would then have an
11 incentive to fight very hard for this?

12 MR. SMITH: Yes, sir.

13 REP. MEEKINS: I am getting at the questions of would you jump
14 off onto another line or do you really have an incentive.
15 When Alcan is there and it looks like a good second best,
16 I think there is a suspicion in some people's minds that
17 at some point the state might jump or you might jump with
18 the state and this may change things. But, if Alcan sort
19 of drops out of the question then it is an all or nothing
20 proposition for you, is that correct?

21 MR. SMITH: Well, I would hope I could somehow dispel within
22 the minds of this group or your legislature the notion
23 that we might jump the track on a contract that we have
24 made in good faith. I really am proud of the fact that
25 we live up to our contracts. I don't feel I need a

1 contract to make me live up to a representation that I
2 make to somebody. And, we have committed to support the
3 El Paso project and I'm going to support it until the
4 state tells me I should do something else or cancels
5 my contract.

6 REP. MEEKINS: What I am getting at is that -- not that I
7 don't believe you but I'm sort of into what your
8 calculations are as to what kind of sanctions happen to
9 you, what do you lose and what you gain under certain
10 circumstances. We were talking about the city gate price
11 being cheaper in different lines and those types of things
12 so why do you really need these -- the availability of
13 gas in that case was said by Tenneco to be very important,
14 more important than the price delivered at the city gate
15 and those types of things. I'm just sort of following
16 that up to try and see that if Alcan does fall out, then
17 you have a direct business incentive regardless of your
18 commitment to push this line, seeing as you have no other
19 choice. You don't have another option.

20 MR. SMITH: We do have, that is correct, we do not have any
21 other option and as I said before, I think we'd stay
22 with what the state asked us to do, told us to do.

23 REP. MEEKINS: Thank you.

24 SENATOR RADER: Any further questions? Senator Huber?

25 SENATOR HUBER: I wasn't trying to push one away but I can

1 ask this one. You caused this question so I have got to
2 clear it up. Would you be willing to purchase our
3 royalty gas further down the line, even without the
4 prior commitment that you have, if it is offered to you
5 at a later date, if it isn't approved now?

6 MR. SMITH: Further down the line in time?

7 SENATOR HUBER: If we end up not approving the contracts and
8 we have uncommitted natural gas, that is state royalty
9 gas, will you be interested in purchasing it further down
10 the line in time?

11 MR. SMITH: Yes, sir.

12 SENATOR HUBER: Okay. And this is a question also that I
13 asked of Tenneco. What route would Southern Natural Gas
14 Company support if your present contract with the State
15 of Alaska is not approved by the legislature?

16 MR. SMITH: If our present contract is not approved, Senator
17 Huber, by the legislature, we had no contract for Alaskan
18 gas of any kind, character or source, under those circum-
19 stances we have no incentive to support any project at
20 all. We can go back into our burrow and stay there until
21 we get some Alaskan gas.

22 SENATOR HUBER: I suppose that then answers -- probably
23 answers -- my third question is, do you have any deals
24 either made with producers or cooking on the back burner
25 or simmering on the back burner for purchase of a portion

1 from producers, say, if it goes the Arctic Gas route?
2 MR. SMITH: The quick answer is "no." I kick my friend, Mr.
3 Van Dyke, frequently in the rear end and tell him he has
4 got to buy some gas from the producers, and he has not
5 been successful in doing so yet. We do not have any deal
6 on the back burner, express, implied, anywhere. I wish
7 we did. But I will say this, and somebody asked this
8 question yesterday -- if, for example, we could go to
9 Producer X and Producer X said, "I'll sell you twenty-five
10 percent of my working interest (or something, you know),
11 a significant quantity of gas, but the condition is that
12 you support some other line," I would like to assure you,
13 sir, that we have got a prior commitment to the State of
14 Alaska with which we are going to comply, and I am not
15 going to walk away from a pre-existing contract and an
16 obligation I have with somebody.

17 SENATOR HUBER: I like your answer. Thank you, Mr. Chairman.

18 SENATOR RADER: Any further questions? Mr. Chatterton?

19 REP. CHATTERTON: Mr. Chairman, I will have a series of
20 questions but this one is so opportune, sir, I have to
21 ask it. Mr. Smith, you actively have pursued trying to
22 get contracts for gas with producers. Are they somehow
23 being smarter than we, the State, they are not willing to
24 sell yet for some purpose? Why do they not want to sell
25 to you?

1 MR. SMITH: I don't want to be evasive. John says we can't
2 fathom the producer mind. In the days of advance payments
3 which as you have learned by now have been outlawed by
4 the FPC, we thought we had a chance of getting some
5 producer gas. When the advance payments dropped by the
6 wayside, the opportunity to buy producer gas seemed to
7 drop also for the moment and they all just seem to be lying
8 behind a log.

9 REP. CHATTERTON: Producers are apparently keeping all options
10 open then, is that a fair statement?

11 MR. SMITH: I would think that is a fair statement, yes. I
12 think that is right. I would say, you know, I think they
13 may not have, perhaps, the same incentives that the state
14 administration had to make a commitment of their gas at
15 this time.

16 SENATOR RADER: Any further questions? Continue.

17 REP. CHATTERTON: Getting back to another track.-- but I'll
18 yield to anyone that --

19 SENATOR RADER: Fine, why don't you go ahead, Representative.

20 REP. CHATTERTON: Mr. Smith, I would ask you to refer to your
21 Exhibit 10 if my number keeps -- you don't have to refer
22 to it because I will in effect be referring to it, if I
23 fib why set it straight. But I understand that in 1970
24 Southern entered into a contract, from what I read here,
25 with El Paso-Algeria for LNG.

1 MR. SMITH: Yes, sir. Right.

2 REP. CHATTERTON: I think I further heard you testify to the
3 fact that -- Oh, first of all, why I think it says that
4 you were buying that LNG from El Paso, is that correct?

5 MR. SMITH: That is correct, sir, yes.

6 REP. CHATTERTON: I think I then heard you give in your
7 direct here that you expect this from 1970 ~~now~~ you expect
8 this plant in Algeria to be on stream in late 1977 or
9 1978?

10 MR. SMITH: I so testified, yes, sir.

11 REP. CHATTERTON: Right. Do you have any concept or recol-
12 lection as to the size of that plant as far as through-
13 put?

14 MR. SMITH: Yes, sir. It is a one billion cubic foot per day
15 plant.

16 REP. CHATTERTON: And the plant proposed at Gravina Point is
17 roughly three times as large?

18 MR. SMITH: Yes, sir. That is correct. I think there is a
19 2.4 billion per day case and a 3.2 billion per day case.

20 REP. CHATTERTON: Do you happen to know when actual physical
21 construction started on El Paso-Algeria's LNG plant?
22 The breaking of ground, let's say.

23 MR. SMITH: Yes, right. We made the contract in 1970 --
24 permit me to ruminate if you will for a minute.

25 REP. CHATTERTON: Yes, yes.

1 MR. SMITH: We made the contract in 1970 and we and the other
2 companies involved made an application to the Federal
3 Power Commission for authority to import this LNG and
4 my recollection, sir, is that that import certificate
5 or authorization was not finally issued until sometime
6 in 1973 is the recollection that I have. And I am pretty
7 certain, I am completely confident that no work started
8 on the liquefaction facilities in Algeria until 1973,
9 because people were not going to be spending a bunch of
10 money until they knew they had a market for their gas
11 and until the import authorization was granted. Obviously
12 they didn't know that that would occur. And my sort of
13 recollection is that it started sometime in the Spring
14 to Midsummer of 1973.

15 REP. CHATTERTON: So we are looking at something on the order
16 of four and one-half years for the construction of a
17 plant one-third the size of the one proposed by El Paso
18 at Gravina Point at the end of a long logistics line.

19 MR. SMITH: That is correct. That is correct. Can I just
20 expand on that a little bit, however? I am not the world's
21 greatest expert on LNG technology but the plant in Algeria
22 and I am confident at Gravina Point will be built with a
23 series of so-called trains, which if you will, are simply
24 big machines for making LNG and it will take in Algeria's
25 case six of those to make one billion cubic feet per day.

1 I think that Gravina Point on the large case will take
2 something like eight, but work can go forward on all of
3 those things simultaneously rather than sequentially.
4 There are things like foundations and power generation
5 facilities and so on which also have to be built but those
6 two essentially go on -- the power generation stuff, for
7 example, goes on simultaneously rather than sequentially
8 so that I don't think it would be fair to infer that it
9 would take three times as long to build the Gravina Point
10 plant as it took to build the Algerian plant. I didn't
11 think, sir, you did infer that but --

12 REP. CHATTERTON: Thank you, Mr. Smith. But why -- to connect
13 up that line of questioning is that it was because basically
14 Mr. Carter was so concerned about time in his testimony
15 and I had to bring that out.

16 MR. SMITH: Right. I think El Paso says that they can have
17 their plant on stream in sixteen months and I think that
18 is probably the first train, so-called, sixteen months
19 from the day they start the construction and they will be
20 using, I'm sure -- I'll be using American contractors and
21 American workmen and you know. I am not an expert on LNG
22 technology. I would have no real problem in believing
23 that they can comply with that kind of a timetable.

24 REP. CHATTERTON: All right. Mr. Smith, you were buying your
25 LNG from El Paso-Algeria. Now, knowing that something

1 like that is possible, why did you not wait for the
2 Gravina Point plant and buy LNG rather than going through
3 the horrible thing that you are going through right now
4 and try and buy gas in place?

5 MR. SMITH: Well, I guess the answer to that really is that
6 we knew the state had the gas available for sale, or at
7 least theoretically wanted to negotiate a contract with
8 people, and we thought it best to go to the guy who had
9 the gas this time. In 1970 when we made the contract with
10 El Paso they had the gas. El Paso doesn't have this gas,
11 the state's, so that is why we came to the state.

12 REP. CHATTERTON: Thank you. Do you plan to be a participant
13 in the pipeline?

14 MR. SMITH: We have made no decision on that, sir.

15 REP. CHATTERTON: I'm sure that was an unfair question, I'm
16 sorry.

17 MR. SMITH: No, it is a perfectly legitimate question. We
18 have not been asked to make that decision. Again, frankly
19 we would have some problem, and we have said this publicly
20 in Alaska before. We would have some problem participating
21 in that line with one-quarter of one-eighth which is to
22 say one thirty-second of the gas under circumstances in
23 which the state, as I have said before, could snatch the
24 gas away from us -- might be able to do so.

25 REP. CHATTERTON: I'm about wound up, Mr. Chairman, if you

1 will stay with me. You did say that the take back
2 provision of the contract, which is contractually in there,
3 did give you a little bit of concern, a little pain, and
4 so I am going to ask you this, in considering that, were
5 you aware that there is an overriding -- potential over-
6 riding situation that is not within the contract, that not
7 only the one-eighth but all of the remaining seven-eighths
8 our Oil and Gas Conservation Commission might just turn
9 the valve and shut it down.

10 MR. SMITH: Yes, I am aware of that as a possibility. I heard
11 some testimony, I guess, to that effect as a possibility
12 at the Royalty Board hearing in mid-November. That is
13 also a concern but again we have to deal with what the
14 situation seems to be at the moment. And, as I understand
15 the situation at the moment, there is an expectation that
16 the gas may be sold and even if the state should do that,
17 Representative Chatterton, I do not think that the contract
18 will automatically be cancelled. That is not my under-
19 standing. I think at some date they are going to have gas
20 to sell and I hope I am still in business to buy it.

21 REP. CHATTERTON: Thank you. One final question, Mr. Chairman,
22 please? I'm sorry, but it just rolled away from me so I'll
23 yield.

24 SENATOR RADER: Any further questions? Going once, going
25 twice, going three times.

1 SENATOR HUBER: You can't pull it off yet. Chatterton still
2 has another one and I think I have one or two.

3 SENATOR RADER: Oh, I am sorry. I am sorry.

4 REP. CHATTERTON: I remembered the one I forgot for a second,
5 but go ahead.

6 SENATOR HUBER: I will let you continue and I will come back.

7 SENATOR RADER: Well, just somebody ask the question and
8 let's go.

9 REP. CHATTERTON: Sir, if you were here yesterday you heard
10 the Commissioner of Natural Resources testify that it
11 would be several years, now that is more than a few and
12 maybe not as much as many, I realize that, but several
13 years whatever you quantify that as, beyond any reason-
14 able doubt he would be sure that he could guarantee any
15 pipeline continuing delivery. And then we put on top of
16 that what you just testified to, five years, sixty months,
17 five years for construction of an LNG plant. That is
18 several -- that begins with an S so I will seven, so we
19 are twelve years out into space before we really start
20 selling gas, aren't we?

21 MR. SMITH: I don't know that I follow that, sir.

22 REP. CHATTERTON: Well by several -- I am trying to just
23 quantify the Commissioner of Natural Resources' several.

24 MR. SMITH: Yes, I agree with that. I am not sure again those
25 two times would run sequentially. They might, I'm not

1 sure, they might run concurrently. Is that a possibility?

2 REP. CHATTERTON: I think I heard you earlier say that you
3 would not be willing to commit funds, say to roll pipe
4 or something, until you were assured that you would have
5 a continuing supply of gas to amortize the pipeline.

6 MR. SMITH: Well, I think my statement was a little bit
7 different. It was in response to a question that we
8 committed to participate in the pipeline. I said we
9 hadn't made that decision.

10 REP. CHATTERTON: Okay, I am sorry. It was a question I
11 asked of your predecessor. I apologize, I'm sorry.

12 SENATOR RADER: Any further questions? Senator Huber?

13 SENATOR HUBER: Thank you, Mr. Chairman. Mr. Smith, you
14 brought this question out. You said the producers don't
15 seem interested in selling that gas at this time or in
16 making commitments on it. Would you speculate maybe
17 why the state's interest would be different, in your
18 opinion, than the producer's interest in this case?
19 If producer's aren't interested, they are pretty smart
20 in this business, why should we commit if they don't?

21 MR. SMITH: Senator Huber, I reserve the right to dissent
22 from the proposition of the producers are pretty smart.
23 They are pretty big but they are not always very smart.
24 Put that comment aside and understand, please, sir, that
25 I really have no way of understanding what is going on

1 in the minds of the state administration or the state
2 legislature, but the speculation in which I would engage,
3 and it is only a subjective reaction to your question,
4 is that the state felt it had an interest in achieving
5 the construction of the Trans-Alaska pipeline, the all-
6 American project, and the state felt that it could best
7 move towards that objective. Those who were in that
8 particular capacity, making that kind of decision, sir,
9 -- obviously the legislature has got to either ratify
10 or not ratify the contract. But, the people who made
11 the decision to enter into the contracts, I surmise,
12 felt that they could -- I'm loath to use the phrase
13 national constituency again when I was challenged on
14 it, but that they could procure significant support
15 from a large number of states in the lower 48 by
16 committing the state's royalty gas at this time.

17 Now, I don't think that is the same objective
18 that a producer of gas has at all. My view is, sir,
19 that the producers, it is only again subjective, I don't
20 really know this for a fact, don't really care, to my
21 knowledge, what route is chosen for the sale of their
22 gas. I think really, sir, what they are interested in
23 is simply the revenue to be derived from the sale of the
24 gas.

25 SENATOR HUBER: Well, Mr. Chairman, Mr. Smith. It would

1 seem to me that the state administration believes that
2 the state would profit by an Alaska route and then it
3 would seem that the route chosen would affect the
4 profitability to the producers certainly as much as it
5 would to the state. They have seven-eighths of the gas,
6 we have one-eighth. I would think that the question isn't
7 answered yet because the same kind overriding interest
8 would be there for the producers as it would for state.
9 It may not different, it may be opposite, but there
10 certainly would be a profit motive, as there is a profit
11 motive here for the state.

12 MR. SMITH: Well, it is a question of timing though I think,
13 sir, because really the producers' sale as will be the
14 state's sale is a wellhead sale of the gas but the
15 distinction I was trying to draw was that, in my judgment,
16 the producers don't have a particular commitment to a
17 particular project at this time which I think is somewhat
18 different from the state administration which does have
19 such a commitment. And seeking to maximize the chances
20 of realizing the commitment to obtain the project which
21 the state wanted, the state said "we ought to do something
22 with our gas which will help to develop support in the
23 lower 48 for the project that we want." And I don't
24 think the producers have that motivation.

25 SENATOR HUBER: Well, it would seem -- I don't want to be

1 argumentative, Mr. Chairman. Mr. Smith, it would seem
2 like the producers when they were able to get head end
3 money, were the first ones out to commit it but now that
4 there isn't any head in money and this contract calls for
5 specifically no head in money, even if it should later be
6 an allowable thing, that now the state is willing to do
7 it but the producers aren't. And I -- it may not be an
8 answerable question but I didn't mean it to be unfair.

9 MR. SMITH: No, it was a perfectly fair question. I honestly
10 don't know what is in their mind so, you know, we have just
11 speculated about something that frankly I don't have the
12 judgment on, sir.

13 SENATOR HUBER: It couldn't possibly be that the state isn't
14 as sophisticated as the producers are?

15 MR. SMITH: Well, I think the state had a different objective
16 is my view and were trying to achieve that objective. I
17 don't think it is a question of being sophisticated, it
18 is a question of who does what at what time.

19 SENATOR HUBER: I have one final question, Mr. Chairman.
20 What, if any, corporate interest exists between Southern
21 Natural Gas Company and El Paso?

22 MR. SMITH: There is absolutely no corporate interest of any
23 kind, which is to say there is no interlocking stock
24 ownership, there is no interlocking directorate, the two
25 companies are completely and absolutely unaffiliated from

1 one another.

2 SENATOR HUBER: This includes an ownership of subsidiaries?

3 MR. SMITH: Yes, sir. There is no joint ownership of any
4 subsidiaries between our two companies. Absolutely none.

5 SENATOR HUBER: Thank you, Mr. Smith. Thank you, Mr. Chairman.

6 SENATOR RADER: Any further questions of Mr. Smith? Well --

7 MR. SMITH: I would like to thank the committee for its
8 indulgence in letting me stay on here and I am afraid I
9 have held you all a little bit longer than you planned or
10 wanted to stay and I am very grateful to you for permitting
11 me to get back home. We have got something of a gas
12 crisis in southeast and we need your gas to help solve it
13 but I am going to go back tomorrow to do what I can to
14 put the bandaid on the wound for the immediate future.

15 SENATOR RADER: Very well. We will adjourn here then. I hope
16 that we will be able to reconvene tomorrow at 11:00 o'clock
17 again picking up our agenda approximately where we left
18 off with the understanding that there may be some witnesses
19 that we will take out of order because of other commitments.
20 I want to remind you also that contrary to the early an-
21 nouncements, the meeting tomorrow will also be here and
22 not in the Baranof. At one time we thought we did not
23 have this room reserved but the meeting will be here and
24 hopefully convene at 11:00 o'clock. We stand adjourned.
25

Feb 2, 1977

22 SENATOR RADER: The Joint Committee hearing of the House-
23 Senate Royalty Gas Sales committees will come to order.
24 Our next witness will be El Paso Natural. We have El
25 Paso down on our tentative agenda twice, once as a

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1 purchaser and once as a route contestant. I'd ask you
2 to wind up all of your testimony at one presentation,
3 if you could. Is that all right with you? You didn't
4 expect to testify twice, did you?

5 MR. HOLLAND: I did expect so, sir, but whatever is most
6 convenient for you.

7 SENATOR RADER: I think because that is the next subject to
8 which we move, I think we might as well, unless it is
9 of serious disadvantage to you, take all of your testimony
10 at one time. Is that appropriate with you, Mr. Holland?

11 MR. HOLLAND: That is certainly fine with me, yes, sir.

12 SENATOR RADER: Is there any objection with the committee,
13 by the committee, any members, of following that procedure?
14 Okay, would you -- Mr. Holland, please identify yourself
15 for the record and your associate.

16 MR. HOLLAND: Mr. Chairman, members of the Joint Legislative
17 Gas Contract Review Committee, my name is Michael C.
18 Holland. I am the assistant to the vice president for
19 El Paso-Alaska Company. I am the manager of my company's
20 Alaskan office. With me today is Mr. Joseph Henri, who
21 represents El Paso-Alaska Company in Juneau.

22 We are grateful for this opportunity to meet
23 with you today and to discuss both the purpose and the
24 effects of the state's commitment of surplus royalty gas.

25 I want to say at the outset that the arrangements

1 which are the subject of these deliberations represent
2 one of the most significant actions by any participant
3 in the lengthy decisional process for the North Slope
4 gas pipeline route. I can assure you that the support
5 of the State of Alaska, as expressed by this commitment
6 of royalty gas, is having a profound positive influence
7 on the ultimate success of our proposal. Conversely,
8 we can just as confidently predict that defeat of these
9 contracts by the legislature will have an equally pro-
10 found negative effect. Any inordinate delay in their
11 approval would produce identical negative results.

12 So, our hope today, ladies and gentlemen, is to
13 prove to you that these contracts should be ratified by
14 the legislature in their present form, at the earliest
15 possible date.

16 I'd like to take a few moments to emphasize some
17 of the reasons for our belief that these contracts are
18 the best attainable for both the state and the purchasers.

19 Firstly, they are the product of intensive, arms-
20 length negotiations. Neither the state nor the buyers
21 are completely happy with all of the provisions of the
22 contracts, but, for our part, we are satisfied that we
23 can neither give up anything more than we already have,
24 nor can we ask anything further from state. As a result,
25 the contracts represent a true bargained arrangement,

1 arrived at in good-faith negotiations.

2 We are obviously pleased with the provision
3 calling for active support of the Trans-Alaska route for
4 the gas pipeline by both the state and the buyers. From
5 the state's standpoint, there has never been a Governor,
6 a Legislature or any state agency, task force, or com-
7 mittee which has studied the alternative proposals and
8 reached any conclusion other than that the Trans-Alaska
9 route is best for the state. The citizens and institutions
10 of Alaska are overwhelmingly in favor of our line. A
11 number of state entities, from political subdivisions to
12 special interest groups, have joined the Hammond Adminis-
13 tration in intervening in behalf of our project before
14 the Federal Power Commission. Indeed, Alaska's commitment
15 to a Trans-Alaska line is perhaps best expressed by a
16 statement in the November 1976 Gas Pipeline Task Force
17 Report, which said, and I quote, ". . . the Alaska public
18 is more united on this question than on any other present
19 major public issue."

20 As to the buyers' support for the Trans-Alaska
21 route, you needn't have any apprehension about my company's
22 sincere dedication to its own proposal. Since 1970, when
23 we first looked at this proposition, (I might add at the
24 request of a group of Alaska businessmen), we have
25 expended approximately Twenty Million Dollars in the

1 design and promotion of the Trans-Alaska route. This is
2 more than four times the amount spent by any individual
3 company sponsoring a competing proposal, and it is all
4 one hundred percent risk money.

5 Tenneco and Southern are the other two purchasers
6 of the state's surplus royalty gas. In spite of the
7 fact that the contracts are not yet final, both companies
8 have played large parts in the progress we have made
9 recently on the Hill and elsewhere in the lower 48 states.
10 They have done far more than any of us have had a right
11 to expect, and we are extremely pleased with the results
12 of their efforts. They have shown us that they can and
13 will produce, and I believe that the best is yet to come.

14 Both Tenneco and Southern bring to this project
15 considerable talent and experience. While we jealously
16 guard our own company's reputation as the leader in the
17 field of large scale, base-load LNG technology, Tenneco
18 and Southern Natural Gas are also recognized experts.

19 Southern is part of El Paso's initial Algerian
20 LNG project and is currently constructing LNG receiving
21 facilities at Savannah, Georgia. Tenneco has recently
22 filed for its own base-load LNG project to supply
23 Algerian gas to the United States. The addition of these
24 two respected companies to the Trans-Alaska proposal will
25 strengthen the available resource base to ensure the

1 development of the most efficient and environmentally
2 sound project possible.

3 From the state's standpoint, these contracts
4 provide for the highest possible price for its surplus
5 gas; rights to the LPG's in the gas stream are reserved;
6 flexibility in recalling gas to meet in-state requirements
7 is total; and resources surplus to Alaska's needs are
8 used as a lever to help obtain approval of a project
9 which will undoubtedly provide the greatest possible
10 benefits for Alaska's citizens.

11 During the three months that this commitment of
12 surplus gas has been public, we have heard and read of
13 several concerns about these contracts which have been
14 expressed by responsible citizens who, we have no doubt,
15 have the best interests of the state in mind.

16 Some have suggested that the Trans-Alaska route
17 might not be best for the state. We ask only that those
18 people look at the record of support for our project by
19 the citizens of Alaska. We challenge either of our
20 competitors to show that they will provide more jobs,
21 more taxes, lower transportation cost or more spin-off
22 development opportunities than our project can.

23 We have heard some suggest that the timing of
24 this sale is bad. From the standpoint of its
25 support for the Trans-Alaska route, this is probably

1 true. It would have produced far greater positive results
2 had it been made a year ago. To those who feel it is
3 too soon, we point out that the contract contains every
4 conceivable flexibility for the state to recall its gas
5 for use in in-state markets -- even to the point where
6 virtually all of the gas could be recalled on the first
7 day the pipeline begins operation. In fact, under the
8 lease agreements with Prudhoe Bay producers, the state
9 does not acquire title to its royalty gas until the gas
10 arrives at the wellhead. So it must be produced in order
11 to exist as royalty gas per se. As a physical matter, the
12 state's royalty gas could be gathered up and then reinjected
13 back into the Prudhoe Bay reservoir. But as a practical
14 matter, who can explain to the citizens of Alaska that
15 they have a valuable, marketable resource which they are
16 paying to have withheld from market, and which is
17 diminishing by between five and eight percent for each
18 production/reinjection cycle. We have firm assurances
19 from the Prudhoe Bay producers that between two and 2.4
20 billion cubic feet of gas per day can be produced without
21 adversely affecting oil production. So protection of oil
22 production is no reason for reinjection, nor is economics,
23 nor is conservation. In our view, reinjecting the gas
24 gains nothing for the state, and therefore it makes no
25 sense at all.

1 We have heard some ask for guarantees that the
2 state's right to recall its royalty gas from our pipeline
3 for in-state use will be fully protected. This is a
4 guarantee that we as a private company simply cannot
5 provide. The United States Congress, however, can and
6 has. Under the Alaska Natural Gas Transportation Act of
7 1976, the State of Alaska has been given the unique
8 authority to take its gas back from interstate trans-
9 portation to satisfy its own intrastate needs. Additionally,
10 these contracts were submitted to the Federal Power
11 Commission -- on the last afternoon of the hearings --
12 and once their approval is granted, another layer of
13 protection of the recall right will be obtained. Finally,
14 under the provisions of the contract itself, if the
15 state's access to its royalty gas is not guaranteed,
16 the contracts self-destruct. There simply is no other
17 way that we can think of to protect this right.

18 A final point that we hear made in detraction of
19 this surplus royalty gas sale is that the state should
20 not commit its resources to gain political leverage.
21 Obviously, this is a philosophical question, but as a
22 practical matter, natural gas is no different a resource
23 than is money from the state's treasury. Those who
24 suggest that the legislature should appropriate several
25 million dollars of state funds for lobbying and promotional

1 activities ignore the fact that the royalty gas contracts
2 achieve this same objective without the expenditure of
3 a single dollar. In fact, the influence gained in behalf
4 of the Trans-Alaska route from the contract is far more
5 substantial than that which could be gained from almost
6 any of money spent for lobbying or for similar efforts.
7 When we visit our market areas and point out that more
8 gas will be available if and only if the Trans-Alaska
9 route is approved, we expect that considerable support
10 for our project will result, particularly in the face
11 of the critical gas situation in the lower 48 states this
12 winter.

13 Now, ladies and gentlemen, that concludes my
14 prepared remarks. I'd be happy to respond to questions.
15 Mr. Chairman, with your leave, sir, I would like to make
16 additional extemporaneous comments on several issues
17 which have come up during the course of these hearings
18 thus far. Perhaps it will shorten the questioning period.

19 SENATOR RADER: Since there is no objection, go ahead, Mr.
20 Holland.

21 MR. HOLLAND: Okay. We talk a lot, ladies and gentlemen,
22 about this matter of taking the gas back. It probably
23 has not been said yet that Alaska can work in behalf of
24 providing a greater guarantee to take its gas back by
25 pointing out the fact that if any of Alaska's royalty gas

1 flows in the Trans-Alaska gas project, the fact that the
2 gas volume flowing through that pipeline is increased is
3 going to decrease the cost of service for the gas being
4 delivered to the lower 48. In that regard, we can say
5 to the Federal Power Commission that by allowing Alaska's
6 gas to flow through the Trans-Alaska line, as opposed to
7 not allowing it to flow through any of the pipelines
8 whatsoever, considering reinjection there is some other
9 alternative.

10 We can show the Federal Power Commission and the
11 citizens of the lower 48 states that their gas can be
12 delivered cheaper for the fact that some of Alaska's
13 surplus royalty gas is going to the pipeline.

14 Secondly, on advance payments. The advance payments
15 procedures in the past have only been allowed to producers
16 and for the purpose of exploration and drilling costs.
17 Advance payments in the past, to our knowledge and as a
18 result of our research, however limited it has been over
19 the last two days, we have not been able to find one case
20 in history where advance payments have been provided to
21 royalty gas owners, because royalty gas owners, by the
22 very virtue of the definition of what they are, don't go
23 out and explore and drill for gas so they don't need these
24 advance funds for those purposes. The Federal Power
25 Commission flow through authority for these advance

1 payments as was discussed here during the last two days
2 was terminated on December 31st, 1975.

3 Now, under these contracts only surplus gas is
4 sold. If the guaranteed volume of gas were provided --
5 if a guaranteed volume of gas were provided, and if it
6 were legal to provide advance payments and if advance
7 payments were allowed to be made to royalty gas owners,
8 then perhaps you would find a company somewhere willing
9 to provide a bonus to acquire this case. But we can't
10 flow advance payments through, they are illegal by the
11 Federal Power Commission and, please remember that all we
12 are getting out of these contracts is whatever is left
13 over after the State of Alaska satisfies its own needs.
14 So we do not have, in this case, an assured gas supply.
15 If it was a guaranteed supply perhaps again, if it was
16 legal, you could attract some sort of a bonus payment.

17 As to deregulation, there has been left here
18 during the course of these hearings an implication that
19 the state might get a higher wellhead price or higher
20 royalties if a project having the lowest transportation
21 costs were approved by the Federal Power Commission. The
22 only bills which have been introduced thus far under the
23 U. S. Congress cover producers at the wellhead. That is
24 to say, the wellhead price itself in the only matter, the
25 only part of a natural gas transportation industry which

1 has been suggested to be the subject of deregulation.
2 Nobody has suggested that the transportation of natural
3 gas be deregulated, nor has anyone suggested that the
4 sale of natural gas in the market area itself be de-
5 regulated. We are only looking at the wellhead price.
6 The sales price by the pipeline and the distributor will
7 continue to be regulated therefore.

8 Now some of these studies, one of which I saw
9 an excerpt about in the newspaper last night, presumed
10 that incremental sale of gas in the market place. They
11 presume an incremental sale of gas in the market place
12 and with that assumption the inference is drawn that when
13 you sell this gas incrementally, you then back off the
14 transportation costs and then what is left is what the
15 wellhead price is going to be. Forgive me for not
16 explaining this very well. I am not that articulate but
17 the fact of the matter is, and I would ask you to please
18 remember that without exception, all of the companies
19 who participated in the Federal Power Commission proceedings
20 on this North Slope natural gas pipeline controversy
21 have asked for authority to roll in the price of natural
22 gas delivered from Alaska. Therefore, you have absolutely
23 no basis against which to compare costs when you are
24 looking at the costs of alternative fuels. If gas from
25 Alaska were sold on an incremental basis, that is if gas

1 from Alaska were sold down there for, say, Four Dollars
2 all by itself, then you could compare Four Dollars to
3 the cost of fuel oil on an equivalent BTU basis. The
4 way it is actually going to happen, if gas is delivered
5 to the lower 48 for Four Dollars and all other gas in
6 the lower 48 is being purchased for, say, an average
7 price of One Dollar and one-half, because of the fact
8 that Alaskan gas makes up only between five and ten
9 percent of the total gas supply down there, you roll all
10 this gas together and you divide it out and you come up
11 with, say, an average price in the lower 48 then of all
12 your gas of One Dollar Sixty, One Dollar Sixty-Five.
13 Nobody will be paying the full Four Dollar price for gas
14 from Alaska, if that is what it is going to be.

15 In fact, the Federal Power Commission judge in
16 his recent opinion recommended rolled-in pricing. He
17 feels that this is the way that gas from Alaska should
18 be sold.

19 Now, the conclusion that we draw from these
20 analyses is that whether or not gas is regulated, let's
21 assume it is going to be regulated initially. The price
22 for the gas paid at the wellhead in Prudhoe Bay will be
23 precisely the same no matter which transportation proposal
24 is ultimately approved. Therefore, the state's royalties
25 will be precisely the same, the state's severance tax is

1 precisely the same.

2 Now let's look at the case for deregulation because
3 deregulation will only occur at the wellhead. Again, we
4 have to say that the deregulated price at the wellhead
5 in Prudhoe Bay is going to be precisely the same once
6 again, regardless of which of the transportation projects
7 is ultimately approved. There will simply be no op-
8 portunity to start in the market place, back off trans-
9 portation costs and what is remaining, therefore, would be
10 the wellhead price.

11 Thank you, Mr. Chairman.

12 SENATOR RADER: Mr. Holland, Dr. Carl Swanson, one of our
13 experts that the committee has retained to assist them
14 has asked that we ask this question of all purchasers.
15 Were you here yesterday? To make certain though that
16 we are not -- that this is into the record, let me read
17 again the two questions that Dr. Swanson wants to make
18 certain are in the record. Number one, do you, as a
19 purchaser, agree that Section 6.5, which provides for
20 annual redetermination of the price under deregulation
21 applies to Section 6.3, when deregulation occurs before
22 first deliveries of gas, as well as to Section 6.4, which
23 applies when deregulation occurs after the first deliveries?

24 MR. HOLLAND: Mr. Chairman, the answer of my company to that
25 question is yes.

1 SENATOR RADER: And the second question, do you, as a
2 purchaser, agree that under Section 6.2 that if the price
3 is regulated, the price paid by you as a purchaser to
4 the state shall include an amount equal to severance
5 taxes if the regulation allows an amount equal to revenue
6 taxes to be paid to working interest owners?

7 MR. HOLLAND: Mr. Chairman, the answer of my company to that
8 question is also yes.

9 SENATOR RADER: Now, Dr. Swanson, I assume that that satisfies
10 your inquiry here.

11 DR. SWANSON: Yes, it does.

12 SENATOR RADER: Are there any further questions from committee
13 members? Representative Meekins?

14 REP. MEEKINS: Mr. Holland, your last statement -- extemporaneous
15 statement was that under deregulation the wellhead price
16 would also be the same, Would you explain that to me?

17 MR. HOLLAND: Yes, I'm sorry. I probably didn't explain it
18 well the first time. Representative Meekins, what I mean
19 by that is that the wellhead price in a deregulated
20 atmosphere will not be calculated on the basis of what
21 the transportation cost to the market for that gas might
22 be. And if Arctic Gas claims that theirs is lower and we
23 heard a gentleman here this morning from Michigan Wisconsin
24 who made that claim. He concluded, therefore, that if you
25 back down from the market, back the transportation cost

1 off from the market place, what is left for the wellhead
2 price at Prudhoe Bay might be higher if the Arctic Gas
3 project is approved and, therefore, the state's royalties
4 might be higher. We vehemently disagree with that. The
5 only thing that is being considered by the U.S. Congress
6 at this time, or in the foreseeable future, is the de-
7 regulation of the wellhead price and the transportation
8 and the sale of gas on the other end will continue to be
9 regulated by the Federal Power Commission. It is not like
10 the oil industry.

11 REP. MEEKINS: I think that is what is confusing me. How
12 would the wellhead price be established under deregulation
13 of the wellhead price?

14 MR. HOLLAND: Well, under deregulation you would probably have
15 an open bidding situation and the producer at Prudhoe
16 Bay would take the most attractive offer to him, regard-
17 less of what the ceiling prices might be as provided by
18 the Federal Power Commission under present circumstances,
19 except for the fact that the Federal Power Commission
20 has established no area rate for Alaskan gas at this
21 time.

22 REP. MEEKINS: Thank you.

23 REP. GRUENING: Well, Mr. Chairman?

24 SENATOR RADER: Mr. Gruening?

25 REP. GRUENING: Did I understand you correctly to say that

1 under deregulation the cost of service is not relevant
2 to the wellhead price?

3 MR. HOLLAND: That is correct, sir.

4 REP. GRUENING: I must be mistaken. I have always assumed
5 that it would be. In other words, the reason cost of
6 service isn't so important at this time is because you
7 have a regulated price and the return to the state based
8 on wellhead isn't going to change any because the well-
9 head is regulated. But under deregulation the differences
10 in cost of service between the three lines then becomes
11 relevant.

12 MR. HOLLAND: No, sir.

13 REP. GRUENING: I guess I don't understand why then it is
14 not relevant to the cost of service under a deregulated
15 pipeline.

16 MR. HOLLAND: Well, Representative Gruening, I suppose that --
17 well, let me start this way, during the three or four
18 years we have been in Alaska, we find that the natural
19 gas industry is very commonly confused with the oil
20 industry. Now in the oil industry you start at the
21 market place and at the present time we are looking at
22 something like Thirteen Dollar oil being the established
23 price on the west coast. You then back off the trans-
24 portation costs, take the Alyeska project, presume it
25 might be what, Five and one-half Dollars or so and you

1 arrive at a net dollar figure which would apply to the
2 wellhead price for the oil.

3 In the case of the natural gas industry, because
4 we are now fully regulated, first, of course, the well-
5 head price is regulated, the transportation end of it is
6 regulated, more importantly the price that we pay in the
7 market place is also regulated. Not only the price that
8 a wholesale natural gas transmission company, like myself,
9 would sell to its distributors for but also the price
10 that the distributor would sell to the homeowner and
11 the commercial institutions within the state market areas
12 themselves, that is also regulated.

13 Now, when we start taking this gas from Prudhoe
14 Bay and we roll it in with all the rest of our gas supply,
15 we simply lose any basis whatsoever for a firm market
16 price from which we can back transportation cost from
17 and, therefore, leaving the net balance as indicated in
18 the wellhead price available.

19 REP. GRUENING: Okay, but you are talking about some rolled
20 in value. I don't know if I understand that fully but
21 it isn't the fact of deregulation that makes the well-
22 head value constant. In other words, if deregulation
23 means anything, isn't it true that wellhead then is not
24 regulated by the FPC?

25 MR. HOLLAND: Correct.

1 REP. GRUENING: Okay. But you are saying despite deregulation
2 you will be able to get the FPC to approve, if they are
3 the approving body, somebody has got to approve this
4 charging other customers for gas they are not getting.

5 MR. HOLLAND: Well, sir, you could take natural gas nowadays
6 and you could sell it for almost any price in the market
7 place, particularly in some areas east of the Rocky
8 Mountains this winter. It could be suggested that you
9 could sell natural gas in the market place for Ten
10 Dollars a million BTU's because when you start rolling
11 that gas price in with dollar and one-half gas, if you
12 are only talking about five or ten percent of the total
13 gas supply being represented at that Ten Dollar cost,
14 the net effect to the homeowner or the ultimate consumer
15 -- the point being, he will never see Ten Dollar gas.
16 He will see a slightly increased cost of gas across the
17 board but he won't be buying this gas for Ten Dollars
18 because they roll it in with all the rest of the cheaper
19 gas. The trend in the industry has been that gas prices
20 are growing by leaps and bounds almost because every new
21 source that we find is much more expensive than the
22 preceding source.

23 REP. GRUENING: Okay, "they" is the FPC? You said that "they"
24 roll it in; who is going to do this?

25 MR. HOLLAND: Well, in the case of the Alaskan project it

1 will be the -- the transporter will send his gas south
2 and at the point where the gas is finally sold to the
3 distributor, at that point it will be rolled in in the
4 distributor's system, which ultimately feeds the commercial
5 institutions and the homeowners.

6 REP. GRUENING: And under that situation you are saying that
7 the cost of service is irrelevant.

8 MR. HOLLAND: The cost of service is irrelevant with respect
9 to what the wellhead price is going to be or the state's
10 returns on royalties and severance taxes, yes, sir.

11 SENATOR RADER: I am going to ask a question myself here
12 because it is along the same line. You stated that in
13 the event of deregulation that the wellhead value would
14 be determined by sort of a competitive bidding by
15 purchasers from producers?

16 MR. HOLLAND: Yes, sir.

17 SENATOR RADER: Well, now, wouldn't the amount that was bid
18 be based in part upon the cost of transporting that
19 product from wellhead to their purchaser?

20 MR. HOLLAND: In the lower 48, sir?

21 SENATOR RADER: In the lower 48.

22 MR. HOLLAND: No, sir, I don't think so.

23 SENATOR RADER: Wouldn't they be able to pay more for it if
24 they could get it there free, for example, than if they
25 have to pay someone and, therefore, if they have to pay

1 someone more or less, wouldn't that affect the amount
2 they would be willing to bid at the wellhead price?

3 MR. HOLLAND: Well, I suppose, Mr. Chairman, you reach a
4 point where there may be some influence but what we are
5 faced with here with several studies and testimony by
6 other witnesses appearing before this board is that the
7 transportation cost has everything to do with the price
8 that would be seen at the wellhead. We don't accept
9 that proposition.

10 Now, if we are talking about paying Twenty Dollars
11 at the wellhead -- I can see I am not going to be able
12 to answer your question that way. I really don't know
13 at what point the transportation cost might influence
14 what might be paid at the wellhead. But the whole idea
15 behind deregulation is to increase the price of gas at
16 the wellhead so as to provide more funds to the producers
17 to get out and explore and find some more gas because
18 they are so critically short of it. Whereas in years
19 past the Federal Power Commission, we all feel, has
20 artificially held the prices to wellhead to be too low,
21 at least too low to encourage exploration.

22 SENATOR RADER: Thank you. Mr. Chatterton?

23 REP. CHATTERTON: The same line of questioning, thank you,
24 Mr. Chairman. Exactly the same -- Mr. Holland, let me
25 ask you a very straight forward question. Actually you

1 are in the business of transporting energy, let's just
2 keep it that way, and someplace along the line that
3 energy has to be sold. All right, now if wellhead price
4 is deregulated, are you trying to tell me that you
5 would be willing and only willing to bid the same amount
6 for a wellhead price if route A only cost one dollar
7 per thousand cubic feet and route B cost two dollars
8 per thousand cubic feet? You would not be able to bid
9 any greater on the wellhead price for route A than if
10 it came through route B?

11 MR. HOLLAND: Representative Chatterton, it is our position
12 that regardless of what the transportation cost would
13 be to market there will be no influence on the wellhead
14 price to be paid to the producer at the wellhead.

15 REP. CHATTERTON: Thank you, sir. Thank you, Mr. Chairman.

16 SENATOR RADER: Representative Hayes?

17 REP. HAYES: Mr. Holland, I am getting an implication, possibly
18 erroneously, that if there is deregulation at the well-
19 head which would provide an incentive for producers to
20 go out and develop more wells, that industry would be
21 willing -- industry, I'm talking about the pipeline
22 companies such as yourself, would be willing to pay
23 those producing companies a premium. I also got the
24 implication that you didn't feel the state, since they
25 were not producers, were entitled to a premium. Are you

1 saying that you would on the one hand pay the producers
2 a premium but not the state if there was deregulation
3 at the wellhead?

4 MR. HOLLAND: Representative Hayes, I don't recall suggesting
5 that a premium might be possible in the case of de-
6 regulation. It would certainly open up options which
7 may not now be opened to the bidders for the gas. The
8 point I was making is that we could find no instance
9 where a premium or bonus had been paid to a royalty
10 gas owner in times past.

11 SENATOR RADER: Did that conclude your questions, sir?

12 REP. HAYES: Yes, thank you.

13 SENATOR RADER: Senator Sumner?

14 SENATOR SUMNER: If we could assume for a moment that it did
15 have some influence, the price at the wellhead, would
16 you agree that the benefit to Alaska through positive
17 economic impact, that the El Paso project would benefit
18 Alaskans even if there was some incremental increase in
19 the amount of money we could get for the royalty gas?
20 I suppose I am not stating it clearly enough, but
21 wouldn't the economic impact from having an all-Alaska
22 line more than offset that amount of money which we
23 might get from a higher price at the wellhead if trans-
24 portation costs were back charged, as was indicated this
25 morning, to give some incremental change to the wellhead

1 price?

2 MR. HOLLAND: Well, my answer to that question, Senator, has
3 to be yes, and I will add that we simply do not accept
4 the proposition that either of the other two projects
5 will have a lower transportation cost than the El Paso
6 project would.

7 SENATOR SUMNER: What do you see, in layman's terms, as the
8 positive benefit to Alaska for the El Paso project?

9 MR. HOLLAND: Okay, firstly, when we make these comparisons,
10 the advantages to Alaska as a result of the El Paso
11 project are approximately twice those for Alcan and
12 approximately six or seven times those for Arctic Gas.

13 Now, we talk about tax dollars. In the case of
14 the El Paso project we'll pay about 2.8 Billion Dollars
15 in property and income taxes over the life of the project.
16 This compares to 1.4 Billion Dollars for Alcan and some
17 substantially lesser amount for Arctic Gas.

18 In the case of employment, during construction
19 we are looking at twenty one thousand workers peak,
20 Alcan is fourteen to fifteen thousand, Arctic Gas is
21 six or seven thousand. After construction, we will
22 provide six hundred and fifty jobs approximately, full-
23 time, highly paid skilled jobs. Alcan's number show one
24 hundred and eight. Arctic Gas' number show thirty-nine.

25 I think the most important advantage of El Paso's

1 project though to the state would be in the spin-off
2 development opportunities that it provides. Now, there
3 has been a lot of conversation here about where the petro-
4 chemical plant ought to be, whether it ought to be in
5 Fairbanks or Delta or tidewater. It doesn't really matter.
6 If you want to build a petrochemical plant in Fairbanks,
7 and that is a decision to be made by the State of Alaska
8 and the citizens of Fairbanks, but I can guarantee you
9 that El Paso will deliver the feed stock in the Fairbanks
10 area less expensively than Alcan could. And when you get
11 to tidewater, of course, that is an opportunity that Alcan
12 doesn't even have. So, briefly, I would suppose those are
13 the major advantages.

14 SENATOR SUMNER: Thank you very much.

15 SENATOR RADER: Representative Meekins?

16 REP. MEEKINS: Thank you, Mr. Chairman. I just want to ask
17 you again on the point of deregulation at the well-
18 head. What I have gotten out of this discussion is that
19 you say if the wellhead price is deregulated, that there
20 are other factors besides the costs of service that would
21 go into the wellhead price. That, as I understand it, is
22 similar to other prices, that there is a certain amount
23 of demand and people are willing to bid according to
24 what their need or their demand is for that. And ob-
25 viously there are upper constraints beyond which the

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1 market won't bear or the cost of service is a factor in
2 there, but basically it is similar to other prices which
3 is a competitive situation. Some people may be willing
4 to internalize or to lose a part of their profit in order
5 to obtain that gas and other people would want to make
6 more on it or something like that. So, there is lots of
7 factors in there and that means that it isn't a direct
8 functional relationship between the cost of service and
9 the wellhead price. Is that what you are saying?

10 MR. HOLLAND: Well, I am saying that there is no relationship
11 between the cost of transportation and what might ultimately
12 be paid from the buyer to the producer or the gas at the
13 wellhead. And I'm saying that the State of Alaska should
14 not concern itself with the differences in the alleged
15 transportation cost between the three projects by way of
16 worrying about whether revenues will be larger from one
17 project or another. Because we maintain a position, and
18 I think we can support it, that in the case of deregulation
19 the cost of transportation will have no bearing on the
20 price of gas at the wellhead.

21 REP. MEEKINS: Thank you.

22 SENATOR RADER: Representative Miles?

23 REP. MILES: Earlier today, Mr. Holland, we heard testimony
24 which indicated the cost of the Arctic route would be able
25 to be kept down due to the limited amount of permafrost

1 in which the line would be constructed. Can you give us
2 your ideas on how the El Paso line and the Arctic line
3 compare insofar as construction and permafrost go?

4 MR. HOLLAND: Well, I would suggest that just the opposite is
5 true. Arctic Gas would seem to me to pass through at least
6 twice as much permafrost there as the El Paso line would
7 pass through. The cost overrun potential for the Arctic
8 Gas project, as judged by the Department of the Interior in
9 an independent study, was twice that of El Paso's. Interior
10 said that they are looking at eighteen to thirty-six months
11 time overrrun because of all these construction difficulties,
12 because of their dependence on the weather, and the
13 amount of snowfall for the snow paths, and that sort of
14 thing. Whereas, El Paso is building right off the haul
15 road in one case and right off the work path, and in the
16 other cases that is already in place for the Alyeska
17 project. The potential for time delays and cost overruns
18 for the El Paso project is significantly less than for
19 either of the two Trans-Canadian projects.

20 REP. MILES: Thank you, Senator. Thank you, Mr. Holland.

21 SENATOR RADER: Senator Croft has indicated that he had some
22 questions other than pricing. I think we might as well
23 stay on the pricing. That doesn't mean that we can't come
24 back to it at any time, but -- Senator Hacknew?

25 SENATOR HACKNEY: No, go ahead with ---

1 SENATOR RADER: Senator Croft, he wants you to proceed if
2 you have a different line of questioning.

3 SENATOR CROFT: I was curious what various projects El Paso
4 has underway in various parts of the world with regard
5 to LNG and what the status of those projects are. The
6 Algerian project has been referred to but I know that
7 you have others too and I am curious what the status of
8 all of them are in terms of their initial cost estimates,
9 their size estimates and whether they are on schedule
10 or not.

11 MR. HOLLAND: Now, Senator Croft, of course the initial one
12 as you suggested is the Algeria I LNG project with a
13 capacity of one billion cubic feet a day from Azrou,
14 Algeria, to be landed at two sites on the West Coast,
15 one at Savannah and one at Cove Point, Maryland.

16 SENATOR CROFT: East Coast.

17 MR. HOLLAND: East Coast, I am sorry. Savannah is still on
18 the East Coast, I suppose. That project is essentially
19 on schedule. We made our initial application in 1970
20 with the Federal Power Commission. Optimistically, we
21 also ordered three ships at the same time from Dunkirk,
22 France. When the ship construction started the Federal
23 Power Commission authority did not issue until 1973.
24 So actually Sonatrach, the national oil and gas corporation
25 for Algeria, did not start on the LNG plant in Algeria

1 until 1974. We happen to have two, and very soon three,
2 ships at an anchorage point in Norway just waiting for
3 that project to come to fruition. Start up is scheduled
4 for December of this year. We have also ordered three
5 ships from Newport News in Virginia and three ships from
6 Avondale Shipyards in New Orleans. That will be a nine
7 ship fleet for that project. Now, we will file on
8 March 1st of this year an amended application for what
9 we call the Algeria II project. That will also involve
10 transportation of approximately a billion cubic feet a
11 day, equivalent of LNG from Azrou, Algeria. It will be
12 landed at a point near Corpus Christi on the Gulf Coast
13 and United Gas will get approximately three hundred and
14 fifty million cubic feet of that gas, El Paso will receive
15 six hundred and fifty million cubic feet of gas.

16 We are looking into opportunities for LNG
17 projects from Iran, Venezuela and Russia. In addition
18 we are looking into coal gasification. We are the first
19 company to get on board with the idea of coal gasification.
20 We filed the first application with the Federal Power
21 Commission, We participated in at least three underground
22 nuclear explosions which are intended to find a way to
23 loosen up very tight gas bearing reservoirs. I suppose
24 that is a fair summary.

25 SENATOR CROFT: Mr. Chairman, I understood that the Iranian

1 project that you mentioned was roughly comparable in size
2 to the Alaska project that you have applied for. It was
3 about two billion cubic feet a day that you were going
4 to liquefy, is that correct?

5 MR. HOLLAND: I don't know, I honestly can't answer that
6 question. I had it in my mind that it was about a
7 billion but you could be right.

8 SENATOR CROFT: I was referring to the Oil and Gas Journal
9 article of November 1st, '76, page 27, entitled "Watching
10 the World" by Bart Collins. He indicates in there that
11 that project has been abandoned by Iran because cost of
12 the project, the latest estimate before it got underway
13 has exceeded Six Billion Dollars. Do you know whether
14 that is correct or not?

15 MR. HOLLAND: I do not, no, sir. I'm simply not involved in
16 that aspect of our company's operation.

17 SENATOR CROFT: But El Paso was involved in that project?

18 MR. HOLLAND: Yes. We at one time had -- I thought we still
19 had underway consideration of a project from Iran.

20 SENATOR CROFT: Could you check and let the committee know
21 if Iran has notified El Paso that it intends to abandon
22 that project because of the cost overrun?

23 MR. HOLLAND: I would be happy to.

24 SENATOR CROFT: The article also goes on to mention that one
25 of the reasons that Iran is also abandoning the project

1 is because they have determined that at least at present
2 prices that it is better off for them to maintain high
3 levels of oil production rather than to jeopardize oil
4 production by going into a large gas production at this
5 point. Do you have any knowledge of that?

6 MR. HOLLAND: I do not, no, sir.

7 SENATOR CROFT: Could you, because we are obviously going
8 into tomorrow, try to contact El Paso and see if they
9 have any information in that regard?

10 MR. HOLLAND: Yes, I will be happy to.

11 SENATOR RADER: Any further questions, Senator? Senator
12 Hackney?

13 SENATOR HACKNEY: Thank you, Mr. Chairman. Mr. Holland,
14 you are an engineer?

15 MR. HOLLAND: Well, I graduated as a civil engineer, yes,
16 Senator.

17 SENATOR HACKNEY: Maybe you wouldn't want to tackle this or
18 perhaps you would. It is a quote from an article that
19 was published by the Candian Arctic Resources Committee
20 and it states that "At best it appears that both projects"
21 and they are referring to Arctic and El Paso, "as
22 proposed by their sponsors are so risky that it may not
23 be possible to finance them privately, even if their
24 other problems can be overcome." Would you care to
25 comment on that?

1 MR. HOLLAND: Well, I think I would. I have not seen that
2 article, sir, but we're assured by our financial advisors,
3 who are White, Weld and Company and the Chase Manhattan
4 Bank of New York, that financing can be arranged for our
5 project and it can be arranged from private sources,
6 using, of course, the existing Maritime Administration
7 Title Eleven provisions which will assist in the
8 financing of the LNG carrier fleet. Now, in the case of
9 Arctic Gas, I suppose Bob Ward could better speak to
10 that, but we feel that the financing of either Canadian
11 project may well be the Achilles heel of those two
12 projects. They have to tap different, much more varied
13 sources; they face different kinds of risks. The question
14 could be asked -- for example, Arctic Gas has the policy
15 of wanting to proceed with construction of their pipeline
16 in spite of Native land claims. Some Natives up there
17 are saying, "I'll lay down my life to stop that pipe-
18 line." Now, I wonder if a prudent financial institution
19 would invest money in a project when they have the
20 threat of that sort of involvement in the Arctic Gas
21 project. Now, again, I would suggest Bob Ward might
22 have different comments on that.

23 SENATOR RADER: Representative Gruening?

24 REP. GRUENING: Mr. Holland, in El Paso's contract with the
25 state, Section 11.3 says that after approval of the

1 Agreement by the Legislature, the Buyer, El Paso,
2 "shall proceed with diligence in the preparation,
3 filing" of applications before the Federal Power
4 Commission. What, if anything, hasn't already been
5 accomplished under that provision? In other words,
6 hasn't everything that that provision calls for already
7 been accomplished by you?

8 MR. HOLLAND: Representative Gruening, the way the Federal
9 Power Commission proceedings have been organized, we
10 have actually just finished Phase I. Phase I will
11 result in the recommendations which go to the President
12 upon which, with other input, he will make his decision
13 as to which route is built. Once the route is selected,
14 we then proceed into Phase II of the Federal Power
15 Commission proceedings because again we are a fully
16 regulated company. Several of the things that will be
17 done in Phase II will be the Federal Power Commission
18 will look at the gas sales contracts, whether they be
19 for royalty gas or working interest gas at Prudhoe Bay.
20 They will look at the financing package, the organization
21 of the consortium, the final tariff arrangements for
22 transporting the gas and perhaps other things I am
23 overlooking.

24 Now, we understand that as part of our obligations
25 under that contract, we are to request from the Federal

1 Power Commission during Phase II of the proceedings,
2 authority to actually send back to the State of Alaska
3 the gas that it wants to recall for its own in-state
4 purposes. In other words, we have to seek approval of
5 this contract from the Federal Power Commission.

6 REP. GRUENING: Phase II comes after the selection by the
7 President and Congress of the route?

8 MR. HOLLAND: Yes, sir.

9 REP. GRUENING: Is Phase II critical, do you think, in terms
10 of the state exercising its right to take back gas under
11 this contract?

12 MR. HOLLAND: Well, from the standpoint of the purchaser --
13 it is more critical from the standpoint of the purchaser,
14 I believe. We have to get authority to execute our
15 obligations under that contract, the things we are
16 obliged to do under the contract have to be approved by
17 the Federal Power Commission because we are fully
18 regulated. We think it is important that the state has
19 submitted these contracts to the Federal Power Commission
20 as part of Phase I. It has, at least, a psychological
21 force with the judge, although I really don't know what
22 the FPC might include in its opinion to the President
23 with respect to what is in these contracts. We will
24 have to wait and see.

25 REP. GRUENING: I think most of us in this room understand

1 the arguments for the El Paso route. I think they are
2 very persuasive. Now, wouldn't the rest of the United
3 States and Congress and the President also see the merit
4 in those proposals without the added threat, and it is
5 a threat, correct me if you don't think it is that,
6 of telling them that if they don't approve our route
7 that we want that we are going to take our gas back.
8 Now, does that add anything to the merits of the
9 argument or do you think it detracts perhaps from the
10 merits?

11 MR. HOLLAND: Representative Gruening, for three years here
12 in the State of Alaska we have maintained -- my company
13 has maintained that the most important thing the state
14 could do to support our project, to help gain its ap-
15 proval is to commit its surplus royalty gas in such a
16 way as it could be used to create a national constituency.
17 Now I have heard representatives from Tenneco and Southern
18 sort of back off from that term, however, in the case of
19 El Paso, we fully intend to apply the influence of this
20 contract in that matter. We intend, for example, to
21 launch a statewide campaign in California. We feel in
22 the case of California we must take our case to the
23 people. We have tried to talk to Quinn, to Maullin,
24 to the Governor, et cetera, et cetera, and I really
25 shouldn't mention names but we haven't gotten very far

1 down there, we do have some problems down there. So,
2 when we point out the fact that we have acquired title
3 up to six hundred and fifty billion cubic feet a day
4 in a situation where the consumers of California are
5 facing curtailments in 1981, moving fifteen percent into
6 the households of California, fifty-two percent into
7 the commercial institutions and all industry are being
8 cut off. And by virtue of the fact that we furnish,
9 as I said, eighty percent of our gas to California,
10 we think that it has got to have some influence down
11 there with respect to which project California ought to
12 ultimately support.

13 REP. GRUENING: Do you think California or the delegation of
14 California and some of the other national delegations
15 will take the threat as credible. In other words, will
16 they believe that the State of Alaska will sit on its
17 gas until some indefinite time if these two routes, or
18 especially the El Paso route is not chosen? Do you think
19 they will take that threat, I mean interpret it as a
20 credible threat?

21 MR. HOLLAND: Representative Gruening, I would suggest, sir,
22 that that is dependent on what the State of Alaska itself
23 says with respect to its purposes for this contract. As
24 far as the buyers go, we can only say that "Ladies and
25 gentlemen of our market areas, there is a good chance you

1 will get more gas if the Trans-Alaska route is approved,
2 so please tell your Congressmen and your Senators and
3 your Governors to help us."

4 REP. GRUENING: Will that level of decision makers, do you
5 think, believe that unless -- despite the merits of the
6 case, they don't approve the El Paso line, that that gas
7 will never get to market despite whatever in-state uses
8 we may have?

9 MR. HOLLAND: I suppose that, again, it is up to what the
10 State of Alaska says it is going to do with its resource
11 in the event the Trans-Alaska project isn't approved.

12 REP. GRUENING: But what we are saying with this contract, if
13 I understand it correctly, is that if it is not approved,
14 we are not letting the gas leave the state.

15 MR. HOLLAND: Well, I think what you are saying in these
16 contracts, sir, is that if the Trans-Alaska route is not
17 approved, then El Paso, Tenneco and Southern have not
18 bought the gas. Now what you decide to do with it beyond
19 that point, of course, we don't know.

20 REP. GRUENING: Well, I am trying to -- because the essence
21 of this contract, the effort is to try to persuade people
22 to our point of view. At least the idea of committing
23 is to build -- I have heard it expressed a number of ways,
24 either to build a constituency or to influence the people
25 that represent that constituency. The only problem I have

1 had so far, the major problem with these hearings is
2 I haven't established just how that is going to be done.
3 Will the fact that we say we are not going to commit it
4 to you, influence Congress when you believe honestly
5 beyond the merits of your argument of the El Paso line
6 -- for the El Paso line?

7 MR. HOLLAND: I think more importantly, Representative
8 Gruening, what these contracts do is to bring two
9 substantial partners to the effort for gaining support
10 and, therefore, two substantial voices in spreading the
11 word about the merits of our project. Now, we have been
12 in this thing all alone ever since the beginning and we
13 had an example of how well we have been able to do alone
14 against a consortium of variously fifteen to twenty-nine
15 members in the Arctic Gas group, first in the staff's
16 opinion and more recently in the judge's opinion. I
17 would suggest that if we had Tenneco and Southern or
18 two other companies or whatever involved a year or two
19 earlier, the judge's opinion issued yesterday might have
20 been a little bit different.

21 REP. GRUENING: If I understand your efforts so far, they
22 have been based on the merits of your argument and if
23 what you have done so far is successful then we should
24 be bringing in people that will be doing the same thing,
25 in terms of arguing their case, the merits. Is that a

1 correct assumption?

2 MR. HOLLAND: I really don't understand, sir, what you are
3 trying to get to.

4 REP. GRUENING: Well, I am just trying to get to how the
5 national constituency, the decision makers are going
6 to react to this contract. Are they going to react
7 favorably to the El Paso proposal, are we going to gain
8 votes in Congress? In other words, by saying they
9 will get the gas through these three companies only if
10 the El Paso route is chosen. I'm just asking you whether
11 it will have a counter-productive effect of saying that
12 we are going to deny you this gas and regardless of the
13 merits.

14 MR. HOLLAND: Representative Gruening. We think it will
15 have a profound positive influence in generating support
16 in the lower 48 states if these contracts are approved.

17 SENATOR RADER: Senator Croft?

18 SENATOR CROFT: In that regard I am curious how you are
19 going to be able to tell people in the State of California
20 that the approval of the El Paso route will result in
21 more gas to California when there is a provision in the
22 contract that the state can withdraw all of the gas
23 that you have bought, basically at any time it desires.
24 And secondly, there is a provision in the contract which
25 says that the state may switch its support to some other

1 route.

2 MR. HOLLAND: Well, sir, the way we will present the contract
3 with respect to the second part of your question is that
4 as long as we are doing our job and as long as Tenneco
5 and Southern are doing their job, there is not a likeli-
6 hood that the state is going to want to switch its
7 support, which we understand will occur only if it
8 appears the El Paso project is doomed to failure. We
9 think we are in this thing big yet; in fact, we intend
10 to win the thing in the end. And would you please repeat
11 the first part of your question?

12 SENATOR CROFT: Yes, the take back provision. How can you
13 tell somebody in California this is going to be more
14 gas to you, when the state has the right to take all of
15 the gas back?

16 MR. HOLLAND: Because if any cubic foot at all of gas flows
17 out from the provisions of this contract into California,
18 that is a cubic foot they wouldn't have otherwise gotten.
19 And when we are looking out into '81 with fifteen percent
20 curtailment, I say again in the priority one, homeowner,
21 gas consumers, each little bit of gas that we can send
22 to California, which is contingent upon approval of the
23 Trans-Alaska route, we think will be very persuasive in
24 getting the people in California to support our project.
25 Nobody can quantify how much gas will actually ever flow

1 out from this contract. We think there will be some
2 and that is enough of an argument to make in California.

3 SENATOR CROFT: You feel then that the switching provision
4 in these contracts doesn't undermine your position at
5 all?

6 MR. HOLLAND: No, sir.

7 SENATOR CROFT: With regard to the amount of gas that is
8 necessary to make your project feasible, are there
9 reserves at Prudhoe Bay now of a sufficient magnitude
10 that your project is not dependent on the discovery of
11 additional reserves?

12 MR. HOLLAND: Yes, sir, there are. There are enough reserves
13 in Prudhoe Bay to make our project viable.

14 SENATOR CROFT: What recovery rate do you use in saying that
15 those reserves are sufficient?

16 MR. HOLLAND: Well, we have a total of twenty-six trillion
17 proven by various geologists who have looked at it. We
18 think the amount needed to flow in one of these projects
19 is in the range of twenty-one to twenty-two trillion.
20 We think that in order to build our project and deliver
21 gas to the lower 48 -- now it is up to the finance houses
22 in the end, if you are just asking our opinion, probably
23 right at two billion cubic feet a day would be the threshold
24 at which we would wonder if we had an economically viable
25 project or not.

1 SENATOR CROFT: And what percentage of twenty-six trillion
2 cubic feet is that? What do you estimate that you are
3 going to recover out of the twenty-six trillion cubic
4 feet, what percentage?

5 MR. HOLLAND: At two billion a day?

6 SENATOR CROFT: Yes.

7 MR. HOLLAND: Well, I don't know the number, Senator, but it
8 is two billion times three hundred sixty-five times
9 twenty years.

10 SENATOR CROFT: You are assuming that throughout, that it
11 would be an economically viable project?

12 MR. HOLLAND: If we could continue producing two billion
13 a day for twenty years, we would probably have an
14 economically viable project. We think we will get more
15 out of there though.

16 SENATOR CROFT: That would be in the neighborhood of sixty
17 percent then?

18 MR. HOLLAND: I don't know the numbers, perhaps so. It
19 sounds about right.

20 SENATOR CROFT: You have done some analysis to come up with
21 that, haven't you?

22 MR. HOLLAND: Well, we haven't done a very sophisticated
23 analysis, Senator Croft. You know our project is sort
24 of built on the train idea where with the installation
25 of six trains at the LNG plant, we would liquefy 2.4

1 and with the addition of five trains we can liquefy 2.0
2 billion cubic feet a day. I haven't been involved in
3 the economic analysis myself but I understand that some-
4 thing below two billion cubic feet a day would give us
5 problems. Now we are also talking about competitive
6 aspects of these projects too.

7 SENATOR CROFT: I am still talking about the impact on the
8 reservoir at Prudhoe Bay and I am curious what your
9 analysis indicates. Is your necessary percentage of
10 recovery rate -- and you think it is somewhere in the
11 neighborhood of sixty percent?

12 MR. HOLLAND: We think it is whatever percentage about two
13 billion plus a day results in, yes, sir.

14 SENATOR CROFT: All right. Have you done a reservoir analysis
15 at Prudhoe Bay?

16 MR. HOLLAND: Yes, sir, we have.

17 SENATOR CROFT: And who did that for El Paso?

18 MR. HOLLAND: We used our own staff. We have a staff of
19 reservoir engineers.

20 SENATOR CROFT: And could we get a copy of that?

21 MR. HOLLAND: Yes, sir, you could.

22 SENATOR CROFT: All right. And what does that show at the
23 minimum level necessary to make your project economically
24 viable, what does it show to be the impact on oil pro-
25 duction out of Prudhoe Bay?

1 MR. HOLLAND: Well, the reservoir analysis which I am referring
2 to did not look at the economic viability of the project
3 aspect. It only looked at what we could expect to see
4 recovered out of Prudhoe Bay over time and it actually
5 went up to four point something billion cubic feet a day
6 for a few years.

7 SENATOR CROFT: What did your study show the impact on oil
8 production would be at Prudhoe Bay?

9 MR. HOLLAND: Senator, I wish I could answer that but let me
10 furnish the study to you and then we can both look it
11 and decide what it shows. I don't think it showed any
12 interference with oil production at all.

13 SENATOR CROFT: Do you know what assumptions were made with
14 regard to reinjection of gas or aquifer or water flood
15 or levels of oil production?

16 MR. HOLLAND: Well, there were no assumptions made in our
17 study as to reinjection of gas, that I'm fairly certain
18 of. There were very likely some assumptions made as to
19 water flooding.

20 SENATOR CROFT: And what about levels of oil production?

21 MR. HOLLAND: Well, with given levels of water flooding, oil
22 production would not be hampered.

23 SENATOR CROFT: Did your study differ substantially from the
24 Van Poolen study or the Corps Lab study?

25 MR. HOLLAND: Senator Croft, I haven't compared them. I

1 don't know.

2 SENATOR RADER: Any further questions? We'll go the first
3 round here still. Senator Poland, I don't think you
4 have spoken yet.

5 SENATOR POLAND: Thank you, Mr. Chairman. Mr. Holland, I
6 have a question in my mind that I can't quite figure out.
7 Inasmuch as your company will be the one that has the
8 pipeline, we have heard a great deal about political clout.
9 It would seem to me that you have more to gain than any-
10 one else and I am a little bit curious as to why you
11 also became a purchaser of gas?

12 MR. HOLLAND: Well, I thought about this last evening. I
13 knew I would be asked the question, what additional
14 influence does the sale of royalty gas give to El Paso
15 and what would we be doing differently if we get the gas
16 as opposed to if we didn't get it and I almost have to
17 say we are doing the best we can now, we have been for
18 three years and I doubt that we can do anymore whether
19 or not we have the gas. But, I do have to tell you that
20 having access to some of Alaska's surplus royalty gas
21 will help us make a case in a different way in our market
22 area and I refer back to the discussion we just had on
23 the California situation. That also applies to Arizona,
24 in which state we furnish one hundred percent of the gas
25 consumed, New Mexico, Texas, Nevada, Colorado, other states

1 in the southwest. So, it will have a beneficial effect'
2 on the prosecution of our effort in gaining support for
3 the project but we are still doing the best we can in
4 the other arenas.

5 SENATOR POLAND: I'm sure that you are. I thought maybe we
6 could have gotten a fourth partner to build this national
7 constituency instead of giving gas to El Paso since they
8 had the pipeline at stake. Mr. Chairman, I have one
9 other question I would like to --

10 SENATOR RADER: A little bit louder, Senator, I see people
11 having difficulty hearing you.

12 SENATOR POLAND: I have one other question that I would like
13 to ask Mr. Holland. He referred to the fact that the
14 El Paso route does go to tidewater, which I think almost
15 all Alaskans fully appreciate, but my question is, why
16 Gravina Point? Why not a spot like Cook Inlet, I am
17 referring to the possibility of the coal generating to
18 prepare the gas for shipment. I understand that we will
19 be burning seven percent of that -- I have heard that
20 figure, I don't know whether it is accurate, to liquefy --
21 was Cook Inlet considered and if it was considered and
22 turned down, could you give me the reasoning behind it?

23 MR. HOLLAND: Yes, ma'am. Senator Poland, we looked at
24 Cook Inlet, we looked at Resurrection Bay, we looked all
25 across Prince William Sound and in fact, we looked at Nome

1 in the beginning. Some of the alternatives were very
2 quickly and easily eliminated as far as a practical
3 location for an LNG plant site. You see, with our
4 project we not only have to find a viable pipeline
5 route, but we have to find a port site where we can send
6 a ship in and a ship out of there every day and one-half
7 for the rest of the project's life, without fail, without
8 interference.

9 When we got over to the Cook Inlet area, the
10 first thing we did which was unpleasant to us, was that
11 we departed from the Alyeska corridor because we came
12 down the rail belt and that would not then let us
13 maximize use of Alyeska's existing facilities, camps,
14 equipment, work pad, et cetera, gravel sources and data.
15 The second thing we found difficult with Cook Inlet was
16 the ice problem there, the tides, the current. Operating
17 an LNG carrier costing Two Hundred Million Dollars each
18 on the basis of one in and one out every day and one-
19 half, we didn't think that we could do it on a reliable
20 basis when we had to fight all those oceanographic con-
21 ditions that occur in Cook Inlet which do not occur in
22 Prince William Sound. So in the end, when we rolled all
23 this alternative analyses together, and we looked for a
24 plant site on competent bedrock, et cetera, et cetera,
25 the best combination was Gravina, and the pipeline route

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1 maximized the use of Alyeska's facilities.

2 SENATOR RADER: Any further questions? Mr. Chatterton?

3 REP. CHATTERTON: Before you let him go.

4 SENATOR RADER: Oh, yes. Well, I would like to go around
5 once to everybody and then we can start the second time
6 around. Representative Chatterton?

7 REP. CHATTERTON: Thank you, Mr. Chairman. What is your
8 understanding, Mr. Holland, as to the terms of the
9 contract regarding who stands for the cost of converting
10 wellhead gas and the quality that it comes from the
11 wellhead to quality gas necessary to one, be injected
12 into the pipeline or two, at least be in a condition
13 for liquefaction? Whose stand is that, the State of
14 Alaska's or do you?

15 MR. HOLLAND: Representative Chatterton, are you talking
16 about the cost of gathering and processing the gas
17 occurring at Prudhoe Bay?

18 REP. CHATTERTON: I am talking about the cost of converting
19 the wellhead gas to a suitable quality for transmission
20 by the pipeline as part A or if it is different, for
21 quality for liquefaction. Are you with me?

22 MR. HOLLAND: I am with you. I understand the question. I
23 would expect that we would pick up those costs. If the
24 point of purchase is at the wellhead or at the inlet
25 side of the separator or wherever it is ultimately

1 established, it has not yet been established. We pick
2 up the share of costs which go to processing the gas
3 to pipeline quality which then goes into our market
4 area. Now in the instance where the State of Alaska
5 is using that gas for its own needs within the state's
6 borders, the potential purchaser of gas, say in Fairbanks
7 or wherever, would then stand their proportionate share
8 of those processing and gathering charges.

9 REP. CHATTERTON: If you purchase gas from a working interest
10 owner, do you also pay their costs to convert it from
11 wellhead quality to pipeline quality?

12 MR. HOLLAND: One way or another we would pay it. It would
13 either be rolled into the wellhead price or it would be
14 rolled into the transportation cost. One way or another
15 we would pay it.

16 REP. CHATTERTON: On that subject that is all I have, Mr.
17 Chairman. Thank you, Mr. Holland.

18 SENATOR RADER: Representative Swanson?

19 REP. SWANSON: Yes, sir. Mr. Holland, you remarked several
20 times with Senator Poland and with Representative
21 Gruening and yesterday with Representative Parr about
22 your political clout and a few minutes ago you remarked
23 about using the people in California as a persuasive
24 measure to using our gas as one of the measures for
25 persuasion to build something and supply them in

1 California. You made that remark a couple of times.
2 Well, now, what kind of persuasion are we going to use
3 when we want our gas back? Where is your political clout
4 there? Is it still going to be with California with
5 all of their Senators and Representatives back in
6 Washington or is it going to be with our one lone
7 Representative and two Senators?

8 MR. HOLLAND: Representative Swanson, we certainly don't
9 intend to mislead the people of California into believing
10 that this is an assured gas supply. We have to reveal
11 the fact, obviously, that the gas is subject to recall
12 but nonetheless if they get a cubic foot, it is a cubic
13 foot they wouldn't have otherwise gotten without the
14 Trans-Alaska route.

15 Now, if you are talking about -- we heard some
16 discussion yesterday about a potential program underway
17 to repeal this 13(b) provision of the Alaska Natural
18 Gas Transportation Act. We supported the State of
19 Alaska in its attempt to get that thing into that bill
20 and we will support the State of Alaska in its attempt
21 to keep in in there too.

22 REP. SWANSON: Then you say that you are going to use your
23 political clout in California and Washington to give our
24 gas back when we want it?

25 MR. HOLLAND: Well, sir, if --

1 REP. SWANSON: Well, I could just take a yes or no answer.

2 MR. HOLLAND: Yes.

3 REP. SWANSON: Thank you.

4 SENATOR RADER: Does that conclude your question, sir?

5 REP. SWANSON: Yes, sir.

6 SENATOR RADER: Senator Huber?

7 SENATOR HUBER: Mr. Holland, you have anticipated most of
8 my questions to date but you may have heard the dis-
9 sertation back and forth yesterday about natural gas
10 liquids and being you are proposing the pipeline, I'll
11 ask the question to you. What would El Paso do with or
12 what will happen to the natural gas liquids, that is
13 those factions higher than C₂ present in the gas as it
14 is produced on the North Slope, if the state elects not
15 to take those liquefactions on the North Slope?

16 MR. HOLLAND: Senator Huber, the state has full rights to
17 those liquids. I think we agree on that.

18 SENATOR HUBER: They do. But if they elect not to take them
19 on the Slope, what will happen to them or what will you
20 do with them? That is the factions above C₂ in number.

21 MR. HOLLAND: All right, sir. We will haul them wherever
22 the State of Alaska wants us to haul them to and if that
23 is to Fairbanks or Gravina or California, that is what
24 we will do. But we will never lose sight of the fact
25 that the liquids belong to the State of Alaska.

1 SENATOR HUBER: All right, Mr. Chairman, there is one more
2 question. Do you have the capability in the line that
3 you propose to haul those factions to other points for
4 the state to take them off? That is what I am trying
5 to get to.

6 MR. HOLLAND: Because of the operating characteristics of
7 our pipeline, temperature ranging from five degrees
8 Fahrenheit to say twenty-eight degrees Fahrenheit,
9 pressure at sixteen hundred and seventy pounds, we
10 can operate --- we can accommodate approximately eighty
11 percent of the liquids which will be available in the
12 gas stream on the North Slope.

13 Now there is a question as to what is going to
14 be done with the remaining twenty percent and we under-
15 stand there is several alternative ways of disposing of
16 those liquids under consideration. They could be burned
17 as fuel on the Slope, they could be sent into a separate
18 small land or liquid pipeline, they could be trucked
19 off the Slope and I have even heard someone say they
20 are studying a railroad proposition.

21 SENATOR HUBER: Mr. Chairman. Could you let us know in
22 writing to the committee just what the situation is in
23 regard to the liquids, what would be available because
24 of the technological ability of your pipeline and so
25 forth and where what won't be available? In other words,

1 you say all but twenty percent of them can be moved. I
2 want to know what twenty percent, what factions these
3 are and so forth and I don't want to hold up your time
4 now but if you could supply that technical information
5 to the committee, I'd like to have it.

6 MR. HOLLAND: I'd be happy to supply it, sir.

7 SENATOR HUBER: Thank you.

8 SENATOR RADER: Senator Sumner, I believe. You will be in
9 order next.

10 SENATOR SUMNER: Just one question. Some inference was made
11 largely with your capacity to timely build this project
12 and finance it. Have you to date been questioned in
13 any active sort of way or by any officials in any
14 official capacity as relates to your capacity to timely
15 complete the El Paso project and to timely finance it?

16 MR. HOLLAND: Well, Senator Sumner, those are two of the
17 major subjects we stood substantial cross-examination
18 on before the Federal Power Commission and even Arctic
19 Gas' witness looked at our capital costs and said okay,
20 within nine or ten percent. The witness then said and
21 the judge said too, any two estimators who agree on the
22 costs of a project of these magnitudes within nine or
23 ten percent, the estimates must be pretty good. There
24 was also no disagreement -- there was no substantial dis-
25 agreement with our construction schedule, that is by the

1 time we get into the field, we can actually have those
2 facilities in operation in the time that we have sug-
3 gested we can in our application.

4 SENATOR SUMNER: Do you have any reservations on those two
5 items?

6 MR. HOLLAND: None at all, sir.

7 SENATOR RADER: Senator Hackney?

8 SENATOR HACKNEY: Thank you, Mr. Chairman. The question
9 was suggested, Mr. Holland, if the state passed legislation
10 charging the producer for twelve and one-half percent
11 of all gas reinjected, would this have a significant
12 problem with El Paso?

13 MR. HOLLAND: Senator, I am sorry. I don't understand the
14 question. Would you please restate it?

15 SENATOR HACKNEY: If the state passed legislation charging
16 the producer for twelve and one-half percent of all the
17 gas reinjected, would this have a significant problem
18 with El Paso?

19 MR. HOLLAND: I am sorry. I just don't understand what that
20 question is.

21 SENATOR RADER: It is approximately time for our recess. I
22 would like to finish with these witnesses though if it
23 is the sense of the committee that we are close to
24 finishing up with them and it is my sense that we are
25 with perhaps -- Representative Chatterton?

1 REP. CHATTERTON: One question. Thank you, Mr. Chairman.

2 Mr. Holland, we were discussing a little bit ago that you
3 would pay, as I heard you say, the cost of converting
4 wellhead quality gas to pipeline quality gas. I think
5 that is admirable. I am worrying like heck -- and you
6 said you would do the same thing for the working interest
7 owner. I am a little worried where the kicker is.
8 Would it be that you would do that and under a specific
9 condition such that the cost of so doing would be rolled
10 into your price by the FPC?

11 MR. HOLLAND: Absolutely, sir. Yes, sir.

12 REP. CHATTERTON: If the FPC did not include that as a cost
13 in establishing your selling rate structure, you would
14 not be interested in doing it, is that correct?

15 MR. HOLLAND: Not only that, sir, but there would be no flow
16 of gas. We can't haul that gas out of Prudhoe Bay unless
17 it is cleaned up. Nobody can, Arctic Gas, Alcan, nobody.

18 REP. CHATTERTON: You lead me then to another question. I'm
19 sorry. Are you saying that if you cannot roll the cost
20 of the conversion to a pipeline quality gas into your
21 rates then we, the state, would have to pay our cost of
22 processing?

23 MR. HOLLAND: Representative Chatterton, we'll pay that cost
24 and we will get authority to roll it into our rates, so
25 there is no problem there. It is a normal cost. There

1 is nothing unusual about it at all.

2 REP. CHATTERTON: Thank you, sir.

3 SENATOR RADER: Representative Carpenter?

4 REP. CARPENTER: Mr. Holland, if the state doesn't or can't
5 take possession of the liquids, say at Prudhoe, what
6 becomes of them?

7 MR. HOLLAND: Well, as Senator Huber and I were talking,
8 about eighty percent of them stay in that gas stream
9 until such point that the state determines it wants its
10 share removed.

11 REP. CARPENTER: But if the state doesn't determine that, the
12 state has no use for them, what happens to them?

13 MR. HOLLAND: Well, if the state decides it doesn't want to
14 use natural gas liquids that are in the gas stream at
15 Prudhoe Bay, in the first place it would be, I think,
16 an inexcusable oversight on the part of the state. These
17 are very valuable feed stocks but if you want to let us
18 take them down and sell them to Arizona and California
19 and Nevada as BTU's, then we will do that. But I don't
20 think that is what you want us to do, sir.

21 REP. CARPENTER: You would move them out of the state at that
22 point?

23 MR. HOLLAND: Yes, sir, if there was no use for them in the
24 state, they would move out of the state, yes.

25 REP. CARPENTER: Has there been any talk of moving the

1 liquids that can't go in our main line, through the
2 Alyeska pipeline?

3 MR. HOLLAND: Yes, that is one of the options I neglected to
4 mention. The heavier hydrocarbons, I think the natural
5 gasoline and perhaps the butanes, parts of those fractions
6 could be included in the Alyeska line; at least that is
7 being studied. Now they have to come out of Valdez
8 though.

9 SENATOR RADER: Representative Meekins?

10 REP. MEEKINS: Mr. Chairman, how is it that California would
11 have more gas if the contracts are approved?

12 MR. HOLLAND: Well, sir, our business is delivering gas
13 throughout the Southwest. All of that gas is delivered
14 pursuant to terms of existing contracts. If we are unable
15 to meet the obligations we have incurred out of those
16 contracts by way of making the volume deliveries we are
17 supposed to make, any gas that we acquire from any source,
18 whether it be Alaska, Algeria or Timbuktu, must first go
19 to satisfy the unsatisfied demands of those contracts.
20 Eighty percent of the contracts we hold in the natural
21 gas company are for service to California. So they get
22 eighty percent of whatever gas is surplus to Alaska's
23 needs that we would acquire under this contract.

24 SENATOR RADER: Are there any further questions? If not, we
25 thank you gentlemen very much and we will take Dr. Tussing

Thompson

WARD

HOLLAND

JOINT PUBLIC HEARINGS
of the
ALASKA STATE LEGISLATURE
on

SCR 3, 4, 5 and HCR 11, 12, 13

"THE PROPOSED SALE OF ROYALTY GAS"

January 31, 1977 - February 7, 1977

Juneau, Alaska

VOLUME IV

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ALCAN (February 3) p. 8

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EL PASO (February 3) p. 70

by: Mike Holland, Assistant to V.P. John Bennett

FEBRUARY 3, 1977

1
2 SENATOR RADER: The hearings by the joint committees relative
3 to the sale of State royalty gas will come to order.
4 We have had distributed by El Paso a document indicating
5 natural gas consumption for those states served monthly
6 in whole or in part for 1975. They have asked that it
7 be made an exhibit. Unless there is objection, we will
8 mark it Exhibit 13, and I believe the reporter has a
9 copy of that, do you not?

10 (Whereupon Exhibit 13 was duly marked.)

11 SENATOR RADER: I believe copies of that have been distri-
12 buted to all members of the committee. We have also a
13 request by Alcan that a pamphlet that they have prepared
14 called "The Alcan Pipeline Project, A Realistic Solution
15 to the Transportation of Alaskan Gas", consisting of
16 twenty numbered pages, be entered as an exhibit. Unless
17 there is objection this will be put in as Exhibit 14.

18 (Whereupon Exhibit 14 was duly marked.)

19 SENATOR RADER: One of the most difficult problems we've had
20 here is that the hearings have continued beyond what any
21 of us had anticipated, the interest has been greater
22 than we had anticipated, and also the thoroughness of
23 examination and the testimony has gone beyond what we
24 had expected. If the hearings do go on tomorrow they
25 will be on the first floor of the Court Building. We will

1 move from here to there. I don't know that they will
2 go on tomorrow, but if they do, before anybody that's
3 here today leaves, I want you to be advised that that's
4 where we will reconvene, and we will also try to recon-
5 vene promptly at 11:00 o'clock again tomorrow subject,
6 of course, to the floor action of the House and the
7 Senate.

8 I understand that some of the House members, I see
9 and I was informed that they might be a little bit late.
10 The problem here of taking witnesses out of order is
11 that I've been requested by so many people now to be
12 taken out of order that every time I do I make it worse
13 for someone else, and I don't really know how to honestly
14 be fair and judge who should be favored and who should not.

15 The witnesses are listed, our general interested
16 witnesses are listed in approximate priority, in approxi-
17 mate order, that we received a response from them to our
18 letters, or a request from them that they be permitted
19 to testify. I am reluctant to pick between equally
20 competing witnesses here as to who should get priority.

21 I would like suggest to any witness who has a
22 problem, that if you could talk to some other witness
23 who is in front of you and get them to agree to swap
24 places, then neither you nor he could be offended, nor
25 could those behind be offended, because they're still

1 in the same relative position. I'm reluctant on my own
2 behalf though to try to judge the relative needs and
3 merits of the witnesses' requests.

4 I did take a witness out of order yesterday,
5 Michigan/Wisconsin Pipeline Company. I frankly did not
6 think the testimony would go on so long; I did not realize
7 it would be so critical. I recognize that now, as having
8 been a mistake because once you take one person out of
9 order every other person is equally entitled to be taken
10 out of order, and suddenly there is no longer a semblance
11 to order in the proceedings.

12 I know that some of the committee members have
13 particular witnesses that they want taken out of order.
14 If any committee member wishes to make a motion to that
15 effect, to take some witness out of order, that motion
16 will, of course, be determined. The voting on it will
17 be limited to the select committee, the five from the
18 House and the five from the Senate, and at that time we
19 will bring up and discuss in detail the very problem
20 that I've discussed so far.

21 I am advised that our consultants -- I believe,
22 I'm not certain of this, but I believe they can hold
23 themselves over until tomorrow, an additional day,
24 which would speed up to some extent the general industry
25 and general public interest witness possibilities.

1 The Department of Natural Resources has agreed
2 to come back and give us a summary of Judge Litt's
3 opinion that we still have not received. Part of that
4 will be read into the record. They also intended to
5 make themselves available to answer questions which may
6 have been raised by conflicting testimony of the witnesses
7 that we've had. I intend to hold them to the last
8 and, if necessary, perhaps they will not even testify
9 until next week, and they may very well testify in
10 front of the committees separately, the Finance Committees
11 and other separately, if necessary. I'd like to have
12 them testify in front of everyone so that we have a
13 record and we all have the opportunity to hear what they
14 have to say, and so the proponents and opponents of the
15 resolution before us could also hear and respond.

16 I hope that we do have that time. But, of course,
17 the key to this is the amount of time that the witnesses
18 take at testifying and the amount of time that members
19 feel necessary to question.

20 If we follow our agenda as prepared, and I will
21 follow that until there is some motion to take someone
22 out of order because, as I say, I don't know how to
23 explain to the rest of the people why they've been put
24 back one space.

25 Incidentally, Mr. Hoyle Hamilton is here.

1 Commissioner Martin said his observer had told him that
2 there was considerable question raised as to reserves,
3 rate of production, and related matters in the testimony
4 addressed to various witnesses, and various witnesses
5 indicated they did not have that first-hand information.
6 Mr. Hamilton is here. Does the committee wish to take
7 Mr. Hamilton out of order at this time or not? Otherwise,
8 his testimony would be included in part of the wrap-up
9 by the Department of Natural Resources.

10 Do I hear any particular desire on that?
11 If there is no expression, then I will leave his testimony
12 until the wrap-up. He will be available to us and we
13 will try to take care of our out-of-town witnesses here
14 first.

15 Mr. Chatterton.

16 REP. CHATTERTON: Mr. Chairman, in the interest of Mr.
17 Hamilton, he is also an out-of-town witness and I do
18 know that he has had some home problems lately, and maybe
19 if he has any great need to get back to Anchorage. Only
20 he can speak to this, and we might reconsider.

21 SENATOR RADER: It has been suggested to me that at least
22 State witnesses are here on government per diem from
23 out-of-town, whereas a number of our interested party
24 witnesses are not on per diem, are paying their own
25 way. So I hope that unless you really feel it critical,

1 Mr. Hamilton, that you will be able to stay over and
2 present your testimony with the Department of Natural
3 Resources or return, if necessary. What is your
4 situation in that regard?

5 MR. HAMILTON: Like everyone else, I would like to be home,
6 of course, but I can stay over at your pleasure.

7 SENATOR RADER: In deference to the citizens who are here
8 and because we're already in our second day beyond their
9 allotted time, I would ask you to stay over.

10 Because of the fact that I told El Paso yesterday--
11 they were actually scheduled to testify twice -- I asked
12 them to testify once. I think that was misunderstood.
13 There has been a subsequent request now by El Paso for,
14 as I understand it, a ten-minute statement, five or ten-
15 minute statement as to alternate routes which you did
16 not make yesterday which you'd like to make at this time.
17 Is that correct?

18 MR. HOLLAND: Mr. Chairman, we never did quite get into the
19 merits of the pipeline yesterday during my presentation,
20 and I would like to follow the presentations of Alcan
21 and Arctic Gas with a very brief statement this morning,
22 at your pleasure.

23 SENATOR RADER: That is the natural schedule, that is the
24 schedule which we have on our agenda. Is there any
25 objection then to El Paso appearing in the order that

1 we had previously indicated on our tentative schedule.
2 Very well, we'll handle that in that manner. On our
3 tentative agenda, going ahead as we had planned, this is
4 the time for the Alcan representatives.

5 For those who have not been here previously,
6 we have a "no smoking" rule. We're just overloaded in
7 here. If you'll please bear with us, it's only thirty-
8 five minutes until we recess for noon anyway, so we
9 should be able to hold out.

10 Mr. Thompson, would you please identify yourself
11 and your colleagues for the record, sir?
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1 MR. THOMPSON: Senator Rader, Members of the Committee, I am
2 Morris Thompson, Vice President of Alcan Pipeline Company.
3 With me today on my right is Cliff Groh of Groh, Benkert
4 and Walter, attorney for Alcan. On my left is Joe Becraft,
5 Director of Gas Procurement for Northwest Pipeline.

6 We'd like to offer testimony today on several
7 points very briefly, our project and the proposed con-
8 tracts. Our project envisions a forty-two inch
9 seven hundred and thirty-one mile pipeline within the
10 State of Alaska, commencing at Prudhoe, following the
11 TAPS line down to Big Delta, down the highway to the
12 Yukon border, from the border over to Fort Nelson
13 following the Alcan Highway, whence we split with an
14 existing pipeline built by West Coast Transmission, then
15 on over to Alberta, again down south to Muenster,
16 Saskatchewan, in essence, with another Canadian partner,
17 utilizing an existing pipeline, from Muenster, Saskatche-
18 wan both Arctic and our project envision the same pipeline
19 into Illinois, the Northern Border Pipeline.

20 Tuesday Federal Power Commission Administrative
21 Law Judge Nahum Litt handed down his recommendation.
22 We've seen an eleven page FPC news release covering,
23 highlighting the points of his recommendation. Several
24 issues were raised concerning the Alcan pipeline project
25 that we'd like to respond to at this time.

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1 Judge Litt asserted that, "Alcan's design is
2 neither efficient nor economic since its proposed pipe-
3 line is undersized; that Alcan's three-year phased-in
4 construction schedule is not credible; and that Alcan's
5 proposed summer construction cannot be accomplished
6 without unacceptable environmental impact."

7 I think we should all bear in mind that the
8 Administrative Law Judge's recommendations is but one
9 step in the certification of the route to deliver Prudhoe
10 Bay gas to marketplace. Northwest Pipeline Corporation
11 and its wholly-owned subsidiary, Alcan Pipeline Company,
12 believing their proposed route to be a viable alternative,
13 entered the FPC proceedings in July of 1976. We feel
14 Judge Litt did not thoroughly review all of our evidence
15 and new material. We feel that we have adequately
16 addressed the issue of the size of our proposed pipeline
17 in filings before the NEB in Canada, where we agreed to
18 look at varying pipeline sizes and pressures. We would
19 only point out that currently there are no gas pipelines
20 in the United States or Canada which operate at a pressure
21 in excess of one thousand pounds per square inch. We
22 propose a line which operates at one thousand two hundred
23 and fifty pounds per square inch, feeling that this is
24 the next logical step in a practical advance in pipeline
25 construction and technology. El Paso proposes a line

1 which operates at one thousand four hundred and forty
2 psi, for example, and Arctic operates one at one thousand
3 six hundred and eighty pounds per square inch, or about
4 a sixty-eight percent increase over known and proven
5 technology.

6 We believe our construction schedule is reason-
7 able; however, in light of the Judge's findings, this
8 will be reviewed. As to the proposed summer schedule,
9 we feel that the experience of Alyeska Pipeline Service
10 Company and with State and Federal surveillance, that there
11 will be minimal environmental problems.

12 We would like to raise and discuss the issues
13 we feel the Legislature should consider in considering
14 the proposed royalty gas sales. Using the minimum and
15 maximum values set forth in the Jensen Associates Report
16 prepared for the Legislature, the value of this resource
17 ranges from Six Hundred and Sixty Million Dollars to an
18 excess of 6.6 Billion Dollars. The contracts presently
19 before the Legislature sell Alaska's royalty gas to
20 three companies in exchange for an unspecified amount
21 of political support for the El Paso project.

22 We feel the realities of the situation are as
23 follows: the Commission Staff of the Federal Power
24 Commission has recommended the Arctic Gas Pipeline route,
25 an all land route. The FPC Administrative Law Judge just

1 Tuesday recommended the Arctic Gas route. The people of
2 the State of California and the Public Utilities Com-
3 mission of the State of California in their brief filed
4 with the Federal Power Commission have come out in favor
5 of the Arctic Gas route, an all-land route, thereby, we
6 might add, rejecting an LNG project.

7 The Sierra Club, the Wilderness Society, the
8 National Audobon Society, and the Alaska Conservation
9 Society, in their brief filed with the Federal Power
10 Commission, have come out in favor of the Alcan route.
11 We feel it is absolutely clear that the final decision
12 is going to be an all-land route. We would also like
13 to call to the attention of the committee the fact
14 that the routing of this gas line probably dictates
15 the routing of the next oil line. If you will recall,
16 in the last Session of Congress amendments were made to
17 the 1920 Mineral Leasing Act which require use of
18 existing corridors to transport oil and gas from Alaska
19 to markets in the Lower 48. With the problems envisioned
20 and with the current problems the Alyeska is having in
21 getting oil east from delivery on the West Coast, we
22 submit that Congress will put the next oil line, as well,
23 down the gas corridor, whether it is Arctic or Alcan.

24 So in consideration of these conflicts, we should
25 also bear in mind that the next oil line is also a

1 consideration, and that's about an Eight to Ten Billion
2 Dollar effort in today's money.

3 A significant problem facing the Arctic proposal,
4 we feel, is the Native Claims and environmental issues
5 they face in Canada. The resolution of the Native Claims
6 problems in the Alcan project is less difficult.

7 Turning to the contracts, they commit the State's
8 royalty gas to three buyers. As a general rule in the
9 gas industry, an owner of natural gas will not make a
10 commitment to sell its gas until the price is known; the
11 point of delivery, costs of delivery and conditions of
12 delivery are known; and in any event, when you are a
13 minority owner, as the State is in this instance, at the
14 latest possible date in order to maximize your contract
15 income by being able to capitalize on the terms given
16 others, and to minimize your losses due to changes in
17 the political and regulatory environs.

18 The State has committed its gas without knowing
19 the price, associated costs, or point of delivery, nor
20 what the other sellers will achieve. The price, we
21 maintain, is critical. If the price is too low, the
22 producers will not sell their gas, but will re-inject
23 it to gain additional oil recovery. In view of the
24 above, we feel it would not be prudent for the State of
25 Alaska to sell its royalty gas at this time.

1 Approval of the contracts will substantially
2 reduce royalty revenues to the State because the trans-
3 portation system the State has selected to support costs
4 more to build, and the markets of Tenneco and Southern
5 Natural Gas are more remote than that of Northwest
6 Pipeline Corporation, which increases transportation
7 costs by having the Tenneco and Southern market farther
8 away. There is a substantial possibility of deregulation,
9 which will create substantially different marketing
10 opportunities than we face today. If the average
11 cost of transportation to the Lower 48 is Twenty-Four
12 Cents less with Alcan than with El Paso, as found by
13 Judge Litt, then Twenty-Four Cents more per mcf would
14 be received at the wellhead, or almost Eight Hundred
15 Million Dollars more for the State's royalty share.
16 Therefore, the net economic benefit for the Alcan project
17 to the people of the State of Alaska must be taken into
18 consideration, and under those conditions. In testimony
19 filed before the FPC, the Alcan project would have a
20 greater net economic benefit to the State of Alaska.

21 Article Twelve of the "General Terms and
22 Conditions" of the contracts attempts to provide that,
23 "Any more favorable terms negotiated in the producer sale
24 contracts will be included in the State's contract," but,
25 it is narrowly limited to Sections 3, 5 and 6 of the

1 "General Terms and Conditions", which in and of themselves
2 are narrow and limited to matters relating to measurement
3 practices and billing procedures. We suggest this pro-
4 vision should be extended to the entire contract; in other
5 words, on any portion of the contract that any other
6 seller gets a better deal, that portion of the contract
7 would also be up for the State.

8 An additional problem with the contracts is the
9 fact that there is no set plan, budget, or performance
10 criteria from which to measure the support provided by
11 the purchasers of the El Paso project. The addition to
12 the contracts of a defined plan, a budget and performance
13 criteria will insure compliance with the State's major
14 objective for the sale. Further, to insure all-out
15 support, the contracts should be automatically terminated
16 if El Paso is not certified or if the State switches
17 its support to another contract. If you read 11.4
18 very, very carefully, there is no automatic cancellation
19 provision.

20 It can be expected that the Federal Power
21 Commission will attempt to charge Alaska for any carrying
22 charges associated with excess capacity in the Prudhoe
23 Bay gas transportation system which is occasioned by the
24 withdrawal of the royalty gas. The FPC, we feel, is
25 simply not going to let the Lower 48 consumer pay for

1 capacity required to serve the varying needs of the State.
2 The State is not protected from bearing these charges
3 under the proposed contracts. The contract should be
4 amended so the State has this protection.

5 The proposed contracts are not necessarily deficient
6 in what they provide, but rather in what they fail to
7 provide.

8 The contract does mortgage future discoveries
9 that can be transported through the pipeline by giving
10 the purchasers a right of first refusal to buy future
11 discoveries up to one and a one-half times the amount
12 of Prudhoe Bay royalty gas that the State has taken under
13 the reservation features of the contract. Northwest's
14 preliminary offer included no such mortgaging provision.

15 Under Paragraph 3.7(a) of the contract, Alaska
16 grants the buyers the right to buy additional surplus
17 gas, "at the highest price available to seller for such
18 gas from any other interstate bona fide purchaser."
19 With the buyers having a right of first refusal, it
20 will be extremely difficult to get serious bids from
21 other buyers because they recognize that they will be
22 simply setting a price which the other buyers will match,
23 the three other buyers will match. Other, more beneficial
24 terms which may be forthcoming from other purchasers,
25 such as advance payments, are not even considered in this

1 right of first refusal.

2 At the time the State takes a portion of its
3 reserved gas, it is obligated to purchase from the buyers
4 a proportionate percentage of the field facilities; that
5 is, the gathering, compression, treating and dehydration
6 facilities which the buyers have paid to handle the
7 State's gas. We believe it would have been far better
8 for the State, as an option, for the buyers to retain
9 ownership of these facilities and only charge the State
10 a cost-of-service for their use. The State would thus
11 avoid a capital expenditure in utilizing its gas.

12 The limitation on processing in Paragraph 9.1
13 of the contract to a residue gas quality of one thousand
14 BTU per cubic foot may effectively limit the State's
15 ability to extract a significant portion of the liquids,
16 particularly if any volume of inerts such as CO₂ and/or
17 nitrogen remain in the stream. In the Lower 48 it is
18 common to accept gas having a heating value of nine
19 hundred and fifty BTU per cubic foot, thereby increasing
20 the State's opportunity of recovering more liquids.

21 In an effort to gain political support for a
22 pipeline system the State, we feel, has failed in its
23 charge to fully survey the market opportunities.

24 The following issues should be considered:

- 25 (1) What are the possibilities of direct sales

1 to high priority, industrial end users?

2 (2) Can the State obtain advance payments from
3 markets unregulated by the FPC? Depending upon the
4 regulations of a particular state, a pipeline or
5 distributor may have an opportunity to include advance
6 payments in its rate base, and it is not at all probable
7 that the FPC will preclude transportation of such gas
8 because of the advance payment feature. Certain payments
9 of this type are currently being offered by interstate
10 pipelines and their unregulated customers.

11 (3) What are the possibilities that gas will be
12 deregulated in the near future? It is fine to say that
13 your contract protects you in the regulated environment,
14 but we are on the threshold of deregulation, and the
15 possibilities of that are many and varied.

16 (4) What has been done to insure that the gas
17 will be delivered by the pipeline system on a basis
18 consistent with the widely ranging daily needs of
19 small distribution systems and limited industrial markets?

20 (5) What provisions could have been negotiated
21 with the buyers and/or transporters to provide gas liquids
22 extraction, storage and distribution networks?

23 Representative Gruening, in his opening remarks,
24 set forth two critical issues: what will the State
25 give up and what will it gain in return. We feel the

1 State will give up its opportunity to gain maximum
2 benefits from the future sale of its royalty gas and will
3 gain an unspecified amount of "political clout".

4 Also, I think, in fairness to the committee and the
5 Legislature, we ought to separate the consideration of
6 royalty gas contracts from what's already going on in
7 the State.

8 As a competitor, we recognize and appreciate
9 the fact that a large percentage of the people of the
10 State support El Paso, that the Legislature is on record
11 as supporting El Paso, that the Governor supports El Paso;
12 that's their prerogative, that's their privilege, and
13 we respect and honor that. However, it's another matter
14 when we offer a depletable resource of the State of
15 Alaska non-competitively to push that support. We think
16 that's a separate issue that ought to be given very
17 serious consideration by the State.

18 We thank the Members of the Committee for allowing
19 us to testify, and we will respond to any questions.

20 SENATOR RADER: Do you have any questions? Senator Colletta.

21 SENATOR COLLETTA: Mr. President. Mr. Thompson, how do
22 you feel on the contracts, do you think that with the
23 sale of gas to those that that's an assist in getting
24 the line built?

25 MR. THOMPSON: Senator, let me try to respond to that. I think

1 prior to the passage of the Procedural Bill, which
2 changed the conditions dramatically, that the sale of
3 the royalty gas could have had a greater impact before
4 the Procedural Bill was passed. Let me try to explain
5 that.

6 As in the oil pipeline, if the decision was to
7 be made in Congress, then you need a maximum lobbying
8 effort because Congress, as a body, reacts to that type
9 of push. But what we have here in the Procedural Bill
10 is the Executive Branch making this decision. For example,
11 the Federal Power Commission recommends a route to the
12 President, the President selects the route and gives
13 Congress a very limited time, sixty days, to vote it
14 up or down.

15 We submit that whatever route the President
16 recommends to Congress will undoubtedly, because of the
17 shortness of time and because it's a major policy
18 consideration for a new President, be approved by the
19 Congress. The likelihood of overturning that, we think,
20 is very small.

21 So, we question -- or I think a logical question
22 could be raised, what impact then will political clout
23 have on a regulatory agency in a quasi-judicial, or
24 quasi-governmental judicial agency and a new President.
25 I think, had it been a major Congressional decision, I

1 would think the State's impact, or the political clout
2 brought by the three would have been greater, in my
3 opinion. But the situation has changed dramatically
4 with the passage of the Procedural Bill.

5 SENATOR COLLETTA: Mr. Chairman, I'd just ask one more.

6 Morry, with that in view then, since in fact we haven't
7 really sold to anyone, are you still interested in pur-
8 chasing and, if so, why?

9 MR. THOMPSON: I think, as every gas company that has been
10 up here so far has testified, we would like to have an
11 opportunity to bid competitively on the State's royalty
12 gas. That is correct.

13 SENATOR COLLETTA: Do you feel it would assist you in getting
14 support for your line if, in fact, you had an opportunity
15 to buy the State's share?

16 MR. THOMPSON: We would want to negotiate with the State for
17 the purchase of its royalty gas so the consumers that
18 we have in our market area, as does all others, have a
19 continued assurance of gas supplies downstream. We would
20 welcome the support of the Legislature in the State of
21 Alaska, but it's not necessarily tied to the sale of the
22 royalty gas. We think those can be two separate entities.

23 SENATOR COLLETTA: Thank you.

24 SENATOR RADER: Senator Poland.

25 SENATOR POLAND: Mr. Chairman. Morry, did your company

1 attempt to purchase royalty gas?

2 SENATOR RADER: I'm sorry, Senator, I don't think people
3 heard you.

4 SENATOR POLAND: Mr. Chairman, I was inquiring as to whether
5 or not Alcan had put in a proposal for royalty gas and
6 been turned down by the State.

7 MR. THOMPSON: At the time that the State was considering
8 the sale of its royalty gas, we were going to make an
9 offer, but as you know, one of the conditions of the
10 sale was that we would agree politically to support
11 El Paso. At that time we had a competing application
12 before the Federal Power Commission and didn't think it
13 was appropriate, and we made a counter-offer to the
14 State, that we would take the royalty gas for what we
15 thought to be a viable alternative. So the conditions
16 of the sale, we felt, precluded us from submitting a
17 bid.

18 MR. BECRAFT: We did make formal letter offers to the State,
19 to Commissioner Martin, in at least as great detail as
20 was made by the other prospective purchasers. But, as
21 Morry pointed out, it was impossible for us to agree
22 to the stipulation of the Trans-Alaska line or nothing.
23 But in all other respects we responded to it and in
24 writing to the State, and make an offer.

25 SENATOR POLAND: In other words, if that string hadn't been

1 attached you would have been a fully serious competitor
2 for the State's gas?

3 MR. BECRAFT: Yes.

4 SENATOR RADER: Senator Sumner.

5 SENATOR SUMNER: If you were allowed to bid on the gas today
6 what could you offer the State in terms of price, or
7 whatever, that it is not getting under the current
8 contract, or the proposed contract for sale?

9 MR. THOMPSON: Two things. We would, of course, be a
10 competitive bidder with other people. Secondly, we feel
11 because of the proximity of the Northwest market area,
12 which is seven Western States, the State of Washington
13 where we supply one hundred percent of their natural
14 gas that's consumed there, Oregon, Nevada, somewhat in
15 Arizona, that proximity of market means that the trans-
16 portation costs are thereby less, protecting the wellhead
17 and thereby insuring greater royalty revenue to the
18 State of Alaska. We think we're in a slightly more
19 competitive position position than the others.

20 SENATOR SUMNER: What would a competitive bid mean in
21 the terms of price to Alaska, how much more money?
22 Could it mean more money under the present regulated---

23 MR. THOMPSON: Senator, those are, of course, difficult to
24 predict. We can't say that we'll give Ten Cents over
25 the Dollar, we're all currently regulated. But I think

1 simply because of the proximity of our market that we
2 better protect the wellhead.

3 SENATOR SUMNER: Would that result in any increase over
4 what the present contract calls for?

5 MR. THOMPSON: I believe, as I indicated in the testimony,
6 that the transportation of Prudhoe Bay gas to whatever
7 markets are a factor for the State to seriously consider,
8 and that if transportation costs can be lowered, the
9 revenue to the State of Alaska is higher, yes.

10 SENATOR SUMNER: We heard yesterday in testimony that the
11 transportation costs had little or no effect in the
12 amount of money the State would get from its sale of
13 the gas. Do you agree with that?

14 MR. THOMPSON: No. I think that the scenario that was being
15 proposed or offered to the State was that if you rolled
16 in prices that the transportation costs would not be
17 significant. But that's a scenario that really can't
18 hold up forever because if you keep rolling in higher
19 and higher gas, your transportation costs are eventually
20 going to be impacted, so it's our position that transpor-
21 tation costs are a factor in the wellhead price.

22 SENATOR SUMNER: The question I have is, do you think that
23 the rolled in technique is going to be employed in the
24 sale of the royalty gas?

25 MR. THOMPSON: I'm not sure.

1 MR. BECRAFT: The Commission will, in all probability, use
2 the rolled in technique. However, the FPC staff, as
3 I understand it, is still very strongly in favor of
4 incremental pricing for the supplemental supply, and
5 perhaps Mr. Moody or others here can correct me, but
6 I don't think the Commission has abdicated their respon-
7 sibility to provide gas at the lowest possible cost
8 to consumers, which they have pursued vigorously over
9 the years, and mostly in recent years by reducing wellhead
10 prices to the point where we know that the gas supply
11 has now become inadequate. I think they intend to
12 translate -- they do look at an increment. The rolled
13 in pricing will be used simply to make a salable product
14 out of it. But they are going to look at each project
15 incrementally, and the notion that transportation will
16 have no impact on wellhead price is preposterous.
17 They'll look at the entire scheme.

18 SENATOR SUMNER: Mr. Chairman, just to emphasize one point.
19 You're saying without any question or any doubt that
20 the cost of transportation will result in a significant
21 price difference in the sale of the gas, to the State
22 of Alaska; we'll get more money if the cost of transporta-
23 tion is less? You're absolutely sure of that?

24 MR. THOMPSON: That's our testimony. We say that the
25 transportation costs can have an impact on the wellhead

1 cost.

2 SENATOR SUMNER: That isn't what I asked you.

3 MR. THOMPSON: When you said "significant," what's signifi-
4 cant?

5 SENATOR SUMNER: I said will it have? You said it can have.
6 There's a difference.

7 MR. THOMPSON: I'm sorry. It will have, in our opinion,
8 an impact on the wellhead.

9 SENATOR RADER: Senator Kerttula is seeking the floor.

10 SENATOR KERTTULA: Just one follow-up, and perhaps it's
11 been answered earlier. The ultimate price, your price
12 per product in the Western States, is it higher or less
13 than that for the same amount of product in the Midwest?

14 MR. THOMPSON: Gas is a regulated commodity and you could
15 price it in several different mechanisms. The FPC staff
16 could set it moderately priced, and that could vary
17 from region in the country, or in this instance they
18 could set a flat rate across the country for the gas.
19 The significant difference for the State, however, is
20 the transportation, Senator, that we're maintaining;
21 the closer to market, the less transportation, the
22 more royalty return, the greater opportunity of protecting
23 the wellhead, therefore, the more royalty return for
24 the State.

25 SENATOR KERTTULA: I understand that, and you're saying

1 that it will be a uniform price, that you won't have a
2 greater or lesser price than, say, Arizona for this gas
3 than you might have in Southern Illinois?

4 MR. THOMPSON: I'm saying that the FPC has not made that
5 decision yet and they have the authority to set a price
6 for Alaska's royalty gas, and the possibility of a unit
7 price is there.

8 MR. BECRAFT: Certainly after deregulation scenario, where
9 we're starting to look at alternative fuels, we can
10 presume that our market will stand a similar pricing
11 structure to other markets, and then the transportation,
12 the distance to market, and the cost of the system does
13 translate directly back to the wellhead in that situation.
14 Fuel oil in our market is roughly comparable to fuel oil
15 in Southeast. It's an alternate fuel, and that's what
16 we're competing with.

17 SENATOR KERTTULA: Thank you, Mr. Chairman.

18 SENATOR RADER: Representative Chatterton.

19 REP. CHATTERTON: Thank you, Mr. Rader. Mr. Thompson, let's
20 take a hypothetical case that, for some time into the
21 calendar future an option is available to you to purchase
22 a portion or all of the Alaska royalty gas and this
23 option, you know that it's available to you for five, ten,
24 fifteen years into the future. With that premise, would
25 you be in any haste to sign a sales contract with the

1 State of Alaska?

2 MR. THOMPSON: I guess it would depend on the conditions for
3 the sale. If it was a pure, as we testified -- let me
4 try to come back somewhat around to the question. As
5 we testified, we don't really feel it's in the State's
6 best interest to sell its gas now, for some of the reasons
7 we listed. However, if the State made that decision
8 and said, "The gas is for sale today," we would want to
9 have an opportunity to be a competitive purchaser.

10 REP. CHATTERTON: All right, you're right on target, Morry.
11 I'm saying your option will remain to purchase all or
12 part of it will remain open for ten, fifteen years; are
13 you in a haste to sign the contract now?

14 MR. THOMPSON: That's a difficult question. I think that,
15 as I've said, if the State decided to sell, we would be
16 an active purchaser. But we don't feel the State should
17 sell now because we think that by waiting, as the other
18 seven-eighths are, that the opportunities are greater
19 for the State to increase the financial return to Alaska.
20 At the same time, as purchasers of gas, we would be
21 clamoring for that opportunity.

22 MR. BECRAFT: It would be good practice for us to buy the
23 gas at the earliest possible date, I think. We're on
24 the other side of the coin. I'd rather buy it today
25 when I know the conditions, make the deal, and not take a

1 chance on wide variation in regulatory, environment and
2 what have you. This is the reason the producers don't
3 want to sell their gas right now. They've been caught
4 many times over the last ten years in widely varying
5 regulatory situations, contract dates that govern what
6 your price is. They don't at the moment, but they did
7 until a few months ago, and they may again under the
8 deregulation bill.

9 They don't have a price, but it is good practice
10 to commit when you have a modicum of certainty as to
11 what you're going to do. And producers want to wait until
12 they know what ball game they're playing. I think they
13 will, in the next six months to a year, begin to designate
14 their markets, and by that I mean the largest uncommitted
15 interests, Exxon and Arco -- because I think under the
16 Arctic Gas Transportation Act the destination of that gas
17 has to be determined, and they will want to get a
18 transportation system approved. They will try to do it in
19 the form of an agreement to a degree, if they don't have
20 a price, to leave options open while designating the
21 market -- if that helps your understanding of it.

22 REP. CHATTERTON: I think so, if what I heard you say is
23 really what you said, that the only purpose for rapidly
24 signing this contract on your part would be to lock the
25 State into a contract under today's conditions that might

1 be to your advantage and the State's disadvantage if you
2 waited five, ten, fifteen years.

3 MR. BECRAFT: Well, that plus the fact that we could pursue --
4 if the reserves are firmly committed to us we could pursue
5 corporate objective. They underpin our financial structure
6 and what have you, and there are financial reasons
7 for getting the reserves and getting them into our
8 picture so it would be part of the financial system and
9 we can arrange financing and what have you for expansion
10 of our Lower 48 system. We can go ahead, and these
11 reserves do help; that's the practical reason.

12 SENATOR RADER: Representative Hayes.

13 REP. HAYES: Senator Rader. Mr. Thompson, during your
14 testimony you mentioned that if the Alcan system was built
15 instead of the El Paso route that the State of Alaska
16 would be the beneficiary of approximately Eight Hundred
17 Million Dollars more income. Is that statement based
18 on a deregulation situation or it has nothing to do
19 with deregulation?

20 MR. THOMPSON: No, that information, Representative Hayes,
21 came out of the FPC filings and was in Judge Litt's
22 recommendation to the Federal Power Commission when he
23 was comparing transportation costs of all three systems.
24 He gave the Twenty-Four Cent differential between El Paso
25 and Alcan, and we projected that out of the commodity of the

1 gas, and that's the difference.

2 REP. HAYES: Just to follow up on that -- then, when you're
3 speaking of a competitiveness in carrying the State's
4 royalty gas, that would be the competitiveness of it,
5 not that you're willing to pay more for it or pay a
6 premium, but simply that because your projected costs,
7 or Judge Litt's opinion says that there would be Eight
8 Hundred Million Dollars difference, that would be the
9 competitiveness of your proposal over El Paso's or
10 Arctic's?

11 MR. THOMPSON: That's correct, from the State's point of
12 view. We maintain thereby that the State would get that
13 additional revenue.

14 SENATOR RADER: Representative Meekins.

15 REP. MEEKINS: Thank you, Mr. Chairman. I would like to have
16 you summarize one of the things you touched on in your
17 testimony. I've been trying to look at this whole thing
18 as you've stated and as Representative Gruening has also
19 stated, in terms of the costs and the benefits to the
20 State in approving this contract. We've heard some
21 people say that the benefits to the State are great and
22 that it might be a determinate factor in getting the
23 El Paso line. We heard Mr. Tussing yesterday say very
24 flatly that there would be no benefit. But I think,
25 given that testimony, it sort of comes down to my mind

1 what the costs are, because if the costs are zero then
2 we're really not losing anything to go ahead and approve
3 this contract on whatever probability that it might have
4 some benefit. So I'd like you to summarize what you
5 think are the costs to the State, what we'd lose in
6 approving this contract.

7 MR. THOMPSON: I think, as you can see, where you could
8 lose several things, lose a guarantee or better guarantee.
9 Now, let me try to answer. All three projects are
10 gigantic, massive, and all three projects throw a lot
11 of financial figures around. We think that to the best
12 of all our abilities, and I'm speaking for the com-
13 petitors as well, that we try to fine line these figures.
14 But moving gas from Prudhoe to Chicago has never been
15 done, so the probability -- you've got to also look at
16 the probability of cost over-run.

17 We submit that because of the design of our
18 system, because we use existing pipelines in Canada,
19 we use proven technology, and we follow a corridor, that
20 the probability of construction completion is greater
21 with us, thereby insuring a quicker royalty return to
22 the State, thereby insuring no cost over-runs which drive
23 your wellhead down. We think you'd lose that opportunity.

24 Also, there has been a lot of questions about
25 the gas productivity at Prudhoe. As we all know, that

1 production rate has not been set. Our system envisions
2 for the first three years a slow buildup from 1.2 to 2.4
3 billion cubic feet a day. El Paso, at one time, envisioned
4 3.4, dropped down now to 2.4 billion cubic feet, and
5 Arctic says 2.25. We submit that Prudhoe is an oil
6 field, and that's where the State is really going to
7 maximize their return. At all costs they must protect
8 the production of oil there.

9 So, in our lower incremental buildup case, we
10 contend and say that we better protect that until a little
11 bit more is known about that reserve. We don't pump
12 two billion cubic feet out a day to start. We think
13 that's an advantage for the State. The lower transporta-
14 tion costs that we have is another advantage to the State.

15 Both Arctic and El Paso use technology that does
16 not currently exist, the high pressure for Arctic and the
17 LNG size at Gravina for El Paso and the cryogenic
18 tankers for El Paso; the technology to build that size
19 of operation is not there so your probability of over-runs
20 are increased. I think those are some of the things.

21 MR. GROH: Representative Meekins, it's difficult to
22 quantify. Assuming a deregulation scenario, it may be
23 a very substantial amount. Certainly that is difficult
24 to quantify.

25 REP. MEEKINS: Mr. Groh, we have two questions here, and I

1 don't want to confuse them. One is which line we should
2 be supporting. If we make the assumption, just for
3 simplification, that -- I'll make the assumption that
4 I'm supporting the El Paso route, then the question really
5 becomes, what do we lose in approving this contract?
6 That's really what I'm interested in, because that's
7 the subject of these hearings.

8 MR. THOMPSON: If you don't sign the contracts now, you have
9 the opportunity later of gauging the market. When the
10 producers start selling their gas you can look at condi-
11 tions that they're getting, and the State could follow
12 those. Under deregulation you also lose the opportunity,
13 perhaps, of selling to an unregulated purchaser, as we
14 indicated here. You also lose, we feel, the possibility
15 of getting advance payments, the possibility, and I
16 underscore that. I think those are the major considera-
17 tions.

18 MR. BECRAFT: You're basically making the assumption, I think,
19 that these are as good a contract as you can get. We're
20 making the case that it is not the case.

21 A statement was made yesterday by one of the
22 witnesses that I might disagree with a little, and that
23 is that once the producers sell their gas everybody will
24 be getting the same price in Prudhoe. Many of the
25 producers, and part of their marketing strategy will be to

1 put it into areas, allocate the gas themselves before
2 the FPC does it. But they will also try to do business
3 with people who can do other things for them that aren't
4 in the four corners of that contract. There may be oil
5 swaps for gas, for instance, which the majors need oil.
6 There may be price upgrades in other contracts or swaps
7 of liquids from the regulated company plants in these
8 major companies. There are other things, and there are
9 deals that are made outside the straight four corners
10 of the gas purchase contract itself. What we're saying
11 is that these opportunities haven't been fully surveyed
12 by the State.

13 REP. MEEKINS: Thank you.

14 SENATOR RADER: I think Representative Carpenter was trying
15 to get the floor a while ago.

16 REP. CARPENTER: Mr. Becraft, this was exactly the point
17 that I wanted to ask you about. You're telling us that
18 the provision of the contract that ties our royalty gas
19 to the best price that the producers are getting at some
20 later date isn't a valid provision; is that what you're
21 telling us?

22 MR. BECRAFT: No, that's a valid provision. Your pricing
23 provision is essentially passive in this contract. If the
24 other guy's prices go up, yours go up, but I don't see
25 much initiation opportunity in there. I don't really see

1 your ability to go out and put your gas in the best
2 market and set the price yourself.

3 REP. CARPENTER: If I may, a moment ago you were telling us,
4 Mr. Becraft, that one of the reasons the producers aren't
5 committing their gas at this time is because we're in a
6 period of deregulation atmosphere and they want to get
7 the best price they can get. Well, if we're linked to
8 them in this provision in this agreement, that's fine,
9 we're safe, aren't we?

10 MR. BECRAFT: I don't think so, because again their price
11 may be established in a market -- I'm making the
12 assumption there is a finite value, top, upper bound,
13 limit to the value of this gas in the Lower 48, broadly,
14 and there will be some variations by market. You are
15 putting your gas -- they may put their gas into less
16 attractive markets. They may be remote markets, they
17 may be in the East, further away in terms of transporta-
18 tion, or they may be put into markets that can't stand
19 higher rolled in costs, or they may be up against the
20 ultimate cost of fuel at that time, so they might not
21 be able to pay this higher price, conceivably, and,
22 therefore, you're tied to their price and that again
23 is not necessarily indicative, particularly in a non-
24 regulated scenario, of what your price might be if you
25 establish it yourself.

1 REP. CARPENTER: Again, you're calling that provision passive,
2 and that is not a good posture for the State, in your
3 opinion.

4 MR. BECRAFT: Yes, sir.

5 SENATOR RADER: We have time for one more question before
6 noon recess. Senator Huber.

7 SENATOR HUBER: Thank you, Mr. Chairman. I think mine might
8 be able to be answered with a "yes" or "no", I hope.
9 Morry, do you consider that the approval of the present
10 sales agreement would be decisive in choosing the final
11 route of the gas line?

12 MR. THOMPSON: No.

13 SENATOR HUBER: And the other one I have for you, do you
14 believe you would be able to offer the State the best
15 possible deal on its royalty gas if we wait until your
16 facility is ready to transport the gas?

17 MR. THOMPSON: I'd like to say yes, but I will say this:
18 that we will come in, we'd like to have the opportunity
19 to bid competitively along with everyone else and give
20 the State an opportunity to review all of the proposals
21 that are received under competitive sale and select
22 the best deal for the State.

23 SENATOR HUBER: Mr. Chairman, the point I'm trying to find
24 out is, if you believe by waiting until that point in
25 time that the State will receive the best possible deal

1 for its gas, or is it better to do it now?
2 MR. THOMPSON: As we've testified, Senator, we feel it would
3 be in the State's best interest to wait.

4 SENATOR HUBER: Thank you, Mr. Chairman.

5 SENATOR RADER: I have about eight minutes after 12:00.

6 We will recess until 1:30 sharp.

7 (Whereupon the hearing recessed at 12:10 p.m.
8 and reconvened at 1:30 p.m.)

9 SENATOR RADER: The committee will come to order. We will
10 resume with the Alcan presentation. Do you have any
11 questions of Alcan? Representative Parr.

12 REP. PARR: In the statement by Mr. Thompson, the prepared
13 text that we have here, the State is obligated to purchase
14 from the buyers a percentage of the field facilities and
15 so forth. What part of the contracts specify that? I
16 don't really understand where that is in the contract.

17 MR. THOMPSON: Representative Parr, if we can look to the
18 exact language -- if we may have a minute to find that
19 exactly in the contract.

20 REP. PARR: I wouldn't ask you to do something I can do
21 for myself, but I've read that contract several times and
22 I guess I didn't pick it up. If I may continue, Mr.
23 Chairman.

24 SENATOR RADER: Certainly.

25 REP. PARR: In these field facilities, would that include

1 the gas treatment plant, the Billion Dollar gas treatment
2 plant; is that under the term of field facilities?

3 MR. THOMPSON: I don't believe so, Representative.

4 But let's double check right in the contract.

5 REP. PARR: The last, and another question, Mr. Chairman,
6 and it's on another thing that was stated. I believe I
7 understood you to say, Mr. Thompson, that the FPC could
8 charge the State for the unused capacity in the line
9 due to the fact that the State is taking its royalty
10 gas out and that the contract should provide that the
11 buyer would reimburse the State for that amount of money.
12 Did I misunderstand that?

13 MR. THOMPSON: We raised the issue that the FPC may charge
14 someone for the excess capacity in the line caused by a
15 pull-back, and our concern is that in contract negotiations
16 that this be tightened up in the contract (that's our
17 suggestion) to insure that that does not happen.

18 REP. PARR: But you are saying that the FPC has the power to
19 do that, to charge the State of Alaska for pulling out
20 its royalty gas and, therefore, in having the pipeline
21 not operating to full capacity?

22 MR. THOMPSON: That's our understanding.

23 MR. BECRAFT: Excuse me, Mr. Parr. I'm not that intimately
24 familiar with the Arctic Gas Transportation Act, but I
25 believe that's an open issue relative to the State's

1 withdrawal of the gas. The FPC will have the power
2 under that act to determine that "adjust and make reason-
3 able rates for the transmission to the point of withdrawal."

4 All we're trying to say is that the original
5 gas, the three hundred million or so, that goes into
6 the pipeline, the facility will be predicated upon
7 the volume, the tankers if it's an LNG route, the
8 liquefaction facilities and what have you. It is not
9 conceivable to me that if you pull out that same three
10 hundred million that that cost of that excess capacity
11 would be transferred a hundred percent or borne, I should
12 say, by the Lower 48 consumers. I'm not sure I can tell
13 you how to cure your contract, but it looks like those
14 costs are an open issue.

15 REP. PARR: The key issue, I was asking you, was, if I
16 understood Mr. Thompson this morning, is that the FPC
17 has the authority and can do that to us.

18 MR. THOMPSON: Yes, sir.

19 MR. BECRAFT: Sir, I think it's Paragraph 3.11, I believe,
20 the one to which we refer in that, and I believe that
21 does include field processing and treating facilities
22 are added, if that was the question a minute ago.

23 REP. PARR: I have one final question, Mr. Chairman. That is,
24 you mentioned something about a standard of nine hundred
25 and fifty btu per, I guess it's a thousand cubic feet

1 or something (I don't know) in the Lower 48, and I believe
2 that other people who have talked have always spoken of
3 a thousand as sort of being standard.

4 MR. BECRAFT: The thousand btu, sir, is a normal point from
5 which to determine a premium for the gas or determining
6 an adjustment to price for heating value above and below
7 a thousand. Now, as to the quality of gas the pipeline
8 will accept; very normally, and certainly in all the
9 standard contracts that Northwest employs in the Lower 48,
10 I believe that minimum is nine fifty to nine seventy-five
11 in most cases. In other words, so long as the gas is
12 sweet gas (as we call it) mercantible gas, the btu content
13 of nine fifty or greater is satisfactory to us.

14 REP. PARR: I don't quite understand the point then. A
15 thousand is simply an arbitrary figure used for determining
16 the sale price for the gas more or less, is that correct;
17 but nine hundred and fifty is a figure you're using for
18 shipment purposes? Is that more or less ---

19 MR. BECRAFT: Yes, what we class as mercantible gas. The btu
20 content of a gas stream, and I'm not a chemist or an
21 engineer even, but it is comprised of the components in
22 the gas, which are the methane, ethane, propane and
23 so forth. In most gas streams you will leave in some
24 of the things that won't bother your transmission such
25 as nitrogen and a minor amount of CO₂, all of which

1 reduce the btu content. That, coupled with a high
2 quality requirement in terms of btu per cubic foot,
3 does effectively limit the producer's option to extract
4 a deep cut of liquid products. Methane, itself, if it
5 was pure methane is something under a thousand in btu
6 content.

7 REP. PARR: Thank you.

8 SENATOR RADER: Representative Gruening.

9 REP. GRUENING: I'm curious as to how we would write the
10 contract to get around the problem that you point out
11 with the FPC charging the State for the excess capacity.
12 How do we write that out into the contract? We're telling
13 the FPC what they can rule in the contract? In other
14 words, how do we get around that point?

15 MR. BECRAFT: The main point is, Representative Gruening,
16 we don't know what that cost is going to be. You set up
17 your procedure here and you have the right under the act
18 to take the gas out, but I think it's more of a caveat
19 than anything else. You've got it there, it's wide open,
20 and as I see the contract you could be certificated to
21 get the gas out and the contract would be effective, and
22 the Commission, at a later time, would determine what
23 those costs are, and I don't think you'd have any control
24 over it. I don't have a recommendation for you and I
25 think you have a problem that will just have to wait.

1 REP. GRUENING: Well, is the inference from your statement
2 that we should write into the contract that the gas
3 companies, purchasing companies, bear the costs related
4 in any way to removing our royalty gas for in-State use?
5 I mean, not the costs, the mechanical costs, but the
6 costs of the excess capacities, as you put it?

7 MR. BECRAFT: You could certainly write it in your contract.
8 I wouldn't be particularly optimistic about the
9 chances of that being approved by the FPC. I think your
10 contracts might be modified to the extent that an
11 acceptable certificate to the State granting this with-
12 drawal would also set forth exactly under the condition
13 what your costs would be, so you'd know. Again, I can
14 see you getting a certificate perhaps, with the price
15 issue still permitting withdrawal but the price issue
16 to be determined at the actual time you take the gas,
17 or somewhat later.

18 REP. GRUENING: We can ask the consultants this, but isn't
19 the problem pretty much the same with the conservation
20 committee saying you're going to take several hundred
21 million cubic feet less because of the conservation
22 problem?

23 MR. BECRAFT: It's the same problem, sir, but in that case
24 there isn't much doubt about who is going to pay the
25 bills involving the gas, a lower amount or a higher amount,

1 of moving it to the Lower 48. The Lower 48 customers
2 are going to pay that tariff. They won't be borne by
3 the Alaskans.

4 SENATOR RADER: Senator Colletta.

5 SENATOR COLLETTA: Morry, you know, it seems to me I recall
6 in other hearings that we've had, the Alcan route, not
7 only for oil but for gas and, unfortunately I never
8 asked the question why that route was not acceptable
9 to these other people that looked at it. Of course, I
10 had the reasons why you say it's the best way to go,
11 but I'm curious as to if you knew why the others have
12 turned it down.

13 MR. THOMPSON: Oh, I don't know that it was "turned down".

14 I think the Arctic consortium, and this might be a better
15 question to Arctic Gas, Senator Colletta -- let me try.
16 I think the Arctic consortium is composed of oil and
17 gas companies that have interests both in Prudhoe and
18 Mackenzie Delta, and they would like to go from Prudhoe
19 over to Delta to perhaps pick up that gas should additional
20 reserves be found in Mackenzie, and then come down. I
21 mean, that's their principal objective in going across
22 the Wildlife Refuge to Mackenzie Delta.

23 As you know, our route was recommended by the
24 FPC staff environmental staff, was considered by a committee
25 of the Department of the Interior and Justice Berger

1 himself, a staff report, or the Berger Report, indicated
2 that if there was to be a Canadian line, a highly
3 desirable place would be the Alcan route.

4 SENATOR COLLETTA: Mr. Chairman, I just have one more.

5 Morry, reading the brochure, you know, Alcan Pipeline is
6 wholly owned by Northwest Gas out of Utah, and has
7 Northwest Gas made an attempt to purchase any of our gas
8 or is your operation so intermingled that you want
9 primarily to construct the line and be a purchaser of
10 gas as just an added benefit, or do you separate the two?

11 MR. THOMPSON: I think, like all companies, Senator Colletta,
12 we're interested in doing both; we're interested in
13 constructing the line and interested in purchasing gas
14 for the customers we serve in our service area.

15 To answer the other part of the question, we were
16 an interested purchaser at the time the State announced
17 that they were going to sell their royalty gas, but one
18 of the requirements that the State put down was that
19 the potential purchasers had to agree to endorse El Paso,
20 and we were contemplating and later filed before the FPC
21 and we, therefore, could not agree with the stipulation.

22 SENATOR COLLETTA: Mr. Chairman, that's exactly the question
23 that I had. You're placing it better than I can. But
24 if, in fact, the pipeline company is a totally divorced
25 entity from the gas company, then why didn't the gas

1 company -- you know, it would just seem to me that the
2 line would be adopted on its merits, and I don't know
3 if this was valid at the time that the State was asking
4 for solicitations on purchases, if it was valid to assume
5 as you're stating now, these contracts mean nothing
6 towards enhancing which line is accepted, why they
7 didn't -- you know, why Northwest didn't buy some gas,
8 care less what line was used.

9 MR. THOMPSON: At the time -- Senator, let me come back.
10 I answered directly yes to a question from Senator
11 Huber when I was asked whether I felt these contracts
12 would have no impact, and to try to be as short as
13 possible I said I didn't think that they would. I don't
14 think they'll have any measurable, appreciable impact.
15 I'm not saying they will have none (period).

16 Secondly, like all gas companies, this is true
17 for all three of us, we purchase gas and sell it to our
18 customers for the purchase price. That's the reason
19 we're all in business. Gas companies make money off
20 the transmission of the commodity as opposed to sell and
21 resell. So, we all have an obligation to the customers
22 that we serve, to attempt to secure as much gas as we
23 can for our market areas. So we're both interested,
24 Senator, in purchasing gas and in constructing the system.

25 MR. BECRAFT: Senator Colletta, our offers to the State were

1 made under the name of Northwest Pipeline, understanding
2 which way you're pointing here, and we are interested in
3 buying it. It is a separate issue with us, and our
4 offers were made for the pipeline customer, written
5 offer.

6 SENATOR COLLETTA: Mr. Chairman, what I'm driving at, and
7 you know, maybe unjustly so -- I can't help but form an
8 opinion that, in fact, you participated in exactly what
9 you're saying the State should not participate in, and
10 that was that that sale of the State's gas to you was
11 contingent upon your line; you don't want the gas unless
12 it's through your line.

13 MR. THOMPSON: No, Senator. No, there must be a misunder-
14 standing, and I hope we're not confusing the issue.
15 At the time the State announced its royalty gas sale
16 we were going to submit a bid, and one of the conditions
17 of the sale precluded us from submitting a bid. That
18 was that you must endorse El Paso. We are interested
19 in purchasing gas and we're interested in constructing
20 the line. We will stay active in constructing the line
21 even if we're unsuccessful in getting a percentage
22 of the royalty gas, and I hope that clears it up,
23 Senator.

24 SENATOR COLLETTA: Okay, thank you.

25 SENATOR RADER: Any further questions of the Alcan representa-

1 tives? If not, gentlemen, we thank you very much.

2 MR. THOMPSON: Thank you, Senator.

3 MR. GROH: It's interesting to be on the other side of the
4 table.

5 SENATOR RADER: The next scheduled witness is Arctic Gas.

6 I want to urge the witnesses, as well as the Representa-
7 tives and Senators, to be as brief as possible. I suspect
8 at this point brevity may have more impact than anything
9 else. It's too bad, Mr. Ward, to hit you with that
10 particular point, but you have testified before us
11 enough times, I'm sure you understand what I mean.

12 But I don't mean to foreclose in any manner any presen-
13 tation you wish to make or in any manner any question
14 that any member of this committee has to make.

1 MR. WARD: Thank you, Senator Rader, Representative Gruening,
2 and Members of the Committee. My name is Robert W.
3 Ward, I am President of Alaska Arctic Gas. I had a few
4 notes to start with a few days ago, and as the hearing
5 has progressed I've added, and deleted and scratched,
6 and I've concluded though in all of it it's not of much
7 point for me to make a long statement, and I am not
8 intending to run over the Administrative Law Judge's
9 decision again. When it came out a couple days ago
10 one person told me that that was responsible for the
11 power outage that we had. I don't think I'll comment
12 much about it anyway unless there are questions.

13 I would like to set a couple points as straight
14 as I can from our perspective, and recognizing that a lot
15 of times the more we clarify things the more confused
16 they become. But I think there has been some confusion
17 about how the effect of royalty gas not moving through
18 the Arctic Gas system would affect the viability of our
19 line and the ability to finance it. I think I said
20 before a committee of the Legislature last year that
21 having royalty gas in the line or not having it in the
22 line would not affect the viability of our pipeline,
23 and predicated it on the basis of the fact that our line
24 is designed, and it's anticipated that our volumes will
25

1 be from two billion cubic feet per day initial volumes
2 to two and a quarter billion feet after the third year
3 of operation, having built up over the three years.
4 That range is about what the royalty gas is, and the
5 amount of the royalty gas is, and it would not affect
6 the viability of the line.

7 Incidentally, there have been comments about
8 reasonable assumptions on the amount of deliverability,
9 and there probably will be others to talk about it with
10 more expertise than I. But from all the assumptions
11 on deliverability that have been made from Prudhoe Bay
12 for natural gas, the reasonable assumption is from two
13 to two and a half billion cubic feet per day. Lower
14 volumes is not a reasonable assumption. It's an assumption,
15 but it's not a reasonable one and should not be character-
16 ized as such.

17 One thing about the royalty gas in the pipeline
18 system, and there have been discussions here, discussing
19 how or if the State would have to subsidize that portion
20 of planned capacity if royalty gas were withdrawn. It's
21 been my assumption, on talking to our attorneys, and
22 admittedly it hasn't been an in-depth search by the
23 attorneys -- if such is required, we will do so -- but
24 it is their opinion, without giving it detailed study,
25 that the FPC would probably not recognize that royalty

1 gas portion as a viable portion financing the line if
2 is is subject to withdrawal, and even though a tariff
3 would probably extend, and would extend to shipment
4 of that gas if it is shipped, it would not necessarily
5 count to financiers for through-put to provide the
6 captial to finance the line because it could be withdrawn.

7 If it is counted, that's where the FPC has the
8 problem of allowing withdrawal, if it's committed to
9 interstate commerce. I would also like to clear up
10 one point on Section 13-B of the Act. It's knowledge,
11 maybe not common knowledge, but at any rate when that
12 amendment was first proposed we opposed it, much to the,
13 not chagrin, but it made Congressman Young extremely
14 upset. I'd like to clarify that slightly.

15 As you can all recall, there was hardly anybody
16 that gave that legislation more than about a twenty
17 percent chance of passage. We were advised, when it was
18 introduced in the House, by the Senate Committees working
19 on it, who would have to ratify it after the House was
20 finished, that they just wouldn't buy that Section 13-B.
21 As soon as we were aware that they would and it would
22 not jeopardize the legislation itself, we did not
23 oppose it and do not now.

24 In all candor, and in my opinion, the contracts
25 that you are considering in this hearing are really

1 pretty good for what you're trying to do, or what the
2 State is trying to do. I don't particularly see that
3 they jeopardize the State that much. I'm not sure that
4 they help that much, but I think the State has gotten
5 about as good a deal as they could possibly get. As a
6 matter of fact, I was amazed that they got as good a
7 contracts as are drafted.

8 I've heard, last year, the people urging the
9 use of royalty gas as a weapon to kill Arctic Gas and
10 somehow authorize the all Alaska route. It's hard to
11 have much of a weapon if you parcel it up among a lot
12 of people and then tell them that you might not be able
13 to get it at all.

14 El Paso has been heavy on political support, and
15 I'm not knocking it. I made a first appearance before
16 the Legislature in regard to this project in 1974. At
17 that time there was a big push to adopt the resolution
18 of support by the Legislature so that El Paso could go
19 to their board and get Thirty Million Dollars to help
20 with environmental studies and engineering work to put a
21 better application together.

22 So, under great pressure they got the resolution
23 passed, and then went to the board meeting and didn't
24 approve the Thirty Million anyway. They said they didn't
25 need it because of the work that Alyeska had done in the

1 same corridor.

2 This royalty gas thing is perhaps somewhat similar
3 in terms of trying to get companies to do as much as they
4 can to help them get political support. I think it was
5 Attorney General Gross who suggested that really it
6 wasn't for political support, it was on the merits,
7 because the merits would speak for themselves; so it
8 really wasn't for political support, and if it were just
9 for political support it would be readily exposed.
10 And it is readily exposed and it is for political support,
11 and it probably will help.

12 Without trying to suggest anything one way or
13 another, I'll just give you one example. Midwest Gas
14 Association, of course, is in the service area of several
15 of our owner companies, Arctic Gas Line Company, and
16 a resolution for support of Arctic Gas was considered
17 at their fall board meeting in December. I think there
18 is just in excess of sixty members, sixty-five, sixty-
19 seven members in Midwest Gas Association. Because of
20 Tenneco's involvement in this contract, where we probably
21 would have had unanimous support, there were two absten-
22 tions and one voted against it. Even though that didn't
23 affect that much, it does have some impact, and El Paso
24 and Southern route had some impact also.

25 But the contracts themselves do not improve the

1 pretty good for what you're trying to do, or what the
2 State is trying to do. I don't particularly see that
3 they jeopardize the State that much. I'm not sure that
4 they help that much, but I think the State has gotten
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19 to their board and get Thirty Million Dollars to help
20 with environmental studies and engineering work to put a
21 better application together.

22 So, under great pressure they got the resolution
23 passed, and then went to the board meeting and didn't
24 approve the Thirty Million anyway. They said they didn't
25 need it because of the work that Alyeska had done in the

1 system at all. And recognizing that I may be speaking
2 some in my own interest when I say it, I would hope that
3 even though you do approve the contracts, as I expect
4 that you probably will -- even though you do, I would
5 hope that you could do it and acknowledge the reasons
6 you're doing it. I think the arguments that are based
7 on conjecture that are not supported by fact in the
8 record shouldn't be part of the situation. I do not see
9 any reason why you should have to, or try to fabricate
10 merits that aren't there.

11 With that, I would be happy to answer your questions.

12 SENATOR RADER: Any questions? Representative Parr.

13 REP. PARR: Mr. Ward, is it your belief that the State will
14 get more money in wellhead sales through the Arctic
15 proposal than through any other?

16 MR. WARD: Our position has consistently been that the
17 opportunity is there, and we have never said that it
18 automatically would because of the Arctic Gas system,
19 and the reason that we have not said that they auto-
20 matically would (even though people suggested we have
21 said it, we haven't)-- the reason for it being there are
22 some other factors involved, and traditionally one cannot
23 argue successfully against what the FPC has done his-
24 torically in the past. But, since the FPC is moving
25 more toward commodity pricing, there is the opportunity

1 for more wellhead price if they go that route and approve
2 it that way.

3 That view, incidentally, is supported by testimony
4 on the record by others than Arctic Gas.

5 I'd like to point out, and I meant to mention
6 it earlier, Mr. Chairman, if you'll allow me -- rolled
7 in prices, to suggest that rolling in prices is going
8 to so confuse the transportation costs that they can't
9 be identified is ridiculous. The shippers are going to
10 pay a tariff to the pipeline company based upon the
11 total cost of service of that line, and that's not going
12 to be rolled in. Arctic Gas is not a buy and sell
13 pipeline, they will not be buying gas and selling it
14 to customers. We develop the tariff that's going to
15 provide the financing of the system, and it's going to
16 pay it. It's not going to be rolled into our costs.
17 We can't roll it into anything. The total cost may
18 be rolled in to consumers down the line, and I think
19 it will be; but to say that the transportation costs
20 cannot be readily identified -- no way!

21 SENATOR RADER: Representative Gruening.

22 REP. GRUENING: I'm reminded, Mr. Ward, of a statement
23 that somebody said about oil and gas men, he said,
24 "They're like cats, you can't tell from the sound of
25 them if they're making love or fighting." After your

1 statement saying that the approval of this contract
2 would help the route decision for El Paso, are you
3 fighting or making love with El Paso?

4 MR. WARD: Well, I did share a room with Mike Holland up
5 in Prudhoe Bay once.

6 REP. GRUENING: You disagree with Arlon's assessment, Arlon
7 Tussing's assessment yesterday that it will have no
8 political effect on the national level at all?

9 MR. WARD: Well, I don't know whether his pronouncement was
10 that it would have no effect on the ultimate decision
11 or if it would not have any effect at all or if it would
12 not help at all. We've had a reasonable effort for
13 two years now with the U. S. Congress and the Adminis-
14 tration, and from originally information to dissemination
15 on issues like the Pipeline Act that was passed last fall,
16 we worked very hard, and we have a new Administration now
17 and there are a lot of new facts that are going quite
18 deep. There are new Congressmen, there are new committee
19 assignments. So we have to do a lot of that effort over
20 again and start it over again. For the most part we
21 haven't been stumbling over El Paso too much in those
22 efforts. That doesn't mean that they haven't been active,
23 because they have. If there are more people in the action
24 when it comes down to Congressional decision, it's got to
25 have some impact. To say that it won't is not being

1 honest.

2 It will have some impact. Whether it will pre-
3 vail or not, I don't know. Whether it's necessary or not,
4 I don't know. But it is obvious, as you people here have
5 already concluded, because it is obvious that the royalty
6 gas is more valuable than money. Otherwise you could
7 go buy it to do the job. It is not that the system is
8 any better, it's not that the merits are any better; what
9 they're going for is to get a chunk of gas. That's
10 what they're willing to put some political clout for,
11 and what they have, is to get some gas. It's not that one
12 system is better than the other.

13 SENATOR RADER: Any further questions? Mr. Hayes.

14 REP. HAYES: Mr. Ward, do you think in view of what the
15 State of Alaska might be getting in the way of of political
16 influence is worth the opportunity they might miss later
17 on to get a higher price from their sales of their royalty
18 gas or possibly to exercise some of the other options that
19 they might have? Do you have an opinion on that?

20 MR. WARD: Mr. Chairman, I'm sorry that I am not capable
21 of answering questions like this in short manner. As a
22 matter of fact, I might have confused that so much that I
23 missed the question. The royalty gas, as it has developed,
24 royalty gas use and the thought by the State to use our
25 royalty has, has been rather interesting itself, because

1 there is a liquefaction plant on the south coast of Alaska
2 now. It has been in existence for quite a while. The
3 State of Alaska has yet to take its first cubic foot of
4 royalty gas in kind.

5 It's a timing problem. They want to use the
6 royalty gas now to help force a decision without a use
7 for it. So they want in this essence to be betting on
8 the cow. The people who are participating in the con-
9 tracts, the purchasers, are also betting on the cow.

10 They really don't think, in my opinion, is going to be
11 pulling back that gas right away or they wouldn't sign
12 the contracts. If they're going to put up something
13 they have to have some expectation. It's a reasonable
14 assumption, there isn't a market for the royalty gas now.

15 Now, is that fact and all this development going
16 to provide for higher prices for State royalty gas if the
17 State held back and kept all their options open? I'm
18 not necessarily sure that's the case. I think that the
19 State is pretty well protected under the provisions of
20 the contract that's drawn. Now, there's some disagreement
21 with it, and that's appropriate, and maybe some things
22 should be tightened up. I don't think the State is hurt
23 that much in terms of price.

24 I was disappointed at one point in time because
25 of the switching provisions in the contract. It seemed

1 to me that even though Arctic Gas were certified, if the
2 State did decide to go with Arctic Gas then, these
3 shippers would be locked in again on royalty gas, and I
4 didn't think that quite appropriate. I didn't mention
5 it earlier because it doesn't seem to bother me now
6 because there were so many definite statements that the
7 State would go over the cliff like the lemmings rather
8 than support Arctic Gas and so the contract would be void.

9 SENATOR RADER: Senator Huber.

10 SENATOR HUBER: Thank you, Mr. Chairman. Bob, I'll be brief.

11 Do I understand you correct, that Arctic Gas would
12 support the State keeping all or part of its royalty
13 gas for use within the State, you wouldn't oppose us
14 doing that, with the FPC or anyone?

15 MR. WARD: No, Senator, and I've said so before, that they
16 would not. Again I would like to point out, there was
17 some discussion here yesterday, as I recall, that if
18 Arctic Gas were certified, if the State took its royalty
19 gas in kind and did not sell it that that twelve and
20 a half percent share would have to be produced and
21 reinjected while the rest of the gas was going out.
22 Unless something is changed since I've been involved in
23 it, more recently, that is not the only option. I think
24 there is an option, a viable option, to leave it in the
25 ground and not produce it at all. Obviously, there are

1 time limits on that because it's going to have some
2 effect further down the road. But I don't think it's
3 absolutely necessary that they have to produce and
4 reinject it if they want to hold on to it.

5 SENATOR HUBER: I have one other question of Mr. Ward, Mr.
6 Chairman. Could you give me a percentage, off the cuff
7 figure, Bob, if we approve or if we disapprove the
8 contracts that are before us now what chance do you
9 believe, in the one case or the other case, the difference
10 in the chance would be of El Paso persevering over your
11 route and getting it instead of you? I'm looking for
12 comparative figures.

13 MR. WARD: Mr. Chairman, I'm not sure I can give a comparative
14 figure because I am inclined to agree with the learned
15 Dr. Tussing, that the big problem or the key, if you
16 will, to the certification of Arctic Gas is indeed
17 Canada. I think, with or without, if Canada was not
18 a factor, in other words, if they weren't in it at all,
19 I don't think there's any question, with or without the
20 royalty gas, and again I could be wrong -- as you know,
21 my political judgments have been wrong before -- but I
22 don't see any other way but that Congress would approve
23 the Arctic Gas route.

24 SENATOR HUBER: Mr. Chairman, could you bear with me just
25 a little bit more? Then you aren't able to give me a

1 figure, Mr. Ward, but from what you just said I would
2 judge that you would say there would be no significant
3 difference in the percentage, if you were able to give
4 me a figure.

5 MR. WARD: Maybe that's kind of academic because I can't give
6 you a figure, but I do think, as I said before, the
7 contracts will have some impact.

8 SENATOR HUBER: Thank you, Mr. Chairman.

9 SENATOR RADER: Senator Croft, did you have a question?

10 SENATOR CROFT: No.

11 SENATOR RADER: Senator Sumner.

12 SENATOR SUMNER: Do you believe that a Native Land Claim
13 settlement in Canada is going to be a problem with
14 approval of your line?

15 MR. WARD: I believe, Senator, that the Native Land Claims in
16 Canada is a very sensitive issue and it has a lot of
17 tension in Canada. That's part, that's only one part
18 of the whole Canadian decision that has to be made.
19 The Canadian Government, in my opinion, and subject to
20 legal opinions that I've had from Canadian counsel, in
21 my opinion the Canadian Government has the option to
22 resolve the claims without prejudice to the Natives
23 so that it would not hinder this project time-wise, if
24 they so desire, and it would be part of the whole Canadian
25 issue.

1 SENATOR SUMNER: Settle the costs later?

2 MR. WARD: Yes.

3 SENATOR SUMNER: Have you or any part of your company ever
4 agreed to share any part of those costs?

5 SENATOR RADER: Senator Sumner, you're not being heard.
6 Would you speak louder?

7 SENATOR SUMNER: Thank you, Mr. Chairman. Have you or any
8 members of your company testified in the past that any
9 part of the Native Land Claim settlement in Canada would
10 be borne by your company?

11 MR. WARD: To my knowledge, Senator, we have not testified
12 to that. I have not personally reviewed the record
13 of what our people in our Canadian company have said
14 before the Berger Commission hearings, but to my know-
15 ledge, they have not. However, it is quite obvious to
16 me that should a corridor be established and the claims
17 extinguished without prejudice to the Natives, subject
18 to compensation at a later date, I'm pretty well assured
19 that Arctic Gas will be paying a substantial portion,
20 if not all, of those claim settlements that pertain
21 and attend to their right-of-way.

22 SENATOR SUMNER: Does your costs before the FPC reflect
23 any figures for that?

24 MR. WARD: We have right-of-way cost figures, yes.

25 SENATOR SUMNER: Do you know what they are offhand?

1 MR. WARD: No, sir, I don't.

2 SENATOR SUMNER: Thank you, Mr. Chairman.

3 SENATOR RADER: Senator Butrovich.

4 SENATOR BUTROVICH: Mr. Chairman. Bob, you've enjoyed
5 Commissioner status in the State of Alaska, and this
6 may be hypothetical also, but do you think that the State
7 has made a wise decision to hold back on the twelve and
8 a half percent or a poor decision?

9 MR. WARD: Senator and Mr. Chairman, I think that the State
10 is making a wise decision in holding back the twelve and
11 a half percent and not making commitments on it now.
12 I think that's the wisest decision the State could make.
13 I recognize that there may be reasons, very cogent ones,
14 to the State for trying to do something different, but
15 I think their wisest move is to hold back.

16 SENATOR BUTROVICH: Thank you.

17 SENATOR RADER: Any further questions? Representative
18 Chatterton.

19 REP. CHATTERTON: Mr. Chairman. Mr. Ward, I think I heard
20 you say that you have over past time used influence or
21 attempted to use influence on the national scenes so
22 far as gaining support for your route, the Arctic
23 route, and I would imagine that you would still continue
24 to plan to seek help and support for your route on the
25 national scene; is that correct?

1 MR. WARD: Yes, it is.

2 REP. CHATTERTON: Now may I ask you this question: do you
3 feel that your ability to gain support on a national
4 scene would in any way be enhanced if in the process of
5 obtaining this support you could also wave a little
6 certificate that said you owned one-eighth of the gas
7 at Prudhoe Bay?

8 MR. WARD: No question about it.

9 REP. CHATTERTON: It would help?

10 MR. WARD: No question about it.

11 REP. CHATTERTON: Thank you.

12 SENATOR RADER: Any further questions? Representative
13 Gruening.

14 REP. GRUENING: Most of the members of the Arctic consortium
15 are also either the producers or closely related to
16 the producers who have the other seven-eighths. Why
17 haven't you used that as part of your political battle
18 to win the route decision?

19 MR. WARD: Representative Gruening, Mr. Chairman, the pro-
20 ducers are no longer members of our consortium, the
21 Prudhoe Bay producers.

22 REP. GRUENING: They will be at some point.

23 MR. WARD: No, I suspect that they won't. Arco, Exxon and
24 SOHIO were members until after we filed the application.
25 They assisted us in perfecting the application, and then

1 some time after the application was filed they withdrew,
2 which was their stated intention when they joined the
3 consortium to start with.

4 They weren't interested in acquiring equity
5 ownership in the gas transmission line. They weren't
6 in that particular business and they don't intend to do
7 so. That's not necessarily true on the Canadian side.
8 We do have major producers in the Mackenzie Delta who
9 are still in the consortium and who plan to take equity
10 ownership in it.

11 I should point out, however, in terms of my
12 response to Chat, I spend a lot of my time traveling
13 around the country, talking to various people here and
14 there, about the project. Some of our participants
15 do have a commitment on gas. As was mentioned here,
16 Columbia and Northern Natural have pretty good commitments
17 on about seven trillion. Texas Eastern still has a
18 contract hanging by a thread. The rest of them, while
19 they all had contracts, they were cancelled because of
20 this New Years Eve Massacre or whatever it was.

21 When I'm in areas in the East, east of Chicago,
22 but in areas, and some of them service areas of the
23 participants to this contract, people there are wondering,
24 "Well, yeah, it's a good system, it's going to get the
25 gas here cheaper, more efficiently, and more directly,

1 it will be more dependable and we like it, but we don't
2 have any gas. You can't get us any gas." I say,
3 "Well, you know, the contracts are still under negotia-
4 tion, the producers at this point in time are not in a
5 position where they feel that they can execute the
6 contracts. Our shippers had it once but they don't have
7 it anymore. But in addition to the Prudhoe reserve
8 there's a lot of potential. If people in your area go out
9 and acquire gas by negotiations with producers we'll
10 ship it for them easier and better than anybody else."
11 That is a fact.

12 REP. GRUENING: Is Columbia telling the fact that it has a
13 thirty percent contract, or whatever amount they have?
14 Are they telling their customers they should support
15 the Arctic line, "because we've got a contract with
16 them"? Are they making any use of that contract?

17 MR. WARD: Columbia is very, very active in their service
18 area. They're a very active member of our consortium.
19 Incidentally, their major usages, there are several
20 states, but Ohio and Pennsylvania.

21 REP. GRUENING: You mean the ones that are now under severe ---

22 MR. WARD: Yes, and they're having an extremely difficult
23 time satisfying their requirements.

24 REP. GRUENING: So they are lobbying, in fact, for your line
25 then, with this percentage.

1 MR. WARD: They've been very, very helpful.
2 SENATOR RADER: Senator.
3 SENATOR CROFT: Imperial Oil is a member of your study group,
4 is it not?
5 MR. WARD: Yes, it is.
6 SENATOR CROFT: And it has most of the Mackenzie Delta
7 reserves, doesn't it, gas reserves?
8 MR. WARD: Yes, and I don't know, Senator, how they break
9 down, but Imperial, Gulf and Shell are the three members
10 who are members of our consortium that by far have the
11 major interests.
12 SENATOR CROFT: But Imperial has the largest percentage of
13 anybody of the Mackenzie Delta reserves?
14 MR. WARD: I believe so, but I can't say.
15 SENATOR CROFT: Has Imperial made any commitment of its
16 Mackenzie Delta reserve?
17 MR. WARD: Yes, they have.
18 SENATOR CROFT: Was that to Columbia?
19 MR. WARD: I'm sorry, again, Senator, I don't have that
20 breakdown. There were commitments made on a lot of
21 the Mackenzie Delta reserves, and at one time they were
22 all made to U. S. shippers. Now, some of those agreements
23 have been cancelled, Senator, and advance payments
24 refunded because of the supply and demand situation
25 in Canada, and also the likelihood that in the first

1 instance anyway the National Energy Board would not
2 declare a surplus and allow any of it to be exported.
3 Some of them have been changed. Some of them, as
4 American National testified here yesterday, are still
5 in effect. Whether they'll ever be able to be proved
6 up on is hard to say; probably not.

7 SENATOR CROFT: And you don't know whether Imperial's
8 commitment is still in existence or not?

9 MR. WARD: I really don't.

10 SENATOR CROFT: Thank you.

11 SENATOR RADER: Any further questions? Mr. Carpenter.

12 REP. CARPENTER: Mr. Ward, do you think that a State royalty
13 gas line has any merit?

14 MR. WARD: Mr. Chairman, yes, I do. It has to be in the
15 context of a lot of different things. My personal opinion
16 is that at this point in time it does not have merit
17 because there is not the market, and it just doesn't
18 seem appropriate at this time. There is no denying the
19 fact that if either Alcan or El Paso were certified
20 they would have a better option to deliver State royalty
21 gas in State than Arctic Gas would. That doesn't mean
22 that they're going to deliver it for free, and there is
23 going to be a cost associated with it.

24 A line that would strictly take State royalty
25 gas, whether it's to interior Alaska -- and, frankly,

1 again from my own perspective and my own intelligence,
2 whatever that is -- I do not think it makes a lot of
3 sense to bring Prudhoe Bay royalty gas to tidewater.
4 If there is too much potential in tidewater, why have
5 State gas and resources at tidewater competing with
6 resources to develop the same kind of thing that the
7 State wants to develop and having to amortize an
8 eight hundred mile pipeline to get it there? I just
9 think that the long-range future of the Alaskans,
10 the development options, are too broad and too varied
11 at this time to be insisting that the State royalty gas
12 has to go to tidewater. To answer your question, I'm
13 sorry it took so long -- if there was a market for the
14 gas in interior Alaska and south of the Brooks Range
15 where it all could be used, the line would support the
16 tariff, there's volumes there enough to support the
17 tariff, then it would make it a reasonable deal. It
18 would cost more than El Paso or Alcan, but it could
19 still be viable.

20 SENATOR RADER: Any further questions? Representative Parr.

21 REP. PARR: Mr. Ward, I hate to ask you this question, I'm
22 sure I'm already supposed to know. I've heard con-
23 flicting stories. Does Canadian law require that your
24 pipelines that run through Canada be fifty-one percent
25 Canadian owned?

1 MR. WARD: Representative Parr and Senator, there is a
2 regulation and requirement as part of the body of
3 Canadian law that requires that, yes. It has been
4 waived from time to time. Frankly, we hope that it's
5 not. It's a capital intensive project, and we'd like
6 them to take sixty percent of that.

7 REP. PARR: While I'm asking this question, obviously ---

8 MR. WARD: There is a requirement now.

9 REP. PARR: What has flown from that, of course, is the
10 contention that the Canadian Government obviously could
11 in some way or other see that the gas was delivered
12 in Canada rather than the United States.

13 MR. WARD: I am aware of the argument.

14 REP. PARR: Thank you.

15 SENATOR RADER: Representative Chatterton.

16 REP. CHATTERTON: That led to one question, thank you,
17 Mr. Chairman. Imperial Oil, is it considered a Canadian
18 company?

19 MR. WARD: In terms of Canada's Canadian content, I don't
20 think so.

21 REP. CHATTERTON: Thank you.

22 SENATOR RADER: Any further questions? Thank you very much,
23 Mr. Ward. The schedule calls for El Paso. Yesterday
24 I thought I had explained to El Paso I wanted them to
25 put on their complete case and not come back twice.

1 Because we have so many out-of-town people we were going
2 to try to move immediately to out-of-town general public
3 interest witnesses. I'd like to ask El Paso if you
4 would forego your re-appearance until we have heard
5 from out-of-town witnesses, or do you think that it's
6 necessary or imperative that the remainder of your case
7 be put on at this time?

8 MR. HOLLAND: Mr. Chairman, El Paso's position, I think,
9 is clear enough on the record at this point. I would
10 have anticipated appearance of Alcan and Arctic Gas this
11 afternoon would have instituted a debate on the merits
12 of the pipelines. This has not actually occurred, so I
13 really don't have anything to say at this time, unless
14 the committee has questions of me.

15 SENATOR RADER: Do we have any questions of El Paso? I
16 don't believe we do, do we? Very well, we'll take a
17 ten-minute recess and then go into general public.

other

Testimony

JOINT PUBLIC HEARINGS
of the
ALASKA STATE LEGISLATURE
on

SCR 3, 4, 5 and HCR 11, 12, 13

"THE PROPOSED SALE OF ROYALTY GAS"

January 31, 1977 - February 7, 1977

Juneau, Alaska

VOLUME V

PRESENTATIONS BY INDIVIDUALS, ORGANIZATIONS, AND
OTHER INTERESTED PARTIES

MICHIGAN-WISCONSIN PIPELINE CO. (2/2/77) p. 1

by: John F. Cota, V.P. of American Natural Service
Company (an affiliate of Mich-Wisc.)

with: Tejindra Bindra

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(2/4/77)

by: Bob Penney, President
Paula Easley, Executive Director

1 these supplies available to our market areas in the most
2 direct and economical manner. I am also responsible for
3 our Canadian gas supply matters and liquefied natural
4 gas projects which are currently in the planning stage.

5 American Natural Service Company is an affiliate
6 of Michigan Wisconsin Pipe Line Company which is one of
7 the largest natural gas distribution systems engaged in
8 the business of purchasing, transporting and selling
9 natural gas to fifty-two distribution customers in the
10 states of Missouri, Iowa, Illinois, Tennessee, Indiana,
11 Ohio, Wisconsin and Michigan. Both of these companies
12 and Michigan Consolidated Gas Company, the largest
13 distribution company in the State of Michigan, are wholly
14 owned by American Natural Resources Company, which also
15 owns several other companies engaged in the natural gas
16 business or other related activities.

17 I appreciate the opportunity afforded by your
18 committee to submit comments on the proposals concerning
19 the disposition of the Alaska royalty gas. Of course,
20 we are fully cognizant that this is a matter of great
21 importance to the State and its citizens and that their
22 best interests should be a major consideration in
23 evaluating any such proposal.

24 I am here to reaffirm to this committee our
25 System's desire to acquire State of Alaska royalty gas.

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1 In response to the initial solicitation of bids for the
2 sale of royalty gas, we wrote Commissioner Guy R. Martin
3 in October of 1975 in which Michigan Wisconsin Pipe Line
4 Company expressed its desire to contract for the purchase
5 of any or all of the twelve and one-half percent royalty
6 share of natural gas which is estimated at approximately
7 3.2 trillion cubic feet to be produced in Prudhoe Bay
8 on the North Slope. Again, we reaffirmed on April 27th,
9 1976 in a letter to Commissioner Smith to acquire the
10 royalty gas.

11 So far, as you know, our system has been unsuc-
12 cessful in acquiring any royalty gas of the State of
13 Alaska presumably because our system has been actively
14 involved in sponsoring the Arctic Gas project known as
15 the Trans-Canadian route. Apparently, our lack of success
16 in acquiring Alaska's royalty gas has been because of a
17 general feeling in Alaska that a Trans-Alaska pipeline
18 route would best serve the interests of the State of
19 Alaska. We respectfully submit that the Arctic Gas
20 project is in the best interests of the State of Alaska
21 and the nation as a whole and, therefore, the State of
22 Alaska should direct its efforts towards supporting this
23 project. Nevertheless, and regardless of which route is
24 ultimately selected, it is in the state's best interest
25 to sell its royalty gas to the companies, such as ours,

1 which have expended enormous amounts of time and money in
2 the planning of Alaskan gas delivery systems and which
3 have evidenced a willingness to invest in such systems.
4 Only in this way can the state provide the necessary
5 incentives to finance and construct such a massive project.

6 Our system is one of the pioneers in the formation
7 and organization of the Arctic Gas project. In September,
8 1967, in our offices in Detroit, our system initiated the
9 first discussions to consider the possibility of the
10 formation and construction of an Arctic pipeline to
11 transport the newly discovered Arctic natural gas supplies.
12 Since then our system has continued to participate and
13 made a major contribution in the development of one of
14 the most extensively studied and carefully planned pipe-
15 line projects in the history of the natural gas industry.
16 To date, more than one hundred and twenty million dollars
17 has been expended by Arctic Gas project consortium in
18 conducting environmental, engineering, construction and
19 planning and other work. Of this, about eight million
20 has been expended by our system alone. In addition to the
21 capital expenditures, senior personnel of our system have
22 been actively participating in all of the committees
23 and task groups formed to study and manage the different
24 aspects of the project, such as engineering, environment,
25 financial, tariff, marketing, legal and other matters.

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1 The deliberations and recommendations of these committees
2 and task groups and the regulatory filings, construction
3 plans and schedules, procurement and logistics, tariffs,
4 financing plans and other activities, are regularly
5 reviewed by the management of our system.

6 Needless to say, our system is absolutely convinced
7 that Arctic Gas project represents the most sound and
8 expeditious method of marketing and transporting the
9 Alaskan gas supplies. As the most economical, that is
10 the lowest cost system, Arctic Gas project holds the
11 greatest promise for the producers and the state, as the
12 royalty owner, receiving the highest return on the sale
13 of their gas. As the project which has engaged in the
14 most comprehensive pre-certification planning, Arctic Gas
15 project assures the state the earliest possible flow of
16 its royalty gas. And, as the project which can be readily
17 expanded, it is the only project that assures the maximum
18 total flow of royalty gas.

19 We believe that the Arctic Gas project could be
20 financed and implemented much earlier than the Trans-
21 Alaska routes and thereby generate early royalty revenues
22 for Alaska. As most of us know, the Arctic Gas project
23 enjoys a broad based support and confidence of our system
24 and several other major United States oil and gas firms.
25 Our system and most of the other firms in the consortium

1 have already executed commitment letters and have testified
2 before United States and Canadian regulatory authorities
3 with respect to their willingness to make equity investments
4 in the project. Furthermore, the Arctic Gas project's
5 organization structure of the different elements thereof,
6 the basis of equity investments by the prospective
7 shippers and the financing plans are being continuously
8 and extensively reviewed by the prospective shippers of
9 the Arctic Gas project and these matters would probably
10 be resolved in substance prior to certification of the
11 Arctic Gas project so as to permit final financing plans
12 to be developed and construction commenced promptly
13 after certification.

14 In contrast, the Trans-Alaska routes enjoy very
15 little support from the oil and gas industry. Of course,
16 it is a truism that most of the sponsoring companies of
17 the Arctic Gas project would also, of necessity, have to
18 participate in the financing and implementation of a
19 Trans-Alaska route if such a route is found to be in the
20 public interest. Needless to say, in such an eventuality,
21 equity investments could not be expected to be made
22 unless all elements of such a route have been reviewed
23 and resolved to the satisfaction of the prospective
24 equity investors. Most of these matters would have to
25 be resolved after certification of such a route because

1 virtually all of the prospective shippers are currently
2 sponsoring the Arctic Gas project. Negotiations
3 concerning participation in the organization and financing
4 of such a route would necessarily be very complex and
5 protracted. Obviously, financing and construction of
6 such a route could not commence while the shippers are
7 negotiating the ownership, organization, management,
8 tariffs and allocation of costs with respect to such
9 a route.

10 Another important advantage the Arctic Gas project
11 enjoys in comparison to the Trans-Alaska route is that
12 its system can be readily expanded to transport additional
13 increments of gas. The Arctic Gas project's system can
14 be expanded by increments designed to meet the volumes
15 of additional gas, by adding compressor units, or
16 parallel pipeline known as looping, or a combination of
17 both. This can be expeditiously and economically
18 accomplished for virtually any reasonable increment of
19 additional gas supply. This should be of special interest
20 to the State of Alaska because the Arctic Gas project is
21 the only system which can be readily expanded and provide
22 a means of marketing the royalty gas attributable to the
23 state from the vast amounts of potential reserves cur-
24 rently estimated at more than one hundred trillion cubic
25 feet.

1 In conclusion, I would like to reiterate our
2 desire to acquire State of Alaska'royalty gas and our
3 hope that you would give it fair consideration. We
4 sincerely hope that our system's sustained efforts in
5 the development of the best possible transportation
6 system for marketing the Alaskan gas supplies would
7 contribute towards the long-term interests of the State
8 of Alaska and the nation.

9 Thank you, Mr. Chairman.

10 SENATOR RADER: Do we have any questions, any committee
11 members? Senator Croft?

12 SENATOR CROFT: Have you attempted to purchase gas from any
13 of the other owners at Prudhoe Bay?

14 MR. COTA: Yes, we have. We had an advance payment agreement
15 with Exxon at one time until the Federal Power Commission
16 declared that void.

17 SENATOR CROFT: And since that was declared void, have you
18 attempted to purchase any more gas?

19 MR. COTA: Constantly. We have talked with every company
20 that has gas.

21 SENATOR CROFT: Do you have any agreement to purchase any
22 more gas?

23 MR. COTA: No, we do not.

24 SENATOR CROFT: What is the problem with purchasing?

25 MR. COTA: The producers have just not been interested in

1 talking to us. They do talk to us but they told me that
2 they are awaiting unitization is one of the reasons why
3 they are not interested at this time in signing up.
4 The other one is that they want to be assured by the
5 Federal Power Commission that all agreements made at
6 this time as contracts will be honored for the duration
7 of the contract period and several other regulatory
8 problems. But, for the most part that is what they have
9 told me, that they did not desire to sign up at this
10 time.

11 SENATOR CROFT: Your proposal requires or anticipates that
12 sometime after 1985 that you will be obtaining -- or
13 the Arctic Gas proposal, you will be obtaining more
14 than three billion cubic feet a day from the North Slope
15 alone, without regard to the Mackenzie Delta. Is that
16 correct?

17 MR. COTA: That is the designed criteria for the line, yes.
18 Four and one-half billion total with the Mackenzie Delta.

19 SENATOR CROFT: Under the most likely production sales
20 schedule that you have, what do you anticipate will be
21 the loss of oil production from Prudhoe Bay as a result
22 of that high a rate of gas sales in Prudhoe Bay?

23 MR. COTA: I can only go by what I have read in the testimony.
24 I am not qualified to answer that question from a
25 technical standpoint. All I have read there is that

1 there would be no loss up to roughly three billion feet
2 a day. Above that I can't answer that.

3 SENATOR CROFT: What point of the testimony was it that
4 there would be no loss at three billion cubic feet a
5 day?

6 MR. COTA: I can't tell you who testified to that specifically.
7 It was in the testimony by -- I'm not sure if it was
8 your people, the State of Alaska, which was testifying.
9 I can kind of go back to the wording. The testimony
10 went somewhat like at two million there would be no
11 problem, at two and one-half to 2.8 to three it would
12 be their considered opinion that there will be no loss
13 of production above that in the present Prudhoe Bay
14 field.

15 SENATOR CROFT: All right. You haven't conducted your own
16 studies on that?

17 MR. COTA: Absolutely I haven't, no.

18 SENATOR CROFT: And if somebody like the Van Poolen study or
19 the Corps analysis showed that anything above two billion
20 cubic feet a day there would be an oil loss, you wouldn't
21 have any information of your own to contradict that,
22 would you?

23 MR. COTA: Absolutely not.

24 SENATOR RADER: Any further questions? Representative Parr.

25 REP. PARR: Would you mind, Mr. Cota, repeating something

1 you said about one hundred trillion cubic feet. Is that
2 your estimate of the reserves in Prudhoe, or what?

3 MR. COTA: Those are not my estimates. Those are the estimates
4 that I read from the different authorities. The testimony
5 of DeGoyer & McNaughton was one. I am not sure if the
6 State of Alaska has testified to that. The most recent
7 one I saw was estimated at one hundred and thirty-five
8 trillion cubic feet per day.

9 SENATOR RADER: Representative Hayes?

10 REP. HAYES: Yesterday there was some indication from the
11 testimony that one of the reasons the owners of some of
12 the other gas on the North Slope -- some of the reasons
13 they might not be interested in selling at this time was
14 because of the possibility of deregulation at some time
15 in the near future which, in that event, would allow a
16 premium to be paid in addition to that allowed presently
17 by the FPC. Do you think that is a valid reason why at
18 this time some of those companies are not interested
19 in talking?

20 MR. COTA: Of course, that is not a reason that anyone has
21 ever given me when I have talked to them. I would
22 personally say that that would undoubtedly be on their
23 mind, but they haven't given that as a reason for not
24 wanting to negotiate at this particular time.

25 REP. HAYES: But it is your opinion though that that very

1 likely could be a reason?

2 MR. COTA: They are all good businessmen.

3 SENATOR CROFT: Mr. Chairman?

4 SENATOR RADER: Senator Croft.

5 SENATOR CROFT: Following up on our question, did you have
6 a chance to read the news release from the Federal Power
7 Commission concerning Judge Litt's decision that we had
8 available yesterday?

9 MR. COTA: I have read it.

10 SENATOR CROFT: At page ten of that summary at the last portion
11 of the second full paragraph on page ten where he is
12 talking about everybody having their hand out, he says,
13 "the producers' failure to sign sales contracts indicates
14 where their concern lies." Do you know what he is
15 referring to in that regard?

16 MR. BINDRA: I'm sorry, could you tell us what --

17 SENATOR CROFT: That last phrase at the end of the second
18 full paragraph on page ten. The paragraph begins, "All
19 the major participants in this mammoth undertaking."
20 And the last phrase is, "the producers' failure to to
21 sign sales contracts indicates where their concern lies."

22 MR. COTA: No, I wouldn't want to give an opinion on what I
23 think they might be talking about or what he might be
24 talking about. I would assume that their concern lies
25 in getting the most they can for their gas.

1 MR. CROFT: I have no further questions, thank you.

2 SENATOR RADER: Let me ask you, have you made a firm offer
3 to the state for the purchase of gas?

4 MR. COTA: Yes, twice. On October of 1975, Mr. Ray Lynch
5 who is the president of Michigan Wisconsin Pipe Line,
6 wrote to Guy -- Commissioner Martin expressing our
7 interest and we offered to purchase any or all of the
8 state's royalty gas. Then during the Spring of 1976,
9 which was a year ago, when the Royalty Board again
10 expressed the terms under which this contract is being
11 discussed now, which meant you had to actively support
12 the Trans-Alaska pipeline. We again, on April 27th, I,
13 at that time, over my signature, we reaffirmed Mr. Lynch's
14 previous offer and stated to them at that time that that
15 one provision, because of our active support of the
16 Arctic Gas project since 1967, and our firm conviction
17 of having studied the Trans-Alaska, the Fairbanks corridor,
18 or all of the other projects that had been proposed, it
19 was finally in our estimation that the most economical
20 route to transport the gas was the Arctic Gas route.
21 That because of that we couldn't support or offer onto
22 the conditions expressed by Commissioner Martin's letter
23 but we would like to reaffirm again our original offer
24 of buying it under the same conditions that we had offered
25 in 1975.

1 SENATOR RADER: What price did you offer to pay?

2 MR. COTA: We did not do it on a price. We actually in effect
3 -- I can't remember the exact wording of it now but we
4 told him that we would pay whatever the regulated price
5 would be at that time or such other price that was the
6 going rate for gas at the time of signing of the contract.

7 SENATOR RADER: You were here during the testimony of yesterday
8 and the day before, were you not?

9 MR. COTA: Not the day before, just yesterday.

10 SENATOR RADER: Yesterday. Well, have you read the contracts
11 that have been proposed?

12 MR. COTA: I have read them, it has been a few weeks ago.

13 SENATOR RADER: And was your price offer substantially the same
14 as those contained in those contracts?

15 MR. COTA: Again, I --

16 SENATOR RADER: Field price or a regulated price, whichever
17 was the highest?

18 MR. COTA: Right. That is correct, sir.

19 SENATOR RADER: Did it have any other advantages to the state
20 in it that are not contained in those contracts?

21 MR. COTA: No, it did not. They were rather simple letters.

22 SENATOR RADER: Representative Chatterton?

23 REP. CHATTERTON: Thank you, Mr. Chairman. Sir, would obtain-
24 ing Alaska gas be of an economic benefit to your company?

25 MR. COTA: Absolutely.

1 REP. CHATTERTON: Realizing that you have no control over
2 wellhead price or city gate price why would you be willing
3 to entertain some type of a equivalency competitive bid
4 nature of a service in-kind to the State of Alaska or
5 something of that nature in order to avail yourself of
6 this economic benefit?

7 MR. COTA: I'm not quite sure I understand exactly what type
8 of an offer you are talking about. I would say at this
9 particular stage, we feel that there is just a certain
10 price, probably, on the commodity market that could be
11 offered for the gas. Whatever that price is at the time
12 that we could still sell it in our market place and under
13 whatever conditions the state would entertain, we would
14 be willing to enter into any negotiations for the gas.
15 We need the gas, we need it badly, but we don't need the
16 gas if we can't sell it so as you work back to the well-
17 head price that is, in effect, it is going to be a commodity
18 price, and because of the advantages in both the economics
19 of transporting the gas and in the cost of the Arctic Gas
20 system, the price to the state will be higher under that
21 than it would be under any other system that you may build.

22 REP. CHATTERTON: Should the Arctic Gas route be finally
23 selected do you plan to participate in that actual cost
24 of the pipeline?

25 MR. COTA: We have already given a letter of equity commitment

1 to the NEB. It has been filed before the National Energy
2 Board and before the Federal Power Commission and we have
3 committed ourself to it, our equity payments.

4 REP. CHATTERTON: Thank you, sir.

5 REP. PARR: May I ask one more question, Mr. Chairman?

6 SENATOR RADER: First, I'll take persons who have not yet
7 asked a question. Senator Sumner?

8 SENATOR SUMNER: Thank you, Mr. Chairman. You indicated that
9 the Arctic Gas line would be in the best interest of
10 Alaska. How do you find that?

11 MR. COTA: That they in the end will get the highest price for
12 their gas because of the economics of transporting the gas
13 on the Arctic Gas system. As I just mentioned to the
14 Representative here, eventually it has got to be sold in
15 the market place and competition with oil or electric or
16 whatever the other fuel is. It is going to back up to
17 the wellhead on a commodity value so that that project
18 which results in the lowest net cost to move that gas from
19 Prudhoe Bay to the market area of the 48 states is going
20 to end up with the highest wellhead price to the state.

21 SENATOR SUMNER: Since Alaska, though, is interested in some
22 jobs and some economic development, do you agree that the
23 Arctic Gas line is the least favorable to the citizens of
24 the State of Alaska under those terms?

25 MR. COTA: Well, first of all, I think one of the other big

1 advantages that is of benefit to the State of Alaska is
2 the thing that I mentioned in my statement -- was the
3 time element of getting ours under way almost immediately
4 upon certification and financing. We are ready, we do
5 have the organization, we have been working on it, we
6 have been in the design work, we are developing the
7 equipment. So first of all there is a great economic
8 benefit to the State of Alaska, not only on the initial
9 gas of getting it marketed at the earliest possible
10 time, but a line that can move all the rest of the gas
11 you will have available. That will be the benefit to
12 the citizens of Alaska and the people involved.

13 Now, as far as the jobs are concerned, which was
14 I think really the question you were asking, I wasn't
15 trying to avoid it. I was trying to come back first and
16 give the economic advantages. I would have to say that
17 you are comparing a one hundred ninety five mile line
18 against an eight hundred mile line, jobs during construction.
19 I think you are absolutely right, there would probably
20 be economic benefit to the other project, the Trans-
21 Alaska project. But in the long run, I think the benefits
22 to Alaska will be much greater with the Trans-Canadian
23 line.

24 SENATOR SUMNER: How about the job ratio after their
25 construction?

1 MR. COTA: I don't think there will be a lot of jobs with
2 either line.

3 SENATOR SUMNER: Which would have more jobs?

4 MR. COTA: Probably your Trans-Alaska line because again it
5 is a longer line. Again I think your benefits will come
6 from the dollars you can derive from the sale of your
7 royalty gas more than the jobs you may develop.

8 SENATOR SUMNER: One other statement that you made that seems
9 to be inconsistent with some previous testimony is that
10 the Arctic Gas line would be the earliest, would give
11 the earliest flow of gas. How do you account for that
12 inconsistency?

13 MR. COTA: Because of being in a position now with the equity
14 investors and with the staff already assembled, to be
15 into operation at the earliest possible date. Now you
16 go back, let's say the Trans-Alaska, who are their investors?
17 At the present time they do not have equity investors.
18 I don't think anyone has committed to put in an equity
19 investment in it. The people that would invest in the
20 Trans-Alaska line would be the same people that will
21 invest -- the same shippers in the Trans-Canada line.
22 They would have to then start from ground zero towards
23 designing the Trans-Alaska line and towards forming an
24 organization, being convinced after certification that
25 it would be a feasible project. This will take time.

1 SENATOR SUMNER: How much time difference do you see, Arctic
2 Gas to the El Paso approach?
3 MR. COTA: Well, I would estimate two years. I can't --
4 SENATOR SUMNER: That is unique. That is about the same
5 time they estimated that theirs --
6 MR. COTA: I heard the testimony yesterday. You may have
7 read Judge Litt's release too. He agrees that one of his
8 reasons for favoring the Trans-Alaska line is for the time
9 element -- or the Trans-Canada line, I'm sorry.
10 SENATOR SUMNER: Is the financing any easier for the Arctic
11 Gas line in your view than it will be for the El Paso
12 line? Is that what you were saying?
13 MR. COTA: I sure do, mainly because it is a conventional
14 type of construction. We have been constructing lines of
15 that type for many, many years.
16 SENATOR SUMNER: Do you believe that the El Paso project
17 couldn't get financing?
18 MR. COTA: No, I think it could get financing.
19 SENATOR SUMNER: Okay. Thank you, Mr. Chairman.
20 SENATOR RADER: Senator Huber?
21 SENATOR HUBER: I have several questions, Mr. Chairman and
22 Mr. Cota. Are you an engineer, Mr. Cota?
23 MR. COTA: Yes, sir.
24 SENATOR HUBER: I was rather surprised because I noted from
25 your testimony that all the things you indicated that you

1 are ahead on are all of the paper work things toward
2 getting the pipeline built. I would expect an engineer
3 would have been ahead on all of the technical things.
4 I'd like to go into why you think it is in Alaska's best
5 interest for the gas to go via Arctic Gas and it would
6 be an expansion, I guess, on another question that was
7 already asked. But, can you tell me any other state to
8 where the intrastate use of the gas is not more important
9 to their economics than is the interstate shipment of the
10 gas from their wells? Is there other states, could you
11 tell me?

12 MR. COTA: I don't think so.

13 SENATOR HUBER: You understand what I mean in the question?

14 MR. COTA: Well, yes I do. I think what you are referring to
15 is are there other states where it would be of more benefit
16 to the state to ship it in interstate as opposed to
17 keeping it intrastate and using it within their own state.

18 SENATOR HUBER: Considering that your system, by the very
19 nature of the route, precludes any use of the gas within
20 Alaska. Do you know of any other state that it is more
21 economically valuable to him to export than it is their
22 intrastate use?

23 MR. COTA: At this no, I would say not.

24 SENATOR HUBER: Have you -- I noticed also in your testimony
25 that you mentioned environment. Have you considered that the

1 line that you build across Northeastern Alaska opens a
2 whole new area, including the Arctic Wildlife Refuge,
3 to development when it hasn't been opened before? Have
4 you considered that effect upon Alaska?

5 MR. COTA: Our environmental people have considered that, yes.
6 I think too that you are going to find that it is going to
7 be opened no matter which line is built. It is just that
8 we will build ours across there. It will be open once,
9 and there will be other exploration of sea along the
10 whole North Slope. We will have a convenient line for
11 them to tie into. The main line will be built at this
12 time under the most ideal engineering and size construc-
13 tion rather than waiting until you build and do the
14 environmental damage of coming all the way down through
15 the State of Alaska, and then you will still end up putting
16 in a series of small lines out to your Wildlife Refuge,
17 eventually constructing in the same area.

18 SENATOR HUBER: Well, I guess it's a ---

19 MR. COTA: Plus, I truthfully don't think there is going to
20 be any damage, which has been testified to. Judge Litt
21 touched on the same question. But, the studies that have
22 been made, and I have attended, and I am a member of the
23 technical committee -- however, I have been for a short
24 period of time. But I have attended the so-called con-
25 struction panel that has testified at both the FPC and

1 the NEB. I am quite satisfied with the work they have
2 done in their engineering research and the tests they
3 are now making on the North Slope, that they can build
4 the line across there without any permanent damage to
5 the environment.

6 SENATOR HUBER: Well, I guess that is a subjective thing.
7 There are many of us that are interested in the environment
8 of Alaska, that maybe the Arctic Wildlife Refuge --

9 SENATOR RADER: Senator, I am going to ask you to restrain
10 your remarks to questions of the witness, sir, if you
11 would.

12 SENATOR HUBER: Yes, Mr. Chairman. I think you are being a
13 little tight there in consideration with what the other
14 is but I will comply.

15 SENATOR RADER: Well, we are going to run out of time here
16 and we have an opportunity here to hear from people out
17 of town. I don't want these hearings to close without
18 hearing from those people and your expressions of your
19 views or my expressions of my views are not nearly as
20 important at this stage in the proceeding as the expression
21 of the views which will not be available to us next week.

22 SENATOR HUBER: I agree with you.

23 SENATOR RADER: I want you to restrict your questioning to
24 questions of these witnesses that they are prepared to
25 answer.

1 SENATOR HUBER: Yes, Mr. Chairman. I could have had my next
2 question by now.

3 SENATOR RADER: I am thinking about the one after that, sir.

4 SENATOR HUBER: Well, if you are going to tighten up
5 considerably --

6 SENATOR RADER: I do intend to tighten up because I think
7 that we are going to be here indeterminately if we don't.

8 SENATOR HUBER: Well, you have tightened up before on me.

9 Mr. Chairman, my next question is you said the State of
10 Alaska would be better off, the State itself. Can you
11 explain to me how we will be better off in regard to the
12 fact that one line is four times as long as the other
13 one in Alaska, in other words, three-quarters of the
14 length of it that would be in Alaska is in Canada, and
15 our difference in our ability to tax that line? The
16 State of Alaska has an oil pipeline transportation tax
17 which is a considerable amount and it looks like three-
18 quarters of that would go to Canada. Now, can you explain
19 that, how that would be to our best advantage?

20 MR. COTA: What I testified to on your best advantage, I
21 would admit first that ours is one hundred and ninety
22 five miles as compared to roughly eight hundred miles,
23 four times as long and that the tax will be of benefit
24 to Alaska. But, I think your greatest benefit is having
25 available to you a line which will result in the highest

1 wellhead price of your gas, at present three trillion,
2 plus an easily expandable line that will provide for
3 readily transporting all the gas that may be found on the
4 North Slope and in the sea. Therefore, your benefits
5 derived will be much greater from being able to market
6 and move all the royalty gas that is found as opposed
7 to your tax benefits.

8 SENATOR HUBER: I'll let it go at that. I am not satisfied
9 with the answer, Mr. Chairman, but your restrictive rule
10 was such that I can't ask the question.

11 SENATOR RADER: Representative Gruening?

12 REP. GRUENING: I take it from your testimony you have a
13 deep concern with the cost to the customer of the gas
14 because at some point the customer won't pay it. Is
15 that it?

16 MR. COTA: Well, I have a deep concern that we would buy the
17 gas and not be able to market it which is really the
18 same thing. Yes, I guess I have a deep concern for the
19 customer also because it affects the economy of the
20 country.

21 REP. GRUENING: Well, your concern though is at some price
22 the gas will be unmarketable, is that it?

23 MR. COTA: That is correct.

24 REP. GRUENING: And your belief the Arctic proposal is better
25 is that it will produce a lower price to the customer.

1 MR. COTA: Correct.

2 REP. GRUENING: Have you calculated what price the customer,
3 beyond what price he will no longer choose to use the gas.
4 Have you calculated that? This is, of course, on the
5 delivery schedules that you have stated.

6 MR. COTA: These are our own company's internal studies. We
7 have a very comprehensive three year and ten year planning
8 group within our company. We have projected what we
9 feel the cost of domestic gas, meaning the lower 48 state
10 gas, will be in 1985, actually through 1987. We have an
11 application with the Federal Power Commission for coal
12 gas, coal gas gasification plant. We have also studied
13 LNG.

14 In this study we have also predicted what the
15 price of fuel oil would be and electricity in 1982 up
16 through 1987. Internally we have used a figure starting
17 out in 1982, which would be -- the original estimate of
18 when this line would go into service, of One Dollar and
19 Forty-Seven Cents wellhead price. We have escalated it
20 roughly seven percent per year, that is a weighted
21 escalation over that period of years. I believe that our
22 1987 figure for the wellhead price is Two Dollars and
23 Thirty-Seven Cents and then you add the cost of trans-
24 portation. We came out about Four Dollars and Eighty-Two
25 Cents by the time it got to our pipeline, somewhere in

1 that neighborhood. At that price, we feel at the cost
2 of oil and electricity at that time, it is still marketable.

3 REP. GRUENING: Anything beyond that, the customers are likely
4 to go to another fuel source?

5 MR. COTA: Yes.

6 REP. GRUENING: And the result of that is that the line is
7 unfinancable, is that the result?

8 MR. COTA: Well, if you can't sell the gas, yes.

9 REP. GRUENING: Okay.

10 MR. COTA: We have to be assured we can sell it and if it
11 gets to some price that we feel that we can't move it in
12 our system and receive it in our market area at a cost
13 within our planning, we would not go into the project.
14 But at this time, at the costs we have seen, we have not
15 only determined that it is an economically feasible price
16 that we can sell the gas, but we have committed to our
17 equity investment in the Trans-Canadian pipeline and the
18 Arctic Gas project.

19 SENATOR RADER: Senator Butrovich and then Representative
20 Meekins.

21 SENATOR BUTROVICH: Mr. Chairman, when Senator Huber asked
22 Mr. Cota a question, I understood Mr. Cota to say that
23 there was a distinctive advantage to the Arctic route
24 if future discoveries were made and I just wonder how he
25 arrived at that conclusion when the heavy exploration, as

1 I understand it is to the west of Prudhoe Bay, rather than
2 to the east. And, also, there is much exploration planned
3 between Prudhoe Bay and the Brooks Range, which would be
4 south of Pet Four and right now Pet Four is receiving a
5 lot of attention. It would seem to me that the Trans-
6 Alaska line would be just as accessible, if not more
7 accessible, by feeder lines from those regions than with
8 the Arctic line.

9 MR. COTA: What I was referring to, and it also fits into what
10 you are saying, is the expandability of the line itself.
11 In other words, the Trans-Alaska line would have to be
12 increased in size, you would have to increase the size of
13 your liquefaction facilities on the south coast, which is
14 difficult, you would have to add additional ships. The
15 big thing, where you would run into a big problem, is being
16 evidenced right now in California of finding a place to
17 land the additional supplies for your regasification.

18 As I said, our project requires, for the most part,
19 some additional compression which will be easily installed
20 either within the present compressor stations or additional
21 stations in between the compressor stations. It is a
22 relatively simple process, it has been done every day in
23 the conventional lines in the lower 48 states.

24 SENATOR BUTROVICH: However, you do recognize the fact that
25 one proposal does not propose to do that? It proposes

1 to transport it in the same area which you would, or
2 in which Arctic would.

3 MR. COTA: Are you talking about the Alcan proposal?

4 SENATOR BUTROVICH: Yes, sir.

5 MR. COTA: Well, according to the testimony I have read and
6 Judge Litt's opinion, the staff opinion, that line --
7 and I do not want to talk for them on this, I will let
8 them talk for themselves on that, but I am only reading
9 the opinion of the Federal Power Commission is that that
10 line is not expansible.

11 And, of course, you have got another thing there.
12 You have got to move that through third parties in
13 Canada after the Alcan line and it is whether they want
14 to expand their system or not. They have never indicated
15 that they will expand their system to take additional
16 gas. They will do it when they want, under what conditions
17 they desire to do it, and they have also expressed that
18 preferential treatment will be given to Canadian gas
19 supplies, which will be the Mackenzie Delta. It would
20 have to be moved through those lines. We have complete
21 control on the Arctic Gas system of doing our own expanding,
22 which the basic line itself being a forty-eight inch
23 high pressure line would not need to be expanded. If
24 anything, there may be some slight looping but, for the
25 most part, it is adding compression and power.

1 SENATOR BUTROVICH: Mr. Cota, would it be a fair assumption
2 to make that whether or not you acquire our twelve and
3 one-half percent or a portion of our twelve and one-half
4 percent that you would anticipate sharing to some
5 substantial degree in the gas which the producers in
6 Prudhoe Bay are producing?

7 MR. COTA: Yes.

8 SENATOR RADER: I am getting signals that the people in the
9 back of the room are unable to hear so I want to urge
10 all parties to speak up loudly because they are anxious
11 to know what you are saying. Excuse me, I didn't mean
12 to interrupt you, Senator.

13 SENATOR BUTROVICH: No, you didn't interrupt me.

14 SENATOR RADER: Did I interrupt you, Mr. Cota?

15 MR. COTA: No, I just -- yes.

16 SENATOR RADER: I did interrupt you, would you proceed?

17 MR. COTA: No, I meant the answer to the question was yes,
18 we do hope to participate in gas from the producers in
19 addition to royalty gas.

20 SENATOR RADER: Any further questions, Senator Butrovich?

21 SENATOR BUTROVICH: No, I am afraid I would be making a
22 statement, sir. Thank you.

23 SENATOR RADER: Representative Meekins and then Senator Poland.

24 REP. MEEKINS: Thank you, Mr. Chairman. I have got a question
25 in regards to the contract. The real issue here is

1 whether or not to approve the contract that the adminis-
2 tration has tentatively engaged in. Do you have any
3 general statements about that contract? What I am
4 interested in is from your experience, do you see any-
5 thing that we are giving up that we won't be able to
6 gain in the future or opportunities foregone by engaging
7 in this contract? Any concerns that you have or anything
8 you could tell us that we should be concerned with?

9 MR. COTA: I don't believe so, Representative. I don't think
10 I am fully enough informed or advised of the content of
11 the contract. I have read the contract, I haven't
12 studied the contract and I don't think I would like to
13 comment on it.

14 SENATOR RADER: Senator Poland?

15 SENATOR POLAND: Mr. Chairman, Mr. Cota, we were discussing
16 the time element and it was my understanding that you
17 felt that your line could be completed more rapidly than
18 the Trans-Alaska line. But, one of the things that has
19 come up from time to time as we discuss this is your
20 Canadian land claims. Do you feel that you could even
21 predict what delay that might bring your line?

22 MR. COTA: We don't feel that it is going to delay it at all.
23 We think that when the NEB comes out with their order
24 and as you heard here yesterday, I believe it was, the
25 treaty has been signed between the two countries that the

1 land claim issue will be settled but it will not necessarily,
2 and we don't feel it will, hold up the start of construction
3 of our line. There will be some commitments made to
4 continue to settle the land claims issue but the line
5 will not be held up as a result of it.

6 SENATOR RADER: Representative Chatterton?

7 REP. CHATTERTON: Thank you, Mr. Chairman. Sir, have you
8 estimated what your initial economic uninterrupted
9 throughput of your gas line would have to be, sir? In
10 cubic feet or mcf?

11 MR. COTA: That question I think was asked of somebody here
12 yesterday in regard to the other line.

13 REP. CHATTERTON: Yes, it was.

14 MR. COTA: I couldn't give you an exact figure on that. I
15 think possibly Mr. Ward, who is going to appear here
16 later, might be able to give you that figure.

17 REP. CHATTERTON: Thank you.

18 MR. COTA: I have heard some figures but I am not sure of
19 them.

20 REP. CHATTERTON: Well, let me ask you a follow-up question.
21 Whatever that number is, you would not be willing to
22 invest in a transmission line until you were assured
23 you could meet that economic threshold daily volume and
24 it would not be interrupted for at least a fifteen or
25 twenty year period?

1 MR. COTA: I could answer your question yes. You stated it
2 very well but I'll start out first by saying we couldn't
3 finance it without at least a twenty year plus contract.
4 We could not finance it unless we could show that there
5 was sufficient gas moving through the line to service
6 the debt on the line and also service our equity.

7 REP. CHATTERTON: Thank you very much, sir.

8 SENATOR RADER: Representative Gruening, did you have a
9 question?

10 REP. GRUENING: Yes. Have you read that portion of the
11 synopsis of the Litt decision on page ten that says
12 "A field price of \$1.00 per thousand cubic feet is the
13 upper limit, he said: a field price established by
14 contract or otherwise at a level much higher will sink
15 the project". Do you agree with that statement?

16 MR. COTA: No, I don't. Maybe what he is referring to,
17 a field price which has been used now in the -- that is
18 a price they have used in the economics of moving the
19 gas. In other words, the fuel, El Paso's or Trans-Canada,
20 and I know he is referring there to the dollar per thousand
21 cubic feet. However, he is talking about 1974 -- 1975
22 dollars which is all based on that which is kind of in
23 line with when I said, I believe, One Dollar Forty-Nine
24 in 1982 is the dollar field price escalated to 1982 and
25 then on up to 1987. In our own shop these are the

1 figures we have come up with and I have said it under
2 that basis on those prices it would be economical to us
3 at this particular time, based upon escalating the fuel
4 oil prices at the same factors.

5 REP. GRUENING: Given the fact that apparently the Arctic line
6 needs a lot higher capacity to make it financible, as
7 I understand it, could the reverse be true, that the Alcan
8 line, which has a lower volume, at least on conventionable
9 terms, be much more financible? Does that make sense
10 to you?

11 MR. COTA: Well, first of all, I don't think it is as
12 financible to start with. It is not going to move the
13 amount of gas.

14 REP. GRUENING: Well, let me ask, will the private markets,
15 the bonding companies, finance, betting on what the
16 reserves, this hundred trillion cubic feet or whatever
17 the projected reserves are; aren't they going to look
18 very much to what is ninety-nine percent sure?

19 MR. COTA: That is correct.

20 REP. GRUENING: Well, then a line which has a more reasonable
21 estimate of actually what is producible is maybe more
22 financible.

23 MR. COTA: That might be true. I'm not sure I get your
24 question entirely.

25 REP. GRUENING: Well, I got your answer. Thank you. If you

1 want to expand on that, go ahead.

2 MR. COTA: Well, would you repeat the last part of your
3 question?

4 REP. GRUENING: Your answer to the first part of the question
5 that the conventional markets would not rely on the --
6 conventional financing markets would not rely on the
7 projected or estimated reserves, gas reserves. They
8 were going to look at pretty much the sure producible
9 amount and on that basis, a line whose economics were
10 based upon that more reasonable or sure amount, would
11 be more easily financed through conventional methods.
12 Is that a correct assumption?

13 MR. COTA: Well, I think if that was true that would be a
14 correct assumption. What you are saying is the Alcan
15 is based upon the twenty-five to twenty-nine trillion
16 cubic feet that is there or whatever that -- solely upon
17 that amount, and that, therefore, our line is based upon
18 the same amount, if that is what the financial people
19 are looking at, therefore, you indicate a lower cost on
20 the Alcan project as compared to ours, therefore, it should
21 be more easily financed. Is that what you are asking?

22 REP. GRUENING: That and the fact that your line depends on
23 discoveries that are not yet certain.

24 MR. COTA: That is not true. Our line is based on the twenty-
25 five trillion, what is there today, and no financial

1 people are going to give us the money to build it based
2 upon the hundred trillion or the hundred and thirty-five
3 or whatever it might be in the future. And we are not
4 going to invest in anything that couldn't be financed
5 and that would not be feasible, needing gas that is not
6 proven. So ours is based on the twenty-five trillion.

7 REP. GRUENING: Well, if it were a fact -- I'm slightly
8 switching the question but if the rate of daily production
9 could not exceed two billion barrels a day, if that were
10 a fact --

11 MR. COTA: Two billion?

12 REP. GRUENING: Yes. A conservation fact, would not the
13 Northwest line be more financible on that basis?

14 MR. COTA: I don't feel it would be. To start with, and
15 again I said Mr. Ward might be able to answer the question
16 about the amount a little better than I am, but I know
17 that two billion, if that is the figure you are going to
18 take, is within the ball park of an economic feasibility
19 for our line.

20 REP. GRUENING: Anything above that would reduce in loss of
21 oil production?

22 MR. COTA: Let's say anything above that did reduce, we would
23 still have a feasible project based on your two billion.
24 You want to remember too, that we do have one thing --
25 two other points is the Mackenzie Delta gas which could

1 be transported on our system, plus we have a Canadian
2 investment community along with the United States invest-
3 ment community. We have two sources of investors in our
4 pipeline.

5 MR. BINDRA: I might make one observation here. I think one
6 of the factors that the investment community is going to
7 look at is the cost at the market. And to the extent
8 that the Arctic Gas project is going to result in the
9 lowest cost in the market, I think it has a much stronger
10 financiability factor.

11 SENATOR RADER: Did you have any further questions?

12 REP. GRUENING: Well, I am not convinced that it will result
13 in the lowest cost among the three lines but I'll leave
14 it at that.

15 SENATOR RADER: Representative Miles?

16 REP. MILES: Thank you, Mr. Chairman. Going back to Senator
17 Poland's original discussion on native land claims. If
18 the Arctic position, Mr. Cota, gains support in the east,
19 would it be to your benefit, the benefit of the other
20 supporters of the Arctic line to become involved in land
21 claims settlement in Canada?

22 MR. COTA: What do you mean in the east, Eastern Canada?

23 REP. MILES: No, no, no. In Washington. In Washington, it is
24 obviously a Presidential/Congressional decision. So if the
25 position does gain momentum back there, when the President

1 is studying it, when Congress is studying it, would it be
2 to your benefit to become involved in the Canadian land
3 claims?

4 MR. COTA: I don't think the federal government of the United
5 States is involved in the land claims. I didn't know they
6 were.

7 REP. MILES: Not the federal government, no, sir. The industry
8 I am talking about.

9 MR. COTA: The industry, no, I don't think we would become
10 involved.

11 REP. MILES: Not at all.

12 SENATOR RADER: Mr. Carpenter?

13 REP. CARPENTER: Mr. Cota, earlier -- again this will seem like
14 I am shouting at you, but earlier Senator Croft was
15 exploring this question of whether the state is going to
16 lose something by committing its gas now, it will either
17 be the producers not committing their gas, and you said
18 that among the reasons that you felt the producers weren't
19 committing their gas was that they were awaiting unitization.
20 How would that affect them compared to how it would affect
21 the state as a reason for committing or not committing our
22 gas?

23 MR. COTA: Well, I don't think the state has committed a
24 specific amount. They have committed a percentage of the
25 gas that will be produced. You do not have a contract with

1 these three companies that I understand commits you to
2 any specific volume of gas, it is only a percentage of
3 all gas produced by all producers on the North Slope.

4 What I was referring to is, say, Mobil, which is
5 a small producer in the whole scheme of things. If they
6 would sign a contract with us for, say, a trillion cubic
7 feet of gas, and this was presented to the Federal Power
8 Commission. Under some of the contracts that have been
9 presented in the past they may only be able to produce,
10 say, six hundred billion instead of the trillion. What
11 they want to be assured of is that after unitization they
12 will be in a position that they do have that amount of
13 gas, somewhere in the neighborhood of a trillion, and that
14 they will not then have to make that gas up from another
15 source in some other location. That is the differential
16 in your problem.

17 REP. CARPENTER: Therefore, their reason for not committing
18 is not a valid reason for the state to not commit?

19 MR. COTA: That is correct, Representative.

20 SENATOR RADER: Are there any members who have not yet had
21 the opportunity to ask their first question? We will
22 start taking the second line around. Mr. Swanson?

23 REP. SWANSON: Mr. Chairman, noting the existence in the miles,
24 El Paso at one hundred and nine and Alcan at three
25 thousand, I don't have a mileage figure here for the

1 Arctic Gas route, but the thing that bothers me is that
2 they are all at the six billion dollar mark. How many
3 miles is the Arctic route?

4 MR. COTA: Total miles is about thirty-eight hundred.

5 REP. SWANSON: Thirty-eight hundred. Another question, if
6 I may. These figures are based on what it costs us to
7 build the Prudhoe Bay line?

8 MR. COTA: The Prudhoe Bay line?

9 REP. SWANSON: Well, our oil line, the cost of getting the
10 pipeline --

11 MR. COTA: Oh, you mean the cost of construction?

12 REP. SWANSON: Right.

13 MR. COTA: No, they are based upon -- after you get out of
14 the permafrost area in Canada, they are based upon
15 conventional pipeline construction that we do every day.

16 REP. SWANSON: All right. Next question, Mr. Chairman. Is
17 this line going to be similar to the Prudhoe Bay line
18 as a cost plus, plus, plus pipeline in which we are going
19 to have to pay for -- the transportation of our oil is
20 going to be the same way across Canada, or is this just
21 going to be a regular legitimate line in a bona fide
22 contract years and so it is not a cost plus, plus, plus
23 thing like the Prudhoe Bay line?

24 MR. COTA: Our staff of the Canadian Arctic Gas Study Limited
25 Group, which is based in Calgary, advised at the last

1 technical committee meeting I attended that the project
2 would be let on firm bids in the same manner as any other
3 gas line. There may be some problems in the permafrost
4 area where there will have to be some, possibly, stipu-
5 lations in there to cover unforeseen -- for the most
6 part it is a conventional contract.

7 REP. SWANSON: My next question then. The return to the
8 State of Alaska on the transportation cost of this
9 would be less in an Arctic route than would it be the
10 type we have got here in Alaska?

11 MR. COTA: I don't want to get turned around on your question.
12 I want to be sure I say it right because I'm not quite
13 sure how you said it. The cost of moving the gas from
14 Prudhoe Bay to the lower 48 market area on the Arctic
15 Gas system will be less transportation cost of fuel and
16 as a result the price that can go back to the wellhead
17 will be higher to the State of Alaska on the Arctic Gas
18 because of the reduced cost on the line, and, therefore,
19 those benefits will be at the wellhead.

20 REP. SWANSON: Even at the difference, Mr. Chairman -- even
21 at the difference in the length of the lines?

22 MR. COTA: Yes, sir.

23 REP. SWANSON: That is all I have, Mr. Chairman.

24 SENATOR RADER: Any other first round of questions by members?
25 We will take a second round of questions if anybody has

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1 any. Senator Poland?

2 SENATOR POLAND: Mr. President, Mr. Cota, this is probably
3 an extremely provincial question, but as I look at that
4 map up there and I look at your route, I see no way
5 that the State of Alaska --

6 SENATOR RADER: Senator, they are unable to hear you at
7 the back of the room. Would you speak louder?

8 SENATOR POLAND: I am sorry. In looking at the route up
9 on the map for the Arctic line, I see no way for the
10 State of Alaska to be able to take off any gas in a
11 place that it would do the state any good. If we use
12 the Arctic route do you believe that we are going to
13 be in the same old position we are in with our salmon,
14 where we ship it out and ship it back up again, or is
15 there some way that we can take off the line?

16 MR. COTA: I think there may be some ways. I might be
17 premature to talk about the Gulf of Alaska and some of
18 your areas at this time but someone here mentioned about
19 return of gas in-kind, a company that might be active
20 in the Gulf of Alaska on gas supplies or any of your
21 other coastal areas could in effect return gas to you
22 in-kind if they were the people that were exploring
23 off the Gulf of Alaska or one of these areas. That
24 would be about the only way I can see unless -- you
25 have got a threshold of twenty-five trillion which is

1 supporting this line to the 48 states, it depends on
2 how much gas is eventually found up there. Just because
3 you don't build the second line now, the gas line to
4 the south of Alaska or to the Anchorage/Valdez area,
5 doesn't mean you can't support a line in the future,
6 the same as your polar gas line there in Canada.

7 I can see their alternative up there, they talk
8 in terms of a threshold of about thirty trillion needed
9 to build that line. They have reduced it now to some-
10 thing under that. It is somewhere between twenty-two
11 and twenty five. They fully expect at some future date
12 that both lines will be built, the polar line and the
13 line that is now being proposed. I don't think your
14 foregoes go in a second line in Alaska --I think the
15 market is going to be there in the future--just
16 because that isn't the line that might be built today.
17 I think your need for gas in the future date is probably
18 more than it is today, anyway.

19 SENATOR RADER: It is five after twelve. These gentlemen
20 have a two o'clock flight to catch. Do we have anymore
21 questions? Senator Huber?

22 SENATOR HUBER: I had one but I wanted an expansion off
23 Senator Poland's question. Your answer to Senator
24 Poland just now about future lines being able to handle
25 it, how do you take this into account with your original

1 statement that the Arctic Gas line can be expanded to
2 four times more economically? Do you mean to tell me
3 that we are going to go against the economics if you
4 put in the first line and not expand it like you
5 recommend in the future? The two statements confuse me.

6 MR. COTA: Well, what I'm saying is that you have the means
7 to move the gas to market on the Arctic Gas but then
8 also, if you have surplus gas which would support a
9 second line and you have the need in Alaska and you
10 have demonstrated the need, you do have the petrochemical
11 plants or the industrial, whatever else you need. If
12 the gas is there we are justifying the construction of
13 our line on the present twenty-five trillion. There are
14 twenty-nine trillion of reserves available but that
15 doesn't foreclose a threshold amount of gas to build
16 another line across Alaska at some future date.

17 SENATOR HUBER: And, Mr. Chairman, that means that it is not
18 out of line with your original statement. It is just
19 that your original statement, once you build the first
20 line then you can expand it to one hundred million, as
21 you said. It will always be more economically feasible
22 to take it out by Arctic Gas, according to you, but we
23 could do it the other way if we wanted to. Is that what
24 you are saying?

25 MR. COTA: This is correct and you will have the income at

1 an earlier date from the Arctic Gas line to apply to
2 the construction of another line which would come down
3 through Alaska.

4 SENATOR HUBER: I needed to find out another thing, Mr.
5 Chairman, on a different subject, if I may, while I am
6 at it. Do I understand that you still have some agreements
7 with producers on the North Slope to furnish you gas?

8 MR. COTA: We do not. Not since the advance payment agreement
9 was eliminated.

10 SENATOR HUBER: But you are still supporting their line. Do
11 you have some kind of agreements on the back burner?

12 MR. COTA: We have no agreements. In fact it is not their
13 line, it is our line at the present time. We are the
14 project supporters, not the producers.

15 SENATOR HUBER: All right, one more related question to that.
16 You did mention that you were broad based with associates,
17 so I will ask for you and your associates, is there any
18 kind of commitments that may be legal from the Mackenzie
19 River Canadian reserves that go with any of your af-
20 filiates that you still have agreements to take?

21 MR. COTA: Well, they are not back burner. They are very
22 straight forward and they have been filed in the NEB.
23 We do have a contract with Imperial Oil for four trillion
24 of the first sixteen trillion of gas in the Mackenzie
25 Delta, however, unless there is quite a surplus of gas

1 found there, we see very little chance that we will move
2 any of that gas out of Canada, but that contract is still
3 in effect.

4 SENATOR HUBER: That contract is in effect so the making the
5 Mackenzie Delta gas more economically feasible is
6 definitely to your best interest by the Alaska gas going
7 the same route?

8 MR. COTA: Oh, sure. Even if we don't get any of the
9 Mackenzie Delta gas, the four trillion of which we have
10 a contract for and we can't move it to the states, we
11 feel that if Mackenzie Delta gas line is built and that
12 the gas is moved to the Canadian market and on over to
13 Eastern Canada, that will relieve the load right now
14 on the Alberta producers and on other producers in
15 Canada, that the surplus gas that we hope in our contracts
16 which we now have, and the first one expires in 1980,
17 that they will be able to continue at least on a year to
18 year basis, gas to us which is very important to us that
19 the Mackenzie Delta gas arrives in the Canadian pipeline
20 system.

21 SENATOR HUBER: So that then answers that your economic
22 interests are definitely best served by Alaska gas --
23 your Canadian economic interests are best served by
24 Alaska gas going through Trans-Arctic so that it will
25 help you with your Mackenzie River holdings?

1 MR. COTA: I think the economic interests of everyone
2 concerned, including Canada, the United States, the
3 48 customers, all the pipelines involved in the State
4 of Alaska, are best served through the Trans-Alaska
5 project -- Trans-Canada, excuse me.

6 SENATOR HUBER: Mr. Chairman, I did have a question on
7 balance and trade but it has been asked before in other
8 meetings, and so that we can get on with it I'll let it
9 go.

10 SENATOR RADER: I appreciate it, thank you. Representative
11 Parr?

12 REP. PARR: Mr. Chairman, my question is very brief and
13 something Mr. Cota said a few minutes ago. Mr. Cota,
14 looking just purely from a business viewpoint, I get the
15 impression that if you were making the decisions for the
16 State of Alaska you wouldn't sell this gas at all to any-
17 body now, to Michigan Wisconsin, to Tenneco and the other
18 people there, that we would hang on to that gas.

19 MR. COTA: Personally, I wouldn't see any reason for hurrying
20 into anything. I would see what kind of support you do
21 get out of those who are seeking the gas. But, if I
22 did contract to sell the gas to them, it would be on a
23 Trans-Alaska route, and I wouldn't make any commitments
24 to go through another line with it; otherwise, you are
25 not going to get the support you are seeking.

1 REP. PARR: Now I am talking from a purely business stand-
2 point without regard to the support of the Trans-Alaska
3 line or any of those things. I get the impression that
4 what you have implied is that we would be better to
5 hang on to our gas if it takes ten years, as a business
6 venture?

7 MR. COTA: I don't think I said that.

8 REP. PARR: Not in so many words but that is the thrust of
9 your testimony.

10 MR. COTA: No, I don't think I even indicated that. I don't
11 know what statement you are referring to but I still
12 think the commitment of your gas to the market through
13 the most economical pipeline that can be built at the
14 earliest possible date is in the best interests of
15 Alaska.

16 REP. PARR: Thank you.

17 SENATOR RADER: Any further questions? We appreciate very
18 much you gentlemen attending. We will stand in recess
19 until 1:30 promptly.

20 (Whereupon the hearing was recessed at
21 12:10 p.m. and reconvened at 1:30 p.m.)

21 SENATOR RADER: The committee will please come to order.
22 We have as our first general public interest witness
23 Mr. Boucher, H. A. Boucher. Identify yourself for the
24 record, Mr. Boucher.
25

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1 MR. BOUCHER: Thank you, Senator. My name is H. A. "Red"
2 Boucher. I'm from Anchorage, Alaska, I serve as a con-
3 sultant to people in the construction, also in the
4 architectural and engineering, I serve in a consulting
5 capacity to Energy Company of Alaska, which is a
6 refinery under the North Pole area, also to Pacific
7 Alaska LNG, who is attempting to put a facility together
8 right in the Kenai Peninsula. In the case of Pacific
9 LNG, I have no responsibility other than to assist them
10 with community affairs in the Kenai area, and I think
11 both Mr. Ward and Mr. Holland will acknowledge that
12 that particular company is involved in both of their
13 projects, the parent company of that. I think it is
14 necessary, and I will be glad to answer any questions
15 on that particular subject.

16 I am here as a private citizen and paying my
17 own way and expenses. The sale of royalty gas is a subject
18 I was concerned with during my period of service to the
19 people of the State as Lt. Governor, and I think the
20 Administration and the people who have followed this
21 issue know that I'm pretty much voicing the same thoughts
22 now that I have voiced consistently over the past two or
23 three years.

24 I think what I would most like to do, and be
25 assured I'm going to attempt to sum this up because

1 there are other witnesses who are technicians in the
2 field and I think they will have things of interest to
3 you and to the people of the State of Alaska.

4 For a moment, if I may, and I think it's always
5 wisdom to look to a higher power when we tend to get
6 caught up in the day-to-day things of life -- maybe
7 Ecclesiastes the First or the Second, the Tenth Verse,
8 might kind of place things in focus. Indeed, everything
9 that is happening now has gone before us and really,
10 are we discussing anything new? By that I mean we're
11 talking about removing a resource from the State of
12 Alaska, and this has been discussed with our fish, our
13 timber and other things. It's not whether we should,
14 when we will, but is it in good order and is it in the
15 people's best interest.

16 So I hope here to go back to the basics, the
17 law that you are dealing with. You've had the pipeline
18 issue discussed, which is the best pipeline, and frankly
19 I think to a large degree you resolved that, as a body,
20 before. If you have had a change in mind, I think you
21 might discuss that, whether it is before you to support
22 El Paso, Alcan or the Arctic.

23 I would like to maybe give a larger view as it
24 relates to the petroleum industry. I found them to be
25 gentlemen of good faith. Of course, there are always

1 people who may not deal with you in good order; but by
2 and large, as both Lt. Governor and Mayor of the City of
3 Fairbanks, I have found that if you dealt squarely
4 with them they dealt with you, that they were working
5 for their corporate interests and you, in turn, should
6 be working for your corporate intersts.

7 So I'm going to solve the pipeline issue by
8 saying this, and it's happened in the past -- the very
9 people (as Clark pointed out) who are battling each
10 other today may be working together tomorrow in the
11 common interest of solving what is the most important
12 issue before us, the national energy problem that faces
13 our country.

14 So, maybe Senator Stevens was kind of wise when
15 he said, "Don't throw the baby out with the water."
16 I think it's been debated enough, I don't intend to get
17 into that particular area because, as I understand,
18 you're talking about the sale of the royalty gas, and
19 that is what I would like to address myself to.

20 I think the bottom line is what Senator Croft
21 said earlier, how much do we have in the reservoir,
22 how much can we commit, because it is an oil reservoir
23 and withdrawal of the gas has an effect on that oil,
24 and you need to concern yourselves with it, and you have
25 some of the finest men in the industry in Hoyle Hamilton

1 and Easy Gilbreth, who can give you the answers to
2 that. You do have the control, you have the conserva-
3 tion of that reservoir and its resource, and that's
4 your first responsibility.

5 Secondly, I would like to address myself to
6 Representative Gruening's remarks, "What are you getting
7 for what you are offering," and I would like to add
8 one dimension, "What does your law which you are bound
9 to operate by state?"

10 I'm going to, in the interest of good time, skip
11 over my formal remarks. There are some flourishes in
12 there that I feel at this particular time may not really
13 have any bearing. I think we all know that the energy
14 crisis that we're seeing is just the tip of the iceberg.
15 This nation is ninety percent dependent upon fossil fuel,
16 and it is imperative upon the Nation and the State who
17 soon be its largest producer, who is going to be looking
18 to us to supply this life-giving energy, to get their
19 act together and develop an energy policy, and I think
20 it's as important for Alaska to establish a leadership
21 role in this.

22 Really, that is the overriding consideration that
23 will affect any decision in the next twelve months. It's
24 one which I've been concerned with, as many of you here
25 in the room are; but I think we need to back off and

1 take a look at the larger picture.

2 I feel that Governor Hammond, based on what I
3 can read here, has in good conscience brought a proposal
4 before the people that he thought that the Legislature
5 wanted and they wanted. I would like to say that.
6 I had a talk with him before giving my comments here,
7 and he knows my general feeling in this area. But I
8 would like to emphasize that. I don't think there's
9 any room for what this Administration did, or that
10 Administration did -- let's get down to the basics.
11 We are dealing with something that's not only going to
12 affect every man and woman in this State, but also
13 sister states to the south.

14 I'm going to go through here to the point where
15 I got down to page four at the top. We're talking about
16 the Legislature when it enacted AS 38.05.183. There
17 were gentlemen and ladies who were in the House when
18 that was enacted that are sitting here now. There was
19 one reason for it, to make sure that we set a portion
20 of our fossil fuels, oil and gas, aside for our own
21 energy self-sufficiency and to build an economic base
22 for this State. I don't think one-eighth of it is
23 considered to be selfish, especially when much of the
24 responsibility of developing an energy base for our
25 nation is going to fall upon this State, and we're going

1 to require additional energy to be able to power these
2 pipelines far in greater proportion than, let's say, Iowa,
3 Kansas, or what have you.

4 I think this, when we go before the Congress
5 of the United States, and if this provision of withdrawal
6 is threatened, I think that should be our case. We are
7 up front, we are the steam engine for America in the
8 next decade, and we must have energy beyond our own needs.
9 I think it's fair to state that we should, as a people,
10 and this is what the Statehood Act was all about, have
11 the opportunity to develop a domestic economy that lifts
12 the burden of the Federal taxpayer off his back; in
13 other words, that we become self-sufficient to the
14 maximum degree that we can.

15 I think overall the purpose of this law was rather
16 simple and I, as one who has served with you, I would
17 like to deal with our legal responsibility, my views of
18 why we did it. Now, this is something that concerns
19 me very much, and I'd like to address myself to it, and
20 maybe the answer is here and maybe I've missed it.

21 When the Legislature enacted AS 31.05.183 it
22 specifically attempted to protect the birthright of
23 Alaskans yet to be born. In fulfilling this obligation
24 the Legislature demanded that prior to the exportation
25 (and I emphasis "exportation") of any of Alaska's royalty

1 gas that detailed studies be made, not only as to the
2 immediate needs of our State, but as to its present and
3 projected intrastate domestic and industrial needs.
4 The mandate is simple.

5 When you use "shall" in there, you don't mean
6 maybe, if, and or but. It also demanded that the Alaska
7 Royalty Oil and Gas Development Board determine that the
8 royalty in-kind oil or gas is surplus to the present and
9 projected intrastate domestic and industrial needs.
10 And it didn't provide, and I'm not trying to be
11 facetious here or intimate that there was any back room
12 dealing -- it provided that it be done right out in
13 public, not just a matter of negotiations as to whose
14 interests, and I am not intimating that it be done, but
15 it's mandatory that it be done. And that you report
16 these findings of how you arrived at surplus and you
17 report them in writing in detailed studies to the
18 Legislature within ten days of the convening of that
19 Legislature.

20 I have talked to a number of Senators and Repre-
21 sentatives, and I can find nothing that would indicate
22 a detailed in-depth analysis of in-State use of this
23 resource. We're paying money to find out if a contract
24 is all right and fine, we need to do that, but I would
25 like to see a detailed in-depth analysis as is required

1 by the law. I have tried to gather everything, the
2 comparative study of the gas pipeline proposals; that
3 talks about the route situation, and you should deal
4 with that there. A comparative economic study of three
5 competing routes, that's not talking about royalty gas.
6 Net economic benefits; fine, that's one of your charges
7 in there, and maybe you might be dealing with that, but
8 if you look further back in the laws as to the various
9 things that the Advisory Board is supposed to study before
10 it authorizes the Commissioner to proceed, I don't think
11 it says, "If, and or maybe," it tells you exactly what to
12 do.

13 Then you have Dr. Knudsen's letter to Mr. Owens
14 of Northwest of December 16. It says, "Well, maybe that
15 economic study isn't just exactly what we said," under
16 what appears to be the catch phrase now, scenario,
17 which, as we all know, means, "Let's try another computer
18 run to see if we can make it work."

19 I'd like to get to the bottom line and keep the
20 rhetoric as much out of here as possible. Here you have
21 a letter which followed your various laws, as I under-
22 stand, and Representative Gruening was kind enough to
23 supply me it. You appropriated Fifty Thousand Dollars.
24 In fact, it might be noted here, for those who might
25 think political, Governor Hammond just let this pass

1 without his signature. So, there's room for views on
2 both sides. He had his reservation at that time.

3 I have the minutes of your Gas Pipeline Impact
4 Committee of February 24. You expressed your wishes
5 there, so if you've changed your mind since then I
6 think the public ought to know it. You had the laws
7 that passed. This triggered, I think, the Royalty Board
8 to go into action, (I haven't seen any of their minutes
9 or studies in their deliberations) which in turn
10 triggered Commissioner Martin's action, which is a
11 letter, and as was pointed out here, one of the clauses
12 clearly stated in here, you must support a particular
13 route. Whether that's in good taste or whether that's
14 a proper way to dispense of the people's resources, I
15 don't know. Whether or not it's legal, that's not for
16 me to determine.

17 I think it is for you to determine whether or
18 not it's wise to do that, and whether that's a decision
19 that you want to live with if this thing, let's say,
20 doesn't go this way or that way. I think we're going
21 to find out that the pipeline decision between now and
22 whenever it was made is going to be like a ping pong ball,
23 it's going to be back and forth; Canada makes a decision,
24 press reaction, counter decision in Alaska. So let's
25 keep our cool and let's act responsible before our nation

1 because we have a responsible position.

2 I would ask only that you do this: go back to
3 the basics, (you know what you did when you deliberated)
4 look at your law, and see if you are functioning within
5 the framework of that law. For example, I'll read
6 all of 38.05.183(d): "Oil or gas taken in kind by the
7 State as its royalty share may not be sold or otherwise
8 disposed of for export from the State until the Com-
9 missioner with the approval of the Alaska Royalty Oil and
10 Gas Development Advisory Board determines that the
11 royalty-in-kind oil or gas is surplus to the present and
12 projected intrastate domestic and industrial needs."
13 And further back in your chapter, I won't bother to go
14 into that, it clearly states to arrive at that thing
15 before they make their recommendation there is clear-cut
16 things, social impact, desirability of localized capital
17 investments, should we refine it inside the State;
18 that's where their area of responsibility is.

19 Back a moment, "... Gas Development Advisory
20 Board determines that the royalty-in-kind oil or gas is
21 surplus to the present and projected intrastate domestic
22 and industrial needs. The Commissioner shall make
23 public, in writing, the specific findings and reasons on
24 which his determination is based and shall, within ten
25 days of the convening of a regular session of the

1 Legislature, submit a report showing the immediate and
2 long-range domestic and industrial needs of the State
3 for oil and gas and an analysis of how these needs are
4 to be met."

5 I think you're aware of the law as well as I am.
6 In fact, that's what we who have served or do serve
7 took our oath on, and I'm not here to say you haven't,
8 but sometimes when you pressure things through and rush
9 it in the name of whatever project -- I'm sure there were
10 men who sat here before when our salmon started to go out
11 and said, "We've got to have them out! We've got to have
12 them out!"

13 All I say is, I know and I can appreciate the
14 industry's needs for an immediate decision, and I can
15 understand and respect their needs, but our needs,
16 specifically the people of the State's needs, may be
17 different than theirs, and if they have their respon-
18 sibility to their corporate board, I think that you well
19 know that. I'm not saying you don't. This was my only
20 purpose; could you please get it back to the law that
21 we're dealing with.

22 Mr. Chairman, that concludes what I have to say.

23 SENATOR RADER: Thank you, Mr. Boucher. Questions? Senator
24 Huber.

25 SENATOR HUBER: Thank you, Mr. Chairman. I have a short one.

1 Red, when the Oil and Gas Royalty Board last fall con-
2 sidered this, do you know how long it took them to come
3 to their conclusions?

4 MR. BOUCHER: Are you talking about the meeting that approved
5 the contract, itself?

6 SENATOR HUBER: Well, if you have knowledge of other meetings
7 that took place, I wish you'd include them too.

8 MR. BOUCHER: The Governor gave his speech on the 12th
9 which, to my knowledge, was the first announcement that
10 the royalty gas was locked into a pipeline. Then on
11 November 22 I attended the Royalty Board hearing. I
12 raised objections to that use of the people's resource
13 at that time, and I am on record as doing it then.

14 To the best of my knowledge, the hearing on the
15 contract which the Governor announced was done in one day.
16 It convened in the morning and, in fact, I caught the
17 same plane that Mr. Holland, and Mr. Penney and the
18 others. It was done at 5:30 that evening on a five to
19 nothing vote, approving the contract.

20 SENATOR HUBER: This then, sir, would be part of your doubt
21 that 30.05.183(d) had really been complied with?

22 MR. BOUCHER: No, I think really what I'm saying, to arrive
23 at a decision, any decision to commit the royalty gas
24 or sell it in any way, shape, form or manner should have
25 been preceded by a series of studies, not Economic

1 Development doing one study, and Revenue doing another
2 study, or what have you. This again points out that in
3 energy matters, they're not separate, whether it's the
4 economy, heating fuel, studying of village needs --
5 we must pull it together and develop one program from
6 which energy matters are dealt with. It is essential,
7 it has such a vast effect on our economy.

8 SENATOR RADER: Any further questions? Representative
9 Chatterton.

10 REP. CHATTERTON: Thank you, Mr. Chairman. For a moment
11 I'm trying to frame a question for you, Red. As I heard
12 you read paragraph (d) of 183, it was a matter that --
13 bear with me as I go here -- apparently it was a matter
14 that the Legislature delegated to the Commissioner
15 the right of determining oil and gas as surplus to the
16 State's needs; is that what it says?

17 MR. BOUCHER: No. He determines whether you go competitive
18 with it or not, and that's another ball game I didn't
19 get into. I'm just talking about dealing with it. He
20 can make the determination of whether it is best to
21 solicit bids or the interests of the State are non-
22 competitive bidding. He must do that with the Royalty
23 Board. That triggers the action of developing the sales.
24 Then you must, after they have done that, go through
25 all of this.

1 REP. CHATTERTON: I guess what I'm looking for, Red, is what
2 is your interpretation of the existing statute as to
3 where the final responsibility rests to determine what
4 hydro-carbons, oil or gas, are excess to the State's ---

5 MR. BOUCHER: Right here. It comes down -- because none of
6 this can happen until the Legislature, by concurrent
7 resolution approves all of these, and you know who you're
8 here representing. So this is where the buck stops in
9 this instance.

10 REP. CHATTERTON: Thank you.

11 SENATOR RADER: Any further questions of Mr. Boucher?
12 Representative Parr.

13 REP. PARR: Mr. Boucher, you mentioned your prepared text,
14 and you didn't say very much about it, but you're con-
15 cerned with this provision of letting buyers switch
16 if the State decides to switch. If I understand you
17 correctly, your thinking is that in such case the
18 companies don't really have to put anything in the pot,
19 they put in so little that if they lose out on El Paso
20 and the Governor switches they can't lose on getting the
21 gas anyway.

22 MR. BOUCHER: I stated that, but I feel at the moment what
23 I ought to really do is stick to the law. I'm wondering
24 whether, by going through the switching provision,
25 you're not in violation of the competitive provision.

1 Does the law not require -- can you make two contracts
2 in one, a contract that is an "if" contract? Is that
3 in the best interest? Northwest just got through and
4 said that if it switched over to them they might bid
5 on it, Arctic said. And you haven't said which route
6 you're going to switch to. So go back to your competitive
7 things and see if that is within, once again, the frame-
8 work of the law.

9 I did refer to somebody might get in for nothing,
10 and I would tend to agree that anybody that thinks that
11 given an option on a resource that's worth Four Billion
12 Dollars and its liquid is worth Eighty-Two Million,
13 you know, that's a lot of beans in anybody's language.
14 I think Southern, Tenneco and everybody would agree that
15 if we said that it was for sale tomorrow to whoever gets
16 it, they'd be lined up from here to Anchorage, and don't
17 kid yourself they wouldn't. I mean, that's the most
18 valuable commodity in the United States today and one of
19 the last fields that's discovered and known of its type,
20 and I think Mr. Chatterton, who has a history of long-time
21 service to the industry, would agree with that. There
22 are not too many gas fields like that one; is that
23 not correct?

24 SENATOR RADER: Any further questions of Mr. Boucher?

25 Senator Sumner.

1 SENATOR SUMNER: Mr. Chairman, you're far more qualified to
2 clear up an area that concerns me that he's raised. I
3 get the impression that he's saying we may not be legally
4 in a position to act, that the Legislature might not
5 have done its ---

6 SENATOR RADER: Mr. Sumner, he certainly raises that point.

7 I do recall receiving in some packet of goods from --
8 I thought it was from the Governor and distributed to
9 all Legislators, a number of resolutions that were pre-
10 sented to the Royalty Board and passed by the Royalty
11 Board and transmitted to the Legislature, at least to
12 me as a Legislator. But I don't know whether or not
13 they meet the law that Mr. Boucher cites or not. I have
14 no -- I didn't look at them from that point of view.

15 MR. BOUCHER: It says, "public and the Legislature in writing."

16 SENATOR RADER: I don't know. These were in writing, and I
17 don't know if they comply with the law or not.

18 SENATOR SUMNER: Mr. Chairman.

19 SENATOR RADER: It's a good point though.

20 SENATOR SUMNER: Would you allow me maybe two or three
21 minutes of flexibility to ask him some questions?

22 SENATOR RADER: Well, I suspect that we might ask the Attorney
23 General those questions for his interpretation of the law.
24 Go ahead.

25 SENATOR SUMNER: Mr. Boucher, is there any specific areas

1 under which exist -- you think violations exist with
2 regard to the statutes you mentioned?

3 MR. BOUCHER: I have searched through here, and in fairness,
4 I didn't say the studies weren't done. I can't find
5 them. I asked Senator Kerttula, I asked Senator Gruening,
6 I looked through the ten days of the journal. Normally
7 it's supposed to be laid on the record, and anything
8 that is this important, I hope there's one study here,
9 and if anybody -- there's a study done on April 16 from
10 in-house by the State, and it just consists of, "Can we
11 or can't we use the gas?"

12 SENATOR SUMNER: Mr. Boucher, you're not -- it's not your
13 nature to be subtle, and I get the impression that you
14 distinctly believe that we have not lived, somebody has
15 not lived up to the letter of the law.

16 MR. BOUCHER: Okay, I'm not trying to be subtle or cute
17 in this one.

18 SENATOR SUMNER: I understand.

19 MR. BOUCHER: I would rather raise this question and have
20 everybody here say, "Well, here are your studies," and
21 then be a fool than to keep my mouth shut and see it pass
22 and blow up in your face later on. I'm not to say -- I'm
23 not down here now, but sometimes all of us tend to get
24 so eager and so intense in the emotionalism of an issue
25 we forget to do our homework. Has the homework been done,

1 that's my question, and I think that this whole hearing
2 depends upon the answer to that question. Then, is that
3 homework satisfactory enough for you to commit the
4 resource? You know, you need to get this pipeline away
5 from the royalty gas and make it -- I'll be facetious
6 and say it's like getting a donkey out of an elephant's
7 ear -- but you've got to extract the two issues and deal
8 with them. But I don't have to tell you that.

9 SENATOR SUMNER: But in your research through the journals
10 and whatever, you're under the impression that nothing
11 has come before the Legislature which satisfies that
12 requirement?

13 MR. BOUCHER: It isn't important whether it satisfies that
14 requirement or me; does it satisfy the law?

15 SENATOR SUMNER: That's what I'm saying, the requirement
16 of the statutes.

17 MR. BOUCHER: I can't find it.

18 SENATOR SUMNER: Thank you, Mr. Chairman.

19 SENATOR RADER: Any further questions of Mr. Boucher?

20 Mr. Boucher, we thank you very much for your testimony.

21 MR. BOUCHER: Thank you, sir.

22 SENATOR RADER: The next is Mr. D. Dallas, and I understand,
23 Mr. Dallas, that Mr. Robert Dempsey is an associate of
24 yours and you wish to testify together. Is that correct?
25 MR. DALLAS: He's part of my testimony.

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SENATOR RADER: That's what I understand. All right, if
you would do that.

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1 MR. DALLAS: Senator, we do have a couple exhibits to pass
2 out. We'd like to do that at the beginning of the
3 testimony.

4 SENATOR RADER: All right, fine.

5 (Whereupon above-described exhibits were
6 distributed to the committee members.)

7 SENATOR RADER: Would you gentlemen please identify yourselves
8 for the record and who you represent and what your
9 expertise is?

10 MR. DALLAS: Thank you, Senator Rader and Representative
11 Gruening. My name is Dois D. Dallas, I reside in
12 Fairbanks, Alaska, and I am employed by Tanana Valley
13 Community College. I am here today representing myself.
14 I am paying my own expenses and have taken leave time
15 away from my job. A copy of my resume has been furnished
16 to you along with a copy of a revised contract that I
17 and an associate, Mr. Robert Dempsey, have prepared.

18 Just as a summary on the resume that you haven't
19 had a chance to read, I am a petroleum engineer, I have
20 had some twenty-four years' experience in the petroleum
21 industry in the Royalston Basin of North Dakota, South
22 Dakota, Montana and the Canadian Provinces for the Royal-
23 ston Basin involved, and I've been in Alaska now for a
24 few years.

25 My remarks will support the theme that it isn't

1 the line, it's not the route that matters. But rather,
2 what happens most to a resident of the State of Alaska,
3 is what is going to happen to the State's one-eighth share
4 of those LPG's, the liquefiable petroleum gases, which
5 are in the raw gas stream which will be produced from
6 Prudhoe Bay. It is true that interior Alaska can use
7 a small portion of the dry gas, the methane, but if a gas
8 line goes by Fairbanks the excess methane is going to those
9 Lower 48 States, regardless of which route is selected
10 by the Federal Power Administration.

11 So the important question is: what is going to
12 happen to the State's share of the ethane, the propane,
13 the butane and any of the pentanes that are still re-
14 maining in the raw gas stream when it arrives at
15 Fairbanks.

16 Paragraph IX of the gas contract, as advanced
17 by the Commissioner of Natural Resources to the Oil and
18 Gas Royalty Board, does reserve the right of the State
19 to remove the liquefiable hydrocarbons, but under our
20 recommended revision this paragraph would not be necessary
21 since a gas processing plant would be located near
22 Fairbanks and all the ethane, the propane, the butane and
23 any remaining higher hydrocarbons would be removed at
24 that time, and only the methane would be remaining in the
25 gas stream that the State owns.

1 We have prepared a large chart which lists some of these
2 physical constants with their composition and quality
3 and quantity of the Prudhoe Bay gas as it is expected
4 to be when it is delivered to whichever line finally
5 receives the certificate from the Federal Power Com-
6 mission.

7 I'd like to go to that chart now.

8 SENATOR RADER: I want to ask the reporter, are you certain
9 that you can get his comments without the mike and
10 the rest of it?

11 MRS. SANDERS: Yes.

12 SENATOR RADER: Fine.

13 MR. DALLAS: Please note that the methane is the one that
14 has the least btu, a thousand and ten btu per cubic foot.
15 But it is the largest in percent of that gas stream.
16 The btu increases as we go on down and we get to the
17 pentane, and that one has four times as many btu's per
18 cubic foot, roughly, as methane. But they all increase
19 progressively as we go down the column. But the per-
20 centage is much less. It's the highest in the ethane,
21 which comes next, but it's only 7.7 percent by comparison
22 with the 85.11 percent that is methane, and finally on
23 down to the pentane-plus, it's only twenty-two hundredths
24 of a percent of those heavier hydrocarbons.

25 You will also note that I've got 1.75 percent

1 down here at the bottom. That's nitrogen and CO₂.
2 This composition that we have was given to the Federal
3 Power Commission by an engineer testifying for Exxxon,
4 and he gave this in three stages. He gave it, as it came
5 out, I think, of their first separation stage, and
6 then he gave the composition in between, and finally
7 this composition, which he said was capable of being
8 delivered in the line that Arctic Gas has prepared. In
9 the study that they have prepared this composition of
10 the gas would exist in their system, and he felt that it
11 would probably exist equally as well in the other two
12 systems, or whoever finally were certificated by the
13 Federal Power Commission.

14 In that reservoir there is something like twelve
15 percent of the carbon dioxide, and that has been
16 removed at this step.

17 In my opinion, herein lies the greatest loss to
18 the State of Alaska. A recent article in the Daily
19 News Miner of Fairbanks indicated that a man sitting in
20 his house in Cleveland, Ohio, suffering from a gas shortage
21 would not be happy to learn that the State of Alaska was
22 withholding natural gas to make plastics.

23 This mistake is this: the excess methane will
24 still go to the man in Cleveland, Ohio, but if we don't
25 revise this contract now, this man in Cleveland, Ohio,

1 will go to work the next day in a petrochemical plant
2 and make synthetic automobile tires or plastic pipe,
3 like these samples that I've passed out to you, or hundreds
4 of other petrochemical products. And he will make these
5 products primarily from the ethane and the propane which
6 will be shipped along with the methane from Alaska.
7 These products would then be shipped back to Alaska from
8 Cleveland, Ohio.

9 It is obvious who is going to pick up the tab
10 for transporting the ethane to Cleveland, Ohio, and the
11 return to Fairbanks, Anchorage or Juneau of that same ethane
12 after it has been transformed into a product essential
13 to our daily existence. It's the Alaskan consumer who
14 would have to pick up the two-way transportation charge.

15 We certainly agree that we should provide the
16 man in Cleveland, Ohio, with any methane that is excess
17 to the heating needs of the State of Alaska, but under
18 no stretch of the imagination is the State of Alaska
19 obligated to provide him with a job.

20 The Province of Alberta, Canada, deals with this
21 problem in the following manner, and I quote: "The
22 Provincial Government has a stated policy that resources
23 be processed and upgraded as much as possible in Alberta,
24 so that jobs are not exported with resources. Petro-
25 chemicals are one example of this policy, and the Province

1 is determined to use the feed stock to provide basic
2 plastic and other derivative industries in Alberta,"
3 end of quote.

4 I would strongly recommend that this policy be
5 adopted by the State of Alaska.

6 There are those who will say that this is not
7 economically feasible in the State of Alaska. I maintain
8 that it is, and now that the opportunity is here this is
9 the time to do something about it.

10 I obtained these samples of black polyethylene
11 pipe that you have in front of you, and here's a couple
12 of large samples in which you can see the nomenclature
13 on the pipe. It is Polyethylene Gas Pipe, and it was
14 picked up by me last Saturday from the Alaska Gas and
15 Service Company in Anchorage. This pipe was once ethane,
16 and it was probably produced from some oil field in Texas.
17 At least it passed through a plant in Houston, Texas,
18 and received one of three or more processing and up-grading
19 treatments. It was then shipped to Watsonville, Calif-
20 ornia, where it was extruded into this form and shipped
21 to Anchorage. Just as in the case of Alberta, there is
22 no reason to ship the State's share of the ethane to
23 any of those 48 States and have it go through three or
24 four up-grading processes and be returned to Alaska with
25 a price tag that does not benefit Alaska.

1 The next two examples that I will show you
2 demonstrate that the State of Alaska already has a
3 miniature petrochemical industry and it needs only the
4 encouragement from people like you, ladies and gentlemen,
5 acting in your capacity as State Legislators, for it to
6 blossom into a full petrochemical industry.

7 In this bag are tiny styrene balls. They were
8 made from benzene. You will find it on this other
9 exhibit up here in the light green near the bottom.
10 That's benzene, a derivative of crude oil. They were
11 shipped by Sealand Transport to Western Insulfoam
12 Corporation at 628 Ocean Dock Road in Anchorage, Alaska.
13 At this location these tiny styrene beads were expanded
14 up to forty times their diameter, and here are the white
15 balls that are those tiny little beads that have been
16 blown up some forty times in diameter. This was done at
17 628 Ocean Dock Road in Anchorage.

18 This would not be a particularly interesting
19 story except for the fact that these final two stages
20 of processing were done in Alaska, under severe weather
21 conditions, and so-called high cost Alaskan labor. This
22 finished product is sold at a price which is twenty
23 percent less than the competitive product which was
24 processed in the Lower 48 and shipped to Anchorage in
25 finished form. The secret in this case is this: the

1 shipping of these tiny beads instead of styrene balls,
2 which are forty times as large as the beads. We shipped
3 a small product. Sure, it weighed essentially the same,
4 but we shipped a small, compact product to Alaska instead
5 of a big product that was ready to be sold at a cost
6 twenty percent higher.

7 This last example that we have (not the last,
8 next to the last one), it's the last of the two examples
9 that illustrate that we already have a miniature petro-
10 chemical industry in Alaska. This is a sample of foam
11 insulated pipe which was upgraded and processed at
12 3605 Peger Road, Fairbanks, Alaska. Again, the raw
13 product was shipped after it had received two or three
14 of those processings and finally the last process was
15 done at Fairbanks, and it was only done because he
16 could do it there cheaper than he could ship it up.

17 The last sample that we have in our magic
18 briefcase today was not processed in Alaska, but in
19 eight years from now it very well could be. The label
20 on these ten plastic freezer containers indicates that
21 they were manufactured for Mobil Chemical Company, Consumer
22 Plastics Department, Macedon, New York. I purchased this
23 at Pay and Save in Fairbanks.

24 Thus, the action that I am suggesting you take,
25 is simply to recommend to the Administration that they make

1 a few revisions in the existing contract and locate a
2 gas processing plant (commonly known as a gasoline plant)
3 near Fairbanks, and that all the remaining ethane,
4 propane and any heavier hydrocarbons be removed from
5 the State's one-eighth share of Prudhoe Bay gas. This
6 could amount to as much as twenty-three thousand barrels
7 of liquids per day, depending upon how much of the heavier
8 liquids might be removed at Prudhoe Bay.

9 Enough methane would be withdrawn to satisfy
10 the heating requirements of interior Alaska. Some of the
11 propane would also be available for heat in the outlying
12 and bush areas where it is not economically feasible
13 to extend the distribution system. The balance of the
14 liquids would then be available for sale to a large
15 number of corporations engaged in up-grading and processing
16 these liquids into usable products. It would not be logical
17 to locate all of these plants near Fairbanks. Perhaps
18 half of them would be located (and maybe more than half
19 of them) in the Anchorage vicinity.

20 An article several weeks ago in the Oil and Gas
21 Journal stated that, "Construction has begun on phase
22 one of a 1.4 Billion Dollar petrochemical development
23 in Canada's Alberta Province." If you change the date to
24 1980, the place could be Alaska, and the amount could
25 stay the same, 1.4 Billion Dollars.

1 The Board of Directors of Dow Chemical Company
2 are meeting this week in Michigan. According to their
3 West Coast general manager, they will have under con-
4 sideration a proposal to look again at Alaska.

5 Yesterday morning I called Coy Hood, Director
6 of Hydrocarbons, in New York City for the Celanese
7 Corporation. He stated to me that his firm would be
8 interested in purchasing approximately one-fourth of the
9 State's methane for use in the State of Alaska under a
10 firm ten to fifteen-year contract.

11 The revisions we have made in the proposed
12 royalty gas contract are essential if the State of Alaska
13 is going to realize the greatest possible value from
14 this gas. Briefly these revisions are as follows,
15 and I think at least the committee members all have
16 copies of these suggested revisions. I'd like to just
17 review the highlights on these.

18 To begin with, when you go into the document
19 about six pages, or the seventh -- it isn't numbered
20 seventh page, but it is the one that I've headed up the
21 top "Proposed Excess Royalty Residues Sales Agreement."
22 The one that's been presented to you was just Royalty
23 Gas Sales Agreement. This, I would suggest be entitled
24 Excess Royalty Residue Gas Sales Agreement.

25 The reason that I make that statement is if a

1 plant is located at Fairbanks, a gasoline plant is
2 located at Fairbanks, and you are able to strip out the
3 liquids and sell only the methane, that methane is not
4 gas as defined in the contract you now have. It is
5 residue gas, it will be what's left over after these
6 other products be removed. So the residue gas is what
7 you'd be selling, and throughout this contract then
8 where I saw the word "gas" meaning the wet gas that you
9 were going to sell, I changed that to "residue." You know
10 I may not have caught them all, but I think in most
11 of the cases where gas, meaning the gas that you were
12 going to sell, I changed that to residue gas. Under
13 my proposed revision you wouldn't be selling any of the
14 ethane, the propane, the butane and the pentanes plus.

15 The companies all admitted, they weren't here
16 for that purpose anyway; they were here wanting to buy
17 from you methane, and we are selling them the whole
18 works.

19 About two pages later I underlined where the
20 gasoline plant access at a point no closer than ten
21 miles or more than twenty-five miles from Fairbanks,
22 Alaska. We added two sections, which we've indicated,
23 they're new paragraphs. They're there primarily for
24 the purpose of setting out early in the contract what
25 the State is selling is just going to be this residue gas,

1 the methane that these gas companies indicated they
2 wanted to buy. The liquefiable hydrocarbons and non-
3 excess gas is what we would then be selling.

4 I guess there's a later place where we emphasize
5 the petrochemical aspect of this. That page should be
6 page three, then four, five, and on page five there
7 are several deletions. The deletions are primarily
8 because under our suggested revision there is no reason
9 to ever refer to taking back the liquids or taking back
10 the methane. We are only going to sell what is excess
11 at that plant at Fairbanks.

12 So on page five we've made some deletions that had
13 reference to that; and page six, there's some more
14 excess royalty residue gas rather than just royalty
15 gas. On page seven we did make one, what I feel wouldn't
16 be drastic if it stayed the same. We changed from
17 twenty-four months to twelve months the time that the
18 State could call back a portion of their gas, and I
19 feel that that's a more reasonable time. If you didn't
20 reserve any of it and you let it all go and then all
21 of a sudden you needed to take back a large chunk of it,
22 maybe they do need twenty-four months in order to make
23 their necessary plans. But if we're already removing the
24 liquids and they're only getting the methane that's
25 residue, then I think twelve months should be a sufficient

1 time for them to be noticed that we're going to use
2 a little more of it.

3 Paragraph 3.5, this says that we're going to sell
4 only that residue gas that's excess after it is pro-
5 cessed there at Fairbanks.

6 Paragraph 3.7(a) and (b) I have deleted completely.
7 I simply cannot understand -- if Representative Gruening,
8 one of the questions he asked, what are we giving up and
9 what are we getting in return -- I simply can't under-
10 stand how officials looking after the interest of the
11 State of Alaska would commit gas that might be discovered
12 some day in the Copper River Basin which is a short distance
13 from Point Gravina, the hauling charge should be much less
14 at a point like that than from Prudhoe Bay. Yet we're
15 stuck with any excess gas that we call back, in repaying
16 that to them at Prudhoe Bay prices, which may be a lot
17 lower than the price of gas would be, for example, in
18 the Copper River Basin. I see no reason to give that
19 kind of a plus to them. So I delete paragraphs 3.7(a)
20 and (b), 3.10 and 3.11. Those four paragraphs, we don't
21 need those at all.

22 I think we deleted part of paragraph 4.2. As I
23 recall, that had to do with the reserve gas. Under my
24 suggested revision there wouldn't be any reserve gas.
25 You're only going to sell what you're not then using,

1 and you would still have the right to call it back.

2 The one paragraph that I suppose the three
3 companies will scream the loudest, and I wouldn't blame
4 them for screaming the loudest, but when I heard all
5 three of them the last three days at this desk, they
6 told you, "We want that gas and we want it bad." If
7 they do, then I think paragraph 4 is not going to be the
8 paragraph that will kill them. They may say it will,
9 but I think, especially in Tenneco's case -- he said,
10 "We weren't even asked."

11 I checked the letters up in the Commissioner's
12 office and it's true, they were not asked if they were
13 interested in establishing any industry in the State of
14 Alaska. So he told you the truth when he said he was
15 not asked if he were interested in establishing some
16 industry in the State of Alaska.

17 Paragraph 4.4 states, "Buyer will construct and
18 operate a gasoline plant at a point not closer than
19 ten miles or more than twenty-five miles from Fairbanks,
20 Alaska. Such gasoline plant will be capable of processing
21 at least three-tenths of a billion cubic feet of gas
22 per day. All liquefiable hydrocarbons obtained by pro-
23 cessing gas through the gasoline plant shall be placed
24 in storage to be erected by buyer at a plant site and
25 shall be sufficient capacity to contain a ten day supply.

1 Ownership of all liquefiable hydrocarbons shall remain
2 with seller, however, nothing in this agreement will
3 prevent the buyer from bidding for the purchase of the
4 liquefiable hydrocarbons and non-excess methane for use
5 interstate domestic/industrial and/or petrochemical
6 industry in the State of Alaska." You may ask why I
7 single out the petrochemical industry. I did it for
8 this reason: if there is any legal mistake about the
9 difference between industry and the petrochemical industry,
10 then this change at least is in favor of the State of
11 Alaska. There is some question about whether you say
12 using this gas in industry means for heat purposes.
13 The petrochemical part of it converts that ethane to
14 something else that's no longer heat. It's not any
15 longer energy. So if there was any mistake about what
16 industry we could really use this in Alaska under this
17 revision, there would no longer be any question but that
18 petrochemical would be a use that would be acceptable
19 under the contract.

20 Further down in that paragraph, "Any excess
21 residue gas shall be sold to buyers in accordance with
22 Section 6.1. Seller will allow buyer to deduct a trans-
23 portation charge of (and I have Thirteen Cents, but I
24 have a question mark after that) per gallon for all
25 liquefiable hydrocarbons removed and 46.2 (and I have a

1 question mark after that) Cents per mcf for all non-
2 excess residue gas retained by seller, or if there is
3 a net deficiency owed by the buyer to the seller, then
4 the seller will remit to the buyer the deficiency."

5 Those two question marks simply mean that I
6 didn't have the time and the resources to go out and
7 come to you and say that these are firm costs that are
8 reasonable for transporting and processing that gas
9 at Fairbanks. I think they are reasonable, but I certainly
10 wouldn't quarrel with a few cents up or a few cents down.
11 If the State can convince the buyers that those prices
12 that I've used here are too high, fine. If the buyers
13 can convince the State that they're too low, fine. But I
14 think they're reasonable based upon what preliminary
15 work that I did on those prices.

16 Section 5.1 ties the heating content to one
17 thousand btu, exclusive of any acid gas. I don't think
18 there is any reason that the State of Alaska should be
19 forced to consider that carbon dioxide, that twelve
20 percent or whatever it was, still in there at Prudhoe
21 Bay. If it's not removed we should merely, you know,
22 be paying what is reasonable on a btu basis, and that
23 revised paragraph 5.1 makes that fairly clear. I think
24 it's been indicated here that the contract probably
25 protected us in that regard already.

1 Section 6.2 deals with the price set by the FPC.
2 We made a change there, and this change makes it certain
3 that if of all those producers at Prudhoe Bay, if they sell
4 their gas in the Lower 48 and the person that ends up
5 with the highest price, we can determine that he has some
6 connection, such as was mentioned here yesterday, with a
7 sister company or a good friend down there that has been
8 exchanging gas with him somewhere else and he really
9 doesn't get the highest price that the State of Alaska
10 could get. It is our opinion that we need to be able
11 to determine that through arbitration and not through
12 pre-set price. So under my provision it would be
13 possible for the State to even get a higher price than
14 is being paid to the highest priced producer in Prudhoe
15 Bay.

16 I think this covers most of the revisions that
17 we have made. Throughout there you'll see that we
18 changed gas to residue gas, and finally back at the end
19 under "Definitions" we've added three definitions that
20 weren't in this contract, and those three definitions --
21 the first one was "residue gas".

22 Yes, I'm sorry, it's about the third or the
23 fourth from the last page, it's an unnumbered page, but
24 it would be the fourth from the last one. The term
25 "residue gas" shall mean that portion of the gas entering

1 the plant which remains after the extraction of plant
2 products and which is not used for fuel and treating
3 in the said plant.

4 Then the term "excess royalty residue gas" shall
5 mean any of the seller's royalty revenue gas remaining
6 after seller completes contracts for intrastate domestic,
7 industrial and/or petrochemical uses within the State
8 of Alaska.

9 Then the last one, the term "acid gas" shall mean
10 carbon dioxide, nitrogen and hydrogen sulfide, and I'm sure
11 that any other impurities that might happen to remain
12 in there that could or should be taken out at the plant.

13 That, I think, covers the revisions. You may
14 have some questions about those.

15 I'd like to conclude then, since it is now possible
16 that the Arctic Gas route will ultimately receive the
17 certificate from the Federal Government, the State of
18 Alaska should firm up alternate plans to have its share
19 of Prudhoe Bay gas delivered at least to Fairbanks.
20 During the spring semester of 1976 at the University of
21 Alaska, Mr. Robert Dempsey, working under my supervision,
22 undertook an independent study in a class in Petroleum
23 Economics to determine just the cost to transport the
24 State's one-eighth share of the gas, that stream of
25 gas that's up on that chart, to Fairbanks. Since Mr.

1 Dempsey is here today, I would like for him to discuss
2 that report with you.

3 MR. DEMPSEY: Thank you, Mr. Dallas. Senator Rader and
4 Representative Gruening, you all have copies of this.
5 I have given it to the secretary for the record. So
6 rather than reading at length from it, I think if you
7 have any questions I can address myself to that.
8 Just a little background, the study of transmission of
9 gas ---

10 SENATOR RADER: Just for the record, I don't have the exhibit
11 number on that. Would the secretary assign it Exhibit
12 Number 15, have you?

13 MRS. SANDERS: 15.

14 (Whereupon Exhibit 15 was duly marked.)

15 SENATOR RADER: Just so we know what you're referring to there
16 would you get all through and try to go through this?
17 I don't know whether we've received copies of what
18 you're talking about or not. Representative Gruening
19 was saying all he really needed was more paper.
20 If this is going to be an exhibit then you need not
21 read it, it will be attached to and made a part of the
22 record, and you can just summarize or depart, as you wish.

23 MR. DEMPSEY: Thank you, sir. As I said, the studies of
24 the transmission of gas to the interior are not new.
25 As far back as 1952 the Alaska Planning Commission

1 undertook similar type studies and generated data on
2 them. However, most of it, and most of the studies
3 that we've done, came up with an extremely high price
4 for delivery of gas to the interior. Mr. Bob Ward
5 referred to that today when we heard him say that he
6 thought a royalty gas line at some time was feasible.
7 And we concur, that it will be feasible.

8 What I found to be the failing of those studies
9 is that they usually dealt just with sufficient gas
10 to heat the interior and, therefore, denying the scale
11 of economics that would normally go along with it. So
12 what we have done is base this study on the delivery
13 of almost the total amount of the State royalty gas to the
14 interior for work there.

15 What we've come up with is a figure that reflects
16 itself in last year's dollars at about a Dollar and a
17 Quarter per mcf for delivery of gas to the interior.
18 This would reflect -- I think the major pipelines,
19 Trans-Alaska and El Paso, usually are in the range of
20 about Thirty Cents. So this reflects the difference
21 in a smaller pipeline. But it does deal with the larger
22 amount of gas. We covered the State's royalty at Fifty-
23 Two Cents per mcf. The transportation cost is about
24 Seventy-Five Cents.

25 SENATOR RADER: Very good. That will be distinctly helpful,

1 particularly that does open up some other options to us
2 that had not been presented to us earlier, I think.
3 I don't know, I'm not sure about the relevancy of this
4 except your suggestions as to the contract, the legalities
5 of course, will be referred to Mr. Rush Moody, of our
6 independent staff, and the Legislative Counsel staff,
7 and the Attorney General, I assume, will have something
8 to say about this too as to your suggestions there.
9 The committee, I don't think, will try to write the
10 contract in its legal form, or even -- we may go into
11 that. But we do appreciate your remarks. Are there
12 any questions of the gentlemen?

13 Mr. Parr.

14 REP. PARR: Mr. Dallas, when you were talking about, you
15 used the figure of maybe twenty-three thousand barrels
16 a day of liquids, what was the gas figure? What gas
17 figure were you talking about, two billion feet a day
18 or what?

19 MR. DALLAS: I think we were using these figures, and I
20 believe two billion cubic feet per day. It might have
21 been a little more than two billion, I'm not sure.

22 REP. PARR: The reason I asked the question was not just
23 idle curiosity. Mr. Boucher had given us something for
24 liquids, and for the two billion cubic feet a day he
25 would have gotten about thirty thousand barrels, and the

1 unit plan developed for Prudhoe says, strangely enough,
2 ten to fifteen barrels per million cubic feet, which
3 only comes out to twenty-five hundred to thirty-seven
4 hundred fifty barrels. We've got an awfully big wide
5 range of estimates and I was just wondering, isn't there
6 a firm figure pretty much as to how many barrels a day
7 you would have of this stuff?

8 MR. DALLAS: Well, I think it's been presented to the
9 Federal Power Commission, and I think that something
10 like thirty thousand barrels a day of liquids, the
11 equivalent of liquids would be there if you still had
12 the CO₂ in it. I think this is a reasonable figure,
13 the sales gas.

14 REP. PARR: But ten to fifteen barrels per million cubic
15 feet doesn't sound right.

16 MR. DALLAS: I don't have that rule of thumb before me,
17 I'd have to stop and do some checking on that one.

18 REP. PARR: Thank you.

19 SENATOR RADER: Any other questions? Senator Huber?

20 SENATOR HUBER: Thank you, Mr. Chairman. What I would like
21 to ask, you said you had the charts showing the percentages
22 of everything that was available in the raw gas. I think
23 you said there was three charts. I wonder if you would
24 supply the committee with those extras, because that
25 answers some of the questions I have asked of other people.

1 MR. DALLAS: Yes, that's an Exxon exhibit before the Federal
2 Power Commission, and I'll be happy to make a copy of
3 that available for the committee.

4 SENATOR HUBER: Thank you.

5 SENATOR RADER: Any further questions? Representative
6 Gruening.

7 REP. GRUENING: If the total amount of liquids from our
8 royalty gas were delivered to either Fairbanks or
9 Anchorage, or a combination, what kind of magnitude
10 of processing, petrochemical processing plants are we
11 talking about? This 1.4 billion plant that you mentioned
12 in Alberta, how many barrels did that process?

13 MR. DALLAS: You see, that wasn't one plant; that was a
14 large number of plants doing a lot of things, and that's
15 exactly what I'm talking about for the State of Alaska.
16 We can't do it all with one plant located at Fairbanks.
17 I'm sorry, it could be done but it wouldn't be logical,
18 economically feasible to do it. At Anchorage is where
19 a lot of this, if we manufacture, take out the ethane
20 at Fairbanks, and then it is converted -- I have an
21 ethane products tree there, and if you will see, the
22 center of that tree is ethylene. That's one step
23 removed from ethane. And out around from the center
24 of that ethylene products tree is about four rings of
25 processing that we need to go through before we get any

1 of those finished products, and those stages can be
2 anywhere along the way after the ethane is turned to
3 ethylene, a liquid that can be shipped. We could also
4 ship ethane as ethane, but we've got to keep it cold
5 to do that.

6 REP. GRUENING: Well, I'm trying to understand what the magni-
7 tude of all these liquids are in our total royalty gas
8 stream.

9 MR. DALLAS: It's roughly a billion pounds a year, and that's
10 the amount that you hear -- I'm sure you've heard it
11 before, that the petrochemical industry says that we
12 need roughly a billion pounds a year a product to make
13 a petrochemical complex feasible.

14 REP. GRUENING: Of the total complex?

15 MR. DALLAS: Total complex.

16 REP. GRUENING: So in a State like Texas, which uses about
17 the size of our total royalty gas every year, consumes
18 that much gas internally, it would use probably more
19 than a billion pounds in its industry?

20 MR. DALLAS: Yes, several billion I would say.

21 REP. GRUENING: One other question. In the opening statement
22 in your presentation here, which was very thorough and,
23 I think, well done, you mentioned in the second paragraph
24 that while there is no intent to criticize the State's
25 motives, only the methods used, you point out that you

1 thought that an uncomplicated well thought-out political
2 document could have accomplished the State's end.

3 What did you mean by that?

4 MR. DALLAS: My associate will help me with this. Why don't
5 we let him answer that question?

6 MR. DEMPSEY: What I had in mind, Representative Gruening,
7 was that -- I think exactly what we're reflecting here,
8 the complexities that come up with a contract when its
9 stated end is a political document. I think that's been
10 made quite clear that that's what we're trying to do, is
11 use it as a political document, and I just throw that
12 out as an option for what it might be worth, that we
13 might have been able to execute a document that optioned
14 the right to negotiate for our gas based upon political
15 support and the result that we gain from that. I don't
16 know if it was possible or if it ever could have been
17 negotiated, but I do say that it might have been a
18 possibility. I don't know even whether it was explored
19 or not.

20 REP. GRUENING: Thank you.

21 SENATOR RADER: Any further questions of these witnesses?

22 We thank you both very, very much for your distinct
23 help this afternoon. We'll take a ten-minute break and
24 be back promptly in ten minutes.

25 (Whereupon the hearing recessed at 3:45 p.m.)

1 MS. VIRGINIA DAL PIAZ: Mr. Chairman, Committee Members,
2 my name is Virginia dal Piaz and I am representing the
3 Alaska Conservation Society, and I'd like to make a
4 brief aside and just commend the committee members that
5 are left here for great perseverance and patience in
6 getting to the bottom of this issue. I, personally,
7 having sat here for four days, have learned quite a lot
8 and I know a lot of the other people have too. I do
9 appreciate the opportunity.

10 The Alaska Conservation Society is the oldest
11 conservation organization in Alaska, being founded in
12 1960. We have over eleven hundred members in the State
13 and nine chapters Statewide. Our purpose is to secure
14 the wise use, protection, and preservation of the scenic,
15 scientific, recreational, wildlife and wilderness of
16 Alaska.

17 As it pertains to this hearing and as Mr.
18 Thompson from Alcan mentioned earlier, we are an inter-
19 venor in the FPC decision, along with three other
20 environmental groups. As a matter of fact, ACS was
21 founded to help fight for the creation of the Arctic
22 National Wildlife Range and to protect it after its
23 enactment. So, therefore, the results of the Litt
24 decision are being looked at very carefully by our
25 organization, and a decision on the possible alternatives

1 to be pursued are being evaluated.

2 The Alaska Conservation Society has also been
3 following closely the oil and gas development in the State.
4 We are on record publicly, numerous times, speaking out
5 against ill-conceived, unplanned-for development of these
6 types of industry in Alaska before a comprehensive look
7 has been taken and a public consensus reached as to
8 what kind of Alaska we want to have; that is, what values
9 Alaskans want reflected in their economic, social and
10 environmental spheres of activity.

11 The purpose of these hearings is to determine
12 approval or disapproval by the Legislature of the pro-
13 posed royalty gas contracts between the State and three
14 companies, Tenneco, El Paso and Southern Natural Gas.
15 Yet, a much greater problem than this exists, which reflects
16 the current indecision.

17 In the late 1960's events were put into motion
18 that are culminating now in 1977; that is the construc-
19 tion of the Trans-Alaska oil pipeline and the subsequent
20 problem of also having to deal with the natural gas
21 that accompanies such a field. At that time and to
22 present, this country (it has also been pointed out
23 earlier, and to what extent this testimony is repetitious,
24 I apologize) -- at that time and to present, this
25 country has had no national energy policy (witness the

1 current tragedy on the East Coast and in the Midwest
2 for which crisis decisions are having to be made) and
3 the State of Alaska has no State energy policy that we
4 are aware of. The point is, that without a firm direction
5 with criteria established by which to base such a
6 decision as to what to do with our oil and gas, Alaska
7 is then placed in a position of having to respond to
8 pressures to sell her oil and gas in a context that is
9 premature and possibly uneconomic. Decisions such as this
10 should be based on long-term energy requirements and
11 fully identify the environmental consequences.

12 Producers, pipeliners, taxers, consumers, ethnic
13 groups, social and natural scientists, developers and
14 conservationists, all alike, should be able to agree
15 upon several basic points.

16 First, the most natural gas in the Arctic will,
17 given time, become economic and will be extracted.
18 However, the when and the how are controllable.

19 Second, as a resource, natural gas should provide
20 the maximum benefit at the least cost to everyone involved.

21 Third, the net energy production should be maxi-
22 mized, commensurate with other views.

23 Fourth, the fossil fuel should last for the
24 maximum time possible under the political realities of
25 our time.

1 And fifth, other values which could be harmed
2 by this project should be identified so that inventive
3 minds can be directed toward minimizing any damage.

4 The correct routing of a large pipeline is a
5 very complex matter, but the project should serve the
6 largest possible number of present and future gas fields;
7 it should be built and operated so as to use a minimum
8 of resources and cause a minimum of disruption to the
9 earth and its life; the pipe should have the longest
10 possible lifetime; and the petroleum resources should be
11 delivered to the markets where the greatest benefit to
12 all people will result.

13 With these criteria in mind, and from our con-
14 siderable study of the matter, Alaska Conservation Society
15 does not support any company, but of the three routes
16 considered by the FPC, the Alcan route looks the best.
17 However, the present state of the art ability to plan
18 Arctic petroleum development, extraction and transporta-
19 tion to market does not match the ideal nor the possible.
20 Most likely, none of the proposals made so far are close
21 to optimum. None considers the entire petroleum province
22 development.

23 Under no circumstances would the Alaska Conser-
24 vation Society support a line crossing the Arctic National
25 Wildlife Range and we will fight actively against it.

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1 As we think the Alcan route looks the best of
2 the so far proposed routes, as we would not support a
3 line going through the Wildlife Range, and as we have
4 very serious questions about the El Paso proposal,
5 specifically the LNG tanker marine leg of the route,
6 we, therefore, conclude that we must urge the Legislature
7 not to approve these contracts. We do not doubt that
8 the State got the best price under the circumstances or
9 that they do not have good reasons for their position.
10 The problem is in further locking in the State, both
11 through the Administration and the Legislature, into a
12 route (in this case El Paso) that we believe is not in the
13 best interests of the State and its environment.

14 In other words, maybe you are asking the right
15 pragmatic question concerning the contracts while the
16 real question goes begging -- not how should we sell the
17 gas, but why. Promoting the El Paso line through the
18 State, as the results of these contracts will do through
19 the lobbying clause, will produce economic activity
20 in the State, which seems to be the real excuse for
21 all of this; possibly even promote a petrochemical
22 industry in the State, as you heard from the gentlemen
23 earlier. These same types of arguments were used for
24 our current huge Six Billion Dollar cost overrun project,
25 the Trans-Alaska oil pipeline. And has it rescued

1 Alaska's economy? If so, what a price we're paying!

2 Be sure you realize the full consequences of
3 these contracts before you approve them, for they go far
4 beyond the actual selling of the gas. They carry a
5 commitment, if successful, for heavy development in
6 Alaska -- more people, more demands for services,
7 environmental degradation and concomittantly, more
8 government to regulate and deal with the development.

9 We hope the Legislature will give some careful
10 thought to the real costs of approving these contracts.
11 They start something in motion that goes beyond wielding
12 political influence. The State and its people will pay
13 heavy costs, both socially and environmentally, if the
14 all Alaska gas pipeline route is successful.

15 In a state that still can't answer "how" to
16 waste and sewage disposal, adequate water supplies,
17 decent housing and wildlife management, must we add the
18 further burden of non-indigenous technology before being
19 able to solve even our basic problems of existence in
20 Alaska? There are no overriding reasons why the trans-
21 portation system must become too costly because of
22 environmental lawsuits, must be routed through wilderness
23 that should be protected forever, must be the death
24 knell for subsistence cultures, or must become an
25 important factor in the extinction of any species or

1 ecologic zone.

2 Industry is rightly responsible for the economic
3 benefits to be derived from developing resources.
4 But profit alone does not justify socially nor environ-
5 mentally irresponsible actions. The public is fast
6 becoming aware of the limit of natural resources and
7 are asking questions concerning all growth being good
8 and all development being a blessing. Government is left
9 in the role of responsible planner and arbitrator of
10 contesting value systems.

11 We believe much more public discussion and
12 presentation of alternatives, as through possibly the
13 Alaska Public Forum, is needed before a final decision
14 can be reached since it will be outside the context
15 of an energy policy which does not exist in the State.
16 We are on record to making this request to Governor
17 Hammond in a letter dated July 26, 1976, asking that
18 this be done.

19 The Alaska Conservation Society opposes any
20 sale at this time as premature. It narrows the State's
21 options for agreements that might be of more economic
22 and environmental benefit in the future.

23 Thank you.

24 SENATOR RADER: Do we have any questions of the spokesman
25 for the Alaska Conservation Society?

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MS. DAL PIAZ: dal Piaz.

SENATOR RADER: dal Piaz, yes. Questions? Thank you very
much. The next witness will be Mr. Gillam, City of
Fairbanks.

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1 MR. SCHOLES: My name is Peter Scholes and I'm the Alaska
2 representative of the Wilderness Society.

3 The Wilderness Society is a conservation organiza-
4 tion dedicated to the preservation of the wild land and
5 waters of our nation. About five hundred Society members
6 live in Alaska, including our President, Celia Hunter,
7 a long-time resident of Fairbanks.

8 Allow me to present a view of the issue being
9 considered here. Backed by several more or less con-
10 clusive studies and under great political pressure, the
11 Governor and the State's Royalty Oil and Gas Development
12 Advisory Board have suggested a sale of the State's
13 royalty share of Prudhoe Bay gas. It is proposed that the
14 gas be sold to three companies that have agreed to lobby
15 in behalf of the Trans-Alaska gas pipeline system.

16 The Administration's position is made much more
17 complex because it involves a choice among three
18 alternatives, two of which appear to be almost equally
19 advantageous for the State, the third being much less
20 beneficial. The Administration has not only ruled out
21 the unpopular alternative, it has chosen among its
22 first choice and what it considers a good second choice.
23 In making the choice between El Paso and Northwest and
24 using the sale of the State's royalty gas as a method
25 of promoting its choice, the Administration hopes to

1 substantially affect the gas pipeline sweepstakes.

2 Now let me explain the Wilderness Society's
3 position in this matter. We are not primarily concerned
4 with the sale of the State's royalty gas. From the
5 beginning, three years ago, our objective has been to
6 assure that the most environmentally sound natural gas
7 transportation system is designed and built, following
8 a route that minimizes impact.

9 Like the State, we are unalterably opposed to the
10 gas pipeline route backed by Arctic Gas. The notion of
11 a pipeline across the Arctic National Wildlife Range or
12 its proposed extensions to the south and west within
13 Alaska and eastward into Canada would be a travesty of the
14 greatest proportion, an affront to the very purpose of
15 the Wilderness Society. The Governor understated the
16 significance of the Wildlife Range when he referred to
17 it as "one of the last undisturbed wilderness areas in
18 the State."

19 However, here the views of the Hammond Adminis-
20 tration and the Wilderness Society diverge. Our evaluation
21 leads us to support the Alaska Highway route and to rank
22 the Trans-Alaska LNG route second. The use of already
23 developed corridors is a definite plus for both routes,
24 and we recognize that under any circumstances construction
25 of a gas pipeline across the State will impact the

1 environment unfavorably.

2 In looking closer at potential environmental
3 impacts we found that the hazards and risks of the Trans-
4 Alaska LNG route are greater than those of the Alaska
5 Highway route. Consider the following list of impacts
6 that apply only to the Trans-Alaska LNG proposal:

7 The project crosses an inventoried roadless and
8 undeveloped area in Chugach National Forest. Though it
9 has not been selected as a Wilderness Study Area, the
10 stretch of forest traversed by pipe could be designated
11 as Wilderness.

12 Second, the liquefaction plant at Point Gravina
13 poses several environmental threats not shared by an
14 all-land transportation system; for example, thermal
15 pollution and the potential for plant destruction or
16 damage resulting from seismic activity.

17 Third, the LNG tankers will add to the prolifera-
18 tion of marine traffic in Prince William Sound and the
19 northern Gulf of Alaska, thereby increasing the risk of
20 collisions and accidents.

21 Fourth, there are potential threats to the
22 environment and to human safety involved in the whole
23 process of LNG transportation. It is a relatively new
24 technology, especially with large tankers.

25 Fifth, the California Coastal Commission's adopted

1 Coastal Plan policy on the siting of LNG terminal
2 facilities includes the following language: "Until
3 the risks inherent in LNG terminal operations can be
4 sufficiently identified and overcome and such terminals
5 are found to be consistent with the health and safety of
6 near-by human populations, terminals shall be built only
7 at sites remote from population concentrations."

8 And sixth, we find that many Californians wish
9 to protect the last few undeveloped stretches of the
10 State's coast; hence, the strong opposition to terminal
11 facilities and regasification at Point Conception.

12 The environmental considerations favoring the
13 Alaska Highway route over the Trans-Alaska system seem
14 to have been noted by the Governor, for he acknowledges
15 that, "the Alcan proposal has certain desirable environ-
16 mental aspects." The Wilderness Society feels that these
17 considerations are persuasive.

18 However, we look also at the mood of the nation,
19 and we think this is an important consideration as the
20 Legislature reviews the proposed royalty gas sale.
21 The route taken by the gas pipeline has become a matter
22 of concern to elected officials in Washington, D.C.,
23 and putting Judge Litt's decision in proper perspective,
24 we feel that the Alaska Highway route will continue to
25 have broader national appeal than the Trans-Alaska system.

1 The big news in the Midwest and on the East Coast
2 is cold weather. Every day of last week the Washington
3 Post ran front page articles on the weather and the
4 ensuing natural gas shortage. Factories have been
5 forced to shut down and schools closed. People are
6 being asked to turn their thermostats down and take other
7 voluntary action to save fuel. In short, as we see it,
8 a few jobs in Alaska are not going to begin to balance
9 the impact on employment that the natural gas shortage
10 is having in the Eastern United States.

11 And, as demonstrated by the Congressional vote
12 on the controversial Western Leg, people do not trust
13 displacement as an alternative to direct delivery.
14 We anticipate that Midwestern and Eastern members of
15 the Congress will have little patience for a gas pipeline
16 system that delivers natural gas from the North Slope
17 to California, and thereby shift other supplies to
18 Eastern markets.

19 But Californians are not supporting the Trans-
20 Alaska system either. This situation was reflected in
21 the thirty-nine to zero vote of California Members of
22 the House of Representatives on the Western Leg amendment.
23 Speaking for the California Public Utility Commission,
24 Leonard Ross said, "On the merits of the proposed trans-
25 portation systems, our own preliminary assessment is that

1 the Arctic Gas Transportation route as presently proposed
2 would be preferable."

3 Ross went on to say, "Another concern raised by
4 the El Paso project has to do with liquefied natural gas.
5 Two LNG projects involving Indonesia and South Alaska
6 have already been proposed by the Southern California
7 Gas Company, Pacific Gas and Electric, and their
8 affiliates. Certification of El Paso Alaska would
9 increase California's dependence on LNG to as much as
10 ninety percent of our gas supply by the mid-1980's.
11 Presumably, gas from the Southwest would be backed off
12 and the existing pipelines either abandoned or used for
13 reverse flow. The net effect would be to make California
14 exceedingly vulnerable to any LNG supply interruption..."

15 Second in the running for major catastrophes
16 of the winter are tanker accidents. We see the ARGO
17 MERCHANT having spilled 7.6 million gallons of fuel when
18 it ran aground on the Nantucket Shoal. The DAPHNE ran
19 aground off Puerto Rico. The OLYMPIC GAMES suffered a hull
20 puncture and spilled a hundred and thirty-four thousand
21 gallons of oil when it ran aground in the Delaware River.
22 And, the SANSINENA exploded in Los Angeles harbor,
23 killing five people.

24 Staff for the United States Senate is presently
25 drafting a bill to regulate commerce by establishing

1 procedures for the siting and operation of liquefied
2 natural gas facilities. In the working paper's
3 Declaration of Policy is this statement: "The siting and
4 operation of liquefied natural gas facilities must be
5 preceded by careful planning and evaluation of costs,
6 dangers, and benefits, because liquefied natural gas
7 is extremely hazardous. Current procedures for the
8 approval of such facilities by the Federal Government
9 are inadequate to meet the Government's obligation to
10 prevent, or to reduce to the lowest possible level, the
11 risk that such importation of natural gas will result
12 in injury or loss. Such current procedures are also
13 fragmented and slow."

14 We speculate that if Congress is serious about
15 this piece of legislation it may be less inclined to
16 approve the Trans-Alaska LNG gas pipeline system at
17 this time.

18 The natural gas pipeline sweepstakes is far
19 from over. There are many more steps in the comprehensive
20 decision-making process prescribed by the Alaska Natural
21 Gas Pipeline Transportation Act of 1976.

22 The Wilderness Society's recommendation to the
23 Legislature is this: for environmental, as well as
24 national political reasons, the Alaska Highway route
25 is preferable to the Trans-Alaska system, both being

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vastly superior to the Arctic Gas route. We urge the
Legislature to reconsider its unswerving and unconditional
support of El Paso's project.

SENATOR RADER: Do we have any questions of Mr. Scholes?

Mr. Scholes, we appreciate very much your remarks.

MR. SCHOLES: Thank you.

SENATOR RADER: The next witness is Ms. dal Piaz.

1 MS. HORTON: Good evening. I'm Allison Horton and I was
2 asked to read the Friends of the Earth testimony because
3 Jim Kowalsky couldn't be here. I'd be happy to relay
4 any questions back to Mr. Kowalsky for response if
5 this raises any.

6 Friends of the Earth is pleased to present these
7 written comments to the Alaska State Legislature on
8 Governor Hammond's proposals to sell the State's share
9 of its royalty gas to the Tennessee Gas and Transportation
10 Company in exchange for support of one of the three
11 competing natural gas pipeline proposals.

12 FOE, a national conservation organization ---

13 SENATOR RADER: Excuse me. Is this the same testimony that
14 Exhibit No. 5, do you know?

15 REP. GRUENING: Mr. Chairman, it may be, but we at that time
16 reserved their wish to read it into the record.

17 SENATOR RADER: If they want to read it into the record
18 then we might as well delete it though as an exhibit.
19 That's what I was thinking. Is this the statement, would
20 you take a look?

21 MS. HORTON: I assume that it is.

22 SENATOR RADER: It is the same testimony?

23 MS. HORTON: I believe the original copy was sent to
24 Representative Gruening. Right.

25 SENATOR RADER: Well, if you're going to read it and make

1 it a part of the record, then make a notation on Exhibit 5
2 that it was read into the record and will not appear as
3 an exhibit. In other words, there will be a blank
4 Exhibit 5, a blank sheet for Exhibit 5 saying that it's
5 in the record. I think that would be the proper way
6 to handle it. That way we'll have the interrogation
7 and the rest of it all in the proper place. Would you
8 proceed?

9 (Whereupon Exhibit 5 was duly withdrawn.)

10 MS. HORTON: FOE, a national conservation organization with
11 sister groups in a number of leading foreign nations,
12 has an Alaska membership of approximately two hundred
13 persons. The office of the Alaska Representative is
14 located at 1895 Pioneer Way in Fairbanks.

15 FOE has a long-standing major interest in the
16 matter of gas and oil development in Alaska. Jim Kowalsky
17 and our Washington staff have lobbied vigorously in
18 Congress in 1975 and 1976 to prevent any progress on a
19 bill to authorize the Alaskan Arctic Gas pipeline proposal
20 sponsored by then Senator Walter Mondale of Minnesota,
21 and ultimately defeated, or abandoned. Our major interest
22 in the Arctic Gas proposal is the inevitable, ongoing
23 destruction of the wildlife resource which would result
24 from a whole cycle of developments which the Arctic Gas
25 proposal would bring to the Arctic National Wildlife

1 Range, which it would cross if built as proposed.

2 The committees may also recall that FOE was one
3 of the leading plaintiffs in the Trans-Alaska oil pipe-
4 line lawsuit, which accompanied and stimulated the debate
5 over which route would be preferable for the construction
6 of that pipeline. At that time we argued that an all
7 overland oil pipeline from Prudhoe Bay through Canada,
8 directly to oil short regions of the Midwest was the only
9 pipeline system which made any sense at all. We also
10 argued that a surplus of oil would occur on the West
11 Coast as a result of the Trans-Alaska pipeline/marine
12 tanker system, thereby making it necessary to ship oil
13 to Japan. Our studies showed the surplus would result,
14 and so did other research which was performed to find
15 this information.

16 All this was ignored, and yet we note now that
17 the wisdom of our arguments has been proven. So have
18 our objections to the marine oil tanker system, a system
19 which now appears to have turned from a string of promises
20 of unique, modern, safe tanker and navigational system
21 to a trail of broken promises.

22 We urge the committees of the State Legislature
23 to listen to what we have to say in the matters of
24 petroleum development in the North.

25 FOE has not endorsed any specific gas pipeline

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1 proposal. We have, however, expressed our preference
2 for a pipeline to parallel the Alcan Highway, even
3 before there was a proposal to build it.

4 FOE opposes the Hammond Administration's proposal
5 to sell the State's share of its royalty gas to
6 Tennessee Gas and Transmission Company to purchase
7 support, as it were, for the El Paso pipeline proposal.
8 This position is based upon our observations in Washington
9 that a proposal to bring gas directly from Alaska to the
10 mid-continent is imminently more acceptable and more
11 preferable than the El Paso project.

12 In other words, the Hammond proposal commits
13 the State to sell its own resources in order to seek
14 what we see as a failing project which never did capture
15 the imaginations of the Nation's lawmakers who, under
16 existing procedural gas pipeline legislation, will make
17 the ultimate decision on the authorization of a gas
18 pipeline route. Although FOE and all other major con-
19 servation organizations which we know about would prefer
20 any proposal which does not breach the Arctic National
21 Wildlife Range, we have also learned that Congress has
22 been pre-conditioned to accept the direct pipeline con-
23 cept, and to reject the end-run concept embodied by the
24 El Paso proposal.

25 In a large part, this pre-conditioning has resulted

1 from the very early-on persistence on Capitol Hill of
2 Alaskan Arctic Gas, who began their informational campaign
3 there as early as the fall of 1973. It was at that time
4 that FOE representative Jim Kowalsky first observed
5 Arctic Gas literature in the offices of the Congressmen.

6 By contrast, El Paso has been virtually invisible
7 on Capitol Hill, even notwithstanding our personal plead-
8 ings with their Washington staff to take a much higher
9 profile. As a result of this entirely lackluster El Paso
10 campaign, we received immediate reactions against this
11 project, justified on the grounds of the perceived
12 unacceptability of LNG tanker technology, as well as the
13 unacceptability of the round-about routing of the El Paso
14 proposal.

15 Meanwhile, the Northwest/Alcan proposal emerged.
16 We believe that this proposal will very likely represent
17 the acceptable compromise in the minds of the Nation's
18 decision-makers, who have heard the rash of objections
19 to the Arctic Gas proposal which many of us have raised,
20 and the rash of objections to the El Paso proposal
21 which Arctic Gas has very effectively raised.

22 The unacceptability of LNG technology was
23 always an immediate objection raised by almost every
24 staff person for the Congressmen we visited to press for
25 consideration of a non-Arctic Gas proposal, for which

1 El Paso, at the time, was the only alternative.

2 FOE does recognize that the El Paso proposal is
3 much more acceptable for the overlapping interests which
4 we and the Hammond Administration seek to protect.
5 But we do have considerable reservations over the LNG
6 technology which accompanies that proposal, such as the
7 loss of energy and the complications of tanker traffic
8 in the coastal areas of the United States. The Alcan
9 proposal, on the other hand, is the compromise which
10 meets all the objections to LNG technology and to location
11 which have been raised to us over and over and over again,
12 and which seems to meet the criteria on which earlier
13 expressions of preference for the Arctic Gas proposal
14 are based.

15 We also note that the State of Alaska doesn't
16 seem to have its information completely in hand on the
17 competing proposals, witnessed by a recently commissioned
18 study by the State to further study various benefits
19 to the State from each proposed pipeline.

20 As a practical matter, we feel that Governor
21 Hammond is wasting his breath and yours trying to sell
22 the State's interests to gain favor for a proposal for
23 which so very, very little grass roots support exists.
24 Tenneco doesn't purchase the grass roots. Neither does
25 any other pipeline/petroleum conglomerate when the

1 sentiment is elsewhere to begin with.

2 We respectfully suggest that the Governor and the
3 Alaska State Legislature would do well to join us in the
4 support for a more practical overland route which has a
5 much higher degree of acceptability already built into
6 the inevitable process, a process which began several
7 years ago, long before Tenneco happened upon the scene.

8 Thank you for the opportunity to present these
9 views.

10 SENATOR RADER: Any questions of Ms. Horton? Thank you
11 very much for your testimony.

12 MS. HORTON: Thank you.

13 SENATOR RADER: We have Dennis Schlofeldt of the Chamber of
14 Commerce, Fairbanks Chamber of Commerce. Is Mr.
15 Schlofeldt present? Going once, going twice.

16 SENATOR HUBER: He was here earlier.

17 SENATOR RADER: Carolyn Berg, I have her name down as a
18 witness. Ms. Berg is not present.

19 That concludes the list of witnesses, at least
20 as delivered to my staff or to me. Are there any other
21 witnesses in the audience who wish to testify, any other
22 persons who wish to testify, other than those fellows
23 who have to stay until tomorrow?

24 I think we all better take our materials with
25 us tonight because tomorrow we will reconvene in the

1 courtroom, the State Courtroom right across from the
2 Capitol Building, hopefully at 11:00 o'clock.

3 (Whereupon the hearing was adjourned at
4 5:45 p.m.)
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1 and reconvened at 4:00 p.m.)
2 SENATOR RADER: The committee will reconvene. I have sug-
3 gested to witnesses that they switch the order when it
4 suits their mutual convenience. I have not felt that
5 I should take it upon myself to deny and push contending
6 witnesses or competing witnesses out of order. The
7 order in which they're scheduled here is approximately
8 the order in which we received a request for testimony.
9 I understand that Mr. Hendershot has agreed to switch
10 with Mr. Jeff Barry. Mr. Jeff Barry, you have the
11 floor.

12 I want to suggest though, so that people under-
13 stand where I think we are in this situation -- I think
14 that tomorrow at 11:00 o'clock we're going to have to
15 start with our experts that we've hired. Tomorrow is
16 absolutely the last day that they'll stay. They've
17 already stayed over-due; we cannot hold them beyond
18 tomorrow, which means that we will go into our expert
19 testimony tomorrow of Dr. Swanson, Dr. Kilgore and
20 Mr. Rush Moody. I have a memorandum from Commissioner
21 Martin that he will be forced to leave sometime tomorrow
22 for Anchorage, if we wish to hear any rebuttal from
23 him. Mr. Boness leaves Sunday for Washington, D.C.
24 on an FPC reply brief, and Mr. Hamilton and Mr. Gilbreth
25 are in Anchorage and can come down with notice. Mr.

1 Jack Byrd, our consulting attorney, has to leave tomorrow
2 also, which means this to me: as far as tomorrow, I
3 think it is going to have to be devoted first to our
4 consultants who we have put over, put out of order, and
5 to a rebuttal by the Administration. The citizens who
6 have indicated their desire to testify, I suspect that
7 what we will do is, frankly, just stay at this table
8 this evening until people either walk away or get tired
9 of talking, and they can say whatever they want to for
10 as long as they want to, or else they can do it and
11 come back next week. But I see no other alternative
12 to that because we absolutely cannot lose our Thirty
13 or Forty Thousand Dollars worth of expert witness testimony
14 that's due tomorrow.

15 I am willing to stay here as long as we have
16 a witness that wants to testify of the general public,
17 and I will ask the recorder if she can do the same.
18 Those of you on the committee who wish to stay will stay;
19 those of you who do not will absent yourselves. We will
20 at least develop a record which will be available for
21 later examination by anyone who cannot stay. It's my
22 thought that we might as well go straight through and
23 give everybody an opportunity to talk.

24 Again, if they wish they may have an opportunity
25 to speak in front of the Senate Finance Committee or

1 Senate Resources next week. I do not know, that will
2 be up to Senator Poland and Senator Sackett. On the
3 House side I understand it has been referred to Finance,
4 and that would be up then to Representative Cowper to
5 decide what he wanted to do there. I don't know of
6 any other alternative. I'm open to suggestions.

7 Senator Poland.

8 SENATOR POLAND: Mr. Chairman, I just wish to support your
9 statement there, that anyone who wishes to testify
10 in front of Senate Resources will be most welcome at the
11 time we look at the bill.

12 SENATOR RADER: Yes, Mr. Chatterton.

13 REP. CHATTERTON: I feel it's incumbent upon me to represent
14 a constituent that is here. The time frame that you
15 gave did not include the name, of necessity, for tomorrow
16 of Mr. Hoyle Hamilton being here, and I'm wondering
17 if maybe the committee could see its way clear to let
18 him come back at a future date so he could testify.

19 SENATOR RADER: Mr. Hamilton, I believe, was to testify
20 as to the reserves and the probable and possible volumes
21 of gas that we can expect reasonably to be contracting
22 for out of the reserves; is that not correct, sir?

23 MR. HAMILTON: That is correct.

24 SENATOR RADER: Now the question, he's here at the convenience
25 of the committee. If the committee wishes to hear more

1 on that then we would ask Mr. Hamilton to come back,
2 or hear him today, or else we would not. I, frankly,
3 think that I've heard enough on that myself. He's
4 testified on that matter in front of the Pipeline Impact
5 Committee last year, he testified earlier this week on
6 it, and I'm sure he can repeat himself once more, but
7 I don't think it's necessary. Is there any other
8 committee member who desires further to hear from Mr.
9 Hamilton? Senator Huber.

10 SENATOR HUBER: Mr. Chairman, there just may be further
11 information from him. I may not want to hear from him
12 at great length, but there may be further information,
13 and new, that pertains to these sales only; so I
14 would ask that he not be removed.

15 SENATOR RADER: Well, the question is, he lives in Anchorage,
16 and the question is, do you want him to stay here
17 while you're thinking about this?

18 SENATOR POLAND: We can bring him back for Senate Resources,
19 John.

20 SENATOR RADER: We can bring him back for Senate Resources.

21 SENATOR HUBER: He could best answer that, sir, being he's
22 here.

23 SENATOR RADER: Well, can you read Senator Huber's mind and
24 best answer the question he's not yet asked?

25 SENATOR HUBER: I said ---

1 SENATOR RADER: Ask him the question then right now. I
2 don't know whether he can ---

3 SENATOR HUBER: The question is, Mr. Chairman, that if
4 he thinks what he has to say is pertinent to these and
5 that it isn't repetitious from before, then we can
6 make our decision.

7 SENATOR RADER: Do you think what you have to offer now
8 has already been presented to the committee or not?

9 MR. HAMILTON: Basically it has. We have made some new
10 computer studies that we will be presenting the results
11 probably in a few weeks, but they don't change much
12 from what we presented here before.

13 SENATOR RADER: When you say have not changed much, how much?
14 Ten percent? Five percent? Fifty percent?

15 MR. HAMILTON: We're talking basically about the same gas
16 take-off rates as we've talked about before, previously.

17 SENATOR RADER: Does it change the position at all in the
18 presentation of the Department of Natural Resources
19 presentation of the contracts to them or their position
20 on the desirability of them?

21 MR. HAMILTON: No, it does not.

22 SENATOR RADER: Then for our considerations that is immaterial,
23 in your view?

24 MR. HAMILTON: That's right.

25 SENATOR RADER: Would you present yourself in case there is

1 someone here who thinks it is material, as I understand it?

2 MR. HAMILTON: Yes, I will.

3 SENATOR RADER: Is there anyone who wishes to hold him here
4 for that reason? Mr. Hamilton, we appreciate very much
5 your staying, but feel free to pursue your other business.

6 MR. HAMILTON: Thank you very much.

7 SENATOR RADER: We do appreciate your concern. We'll hear
8 from Mr. Jeff Barry. Mr. Barry, would you identify your-
9 self for the record? I know you've been here, so I know
10 you'll keep your remarks as brief and to the point as
11 possible.

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1 MR. JEFFERSON BARRY: Thank you, Senator Rader. My name is
2 Jefferson Barry and I'm representing Teamsters 959 through
3 the delegation by Jesse L. Carr. Our union has collective
4 bargaining agreements for more than twenty thousand Alaskan
5 residents. We also have service facilities for attendants,
6 hospital, medical, legal services, pensions and recreation,
7 so that the total peoples, numbers, that we serve, both
8 fraternally and economically, is in excess of forty-five
9 thousand Alaskans.

10 I am really speaking for the people that I repre-
11 sent and, hopefully, also to speak for the people of
12 Alaska that you represent.

13 When this first sale was announced it was received
14 with a good deal of appreciation because, really, the
15 words "only surplus royalty gas are sold" really presents
16 the thing that the obverse is true, that there are going
17 to be uses made of the gas that is not surplus.

18 Mention has been made of Commissioner Martin's
19 statement about the poor gentleman down in the Lower 48
20 that was sitting at home because of the gas shortage and,
21 with the exception of Cook Inlet, I think that -- and as
22 a matter of fact, you would spend a Hundred and Fifty
23 Million Dollars in communications, and a lot of people at
24 Bethel with low lights and television sets, and in the
25 background is an oil generator pumping away, and they're

1 looking at the same guy, and they see that he has hot
2 water, he has heat in his house, he has lights and he has
3 facilities, what we call the higher quality of life.
4 I think that that's the decision that this committee has
5 to make, is whether the needs of the people of Alaska --
6 certainly from a construction standpoint, we are interested
7 in the jobs that will be generated, but we also are looking
8 for the services that are generated because our whole
9 history of our union, in fact of all the labor unions, has
10 been to upgrade as much as possible and give as much
11 security to the better things of life. And one of the
12 things of life is to be able to have a decent style of
13 living.

14 I haven't heard testimony to the effect, for
15 instance, that if this line were to go to tidewater it
16 wouldn't only create certain jobs from the thing, but it
17 would also make available to every single person in the
18 State of Alaska, if the people wanted it and the State
19 approved it, this Legislature, to have either shipped to
20 them, up rivers and down the coasts, or barged down the
21 rivers out of Fairbanks and the Yukon, to every village,
22 to the public buildings, to schools because, really, there
23 isn't any place else that has as low a standard of living,
24 and what we have always strived for is to be free at
25 last, you know, like the Civil Rights thing.

1 When the discovery was made at Prudhoe Bay it was
2 made on our land. It's our gas, that twelve and a half
3 percent royalty. There has been testimony, and I believe
4 it to be true, that any future lines that may be constructed
5 would follow whatever line is going to be constructed
6 this time. If it goes through Canada we are, in effect,
7 having our gas, our life blood for a standard of living
8 that can be achieved fairly soon expropriated just as
9 though we were a foreign country.

10 After carefully reading the Governor's proposed
11 sale, I think it is flexible and somewhat fainthearted.
12 I would much rather have seen the appropriate person, like
13 that Tarryton ad and the black eye, and I would much rather
14 fight than switch because we believe that the only way
15 possible to make this vital resource available to all
16 Alaskans is for it to reach tidewater.

17 I don't think that this committee has too much
18 of a decision to make on this until they make the very
19 first decision and really a commitment to it, and that is
20 of whether you want this gas in Alaska or not. Speaking
21 for the Teamsters, we do, we want it to be made available,
22 and we think that the overwhelming majority of Alaskans
23 want to have access to their own gas. You know, it would
24 be a terrible thing to have an oasis and you've got the
25 coolest water in town, you live and die and you're always

1 drinking from somebody that brings it by warm camel.

2 I don't think that there is likely to be a chance
3 at all that this gas line goes in Alaska, in either Alcan --
4 in fact, I think the only way that Alcan could get it is
5 if they could cause some kind of a French and Indian up-
6 rising east of British Columbia. I don't think that this
7 El Paso line is going to get it unless something more than
8 to send mercenaries back to lobby is going to achieve it
9 for us. In fact, I think it will take a miracle to do it.

10 I've been in Alaska long enough to have seen two
11 miracles occur in such a fashion as this. I'd like to take
12 you back to Statehood days. In 1955 the Legislature
13 convened the Constitutional Convention, there was an
14 election, and we performed a Constitution. Then in 1956
15 it was to be ratified. The then Governor of Alaska didn't
16 propose any positive action, but the Legislature did,
17 people just such as yourselves.

18 We had about a Six Million Dollar budget, and they
19 did the extraordinary thing of sending what they called
20 the Tennessee Plan back to Washington, two Senators and
21 one Representative. There was the same kind of three
22 options that we have now. There were those who were for
23 statehood; there were those who were for commonwealth,
24 which is the alternative that got rid of the income tax;
25 and there were those who said, "Hey, we don't have a

1 goddamn thing to say about it anyway, they're going to do
2 it in Washington."

3 But I'll tell you -- for the first time in seventy-
4 five years, I believe, is when Earnest Gruening, Bill
5 Egan and Ralph Rivers went back and did so impress the
6 Congress and the President that within two years Congress
7 voted the Statehood Act, and on January 3, 1959, President
8 Eisenhower proclaimed that we were a state. It was a
9 miracle that was done by the people of this state because
10 they all wanted to create their own destiny, to be free
11 really. And the nicest thing that's said in the Statehood
12 Act, and those words really come alive, that Alaska is
13 declared admitted to the Union on an equal footing with
14 all of the other states in every respect.

15 Then in Section Six, Congress clearly recognized,
16 because only one percent of the land was owned in Alaska
17 by private interest, so they awarded for the development
18 and the economies of the communities four hundred thousand
19 acres without mineral rights surrounding some urban areas,
20 and four hundred thousand acres with rights that we got
21 if they weren't already taken, and a hundred and two
22 million five hundred and fifty-five thousand acres with
23 all mineral rights. They did that, and the words are
24 used that this is a compact between the United States
25 and said State for the development and the economic well

1 being. That's what we're really facing here now, how
2 much do we want to guarantee that every citizen in this
3 state has an opportunity from that immense wealth that's
4 the largest gas and oil field on the North American
5 continent. We may not ever be able to get anything out
6 of it unless we buy it in the canned and manufactured use
7 in Houston, Texas.

8 I don't think that the State's action is going
9 to change radically what has already transpired. We're
10 faced with a decision already being made by the staff
11 report of the Federal Power Commission, we're faced with
12 Judge Litt's decision. And really, it's a very complete
13 and logical decision for what he was studying and the
14 records indicate. In it he calls attention to the fact
15 that we have already -- both the staff statement and his
16 statement, that we are supporting the El Paso proposal
17 on economic grounds, bargaining with the pipeline purchase
18 of its royalty gas to release portions of that intrastate
19 industrial use.

20 As I say, I think a miracle can occur if this
21 Legislature will cause it to occur as it did in 1956.
22 And I should have said the second miracle was reconstruc-
23 tion after the earthquake.

24 We have never been treated badly by Congress nor
25 any president. Who we have been treated badly by is

1 Big Brother, and I term Big Brother the departments,
2 the bureaucrats, the Secretary of Interior. For instance,
3 out of that hundred and three million acres that we were
4 to get in twenty-five years, we're going into the nineteenth
5 year and have received less than twenty percent, and
6 they're already withdrawing a hundred and forty-six
7 million more acres before we get to choose the remaining
8 amount.

9 The Department of State has treated our fish
10 away. The Department of Interior and Forestry have
11 shoved us out of some of the most productive forests in
12 Alaska. But always Congress has said that, "We want to
13 make you whole, we want you to be economically viable."
14 I think that we can create another miracle, and that's
15 the reason that I think, first of all, that the Governor
16 really has done no more than send mercenaries.

17 I don't know what other enabling legislation
18 this state contemplates, but I know from the report that
19 it's not going to affect the Commissioners, and we have
20 some suggestions to make to you. Besides being in the
21 people business we also have learned to negotiate contracts,
22 and I can tell you gentlemen and ladies that you have
23 the most powerful weapon in the world to really knock
24 out a hell of a good contract on the basis of this other.

25 The one door opening, I should say -- they closed

1 the front door on us, but Judge Litt opened the back door.
2 What he says is that the financial plan prepared by
3 Arctic Gas does not outstrip the capacity of any of these
4 markets and is generally feasible. He concluded, however,
5 that the magnitude of the capital investment is such
6 that the gas transmission company sponsors cannot provide
7 the institutional lenders with the security necessary to
8 warrant financing. There must be reliance upon both the
9 consumer and the taxpayer to guarantee the project will
10 be completed and the debt service will be secure against
11 any sustained outage.

12 Legislation to protect tracking of rates to the con-
13 sumer level and to approve U.S. participation is necessary
14 if the project is to be built. He made the following
15 recommendations: consumer participation in guarantees on
16 capital costs, but only for debt service; the equity
17 holder should accept the usual risk of equity investment;
18 and the Federal Government should entertain an insurance
19 or completion guarantee arrangements to facilitate raising
20 project debt capital at a more reasonable cost.

21 What we're suggesting to the Legislature that
22 they immediately, because I agree that you must act in
23 haste if we are to get a line -- I would open further
24 negotiations with El Paso and ask to be included on an
25 option plan as a full partner so that when you go to

1 Washington before the Commissioners you can say, "Hey,
2 this is the State of Alaska that is going to build this
3 equally with El Paso," and you can get that from El Paso
4 for free.

5 What your kicker is and what's the most powerful
6 weapon that you have is that you can issue the general
7 obligation bonds exactly as he says the Federal Government
8 has to do. I spoke with Mr. Holland earlier today and
9 he thought that approximately Five Billion Dollars is
10 necessary in the State of Alaska, 2.4 Million for the
11 line down to Gravina, 2.6 about, or 2.5 for the completion
12 of that terminal. That's El Paso Alaska, and that's
13 who has made this complex.

14 Taken over a twenty-year period you're going to
15 save, by debt service on tax exempt bonds, you're going
16 to save Several Billion Dollars. That's your equity to
17 ownership, just the same as you gave them equity in our
18 royalty gas only for actively supporting your Governor's
19 selection. That's what we call bargaining, and when you
20 go back with such a project to the Commissioners and the
21 Federal Power and to the President and to Congress all
22 over again you're an equal partner. You're reducing the
23 debt service on that gas line, you're maintaining the
24 integrity during construction and operation, you're
25 participating in the management level of the rate structure.

1 Incidentally, Judge Litt's proposal said that there
2 was fifteen to seventeen percent profit built into it.
3 I don't think that there is any other possibility, really,
4 of changing dramatically or actually, from an essential
5 standpoint, anything to the Commissioner, the Federal
6 Power Commission, without having a different project in
7 mind. They've already recognized that we have a contract
8 on this royalty sale.

9 You also have one other extra powerful tool.
10 This proposed contract, I believe has been testified to,
11 amounts to about a Billion Dollars. Under the Permanent
12 Fund twenty-five percent of that goes into a bank of
13 investment that must be for income producing purposes. I
14 can think of no higher rate for the people of Alaska, to
15 be able to pledge the receipts of that fund against any
16 outages that might occur; but more than that, to agree
17 to purchase if the general public doesn't.

18 You started a State Industrial Bank for
19 political subdivisions in the state. The City of Valdez
20 has sold bonds of about Two Hundred Million Dollars
21 worth now. They have a proposed thing of Two Billion
22 for the facilities at the terminal site. Those bonds
23 were, I am told, a little over seven percent, and they
24 were just snapped up.

25 The State of Alaska could sell revenue bonds

1 as you do, for instance, for the airport. Those are
2 about one point higher than the bonds that you sell under
3 the G.O. The last bid you got, I believe, was 5.08 and
4 there have been some last year at the airport that were
5 about 6.1, which was one percent higher. But it made
6 a difference in that Forty Million Dollars -- in the
7 Twenty Million Dollar bond issue of Three Million Dollars
8 of the debt service.

9 The debt service on Five Billion Dollars is a
10 terrific amount of money over twenty or twenty-five
11 years.

12 Mr. Holland said that El Paso's testimony was
13 that they anticipated they could get the money from the
14 general public for nine and a half percent. This is a
15 way for them to get money at six percent, and for you,
16 and I, and all of the people of the State of Alaska
17 that own half that gas line. Half that gas line means a
18 terrific thing for the state.

19 It's not a unique thing for governments to par-
20 ticipate. In almost a similar circumstance British
21 Petroleum is a Crown corporation sixty percent owned
22 by the British Government. They entered into a contract with
23 SOHIO in order to get the money to finance their portion
24 of Alyeska BP Alaska, and in so doing they took options
25 that, as their oil that came from their ground was

1 produced to SOHIO they began to acquire stock in SOHIO,
2 until they were going to become a majority stockholder.

3 I hope you understand that this is a suggestion
4 that can be done. But I don't believe that there is any
5 other manner, any other manner at all, that there will
6 be a gas line through Alaska with access unless the
7 Legislature takes the action to do it.

8 I know that I haven't addressed myself to the
9 particular contract in those three companies. It's just
10 that I am really very superstitious, and Tenneco happens
11 to be Tennessee, and a Tennessee Plan was a hell of a
12 lucky thing for us. If we went back to the Commissioners
13 with such a proposal of a half ownership and then Tenneco
14 and Southern would have a whole new thing to use their
15 political clout for, perhaps the Governor's decision
16 was wise in the essential parts of the contract that he
17 made.

18 SENATOR RADER: Any questions of Mr. Barry? Representative
19 Hayes.

20 REP. HAYES: Just to boil that down to the issue before us,
21 I have concluded from what you've said that the question
22 before us -- that your feeling about the question before
23 us, which is whether or not we should approve these
24 contracts, is that you're recommending that we not approve
25 them.

1 MR. BARRY: No, I'm not at all. I'm recommending that you
2 examine the contracts, and whatever portion that you're
3 going to approve, that you will put enabling legislation
4 that those contracts become a part of that enabling legis-
5 lation.

6 SENATOR RADER: Representative Chatterton.

7 REP. CHATTERTON: Thank you, Mr. Chairman. Mr. Barry, as I'm
8 told, and correct me if I'm wrong, I have two options
9 I guess, two alternates. The way through the mechanics
10 of this system I can either vote "yes" or vote "no" on
11 these gas sales contracts; I cannot modify. Is that
12 your understanding?

13 MR. BARRY: Well, no, that's not been my understanding. I
14 suppose that from a technical nature, if you voted to
15 modify that you would be making a change and sending it
16 back to see if that would be approved by the Governor
17 and the Gas Advisory Board.

18 REP. CHATTERTON: Thank you.

19 SENATOR RADER: I've made preliminary inquiry in that regard,
20 and there seems to be the feeling, preliminarily anyway,
21 that what Mr. Barry says is basically correct, and that
22 is that if we suggested modifications it would be a
23 rejection in the nature of a counter offer which is really
24 not within the terms of the statute, which gives us only
25 an ability to confirm an existing contract, which means

1 that they would probably start the process again and
2 come back through with an additional resolution asking
3 us to approve it outright. I don't know if that's correct
4 or not, but that's a preliminary opinion that was given
5 to me that perhaps could be changed.

6 REP. CHATTERTON: Thank you.

7 REP. GRUENING: To comment on that, Mr. Chairman, I also heard,
8 maybe from the same source, that we could change through
9 Bill the procedure by which these contracts would again
10 have to be approved so that you could have an expedited
11 approval process.

12 SENATOR RADER: We can pass a bill that changes on anything
13 we're doing here, you know; that's true. Any further
14 questions of Mr. Barry?

15 Mr. Barry, we thank you very much for your
16 distinctly new approach to this problem.

17 Our next witness -- we have a change, as I
18 understand it between the Alaska Conservation Society
19 and the Wilderness Society. Scholes, I believe, is
20 going to testify next, P. Scholes, Peter Scholes.
21 Mr. Scholes, please identify yourself for the record
22 and who you represent.

1 MR. STAHR: Senator Rader and Representative Gruening, and
2 Members of the Committee. I am Thomas Stahr, I'm manager
3 of the Anchorage Municipal Light and Power Department.
4 I have some brief written comments which I think have
5 been passed out, plus a little amplification on it,
6 and I will read this.

7 Natural gas is the primary source of energy or
8 heating and electric power generation in the Anchorage
9 area. While there is no question but that we must
10 ultimately develop renewable energy sources, the time and
11 money required to do this are great. Therefore, it is
12 essential that in-State requirements for natural gas are
13 given the highest priority. The proposed contracts for
14 royalty gas sale appear to adequately provide for in-
15 State use, but I believe the Alaska Legislature should
16 additionally make a strong statement of policy that
17 in-State use of all royalty gas is to have continuing
18 preference.

19 The price received by the State for royalty gas
20 exported from the State should be as high as permissible
21 and proper. The proposed contracts appear to maximize
22 our options for a good price. Royalty gas for in-State
23 consumption should be priced so that it neither penalizes
24 or subsidizes consumers and other tax payers.

25 The exchange provisions of the proposed contracts

1 may be even more important if an inaccessible pipeline
2 route is chosen. If the Arctic route is selected this
3 may be the only way that Alaskans can obtain direct
4 benefit of this energy source. We must be certain that
5 our options for this possibility are maintained and
6 enhanced.

7 When we observe what has happened in the Lower 48
8 this past winter due to having supplies inadequate to
9 meet the demands imposed by a severe weather condition,
10 we must take steps to insure that Alaskan royalty gas is
11 made available for Alaskan needs.

12 To amplify on this, for life to exist in Arctic
13 and sub-Arctic environments a high energy consumption
14 is a basic prerequisite. For all except the most rural
15 areas near total reliance must be on commercial energy
16 delivery systems.

17 The energy supply future for the Anchorage area
18 is far from secure. The economic availability of North
19 Slope gas is contingent on the pipeline route selected.
20 Export of large quantities of Cook Inlet gas is also
21 being actively pursued. It is entirely possible that
22 South Central Alaska will not be left with sufficient
23 gas for its long-term needs, much less gas for the
24 industrial development required to provide a productive
25 employment base.

1 The development of alternate energy sources
2 takes a long time and is extremely expensive. Major
3 hydroelectric developments require ten to twenty years
4 to complete. While they will yield the lowest long-term
5 energy costs, the initial investments required are very
6 large. Coal based plants of the size necessary to
7 replace natural gas as a primary energy source take six to
8 ten years to construct, yield high energy costs, second
9 only to oil, and require large initial investments.
10 Capital costs for coal based energy are in the order of
11 fifty percent of hydro, and there are large ongoing
12 fuel and labor costs.

13 Conservation of a depletable resource is by
14 definition not a long-term solution. However, when
15 properly applied, conservation of depletable resources
16 can yield immediate social and economic benefits.
17 Anchorage has under construction a waste heat generation
18 facility which will save three billion cubic feet of
19 gas annually. This will benefit our consumers economically,
20 but as large as the saving is, it is not large enough to
21 significantly affect the gas supply problem. Conserva-
22 tion alone is not a solution.

23 When we look at the most pessimistic picture,
24 as we must, we are left with the Cook Inlet royalty gas
25 as the only sure potential addition to the gas reserves

1 committed and accessible for Alaskan use.

2 Just as reputable stock brokers advise prospec-
3 tive clients to have adequate insurance and savings
4 before investing in the market, I urge that we insure
5 our energy future by firmly committing Cook Inlet and
6 all other accessible royalty gas to in-State use
7 before investing the North Slope gas.

8 Thank you.

9 SENATOR RADER: Do you have any questions of Mr. Stahr?

10 Representative Parr.

11 REP. PARR: Mr. Stahr, how long do you have gas for now,
12 in your guess? I'm sure you're looking ahead in your
13 job with the Anchorage Municipal Light and Power; what
14 are you looking at, a five-year supply, a ten-year,
15 a fifty-year, or what right now?

16 MR. STAHR: Representative Parr, it looks that in the mid
17 '80's the gas supply situation is very questionable.
18 Part of this has to do with some ongoing negotiations
19 for royalty gas which, for reasons inexplicable to me,
20 seem to be going very slow and poorly.

21 REP. PARR: But from your existing actually Cook Inlet and
22 so forth gas, in the mid '80's you'll start running out,
23 perhaps?

24 MR. STAHR: These are the gas reserves that are committed
25 to our supplier. I believe the other, Chugach Electric,

1 may have somewhat longer gas reserves. But the gas that
2 is committed for the use of the Anchorage area, the
3 people of that area, sometime in the mid '80's that
4 gas will run out. There is still uncommitted gas.

5 SENATOR RADER: Any other questions? Representative Gruening.

6 REP. GRUENING: Mr. Stahr, do you have any hesitation about
7 the contracts that are before us in terms of protecting
8 in-State use and particularly your problems?

9 MR. STAHR: Representative Gruening, it seems to me that so
10 much is dependent upon the route that certainly if the
11 route, if the contract would help lead to a route
12 accessible, this is good. If it doesn't -- I think the
13 point I'm trying to make, and I know it's somewhat
14 tangential to what you gentlemen have to do, is this:
15 the use of this energy source in the State has to be the
16 most important consideration.

17 REP. GRUENING: Have you considered the possibility of an
18 exchange as being an in-State use; in other words,
19 exchange even though we may not have a pipeline going
20 to Cook Inlet from the North Slope, but exchanging,
21 in other words, as the gas goes out whatever, Alcan route,
22 or the El Paso route or the Arctic route, we could exchange
23 that gas so that you could have greater access to Cook
24 Inlet gas?

25 MR. STAHR: This would certainly be a very desirable thing.

1 It may, in fact, be one of the only feasible ways in the
2 long run. In regards to that, I don't see, and I'm not
3 an attorney, how -- the contract provides for it, but
4 it doesn't provide any means to enforce this, and this
5 is an excellent thing that should be pursued.

6 REP. GRUENING: Thank you.

7 SENATOR RADER: Any other questions of Mr. Stahr?

8 Representative Chatterton.

9 REP. CHATTERTON: Thank you. Mr. Stahr, are you speaking
10 for the Anchorage utility, are you speaking for the City
11 of Anchorage, the municipality of Anchorage, or for
12 yourself?

13 MR. STAHR: Representative Chatterton, I am speaking for the
14 utility only, not for the municipality.

15 REP. CHATTERTON: Thank you, sir.

16 SENATOR RADER: Thank you, Mr. Stahr. I'd like to ask the
17 reporter, I understand that the remarks by Mr. McCutcheon
18 were somewhat abbreviated. Did he give you a full copy
19 of his statement and did you intend to include it in
20 your transcript?

21 MRS. SANDERS: Yes.

22 SENATOR RADER: Under those circumstances, his full remarks
23 will be included in the transcript and it will not be
24 necessary to make it a supplement or an exhibit.
25 Is that correct?

1 MRS. SANDERS: Yes.

2 SENATOR RADER: Okay. I didn't see you writing at the time,
3 so I thought that he was -- fine.

4 Our next witness is Allison Horton, Friends of
5 the Earth.

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1 MR. GILLAM: Senator Rader, Representative Gruening, Members
2 of the Committee that are left. I'm Harold Gillam, Mayor
3 of the City of Fairbanks, and that makes me an expert
4 on nothing. I do appreciate the opportunity to speak
5 before you.

6 I first wish to state that I, as eighty-five
7 percent of the Alaskans are, am in favor of seeing that
8 we get the maximum of construction work done within
9 the State of Alaska. So I favor either the Alcan route
10 or the El Paso route, and my third choice, as is prevalent
11 in Alaska, is the Arctic gas route. I am, however, a firm
12 believer that the resources within the State should be
13 developed, but in being developed that we, as a state,
14 have an obligation to make sure that the maximum utiliza-
15 tion of that resource is made within the State.

16 A proposal was made, and I don't know that it
17 was a valid proposal or not because it was never explored;
18 but it was made to utilize the royalty share of the gas
19 to processing fertilizer in the Big Delta area. This
20 proposal was not at all considered by the Administration.
21 I believe the excuse given was that it was received too
22 late. However, this is the type of development that we
23 must encourage. Such utilization would put Alaskans to
24 work, and I see nothing wrong with that. It would also
25 provide a source of southbound freight, the lack of which

1 is the reason that high freight costs are pressed on
2 the Alaska trade.

3 I wish to commend the Governor for his efforts
4 to date. I believe that both he and Representative Young
5 earned their keep by getting the ability of the State
6 to retain control of their royalty share. I think it's
7 almost unheard of elsewhere. Since we got that right,
8 I don't think we should forfeit it and give it away.

9 I do wish to testify in opposition to the pro-
10 posed contract to Tenneco at all. I believe that the
11 sale is premature, and I see no over-powering reason
12 that it should be concluded. I believe that the political
13 clout that Tenneco and all profess to have will be, in
14 any event, exercised in favor of the El Paso route, for
15 the simple reason that it is in their own best interest.

16 If the Arctic gas route prevails they will probably
17 not get a whiff of the gas, and the other routes at
18 least give them a chance. I believe in just keeping
19 our complete options open.

20 So I'm opposed to the proposed contract for two
21 prime reasons. We're not going to get the maximum
22 utilization of a non-renewable natural resource and,
23 secondly, nothing is more odorous to me than sale of
24 a natural resource in exchange for some dubious political
25 clout.

1 That concludes my testimony, sir.

2 SENATOR RADER: Any questions? Representative Chatterton.

3 REP. CHATTERTON: Yes, sir. You were speaking, Mr. Gillam,

4 for the City of Fairbanks?

5 MR. GILLAM: No, this is not. If you know the City of

6 Fairbanks, you know no one man ever speaks for the City

7 of Fairbanks.

8 SENATOR RADER: Do you speak for the City Council?

9 MR. GILLAM: Again, if you know the City Council, this is

10 not a unanimous position of the City Council.

11 SENATOR RADER: Is it a majority position of the City Council?

12 MR. GILLAM: Certain statements that I made are a majority

13 position, some are a minority.

14 SENATOR RADER: Okay. Any other questions?

15 REPRESENTATIVE GRUENING: You're speaking for yourself today?

16 MR. GILLAM: I speak for myself, as I think anybody who

17 knows me knows that I do that.

18 SENATOR RADER: Senator Huber, have you got a question?

19 SENATOR HUBER: Yes. Harold, your statements, you do make

20 them with the of your abilities in the engineering

21 business, particularly where it comes to using petro-

22 chemical products? You didn't set any stage for that

23 other than the Mayor of Fairbanks.

24 MR. GILLAM: No.

25 SENATOR HUBER: Would you like to comment on it?

1 MR. GILLAM: No comments. That's well beyond my expertise.
2 I think that we should get the maximum utilization of
3 our resources. I don't think that we have been firm
4 enough in our past policies in doing this. I think
5 that any sales of the royalty gas and oil should be
6 conditioned on the maximum utilization of employment
7 within the State of Alaska. Beyond that I guess I just
8 have no further comment.
9 SENATOR RADER: Any further questions of Mr. Gillam?
10 Thank you, sir, very much.

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9 SENATOR RADER: Any further questions of Mr. Gillam?

10 Thank you, sir, very much.

11 Our next witness is Carl Heinmiller of Haines.

12 I haven't seen Carl around recently, I don't know if
13 he's here or not.

14 The next witness will be Mr. Jerry McCutcheon.

15 MR. McCUTCHEON: Mr. Chairman, I understand that you're
16 going to have the hearings continued on tomorrow, and
17 since I'm stuck here for another day now and I would
18 like to listen to some of the State's witnesses before
19 I speak, I wonder if I could appear tomorrow.

20 SENATOR RADER: I can't at all guarantee you that you
21 can appear tomorrow, sir. Our difficulty is that we have
22 about Forty Thousand Dollars worth of experts that
23 we've hired that have to testify tomorrow, and also we
24 have to hear from the State rebuttal tomorrow. If you
25 want to take the chance of appearing at the tail end of

1 tomorrow's testimony you can do so, but you would be
2 at the tail end.

3 MR. McCUTCHEON: I was hoping to get on the front end so
4 that I could catch the plan out of here. Actually I
5 don't think it's an unreasonable request, after waiting
6 for four days.

7 SENATOR RADER: I also have another request from OMAR for
8 the same request. I can only tell you this: tomorrow,
9 as far as I'm concerned, if the committee wants to over-
10 rule me they can -- but tomorrow we absolutely have got
11 to start in with our Thirty or Forty Thousand Dollars
12 worth of expert witnesses and get their testimony.
13 We're staying here this evening to try to accommodate
14 anybody else. If there is time tomorrow we will be
15 more than happy to accommodate you, but I'm going to take
16 that other testimony first.

17 MR. McCUTCHEON: Well, I believe it will go long past plane
18 time tomorrow.

19 SENATOR RADER: I'm afraid it probably will too, and that's
20 why I think you should do it now.

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1 MR. McCUTCHEON: For the record, my name is Gerald McCutcheon,
2 my mailing address is Box 2340, Anchorage, Alaska 99510.
3 I'm a life-long Alaska resident. I represent nobody
4 but myself. I'm not paid by anybody else. I'm down
5 here at my own expense.

6 I will start with some remarks which were made
7 here . It seems to be a giddy thing to talk about the
8 Trans-Alaska oil line and the surplus oil on the West
9 Coast, and Mr. Tussing's remarks, and he knew this in
10 '72, and rocks were thrown at him, etc. That is not a
11 fair statement. There were those of us who knew that
12 in 1969. There were us who knew where the terminal
13 would be in 1969 before it was announced, and there
14 are those of us in this room who also purchased property
15 down there in 1969 before the terminal was announced.

16 So we did have some idea where it was going.
17 We put our money in there. The fact that the Native
18 Land Claims interceded, for some people in the State it
19 left a very confusing situation; you were on both sides
20 at one time. It's sort of like watching your mother-in-law
21 go over the cliff in your brand new Cadillac. I was
22 one of those people in that position.

23 What I guess I'm saying is simply that they have
24 a complete track record, this way or that way. There was
25 a man by the name of Hal Galliett, who spoke during that

1 period of time, and he went from one luncheon to the
2 next luncheon begging for a place to speak, anywhere
3 he could, and he was talking about the other line and
4 the surplus oil on the West Coast. So it was a known
5 fact. It was just that the intervening State Adminis-
6 trations have seen unfit to take any remedial action,
7 and that's the real problem. It wasn't that we didn't
8 know it; it was known. And I think if you'll rummage
9 around in the old newspapers you will find some remarks
10 by Senator Stevens at that time when there was a wrangle
11 in Congress, that he didn't like the prohibition of
12 export of oil to Japan on a temporary basis. It still
13 is the more reasonable solution to the trade of Alaska.

14 Now, as to the Trans-Alaska pipeline and whether
15 or not it should have gone in the other direction, I would
16 be very happy to debate anybody publicly anywhere on
17 that decision. We made the right decision at that time,
18 and it's still right today. If we had made the other
19 decision, the costs would have been enormous, the building
20 would have been greater, and I believe the wellhead value
21 would probably have been zero. It's more than three
22 times as long, and to deliver the oil there you can
23 expect three times the charges. If we had to pay for
24 three times the charges we would not have the wellhead
25 value of any sufficient amount.

1 Now, I'd like to see the Governor, or whoever
2 else, come back and answer that one.

3 Going now now to this one: the determination
4 of whether or not the State should sell its gas, or that
5 anybody's gas should be allowed to be withdrawn, is
6 dependent upon the best management of the reservoir.
7 The oil companies look at the reservoir from the stand-
8 point of present value. While the State also can do the
9 same, the State must remember that the discount rate
10 for the State and the oil companies is very different.
11 No one had refuted Tanzer's estimation of the discount
12 rate of the oil companies with respect to the pipeline
13 and the reservoir. It will be an almost unbelievably
14 high rate for any kind of a business or industry; in
15 short, an exorbitant profit. The State, on the other
16 hand, is hard pressed to show a discount rate much above
17 zero, and some of us believe that it is negative.
18 After what the public believes to have happened to the
19 Nine Hundred Million Dollars, I am sure the public would
20 agree.

21 The State has not only the need to see that the
22 field is operated to the best interest of the State, but
23 also that the best long-term interests of the Nation
24 are also served. Again, America's interest and the
25 oil companies' interests are not the same. I will

1 skip part of that.

2 Multinational oil interest are not our
3 interests, monetarily or otherwise. Thus, the State
4 being the second largest holder in the reservoir and
5 having the power to control the way the reservoir is
6 produced, should operate the reservoir to maximize the
7 State's own interest first and last, for that is exactly
8 what any other oil company would do if they had control.
9 We are now an oil company, and we are one of the
10 largest oil companies in the world.

11 There are 19.1 billion barrels of oil in that
12 reservoir, and that somehow seems to escape a number
13 of people. What we are trying to do is maximize recovery
14 from that reservoir. The maximum oil recovery occurs
15 with total gas reinjection, ninety-two percent.
16 I've heard here recently now there are some figures
17 that that has been reduced. There's new material out,
18 they can't get that much gas to liquefaction. No one
19 disputes this. This is the maximum oil recovery. Other
20 computer runs were done to show sales of two billion
21 cubic feet a day, and these are portrayed as only being
22 a little less than the total reinjection run of Run No. 10.

23 While there appears to be not much real difference,
24 a closer examination revealed that it is sophistic for
25 computer run No. 10 was not done the same way that the

1 other runs were done. The operational limits were changed
2 to a more favorable procedure in those which show a high
3 recovery with gas sales. Fifteen thousand cubic feet
4 was used as the upper limit for runs under No. 19, while
5 twenty-five thousand cubic feet per stock tank barrel
6 was allowed for runs 20 through 29. From computer run
7 No. 10 the gas-oil ratio never got above four thousand
8 cubic feet , while some of the other computer runs
9 were actually allowed to reach fifty thousand cubic
10 feet per barrel before being terminated. Obviously, if
11 you allow a blowing down of the reservoir in one case
12 and not the other, the two will not be comparable for
13 considerable more oil will be produced under the blow
14 down operational limits.

15 An analogous situation might be used in clarifi-
16 cation. Pacific Lighting bought some old exhausted
17 reservoirs in California for use as gas storage. When
18 Pacific Lighting removed the gas during the winter, up
19 came the oil. These were reservoirs that were exhausted.
20 They pumped the gas down, and when they recovered their
21 gas up came some more oil.

22 I have another problem with the water injection
23 and fluid displacement. At first reading one does not
24 observe things that take place in the reservoir. It is
25 not until one begins to calculate the net fluid

1 withdrawal that one observes what takes place in a
2 reservoir. In computer run No. 26, the most likely
3 producing situation, with gas sales of two bcf, by the
4 twentieth year more fluid is reinjected in the reservoir
5 than has been withdrawn. However, in computer run No. 10
6 total gas reinjection, the one that's used for standard,
7 there is 3.2 billion barrels of fluid more had been
8 withdrawn, than had been withdrawn than reinjected, and
9 that was 3.2 billion barrels, over a three billion
10 barrel difference in the net amount of fluids withdrawn.
11 I believe this is bound to have a pronounced effect
12 on the reservoir.

13 There were two additional well groups added near
14 the gas-oil contact in the fourth year. This was not done
15 in computer run No. 10.

16 While computer run No. 10 is used as a standard
17 against which other runs are weighed, run No. 10 is not
18 really comparable for it did not receive the same favor-
19 able treatment. The question becomes, how much higher
20 would oil recovery be above the current 8.2 billion
21 barrels. I had speculated that it would be more than
22 nine billion barrels. For more than a year now I've tried
23 through various legislators to have additional computer
24 runs performed. These gaps in knowledge were never filled,
25 although there was admission by the Administration that

1 they should be done.

2 I have found further evidence which moves the
3 question from statements of a layman to statements of
4 a professional. This finding was a graph which plots
5 oil recovery versus gas sales. This was obtained from
6 Alcan Gas, who apparently obtained it from the State
7 of Alaska, and it bears the VanPoolen Report label.
8 You gentlemen, I think, saw that yesterday.

9 It is a graph based on the State's VanPoolen
10 report. In an extension of this graph we find a little
11 over nine billion barrels of oil as a probable amount
12 of recovery when the operational limits are changed to
13 those above computer run No. 19. From this we can see
14 there will be, at gas sales of two billion cubic feet
15 a day, a 1.4 billion barrel loss of recovery.

16 This is almost twenty percent of the anticipated
17 recovery to give up. One out of every five or one out of
18 every six barrels of oil for a gas line is too high a
19 price to pay. Gas in the South 48 States is shut in
20 and today AMCO is flaring substantial amounts of gas in
21 the Rocky Mountain states from a recent discovery.
22 Their statement was, "It wasn't worth building a line
23 for." That's important gas and oil, gentlemen.

24 Earlier the State Administration testified
25 before the Oil and Gas Taxation Committee that they could

1 predict forward with some certainty that the producibility
2 of Prudhoe Bay equalled the number of years of experience.
3 Thus, when they've had one year's experience they
4 will be able to predict the second. When they have had
5 five years' experience, they can predict another five
6 years.

7 Alaska is nine months to a year away from pro-
8 duction and we have no experience. You are trying to
9 make a decision on Prudhoe Bay producibility, which will
10 commit the State for the life of the field to a project
11 can only be met under the most optimistic conditions
12 and which will still be a very substantial sacrifice
13 in oi. The amount of oil is equal to a giant field,
14 twice over.

15 Today data is being gathered for additional
16 computer runs. These will not be available until next
17 month, if the Administration is willing to release them,
18 and I understand that was what Mr. Hoyle Hamilton was
19 to testify about. But there are some discrepancies there
20 because it was known that reruns were actually back, that
21 the material was supposed to be gathered, and they're
22 not supposed to be run; new runs were not supposed to
23 be run until about the middle of next month.

24 My question is, shouldn't you wait until these
25 runs are available, until all the information is in?

1 There are problems with heavy oil, tar, at the
2 gas-oil boundary, and this week I learned there is a simi-
3 lar problem at the water-oil contact zone. Should we
4 not have some production history before any gas is
5 released from the reservoir?

6 Although the previously mentioned computer runs
7 called for water flooding, there are no plans for water
8 flooding nor will the industry start serious consideration
9 of water flooding until after production begins according
10 to the State Administration. The Oil and Gas Journal
11 hinted that the oil industry is going to resist the
12 State's request for water flooding. Without water flooding
13 the recovery would fall as low as 6.4 billion barrels
14 of oil at two bdfd, computer run No. 5. This would be a
15 loss of recovery of 2.7 billion barrels of oil.

16 Should we not wait until the oil industry has
17 determined whether or not it's going to water flood and
18 the method of water flood? After all, it will take four
19 or five years to construct the plan after it's devised.
20 Should we not wait until the industry determines whether
21 or not there is going to to be general water injection,
22 peripheral water injection, or spot water injection?

23 This committee does not have current information,
24 and I defy any one person on this committee to show me
25 where he has basic information with reference to the

1 reservoir which is not at least two years old.

2 Why is the Legislature considering gas sales
3 when we don't even know the producibility of the reservoir
4 or have access to the latest information?

5 The Hammond Administration has refused to let
6 a reservoir engineer appointed by the Legislature to
7 review the proprietary information that went into the
8 State's decision-making process. Thus, you are con-
9 sidering a sale of the State's royalty gas on blind
10 faith and committing the State to a course of action
11 which is irreversible.

12 The pipeline is not economically feasible. It
13 requires government guarantees of financing and of
14 customers, and I'm hearing today now for the first -- it's
15 not the first time, but again we have the question of,
16 "We want to get the State involved in the financing of
17 this line." It's very strange that the oil industry
18 did not want us in, and they fought us over entering
19 the oil line. It's strange how the industry doesn't
20 want us in on that which is possible, and some of the
21 people would like to have us in when it's not possible,
22 not profitable, and it's the only way they're going to
23 be able to finance that, is with some kind of a government
24 agency holding the golden sack for them. It requires
25 government guarantees of financing with customers.

1 El Paso requires even more; it requires the State to
2 subsidize it with its royalty gas, to buy El Paso a
3 tanker fleet, and to forego any substantial use of the
4 royalty gas within the State.

5 The economic studies done by the State require
6 eight-eighths of the gas for the El Paso line, and as
7 we're all aware, there is a study done by the State
8 showing any use of the gas within the State of Alaska --
9 and don't you think you gentlemen should have that
10 information to see what happens to the line?

11 The Federal Government will guarantee the cus-
12 tomers through an all-events tariff. The customers will
13 be forced to pay for the gas line from the time the
14 construction starts, including costs, interest and
15 profit, and continue to pay even if the line is never
16 completed.

17 BLM's economic analysis shows the pipeline
18 requires 2.5 bdfd, rising to 3.5 bdfd in order to meet
19 the minimum economic requirements of a Seven or Eight
20 Billion Dollar line. On page 149 the BLM states the
21 figures they use for costs, Seven or Eight Billion
22 Dollars, are not possible for they are predicated upon a
23 hundred percent engineering perfect line. This so-called
24 engineering perfect line of Seven or Eight Billion Dollars
25 has a port of entry average cost of Two Dollars and

1 Sixty Cents per mcf. And I think you gentlemen at this
2 juncture should find out the difference between cost
3 of service and cost averaging of it, because you're
4 faced with cost averaging in the future, and if you think
5 with cost averaging you're going to be able to benefit
6 the State of Alaska, I really don't.

7 Since even the State admits the gas system will
8 cost Fourteen to Sixteen Billion Dollars, the real
9 expected cost would be Five Dollars and Twenty Cents per
10 mcf. Even if a Dollar was considered to be the wellhead
11 price and subtracted from the delivered cost, the price
12 would be Four Dollars and Twenty Cents per mcf, and we
13 Alaskans will be getting nothing for our gas. That
14 price is still three times the highest interstate price,
15 and two times the highest intrastate price. I'm not
16 talking about the small quantities of gas presented to
17 this committee in December of a year ago, I believe it
18 was, where they said the gas of Five Dollars was sold.
19 That's true, they sold Five Dollar gas, but they forgot
20 to tell you how much Thirty-One Cent gas was sold with
21 that Five Dollar gas. There's a big difference.

22 Five Dollar gas is Thirty Dollar oil and Eighty
23 to Eighty-Five Dollar a ton coal. Coal is currently
24 Thirteen to Fifteen Dollars a ton in the South 48 the
25 last time I looked through the Wall Street Journal for it,

1 and Twenty Dollars a ton in Fairbanks. Do you really
2 think you're going to take that kind of gas to market?

3 The market for gas drops rapidly as the price
4 rises. At a Dollar Eighty Cents per mcf the market has
5 dropped nineteen percent. If the market drops nineteen
6 percent there is no market for Alaska's royalty gas
7 at the current time. Interesting enough, in the dis-
8 cussion the other morning -- I believe it would be
9 Wednesday morning -- on the radio, there is currently
10 apparently some twenty-five percent of the gas reserves which
11 are held in and held intrastate. Now, those gas reserves
12 will come on line when the price rises high enough, and
13 if we go to full deregulation the gas problems in the
14 South 48 States will resolve themselves, I think.

15 By Two Dollars and Forty Cents it drops another
16 twelve percent; with a rise of another Forty Cents, to
17 Two Dollars and Eighty Cents, the market has dropped
18 another twelve percent, for a total loss of fifty
19 percent of demand. With South 48 gas at a little more
20 than half the price of Alaska's gas delivered to the
21 South 48, the market for gas is only one-half the
22 current demand. Even at a Dollar Eighty Cents, there
23 is no need for Alaska's gas. Thus, if we sell the gas
24 and deregulation occurs, Alaska's royalty gas will have
25 a wellhead value of zero. Governor Hammond, Commissioner

1 Martin and Attorney General Gross have all admitted
2 that this is a strong possibility, but pointed out
3 (in Gross' case) it is the ad valorem taxes with which
4 they hope the State will make money.

5 The cost of gas delivered to Fairbanks will be
6 higher than the current highest interstate price.

7 Do you gentlemen believe that a petrochemical industry
8 based on gas will locate at Fairbanks?

9 There is extremely little likelihood that Alaska
10 will be allowed to keep its royalty gas. Senator Stevens,
11 along with Senator Hollins, Senator Stevenson and Senator
12 Jennings, have already introduced a bill which would
13 appropriate gas from anywhere, in interstate or intra-
14 state, in the case of emergency. This will be the
15 harbinger of things to come. That's our own Senator.
16 No petroleum petrochemical plant is going to locate in
17 Alaska based on interruptable gas.

18 Another question which has not been raised is
19 the fact that the BLM proposal calls for cost averaging,
20 not cost of service, and that is probably what is going
21 to happen. So the users of the gas within Alaska will
22 have to pay part of the cost for delivery of gas to the
23 South 48 States. If these previously mentioned things
24 did not preclude the use of gas within Alaska, the cost
25 averaging alone would make the use of gas in Alaska

1 prohibitive. And remember, it is the Federal Power
2 Commission that gets to set the rate for Alaska's gas,
3 for Alaska's charges, and if you take something out
4 of that system, part of that system, you're going to
5 get to pay for that part of the system.

6 The State of Alaska should use all its gas
7 except that which is needed for equipment fuel and the
8 gas liquids to pressurize the reservoir. Oil field
9 pressurization is, without a doubt, the highest and
10 best use of Alaska's gas at this time or in the foresee-
11 able future. There is no reason for Alaska to allow
12 the withdrawal of gas from the reservoir until a water
13 flooding plan is not only completed but also under
14 construction, and all the plans for the gas line should
15 be shelved until that time. The gas will still be there.
16 It won't have gone anywhere.

17 Petrochemical plants are now being built in the
18 Middle East. The world's largest construction project
19 is in Saudi Arabia, not Alaska -- gas injection, water
20 flooding and petrochemicals, Fifteen to Sixteen Billion
21 Dollars.

22 It is interesting to note that an LNG plant that
23 was to be built in Iran for a project of two bcfd was
24 cancelled. The partners were Iranian National Gas,
25 DISTRA Gas and a company by the name of El Paso. You

1 might recognize that name El Paso. The project was can-
2 celled when the costs rose to Six Billion Dollars, and
3 the project became economically unfeasible. Iran stated
4 that the highest and best use of their gas was for field
5 pressurization. If a two billion cubic feet plant a
6 day LNG project at Six Billion Dollars failed, how are
7 we going to build this project of two billion cubic feet
8 a day at a Fifteen Billion Dollar charge and have it
9 economically feasible -- I'll add in here -- without a
10 great screwing of the American public?

11 Middle East gas costs more to deliver than the
12 value of the gas at the point of delivery; thus, they
13 are turning to petrochemicals. This is true for Alaska
14 too. Petrochemical companies are finding it is cheaper
15 to go to the source of supply. The market for petro-
16 chemicals will rise from One Hundred and Six Billion
17 Dollars to Three Hundred and Fifty Billion Dollars by
18 1985. The market for petrochemicals will go up.
19 Thus, there will be plants which must be built to
20 supply an additional Two Hundred and Fifty Billion
21 Dollars in petrochemicals by 1985.

22 I believe it was in a report in the summer, of
23 the Oil and Gas Journal, that said that roughly, say,
24 six percent of our oil and some seven or eight percent
25 of our gas is being used for petrochemicals now, and

1 this will rise to approximately fifteen, sixteen percent
2 by about 1985. That just happens to be about what might
3 be on the North Slope at that time.

4 I don't know of any reason why Alaska should not
5 go after part of those petrochemical plants and look out
6 for the long-term interest of Alaska. Those plants
7 belong on the North Slope with a railroad to serve them.

8 There is now economic justification to build the
9 railroad to the North Slope, even without the petro-
10 chemical plants. Thus, a railroad would be assured to
11 the petrochemical industry; it would be there when the
12 petrochemical industry was ready to move in.

13 That concludes my testimony.

14 SENATOR RADER: Any questions of Mr. McCutcheon? Mr.
15 Gruening.

16 REP. GRUENING: Jerry, I take it that your major theme in the
17 presentation is that natural gas is too valuable to burn.

18 MR. MCCUTCHEON: Well, that's a true statement; at least
19 that's what the Arabs think at this juncture, and they're
20 going to do their best to stop burning it, or shipping
21 it to somebody and letting them flare it under a boiler,
22 if you want to put it that way. Just ten percent of the
23 petrochemical increase in the petrochemical market
24 built on the North Slope where the exhaust gases could
25 be placed in the reservoir and used for the beginning

1 of tertiary oil recovery, ten percent of that would be
2 Twenty-Five Billion Dollars a year and, hell, that out-
3 weighs royalty gas or anything else we've got, and that
4 would be year in, year out. Take methanol, for example,
5 three-quarters of the equipment that's used for methanol
6 would be also adapted for coal. You know, we've got
7 more coal on the North Slope than any form of energy
8 that the Arabs have got in the Middle East. With that
9 reservoir tied in, the United States wouldn't be buying
10 it.

11 SENATOR RADER: Any further questions? Mr. McCutcheon,
12 have you discussed any of this with the Department of
13 Natural Resources or Commissioner Martin or any of the
14 people involved in this?

15 MR. McCUTCHEON: Have I discussed it with them?

16 SENATOR RADER: Yes. Do they agree with your analysis,
17 or do they disagree with it, or what?

18 MR. McCUTCHEON: They run for cover.

19 SENATOR RADER: You've talked about highly technical matters
20 which I don't claim to have near the expertise on either.
21 I'm wondering, what do our oil and gas people say though
22 when you present these arguments to them?

23 MR. McCUTCHEON: Well, those that will discuss it privately
24 agree this is the way it should be done, and those who
25 do not work for the State I've discussed it with who are

1 in a similar position in the Federal Government also
2 agree it should be done.

3 SENATOR RADER: How do you account for the fact that they
4 won't publicly state it?

5 MR. McCUTCHEON: Political suicide. It depends on who the
6 Administration is. When Wally Hickel was in the Adminis-
7 tration some years back, he got his back up over the
8 gas that was being flared in Cook Inlet and he made the
9 oil companies bring it ashore. Now, some people may
10 have condemned him because he had an interest in an
11 Alaska interstate and, consequently, he had an interest
12 in the gas company. But I don't give a damn which way
13 you cut it, at least he did a service for the State.
14 He made them start bringing it ashore, and out of that
15 we wound up with a lot of condensates in the line,
16 and we had troubles for a while, but they've gotten
17 resolved.

18 Now, all of that came along about that period
19 of time, to prohibit flaring of gas on the North Slope,
20 and anticipating what is happening now. Just let me
21 finish, John. Then came the further intervening
22 Administration which turned around and looked the other
23 direction over flaring on the North Slope, and actually
24 went out of their way to make it possible for the oil
25 companies to flare the gas on the North Slope by putting

1 in deliberately false information.

2 SENATOR RADER: Does anybody else have any further questions.

3 Representative Hayes.

4 REP. HAYES: Jerry, the relationship you mentioned between,
5 was it methylene and coal?

6 MR. McCUTCHEON: Methanol and coal.

7 REP. HAYES: Methanol and coal, yes. You mentioned some
8 use of common equipment. Are you talking about trans-
9 portation equipment?

10 MR. McCUTCHEON: No, manufacturing process equipment. As a
11 matter of fact, your best combination is to use some
12 coal along with your natural gas in the manufacture of
13 methanol. The problems which have always been dynamiting
14 methanol have been they've always took a look at methanol,
15 converting it to methanol, taking the whereofs back,
16 and then converting methanol back to gas again, and then
17 using that, and that's a very inefficient method of
18 utilization of gas. What they can do on the North
19 Slope is an improvement on the spectrum of all the
20 alcohols of the various gases, ethyl alcohol, propyl
21 alcohol, etc. And you can use them in an automobile.
22 Using straight methanol in a country like Alaska in a
23 gas tank is disastrous -- the first drop of water, the
24 two go separate. But with your longer chain alcohols
25 they remain in a mixable state, or an emulsion there, if

1 you want to call it that. These could be used in an
2 automobile. I don't have the figures on that, but if
3 you turned the whole thing into methanol, shipped it
4 down to the South 48 States, and then used it in gasoline
5 at, say, ten percent, they would absorb it, the whole,
6 all of it that way.

7 I don't really even think -- the more I've looked
8 at this thing the less I see that it's appropriate at
9 this juncture to commit Alaska's gas or to make any
10 determination of what we're going to do with that North
11 Slope gas field, and the gas cap gas, and the solution
12 gas, because its highest and best use at this time is to
13 run that reservoir. And I think it's more appropriate
14 when we determine what else we've done in there. We
15 can't even get information on the reservoir, we can't
16 get information on the lisburn formation. Those are there,
17 and we can't get any information on it. You know, you
18 go talk to the Gas and Oil Division and they absolutely
19 dummy up. As a matter of fact, there's two billion
20 more barrels of oil there, and they've never bothered
21 to tell you people. But you can find it in John's
22 little report there, if John will go look in his report;
23 it's there, it shows up in one little paragraph,
24 and it even gives production rates. But the State of
25 Alaska -- and it's attributed to them -- the State of Alaska

1 doesn't even go out and try to find that information,
2 and they deny it.

3 SENATOR RADER: Representative Gruening.

4 REP. GRUENING: Jerry, you might be aware of the fact the
5 Administration just last Thursday commissioned a
6 Thirty-Four Thousand Dollar study to look into the
7 in-State uses of this gas, and I'm assuming it includes
8 petrochemicals. Do you expect that study will produce
9 some of the findings, or agree with your findings?

10 MR. McCUTCHEON: No. It will be not too unlike the last
11 study which Dobey did.

12 REP. GRUENING: It isn't Dobey's study, it's another one.

13 MR. McCUTCHEON: I know, but I suspect it will come out the
14 same way the last one did. It came out and all of a
15 sudden it bounced around. I sat down and did some
16 calculations on it and said, "Hey, man, you can't do
17 those things with State royalty gas that you think
18 you're going to do. You haven't got the gas to get it
19 done."

20 I'd like to go back and calculate it again
21 because I've heard today here, and I think your accountants
22 will tell you, the State does have enough royalty ethane
23 gas to run a billion pound plant; but I question that.
24 I'm old and rusty and I'd have to go back and polish up
25 on it. I'm not an engineer, so it takes me some time to

1 struggle around with. But I don't think the State's got
2 enough ethane gas in its ethane to run a billion pound
3 plant, and I think it's going to have to bend. That
4 might be a way to do it, you might be able to trade some
5 of the methane for ethane and make some trades in there.
6 But I don't think that you're really going to see petro-
7 chemicals up here until until such time as -- so long
8 as the State keeps parading its resources out on a long
9 leash like a bitch in heat, you've got everything coming
10 around that except what you really want, and I think
11 if you hold it back and say, "This is what we want and
12 this is what we're going to do, and we're going to wait
13 until it's there," then I think you'll see something, and
14 I think you'll see something worthwhile.

15 SENATOR RADER: Senator Huber.

16 SENATOR HUBER: My question, I think, Mr. Chairman, is very
17 much like Mr. Gruening's except rather than asking you
18 if you know of a State study, asking if you know and can
19 relate of any industry interest or industry study in this
20 direction.

21 MR. McCUTCHEON: Are you leading me to the Westinghouse Study?

22 SENATOR HUBER: The Chairman doesn't allow me to lead. I mean
23 Westinghouse, I mean Wentworth Brothers, I mean all areas
24 that you know about in regards to methanol and all other
25 petrochemicals.

1 MR. McCUTCHEON: One of the ways to look at this, the State
2 of Texas will be a net importer of oil and gas in 1985,
3 and I think one of those places that oil is going to
4 come from is a place called Alaska. We should be doing
5 what they're doing.

6 Now, Arthur Little did a study for the State of
7 Texas, and I have never seen it, but I would suggest
8 to you, Senator Rader, that you might have your committee
9 get their hands on it from the Texas Delegation -- and
10 that study shows the various profitability of what
11 happens. A barrel of oil in the State of Texas is worth
12 Five Dollars when it's produced. When it's processed
13 it's worth Fifty Dollars. But when it's made into
14 material or other things, it becomes worth Two Hundred
15 Dollars a barrel.

16 SENATOR RADER: Mr. Chatterton, do you have a question?

17 REP. CHATTERTON: Thank you, Mr. Chairman. One question -- I
18 think I heard you right, but I would to double check.
19 When you said, I think using your language, we should
20 hold our gas back, I gather you mean not only our
21 one-eighth tail but also the seven-eighths dog; is that right?

22 MR. McCUTCHEON: You bet! Right under our -- we have control
23 of the reservoir and there's nothing they can do about
24 that. And the question is a good sound matter of
25 conservation, and I think we should practice it first,

1 and then go from there. I don't mean to threaten any-
2 body that we're going to withhold our gas, and I don't
3 mean to pirate anybody around, because I don't think
4 we should engage in that kind of game. But I think that
5 we should run our reservoir in a tight-fisted manner.
6 Remember, we're the second largest holder up there.
7 You may think that twelve and a half percent -- but
8 remember, we've got eight percent in taxes too at this
9 juncture, and you subtract that from what Exxon and
10 ARCO have got and all of a sudden we become second and
11 they're third and fourth.

12 SENATOR RADER: Mr. Parr.

13 REP. PARR: One brief question, Mr. Chairman. Mr. McCutcheon,
14 I hope I heard you wrong, but I'd recheck. Early in
15 your testimony, if I heard you right, you said that an
16 engineer hired by the Legislature was refused data on
17 the reservoir. I would like to know if I heard you right,
18 and then who is the engineer if that's the case?

19 MR. MCCUTCHEON: Let me state this in expanded form and
20 maybe it will become clear. There was a proposition
21 which was passed by the Oil and Gas Taxation Committee
22 to hire a reservoir engineer, a person who normally
23 deals with proprietary information and does it every day.
24 This person was to be responsible to the Legislature.
25 This was Senator Croft's committee, and my position was

1 that the man should be hired. Approval was for the man
2 to be hired. Then the next question of my position was
3 that he should be hired but that he should not proceed
4 further untill such time as there was access to the
5 proprietary information because we've had enough people
6 going down exactly the same corridor but without the
7 proprietary information and, thus, a question -- Mr.
8 Martin wouldn't let him see. First the question was
9 bounced off and, yeah, they would. The next time
10 around when it came in formally, formalized in writing,
11 no, they would not. And I think that this committee,
12 or any other committee having a person who normally
13 handles this thing -- I don't mean anybody, but I mean
14 a man industry-wise who does this all the time, should
15 have access and should be responsible only to the Legis-
16 lature, the same way as Congress has got access if it
17 really want's to buckle it down to anything that the
18 United States Government has got, little secrets that
19 they're supposed to be holding back from them. And I
20 think that the same damn thing applies to the Legislature.
21 I don't think we should have an Administration which can
22 withhold information. True, if you've got to have one
23 thing and the information the man comes back with to
24 you is going to have to be secret, he can give you an
25 opinion of what he has seen because he can't release the

1 information, that has to still remain proprietary.

2 But the Legislature should have a man that has access
3 to proprietary information when it applies to the
4 Legislature.

5 SENATOR RADER: Representative Parr, any further questions?
6 Any further questions of Mr. McCutcheon? Thank you
7 very much, Mr. McCutcheon, we appreciate your patience
8 and your testimony.

9 We have in addition to those listed on our
10 agenda several others whose names have been added since
11 then. We will continue. Mr. Penney sent me a note
12 at 4:50 saying that he had another commitment, that
13 he couldn't testify. After that we have Mr. Thomas
14 Stahr of the Anchorage Municipal Light and Power.
15 Is Mr. Stahr still here? Mr. Stahr, do you wish to
16 testify?

1 MR. PENNEY: Yes, that would be fine, Mr. Chairman. Chair-
2 people, if that is the correct term, my name is Bob
3 Penney, and I'm President of the Organization for the
4 Management of Alaska's Resources. On my left is Ms.
5 Paula Easley, she is our Executive Director.

6 This month OMAR is two years old. It was started
7 some two years ago, with the idea of having some citizenry
8 input into what happens to the development and/or the
9 management of Alaska's resources. One of the first goals
10 and projects that we took on was the issue of this
11 natural gas line, and since then we've spent many, many
12 hours and an awful lot of time trying to at least get
13 a layman's understanding of what's really happening.

14 We have an office in Anchorage. The address is
15 the Fourth Avenue Theater Building. We have a one-man
16 office in Fairbanks, Alaska National Bank, and this
17 next month we'll have an office in Seattle, and we have
18 an associate office in Washington, D.C. under USA, Alaska.
19 We have forty-nine directors from all over the State,
20 and we have an executive board of eleven people, and the
21 executive board meets once a week. We have public
22 meetings once every Thursday in the Anchorage office.

23 I'd like to start off by saying OMAR doesn't
24 really say who builds the gas line, we never have.
25 We don't care where it goes, through what cities it may

1 pass; we just say it must go to a tidewater, ice-free
2 port within the State of Alaska. And our second point,
3 in our estimation, Prudhoe Bay gas is going to be
4 produced. Now, it's produced with the oil and, as we
5 understand it, we don't own one-eighth of the gas,
6 we own one-eighth of the production and initially,
7 unless we take it in like kind, we own one-eighth of
8 the revenue. And, as we understand it, if we elect
9 to take it in like kind, as Commissioner Martin has done,
10 we then can take one-eighth of that production of that
11 gas in like kind or take the gas itself.

12 (b) Per Atlantic Richfield Company engineers
13 (Chat was at the meeting) it will cost nine to ten and
14 a half percent of the gas to reinject it into the ground.

15 (c) It's against the law to flare it, as it
16 should be.

17 (d) Eighty-seven and a half percent of the gas
18 is already sold to others. It will leave the State,
19 the rest of the country will demand it. There is a
20 Federal law that sets a time frame for delivery of this
21 gas. The gas is going to be produced.

22 Our share, as brought out by Mr. Moody, of the
23 estimated three and a quarter trillion cubic feet,
24 we have in this contract before you sold or are endeavoring
25 to sell eighty percent of that gas, or 2.6 trillion feet,

1 and that amounts to eighty percent of the gas. Somebody
2 said the other day they thought only seventy-five percent
3 should be sold, and this is approximately eighty.

4 Our surplus royalty gas has to be sold for a
5 period of time; that's what our observations have given
6 us. We can't use it all right now in the State. I
7 believe the State of Alaska looked for four and a half
8 months trying to find a user for that gas specifically
9 within our State. OMAR really feels this, and the reason
10 we feel we're for this line is as follows.

11 We feel that the eventual use of the royalty gas
12 within our State is the number one reason and benefit
13 that Alaskans will accrue from this gas line.

14 (b) At a flow of three hundred million cubic
15 feet a day, this royalty share equals, according to our
16 figures, 2.2 times the amount of gas presently being
17 used by forty percent of our population, the Anchorage
18 Bull.

19 Last year the State could not find, nor is there
20 a user at this time, who will agree to use or develop
21 all the gas within our State.

22 (d) OMAR concluded over a year ago that we have
23 to sell our surplus gas in order to have it back again
24 some day. The eventual use in our State, as we stated
25 before, the eventual use in our State of that gas should

1 be our number one priority.

2 Number Four: Prudhoe gas is going to market
3 and the routing of that gas line will be a political
4 decision finally decided by the Congress of the United
5 States of America.

6 (a) We initially started working for a royalty
7 gas contract at the recommendation of Senator Stevens
8 and Representative Young over one year ago. They told
9 us the route would probably be a political decision,
10 just as the oil line one was.

11 (b) El Paso's application, in our opinion, is
12 the overall number one choice for Alaska. Let's face
13 it, they're a pretty small company in the big picture,
14 when compared to the forces and money behind Arctic Gas
15 at this time.

16 (c) We have been urging Commissioner Martin
17 and the Administration since last February to conclude
18 a royalty gas sale as recommended by the Congressional
19 Delegation. As far as we're concerned, Guy Martin
20 took a long time, worked on it very thoroughly, and
21 went through extensive negotiations. We believe that
22 last April 14 the contracts were almost signed and would
23 have possibly been included for review by the last
24 Legislature, but they were not completed until this
25 November.

1 A sale, to be most effective for our State,
2 should have been concluded, in our estimation, last
3 spring. It has taken twelve months to get this contract
4 before you in the steps it's in. Six to eight months
5 from now it will all be over, the decision for the
6 routing will have been made.

7 (d) The FPC Judge stated many times during the
8 testimony and asked, "What's Alaska going to do with its
9 gas? Is their gas going to go into the system? Are
10 they going to keep it?" This contract you have before
11 you was entered into the FPC record in its rough draft
12 on the last afternoon of the last day before public
13 testimony was closed.

14 (e) If all the gas goes to Arctic and if our
15 State found no new reserves for some reason, wouldn't
16 it be something if Alaska ended up some day like
17 Louisiana, some years hence, with a shortage of gas? It's
18 not probable, but it is conceivable.

19 (f) A political decision? Alaska is using all
20 the forces we can to affect a Congressional decision.
21 Do you mean like we did for the oil line? Or like we
22 did for Statehood? You bet we are! If we don't stick
23 up for our own state, I don't really think anybody else
24 is going to.

25 Here are some of the letters we have received

1 from Senator Stevens, Senator Gravel and Representative
2 Young dated November 2, November 5 and November 17, 1976,
3 mandating a royalty gas contract.

4 MS. EASLEY: Last fall when we were getting pretty nervous
5 about whether the royalty gas contracts would be concluded
6 in time to be included in the FPC record, we asked Don
7 Young and Ted Stevens and Mike Gravel to meet with us,
8 and we did separately. And we asked them each a very
9 important question. We said, "Do you still consider the
10 royalty gas contract critical to the success of the
11 Trans-Alaska gas line."

12 Ted Stevens told us that if we did not have the
13 royalty gas contracts we didn't have a chance to win.
14 Don Young said the same thing, and Mike Gravel said
15 the same thing in different words. So we were convinced
16 then, as we are now, that that is the most important
17 thing that we need in order to do our job in committing
18 the funds that have been contributed to our organization
19 to carry this fight to the nation.

20 MR. PENNEY: November 2 in a letter to Honorable Jay Hammond
21 from Mike Gravel: "In response to a request from the
22 Organization of Management of Alaska Resources, I am
23 putting on paper my position with respect to the commit-
24 ment of Alaska's royalty gas. I have enunciated this
25 position on numerous public occasions, both in Alaska and

1 Washington, D.C. Without doubt, the commitment of
2 Alaska's share of the Prudhoe Bay natural gas could
3 bring us allies in our cause if only because the
4 beneficiaries would thereby have a proprietary interest
5 in the success of our endeavor, designation of an all-
6 Alaskan gas line."

7 November 5, in a letter from Senator Stevens,
8 to Paula Easley at OMAR: "Dear Paula: I am writing
9 to confirm to you my feelings that Alaska's royalty gas
10 should be committed so as to pick up as much support
11 as we possibly can gain in the Congress, in the South
12 and in the Southwest. As you know, I have not expressed
13 any opinion on the question of that share that any
14 respective purchaser receives. However, these commitments
15 will only make sense if they are associated with support
16 for the all Alaskan line, and to get that the share to
17 the new supporters must be credible." That's the time
18 when we were being asked by, for instance, Senator Stevens
19 wanted to see Tenneco, I think, at the time get it all,
20 and Senator Gravel was thinking that El Paso should have
21 gotten half. But it was a decision of what the percentages
22 was, was left up to the State Administration. In fact,
23 we didn't make any comments because we don't think that's
24 within our vein.

25 "The recent report of the Berger Commission's

1 staff recommendations (continuing with the Senator's
2 letter) reinforces my feeling that we have a real chance
3 to win, and when the review of Alaska's gas transportation
4 system comes before Congress we will need all the help
5 we can get."

6 November 17 from Don Young to the Honorable Jay
7 Hammond, in addition to a wire he had sent the prior day.
8 "It is timely that the State has taken this action to
9 achieve the goal of an all Alaskan route and to preserve
10 the State's option for use of its royalty gas in the
11 State. In the past, FPC Hearing Judge Nathan Litt has
12 repeatedly inquired about the disposition of the State's
13 royalty gas. It has been argued that if the State sold
14 its gas it would be an unrefutable indication that the
15 State is willing to do all that is in its power to
16 commit itself to an all Alaskan route. Now at last
17 this is the case and any reservations on this point can
18 be swept aside."

19 Political decision? It is. If we don't listen
20 to and seek the feelings of our Congressional Delegation
21 as to what should be done on an issue decided in
22 Congress, then who should you ask.

23 Number A: I would like to take a moment out
24 at this time to do the same thing that Russ did, and I
25 would like to publicly say how much I thought Bob Ward's

1 testimony was really right on the button yesterday, and
2 he renewed my respect for him so much -- that he just
3 told it like he really thought it was. I thought that
4 was probably one of the nicest presentations I ever
5 heard anybody give, particularly when they've got to
6 have the least desired position of anybody involved.
7 I thought it was well done.

8 We concur with that thinking. We thoroughly
9 endorse the concept of these contracts. As we said,
10 it's taken twelve months to get this far. We weren't
11 privy to the negotiations. When last April we asked
12 Commissioner Martin how negotiations were to be handled
13 he told us no one was going to be involved but the
14 four companies and the State. We understood and agreed.
15 It took almost seven months to conclude these negotiations.

16 We really can't answer the questions as to the
17 technical terms and things that you've heard now. The
18 only thing that we can do is address ourselves to the
19 concept of the contracts, which was initially told to us
20 by the Congressional Delegation.

21 We have some concerns about the switching
22 clause, and we've dicussed it at some length. We have
23 a couple of suggestions after, if you want to. It's
24 hard now for us to judge what's going to be hindsight
25 in two to three years from now, and I'm sure it was

1 awfully hard for Commissioner Martin and the attorneys
2 to judge now the best contract to draw for probably
3 1982. But I think from testimony I've heard here, I
4 think the contract is probably as well done as it could
5 have possibly been.

6 After all our encouraging Commissioner Martin
7 to finally conclude a sale, we have to admit we think
8 on an overall basis the contract really exceeds in many
9 ways our best expectations. We think overall that he's
10 done a fine job and actually has done the best he possibly
11 could for our State, particularly under the circumstances.

12 One of the points that, as we understand it --
13 in essence if this contract is inked and it goes for
14 approval, or if it doesn't go for approval but if Congress
15 eventually approves the all Alaskan route as it's pro-
16 posed, as we understand the contract, the next day our
17 Governor could say, "We have the route now; however, we
18 have an in-State use for the gas and two years from
19 now we're going to take it back," and then two years
20 hence, even before the line is even built, before it's
21 ever constructed, we can cancel out the terms of the
22 contract. I just have a feeling that there's got to
23 be a little faith on both sides, because I don't know
24 how I'd sign it if I were a gas company. But evidently
25 they did think it was all right.

1 One other point that hasn't been brought out
2 and I don't know why they don't want to talk about it,
3 but I'm going to talk about it because I think it's
4 very important. But El Paso, in essence, and I think
5 you'll find that as we go into this the next six months
6 and some more testimony, if you want it, will show
7 that the financing of either one of these three routes
8 is going to be one of the major critical things, and
9 we think at this time it is the major critical stumbling
10 block for Arctic Gas. And we have testimony, if you
11 want to review that further.

12 But El Paso, in essence, has already got twenty-
13 five percent of their system financed, as we understand
14 it. Their tankers are going to cost 1.6 Billion Dollars,
15 which is a quarter of their project, and under the
16 Maritime Act (I don't remember the name of the Act) there
17 is a low interest rate available for that, and also
18 in a Federal insurance. So, in essence, they've already got
19 twenty-five percent of their package cut and done. I
20 don't know if that's been brought out before, I don't
21 think it has.

22 In summation, don't forget, we won't have any
23 accessible surplus of royalty gas if Arctic is certified,
24 and I really think people lose sight of that. We will
25 just have dollars of revenue from then on, because Mrs.

1 Jones is going to be cooking eggs in Ohio for the next
2 twenty-five years with our royalty gas.

3 And (b), we think this is almost as important:
4 if either Canadian line gains approval, you will then
5 have an established corridor from the heartland of our
6 State funneled directly to the South 48. If we ever
7 want or choose then to see Pet 4 or other resources used
8 or developed within our State, the chances of doing so
9 will become much, much more remote. Whatever you do
10 with this contract, somebody, some day is going to buy
11 a portion of our surplus royalty gas, and we think that
12 if El Paso, Southern and Tenneco would be foolish enough --
13 they would be foolish, they'd be unfair to their stock-
14 holders, and less effective for Alaska if they publicly
15 review their game plan for approval of the Trans Alaska
16 line. If they do, they're almost sure to read again
17 about it in Jack Anderson's column or else somewhere else
18 in national print. If you haven't heard about the
19 column, I'll tell you about that.

20 They are large companies, they need the gas,
21 and "no ticket, no laundry." If they don't work with
22 us they very probably will get no gas. So we have to
23 have some reliance on their ability to perform.

24 (e) To me, personally, this contract is also
25 important nationally, as it's like the tapping of a pencil

1 on the negotiating table by the State of the Far North,
2 that we're not asleep, we are interested in our own
3 destiny, we do want a say in the use of our own natural
4 resources, in our way of life, we do want to get off
5 the Federal dole, and we do want to direct our own
6 heritage.

7 We have over one hundred and fifty press
8 clippings. Somebody asked if this was going to be
9 news across the nation, and I'll let Paula enunciate
10 on that. This news of the royalty gas sales has already
11 been in most of the major papers in the United States.

12 MS. EASLEY: I'm sure most of you are aware of that, and
13 unfortunately it has been reported and accepted as an
14 already concluded situation, and quite a few of the
15 articles have mentioned that the contracts do have to
16 have the stamp of approval of the Alaska Legislature.
17 But the way it is stated, it's just been that it is an
18 assumed fact. And we are concerned about this element
19 of it, should the contracts not be approved, the effect
20 of that at the national level in indicating to the public
21 and to the Congress that Alaska is not behind the pro-
22 posal that it professes to be, and that eighty-five
23 percent of its citizens say they are.

24 MR. PENNEY: Last, review, assess, discuss, make sure it's
25 right for all of us, if you have to, this contract. The

1 final terms are in your hands. But, if you will, pass
2 it out as soon as you can with a large majority. Affirm
3 and then make it your first step in the fight for our
4 own gas line.

5 Then second, (that's the first step) pass an
6 appropriation bill to be used nationally in an effort
7 to tell the Alaskan side of the story, that the all
8 Alaskan U.S. route is the best one for all of the United
9 States.

10 Then thirdly, we respectfully ask that you do
11 everything you can legislatively to see that it's
12 "easier" to go through Alaska with our gas than through
13 the middle of another country.

14 SENATOR RADER: Thank you both. Any questions? Senator
15 Huber.

16 SENATOR HUBER: One short one. Bob, you didn't agree with
17 Bob Ward's testimony so much as to agree with his bottom
18 line, did you, that it wouldn't make any difference?

19 MR. PENNEY: No, John, but if you'd like to -- some of the
20 points he brought out we think were very valid, partic-
21 ularly as far as the part that gets into problems in
22 Canada, and we researched those very thoroughly. We
23 subscribe to two clipping services from Canada, and it
24 keeps one person busy just reviewing those, and we think
25 we have a pretty good grasp or feeling for what is taking

1 place in Canada, at least as far as the press reports.
2 And if you want to get in and talk with some of that,
3 we can tell you where we think some of the tough parts
4 and some of the good parts will be.

5 SENATOR HUBER: You at least agree that he was very candid?

6 MR. PENNEY: Yes, sir.

7 SENATOR HUBER: As far as the last line -- I wanted to be
8 sure you didn't agree with his last line.

9 MR. PENNEY: That's true, John, but I was very impressed
10 with his testimony. One other aside, there has been
11 some mention in talk made about the treaty here, and
12 last February 1, I believe, Aron Tussing brought this
13 up, so we will be able to see how his suggestion worked.
14 But February 1 we sent a letter to Senator Gravel,
15 Senator Stevens and Don Young, and in essence said this,
16 that while we understand that the U. S. and Canada are
17 agreeing to the treaty in which no line will be taxed
18 any different than somebody else's line, as we all
19 know the -- just let me read the paragraph. "We at OMAR
20 are concerned that the provinces through which the Arctic
21 Gas or Alcan Pipeline might pass have not ratified nor
22 endorsed this treaty between U.S. and Canada. We are
23 all aware the provinces of Canada have unusual taxing
24 powers when compared to those enjoyed by each of the
25 states of the United States. We ask that you consider

1 a proposal requiring each province through which a
2 Prudhoe Bay gas line might pass to give a written pledge
3 to support these treaty provisions before the U. S.
4 Senate ratifies the treaty itself."

5 SENATOR RADER: Any further questions? Senator Sumner.

6 SENATOR SUMNER: You mentioned an appropriation. Did you
7 have a figure in mind or have you gone through some
8 other channels with that?

9 MR. PENNEY: Senator Sumner, Mr. Chairman, yes, we have.
10 We've projected out two or three different things that
11 could be done. But if the State were to hold down its
12 expenses as closely as possible, we think it's going
13 to require a Three Hundred Thousand Dollar contribution
14 just on the part of the State itself to do any kind of
15 effective job. But there are so many things we could be
16 doing in the next six months to try and win this thing.
17 There are so many avenues we could explore. We've asked
18 the Governor, and Lowell Thomas is going to take another
19 trip now for thirty days. We have to raise the funds
20 to take care of his airplane tickets. He was very
21 effective last time. He's written letters to every one
22 of the other Attorney Generals throughout the United
23 States -- or Lt. Governors, excuse me, asking them about
24 the Alaska route. There's an awful lot we could be
25 doing. We're going to have two more flights going back

1 to Washington, D.C., about a hundred and ten people,
2 later on this spring and early summer, as soon as our
3 Delegation tells us. And there is so much we could be
4 doing, but if we don't start doing it, and if we don't
5 start doing it right away, and really if we do nothing,
6 and we get nothing, that's just about what we deserve.

7 SENATOR RADER: Any further questions?

8 MR. PENNEY: Thank you very much.

9 SENATOR RADER: Thank you very much. We have a number of
10 exhibits that we need to introduce. Let me just identify
11 them. We have a letter from United States Senator Mike
12 Gravel supplementing his wire of several days ago. That
13 will be Exhibit 20. I won't read it, it will be attached.
14 Exhibit 21 is a series of correspondence including
15 a letter from the Lt. Governor of the State of Alabama,
16 a letter from George E. Smith, Alaska Chapter of
17 Associated General Contractors, a letter from Robert L.
18 Hardick, Anchorage Chamber of Commerce, a telegram from
19 A. L. Swalling of Anchorage, Alaska, a telegram from J.
20 A. Sproul, a telegram from Richard L. Maullin, a letter
21 from Mrs. Jeanne Wilson, President of Greater Fairbanks
22 Chamber of Commerce, a letter from George Easley,
23 President of the Easley Construction Company, a telegram
24 from James T. Jefferson, of Jefferson Enterprises,
25 Detroit, Michigan. Most of these were responses to our

1 invitation to come and testify, and they sent written
2 letters or telegrams expressing approval or disapproval
3 of what we were doing. I don't intend to read them but
4 I intend to make them a part of the record; so that will
5 be Exhibit No. 21, called miscellaneous correspondence.

6 (Whereupon Exhibits 20 and 21 were duly marked.)

7 Do we have any other ---

8 SENATOR HUBER: Mr. President, may the list to whom
9 invitations were sent to be a part of the record?

10 SENATOR RADER: Senator, I don't know that we can do that.
11 Representative Gruening's office, I know, sent out some
12 and my office sent out some in two different groups that
13 had some overlap. I'd invite you to come to my office.
14 We've got the letter from the Legislative Affairs people,
15 and, Elke, maybe you know more about those lists than
16 anyone. Would you explain to us what ---

17 MS. KALLAB: Yes, to the extent that I can. As far as on
18 the Senate side, the list that we initially began with
19 was furnished to us by the Department of Natural Resources,
20 which are used as lists as far as Oil, Gas and Royalty
21 Board invitation lists. Those are the three lists we
22 worked from.

23 As it turned out, in the confusion, everybody
24 got an invitation. So I don't think we've lost anybody
25 from the Department of Natural Resources that has been

1 on that side.

2 On the House side, as far as Representative
3 Gruening is concerned, I know that he invited several
4 people that were also invited by Senator Rader, namely
5 Dr. Tussing, and in addition he invited Dr. Michael Scott
6 to testify for the joint hearings here. I don't know,
7 but I'm sure aide, Brian Rogers, will have a complete
8 listing as to what other invitations were issued, either
9 verbally or by writing.

10 The material that went out through Senator
11 Rader's office is very readily available and could be
12 very easily made a part of the record.

13 SENATOR RADER: Without objection, I will make available
14 a list of the invitations sent out by my office, and it
15 will be marked Exhibit No. 22. Representative Gruening,
16 do you want to supply such a list for Exhibit 23?

17 REP. GRUENING: That's fine.

18 (Whereupon Exhibits 22 and 23 were duly marked.)

19 SENATOR HUBER: My only reason for the request was so that
20 the record should show that we had invited a large cross
21 section of people so it couldn't be said that we had a
22 selected list later on.

23 SENATOR RADER: Fine.

24 REP. GRUENING: Mr. Chairman, in that regard you might want
25 to put another exhibit, and that is newspaper ads that

1 were run by the joint committees, and we might even get
2 a proof from the paper to attach so they know the dates.

3 SENATOR RADER: How many newspaper ads were run and in what
4 newspapers?

5 REP. GRUENING: Daily News Miner, the Anchorage Times and
6 the Daily News.

7 SENATOR RADER: One ad or several ads?

8 REP. GRUENING: Two days in each paper.

9 SENATOR RADER: If we can find a copy of that, that will
10 be supplied to the reporter as Exhibit No. 24.

11 (Whereupon Exhibit 24 was duly marked.)

12 SENATOR RADER: Do we have any other requests for exhibits
13 to be attached? We have one final exhibit, No. 25,
14 which will be supplied by the Department of Natural
15 Resources, and with that I take it that concludes our
16 joint hearings; is that correct?

17 (Whereupon Exhibit 25 was duly marked.)

18 REP. GRUENING: Do we have the relevant statutes attached
19 in there?

20 SENATOR RADER: No, we do not. Exhibit 26, would your office
21 supply what you consider to be the relevant statutes?

22 REP. GRUENING: Sure.

23 SENATOR RADER: Exhibit 26 will be the relevant statutes,
24 to be supplied by Representative Gruening's office to
25 the reporter.

1 (Whereupon Exhibit 26 was duly marked.)

2 SENATOR RADER: Ms. Easley.

3 MS. EASLEY: I'm sorry, I just gave the reporter some
4 telegrams and letters from other organizations that had
5 asked us to speak on their behalf. Can she just do that,
6 write them in?

7 SENATOR RADER: I'll make that Exhibit 27, it will be called
8 miscellaneous correspondence and written testimony
9 submitted by OMAR on behalf of others.

10 (Whereupon Exhibit 27 was duly marked.)

11 SENATOR RADER: Are there any other exhibits that should be
12 made a part of this written record? Ladies and gentlemen--

13 REP. GRUENING: John?

14 SENATOR RADER: Yes.

15 REP. GRUENING: I know you want to get out, but what are
16 your plans for talking to the Department of Resources
17 people?

18 SENATOR RADER: Mr. Boness was scheduled to leave Sunday
19 for Washington, D.C. and be gone for several weeks to
20 work on the Federal Power Commission brief. Commissioner
21 Martin has submitted to both you and I a schedule of his
22 activities. It appeared to me that if we did not meet
23 with him Monday -- Mr. Boness agreed to stay over and
24 Mr. Martin agreed that Mr. Boness' presence was important
25 if he was going to submit any rebuttal testimony -- it

1 appeared to me that if we did not meet Monday it might
2 be several weeks before we could meet again.

3 It was my judgment and it was my feeling, as
4 the chairman of our committee, and I've announced it in
5 the Senate, that we will meet with Commissioner Martin
6 and Mr. Boness of the Attorney General's office, and
7 whomever of their staff that they deem important, to take
8 any supplemental, rebuttal or additional testimony that
9 they think has been brought out by any of the testimony
10 that has been presented thus far.

11 REP. GRUENING: What time?

12 SENATOR RADER: 10:00 o'clock, here.

13 REP. GRUENING: We normally have a session. We'd like to
14 attend.

15 SENATOR RADER: Our problem is our session. I scheduled
16 it for 2:00 o'clock. As I recall, I talked to you and
17 I thought that you were not interested in this, so I
18 scheduled our session for 2:00 o'clock.

19 REP. GRUENING: It was my understanding it wouldn't be part
20 of the record.

21 SENATOR RADER: It will not be a part of the record.

22 REP. GRUENING: But it is from your prior statement that
23 they will be submitting something and you're taking
24 testimony.

25 SENATOR RADER: They will submit written testimony or whatever

1 they think is important for this record, and I don't
2 know what that's going to be. But our committee wanted
3 to hear from them and didn't want to wait two weeks
4 for it.

5 REP. GRUENING: Well, I'm wondering -- I haven't talked to
6 the rest of the committee, but there might be some
7 interest in talking to these folks if it's going to be
8 on the record.

9 SENATOR RADER: I did not plan to have the reporter here;
10 in fact, the reporter had asked to be relieved. I did
11 not intend that it would be a part of the written record.
12 If you are interested, let's make it 10:30, if we
13 could do that.

14 REP. GRUENING: Whenever.

15 SENATOR RADER: All right. Now let me ask you this: if you
16 wish, we can make that a part of the joint hearings and
17 ask the reporter to come back. I don't know whether
18 the reporter can or not.

19 REP. GRUENING: I don't know if that's necessary, but as long
20 as Mr. Boness is going to be here especially for that,
21 we might as well make it a half an hour later and we'll
22 all attend.

23 SENATOR RADER: All right. Then I think we should continue
24 the joint hearing, and I will ask the reporter then to
25 come back at that time. I understand we have the

1 courtroom committed to us at that time, 10:30 Monday,
2 and I'd like to ask the staff if they will make certain
3 that is posted on the bulletin board; my own staff if
4 they will contact the Department of Natural Resources
5 and inform them, and try to get a page over here from
6 the Senate, or send a page over here at a quarter to
7 10:00 to inform people who come here for that purpose
8 that the hearings will not commence until 10:30, and
9 to see that order is preserved in the courtroom.

10 We will adjourn until 10:30 then Monday.

11 (Whereupon the hearing adjourned at
12 6:05 p.m.)

Exhibits

JOINT PUBLIC HEARINGS
of the
ALASKA STATE LEGISLATURE
on

SCR 3, 4, 5 and HCR 11, 12, 13

"THE PROPOSED SALE OF ROYALTY GAS"

January 31, 1977 - February 7, 1977

Juneau, Alaska

VOLUME VI
EXHIBITS

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EXHIBITS

1. Telegram to Senator John Rader from Senator Gravel dated January 28, 1977.
2. Telegram to Senator John Rader from Senator Stevens dated January 28, 1977.
3. Effect of Alaska's Royalty Gas on Natural Gas Supply: Tenneco Market Area (25 states).
4. Letter to Senator John Rader from Congressman Young dated January 28, 1977.
5. Letter to Senator John Rader from Senator Mike Gravel
6. Letter to Senator John Rader from William H. Kumm of K M Associates dated January 27, 1977, with attachments.
7. Telegram to Senator John Rader from Hall Green dated January 31, 1977.
8. Letter to Mr. Richard Maullin from Robert C. Thomas of Tennessee Gas Transmission Company, dated January 18, 1977.
9. Amendment to Application or Report - Securities and Exchange Commission.
10. Statement of Southern Natural Gas Company before Special Committee of Alaska Legislature.
11. "An Inkling of the Long Journey" by Arlon R. Tussing, Northern Perspectives, Volume four, number four, 1976.
12. Summary of Comments by Arlon R. Tussing at National Economic Research Associates, Inc. Workshop on Economic Growth in the West and Related Energy Problems.

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- 1 13. El Paso Natural Gas Company - Natural Gas Consumption
- 2 for those States Served Wholly or in Part for Calendar
- 3 Year 1975 and Natural Gas Curtailment in 1976 and
- 4 Estimated Curtailment in 1981.
- 5 14. "The Alcan Pipeline Project - A Realistic Solution to
- 6 the Transportation of Alaskan Gas."
- 7 15. Cost Estimates for Gas Transmission Line and Distribution
- 8 System for Movement and use of North Slope Natural Gas
- 9 to Interior Alaska, prepared by Robert Dempsey.
- 10 16. "Economic Analysis of Alaskan Royalty Gas Contracts"
- 11 a report to the State of Alaska: Legislature by Jensen
- 12 Associates, Inc.
- 13 17. United States of America Federal Power Commission,
- 14 Report to the Commission signed by Judge Nahum Litt
- 15 April 27, 1976.
- 16 18. Two-page document dated February 4, 1977, from Jerry
- 17 McCutcheon to Senator Rader
- 18 19. Report dated January 28, 1977, to Committees from
- 19 Vinson, Elkins, Searls, Connally & Smith
- 20 20. Letter to Honorable John Rader from Senator Mike Gravel
- 21 21. Group of documents consisting of:
- 22 a. Letter from Honorable Jere Beasley, Lt. Governor
- 23 State of Alabama to Honorable Lowell Thomas, Jr.
- 24 Lt. Governor, State of Alaska.
- 25 b. Letter from George E. Smith, Alaska Chapter of

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- 1 Associated General Contractors.
- 2 c. Letter from Robert L. Hardick, Anchorage Chamber
3 of Commerce.
- 4 d. Telegram from A. L. Swalling, Anchorage, Alaska
- 5 e. Telegram from J. A. Sproul, Pacific Gas & Electric Co.
- 6 f. Telegram from Richard L. Maullin, Chrm., Ca. State
7 Energy Commission.
- 8 g. Letter from Mrs. Jeanne Wilson, Pres., Greater
9 Fairbanks Chamber of Commerce.
- 10 h. Letter from George W. Easley, Pres. G.W. Easley
11 Co., to Senator Rader
- 12 i. Telegram from James T. Jefferson; James T. Jefferson
13 enterprises, Detroit, Michigan
- 14 22. Mailing list of invitations by Senator Rader's office.
- 15 23. Mailing list of invitations by Representative Gruening's
16 office.
- 17 24. Newspaper ads in Daily News Miner, Anchorage Times
18 and Daily News.
- 19 25. Report by Department of Natural Resources
- 20 26. Statutes relevant to sale of royalty gas.
- 21 27. Group of documents consisting of:
- 22 a. Telegram from Lynn Chrystal, Mayor of Valdez.
- 23 b. Telegram from Barney Neyring, Valdez
- 24 c. Telegram from C. W. Ellis, Valdez Airport Terminal
- 25 d. Telegram from James C. Manley

- 1 e. Telegram from Mr. and Mrs. Ervin Michael
2 f. Resolution of January 26, 1977, by Greater Anchorage
3 Chamber of Commerce
4 g. Telegram from Paul and Ellen Foster, Valdez
5 h. Letter from Mrs. Jeanne Wilson, President, Greater
6 Fairbanks Chamber of Commerce.
7 28. Federal Power Commission news release from Washington,
8 D.C., No. 22868, dated February 1, 1977
9 29. Federal Power Commission news release from Washington,
10 D.C., No. 22869, dated February 1, 1977
11 30. Letter of January 30, 1977 from Ruth A. M. Schmidt, Ph.D.
12 31. Letter and Resolution from John W. Pemberton, Clerk,
13 Alabama House of Representatives.
14 32. Letter of February 3, 1977 to Honorable Lowell Thomas, Jr.
15 from Evelyn Gandy, Lt. Governor, State of Mississippi
16 33. Letter of February 7, 1977 to Committees from Don Dickey,
17 President, Alaska State Chamber of Commerce.
18 34. Resolution No. 76-1117-13 by State of California State
19 Energy Resources Conservation and Development Commission
20 35. Letter of February 3, 1977 to Honorable John L. Rader
21 from K.E. Showalter of Sohio Pipe Line Company, enclosing
22 copy of letter of March 10, 1976 to Honorable John L.
23 Rader from C. E. Spahr of Sohio
24 36. Letter of February 7, 1977 to Senator John Rader from
25 Eric Eckholm of Anchorage, Alaska

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- 1 37. Telegram from Dave Rose, Chairman, Anchorage Assembly
2 38. Telegram from Doug Bechtel, President, Cordova
3 Chamber of Commerce
4 39. Telegram from Ron Moore, Levance Forsythe, Les Reynolds,
5 Richard J. Sears, John Berggren and Teri Young
6 40. Telegram from F. W. Catalano, President, Home Builders
7 Association of Alaska
8 41. Letter from Axel (Bud) Janson, Vice-Mayor, City of Cordova
9 42. Resolution of February 15, 1977, from Juneau Chamber of
10 Commerce
11 43. Telegram from Fairbanks Clinic, Abram H. Cannon, M.D.,
12 Gary L. Walkup, M.D., Glen W. Straatsma, M.D., James N.
13 Bertelson, M.D., H. James Jordan, M.D., Joseph M. Rebar,
14 M.D., Robert D. Hanek, M.D., Joseph K. Johnson., M.D. and
15 Donald A. Denneson, Administrator
16 44. Letter of February 8, 1977, together with attachments
17 to Honorable John Rader and Honorable Clark Gruening
18 from Michael C. Holland, Assistant to the Vice President,
19 El Paso Alaska Company
20
21
22
23
24
25

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2
1 FEBRUARY 1, 1977

2 SENATOR RADER: The Joint Committee will come to order. Some
3 of our people are not yet here. I have a communication
4 from Congressman Don Young which will be made an exhibit
5 but I did agree with him that I would read it to the
6 committee. Because it will be a part of the exhibit,
7 I thought I might go ahead and read it now even though
8 some of our committee members are not here.

9 (Whereupon Exhibit 4 was duly read
10 into the record)

11 SENATOR RADER: Exhibit 4 will be Congressman Young's letter.
12 Exhibit 5 is a Friends of the Earth communication.

13 SENATOR HUBER: Can we have theirs read to us, Mr. Chairman?

14 SENATOR RADER: We certainly can if you wish, sir. All
15 exhibits can be read if any member of the committee wants
16 to. I only read Congressman Young's because I agreed
17 with the Congressional Delegation that I would read
18 theirs.

19 SENATOR HUBER: I thought with the testimony coming up it
20 might be good to hear what some of the environmental
21 groups have got to say before we read it afterwards.
22 It might affect some of the questions that I want to ask
23 of some of the people that are testifying so I request
24 that it be read if it isn't too long.

25 SENATOR RADER: Exhibit 6 will be K M Associates' communication

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AGO 800530

1 dated January 27th addressed to me, with attachments.
2 Exhibit 7 will be a wire addressed to me from Alaska
3 Farmland International Energy Company dated January 31st.

4 SENATOR HUBER: What is the address on that, Senator?

5 SENATOR RADER: I have only Anchorage. I hand the exhibit
6 to Senator Huber, I'm not able to determine for certain
7 what it is.

8 SENATOR HUBER: May I look at it now?

9 SENATOR RADER: Certainly. Do we have any further exhibits?
10 Exhibit 8 is a copy of a letter from Robert C. Thomas
11 to Mr. Richard Maullin dated January 18.

12 (Whereupon Exhibits 4, 5, 6, 7, and
13 8 were duly marked)

14 SENATOR RADER: Any exhibits can be read although I do want
15 to -- frankly, some of these are quite lengthy. If it
16 looks like it is going to delay us too much, I'll leave
17 it up to the committee and we'll take some votes on it.
18 Otherwise though, if we have miscellaneous exhibits you
19 wish to read why we'll go ahead with that.

20 SENATOR HUBER: I would request, Senator, that we read the
21 one from the Friends of the Earth, which apparently is
22 quite short, and this telegram from Alaska Farmlands
23 that I have briefly skimmed over. I think it is very
24 pertinent and should be read.

25 SENATOR RADER: I'll ask Mr. Gruening if he would read it.

1 My voice is going to give out before I get through with
2 this.

3 SENATOR HUBER: It does, Mr. Chairman, it does tie in with
4 questions I asked about what groups were sold or had
5 chances to bid on it yesterday, and I think this is
6 quite important.

7 SENATOR RADER: I want to make only one point and that is
8 that we have a great number of out-of-town witnesses
9 here and matters which can be read by members later on,
10 unless it is pertinent I'd prefer to take our out-of-town
11 witnesses first and our written communications at the
12 end of the hearings. But, at your request, Senator,
13 we'll make an exception in this instance.

14 SENATOR HUBER: I would appreciate it if you would on those
15 because I think they'll affect the --

16 REP. GRUENING: Okay. Mr. Chairman, on the Friends of the
17 Earth statement, I think we'll have somebody reading
18 that later.

19 SENATOR RADER: Mr. Gruening informs me that someone will,
20 at a later date in the hearings, read the Friends of the
21 Earth statement.

22 SENATOR HUBER: In that case I will withdraw my request.

23 REP. GRUENING: All right.

24 REP. SWANSON: Mr. Chairman, will we also hear the letter
25 from Farmland Incorporated?

1 REP. GRUENING: I'm about to read that.

2 SENATOR RADER: Yes, Mr. Gruening is going to read that right
3 now.

4 (Whereupon Exhibit 7 was duly read
5 into the record)

6 SENATOR HUBER: Mr. Chairman?

7 MR. HUBER: Inasmuch as they -- in that telegram they did
8 mention certain communications between them and the
9 Department of Natural Resources which they said is the
10 reason for them taking this stand, I would request that
11 the committee, through you -- through the joint chairmen,
12 request from the Department of Natural Resources as a
13 part of our record, such correspondence. I mentioned
14 yesterday that there was a complete turndown in cor-
15 respondence from certain other companies too, so I would
16 request that you do request the Department of Natural
17 Resources their correspondence with Farmland, Inc. which
18 is mentioned in the telegram. Also, correspondence
19 with Wentworth and Signal Burma groups in regard to
20 purchases.

21 SENATOR RADER: Senator, we'll certainly consider that but
22 I don't want the committee at this time to be diverted
23 from the taking of testimony from persons who are out
24 of town. We'll have an opportunity after they leave.
25 We're going to have a hard time getting them into the

✓

1 schedule we've already proposed. I think your point is
2 well taken and we'll consider it at later times with your
3 permission.

4 SENATOR HUBER: Maybe, Mr. Chairman, if you'll bear with me
5 just a moment, it may be that the accusations these
6 people raise have absolutely no bearing whatsoever and
7 that they are not worthy of it but certainly by seeing
8 all of the record in the Department of Natural Resources,
9 in their letters and requests and in the answer to them
10 we'll be able to make our determination of it.

TELEGRAM

BCA ALASKA COMMUNICATIONS, INC.

PHONE: 586-6440

DUNEAU, ALASKA 99801

1977 JAN 28 PM 7 25

02036 NL ANCHORAGE ALASKA 51 01-28 0345P AST

EXHIBIT# 1

PMS SEN JOHN RADER

JUN - 1296

I URGE PROMPT CONSIDERATION AND APPROVAL OF THE ROYALTY GAS
CONTRACTS FACING THE LEGISLATURE
EXPEDITIOUS ACTION ON THE LEGISLATURES PART WOULD
ACCURATELY REFLECT THE VAST MAJORITY OF PUBLIC OPINION
ON THIS ISSUE IN THE STATE. IT WOULD ADDITIONALLY
HELP IN WASHINGTON THE CHANCES FOR APPROVAL OF AN ALL ALASKA
GAS PIPELINE.

MIKE GRAVEL USS

1977 JAN 28 PM 7 42

TELEGRAM

RCA ALASKA COMMUNICATIONS, INC.

PHONE: 586-6440

JUNEAU, ALASKA 99801

AAX

EXHIBIT # 2

IPMAFUB AHG

1-035734A023 01/28/77

ICS IPMNAWB WSH

SUSPECTED DUPLICATE

09027 GOVT NEWASHINGTON DC 460 01-28 710P EST

PMS HONORABLE JOHN RADER

PRESIDENT

1297

ALASKA STATE SENATE

POUCH V

JUNEAU AK 99811

I APPRECIATE YOUR REQUEST FOR MY VIEWS ON THE PROPOSED
CONTRACTS FOR THE SALE OF THE PRUDHOE ROYALTY GAS TO EL PASO,
SOUTHERN AND TENNECO.

AS YOU KNOW, LAST YEAR I URGED GOVERNOR HAMMOND TO NEGOTIATE
A SALE OF THE ROYALTY GAS FOR SEVERAL REASONS. I FELT THAT A
SALE WOULD CLEARLY ASSERT THE STATES RIGHT TO CONTROL THE GAS
AND WOULD, THEREFORE, PREVENT DEDICATION OF THE GAS TO
INTERSTATE COMMERCE. THAT ARGUMENT IS STILL VALID IN SPITE OF
THE AMENDMENT TO PUBLIC LAW 94-586, GIVING ALASKAS GAS SPECIAL

2.1
PROTECTIONS. I ALSO ASKED THE GOVERNOR TO SELL THE GAS FOR THE ADDITIONAL HELP SUCH A SALE WOULD BRING TO THE APPROVAL PROCESS IN WASHINGTON. THE ASSISTANCE SOUTHERN AND TENNECO CAN GIVE HAS ALREADY BEEN DEMONSTRATED IN WASHINGTON. THEY HAVE INTERVENED BEFORE THE FEDERAL POWER COMMISSION AND HAVE INITIATED CONTACTS WITH OTHER MEMBERS OF THE HOUSE AND SENATE. ALSO THE SALE REPRESENTS THE FIRST CONCRETE COMMITMENT OF GAS TO EITHER PROJECT AND, THEREFORE, AFFECTS THE ECONOMICS OF THE PROPOSALS.

SOME OF THE SPECIFIC CONTRACT PROVISIONS CAUSE ME SOME CONCERN, BUT, I FEEL THE CONTRACTS SHOULD BE APPROVED.

TO REJECT THE CONTRACTS NOW WOULD BE A SERIOUS BLOW TO THE ALL-ALASKA LINE. THOSE WHO FAVOR OTHER ROUTES WOULD SEIZE ON FAILURE TO APPROVE AND MAKE MUCH OF IT. THE COMPETITION BETWEEN THE PROPOSALS IS INTENSE AND WILL GROW MORE SO. I THINK THERE IS A GENERAL CONSENSUS IN THE STATE THAT THE ALL-ALASKA LINE IS PREFERABLE. IT WOULD PROVIDE BENEFITS TO MOST AREAS THAT WOULD BENEFIT FROM ANY OTHER LINE AND WOULD BENEFIT OTHER AREAS, AS WELL. THE ECONOMIC IMPACT ON THE STATE AND THE IMPACT ON STATE REVENUES IS GREATER FOR THE ALL-ALASKA LINE. REJECTION OF THESE CONTRACTS COULD STALL EFFORTS TO HAVE THAT LINE APPROVED.

ALSO, THERE IS SIMPLY NOT ENOUGH TIME TO RENEGOTIATE THE CONTRACTS. LAST YEAR THE CONGRESS ADOPTED LEGISLATION SETTING FORTH A TIMETABLE FOR APPROVAL. UNDER THAT LEGISLATION, THE INITIAL DECISION OF THE FPC ADMINISTRATIVE LAW JUDGE WILL BE ANNOUNCED BY FEBRUARY 1ST. THE FINAL COMMISSION DECISION WILL BE REACHED BY MAY. THE PRESIDENT MUST REACH A DECISION BY SEPTEMBER

1ST, ABSENT UNUSUAL CIRCUMSTANCES. THE CONGRESS WOULD THEN
HAVE 60 DAYS TO ACT ON THE PRESIDENTS PROPOSAL.

IN VIEW OF THE LENGTH OF TIME THAT WAS REQUIRED TO NEGOTIATE
THESE CONTRACTS, I DO NOT FEEL THAT WE CAN AFFORD TO DELAY FINAL
APPROVAL OF THE SALE. FURTHER NEGOTIATIONS WOULD RESULT IN NO
AGREEMENT UNTIL IT WAS TOO LATE TO BE OF ANY ASSISTANCE.

IN SUM, ALTHOUGH I HAVE CONCERNS ABOUT SOME PROVISIONS, I
FAVOR APPROVAL OF THE CONTRACTS. THEY ARE IN THE INTEREST OF THE
STATE AND ITS PEOPLE, IN MY OPINION.

PLEASE LET ME KNOW IF I CAN BE OF ANY ASSISTANCE.

TED STEVENS

UNITED STATES SENATOR

2240 EST

IPMAFUB AHG

IPMAFUB AHG

EFFECT OF ALASKA'S ROYALTY GAS ON NATURAL GAS SUPPLY:

TENNECO MARKET AREA (25 states)

Prudhoe Bay natural gas production rate is assumed to be
2.0 Bcf/day

Yearly Prudhoe Bay natural gas production 730 Bcf.

Royalty Share of Prudhoe Bay production = $1/8$ of 730 Bcf = 91.25 Bcf/Year

Tenneco Share of Royalty Gas = 50 % of 91.25 Bcf = 45.625 Bcf/year.

Tenneco Summary of Operating Data (from "Tenneco Statistics 1975")

Volume of Gas sold and transported: 1,634 Bcf
Volume of Gas purchased: 1,459 Bcf

Tenneco's share of 25-state gas market:
1,284 Bcf
9.9 %

Tenneco's share of royalty gas as a per cent of Tenneco's
share of 25-state gas market:

$$(45.625 \text{ Bcf/year} / 1,284 \text{ Bcf/year}) = 3.55 \%$$

Tenneco's share of royalty gas as a per cent of total
25-state gas consumption:

$$(45.625 \text{ Bcf/year} / 12,879 \text{ Bcf/year}) = 0.35 \%$$

Total U.S. Consumption of Natural Gas in 1975 (rounded): 19,000 Bcf

Yearly Royalty Gas Production as a percent of total U.S. Consumption:

$$(91.25 \text{ Bcf/year} / 19,000 \text{ Bcf/year}) = 0.48 \%$$

Yearly Prudhoe Bay gas production as a percent of total U.S.
Consumption:

$$(730 \text{ Bcf/year} / 19,000 \text{ Bcf/year}) = 3.84 \%$$

Note: Above calculations do not take into account shrinkage of
natural gas through transportation (e.g. 6% loss in liquefaction
and deliquification).

TABLE I

3.1

EFFECT OF ALASKA'S ROYALTY GAS ON NATURAL GAS SUPPLY:
TENNECO MARKET AREA

<u>STATE</u>	<u>1975 Consumption (Bcf)</u>	<u>Tenneco % Share of Market</u>	<u>Tenneco Share of Market (Bcf)**</u>	<u>Tenneco Royalty Gas Share of Market (%)***</u>
*Alabama	260	10	26	.36
Arkansas	270	41	42	4.03
Connecticut	64	46	29	1.63
Illinois	1130	16	181	.57
Indiana	488	41	44	4.03
Kentucky	208	13	27	.46
Louisiana	1376	41	413	4.03
Maine	2	91	2	3.23
Maryland	147	20	29	.71
Massachusetts	153	53	81	1.88
Michigan	902	6	54	.21
Minnesota	318	2	6	.07
*Mississippi	208	4	8	.14
N. Hampshire	8	72	6	2.55
New Jersey	279	6	17	.21
New York	571	27	154	.96
No. Dakota	26	21	5	.75
Ohio	951	21	200	.75
Pennsylvania	698	27	188	.96
Rhode Island	22	23	5	.82
*Tennessee	255	39	99	1.39
*Texas	3911	41	439	4.03
Virginia	123	20	25	.71
W. Virginia	172	19	33	.68
Wisconsin	367	14	51	.50
TOTAL 25 STATES	12,879	9.9	1284	.35

Notes to Table I:

- * indicates state will receive additional royalty gas supplies from Southern Natural Gas:

Alabama receives 66% of supply from Southern
Mississippi receives 13% of supply from Southern
Tennessee receives 8 % of supply from Southern
- ** Tenneco share of market expressed in Bcf was calculated by multiplying each state's 1975 consumption by Tenneco's percentage share of market (Source of these figures was Table II from "Why Tenneco", published by Tenneco). Minor inaccuracies may have occurred due to rounding.
- *** Figures for Tenneco Royalty Gas share of market assume equal distribution among states by relative share of consumption

Tenneco was chosen as an example of the impact of royalty gas commitment because original data was readily accessible. Figures for 1976 consumption among the states served by Southern Natural Gas indicate similar results. El Paso service area figures were not available.

The calculations indicate that the addition of Alaska's royalty gas to U.S. supply will increase total U.S. supply by less than 1/2 of one percent.

Prepared for House Special Committee on the Sale of Royalty Gas

TENNECO'S INTERSTATE NATURAL GAS PIPELINES

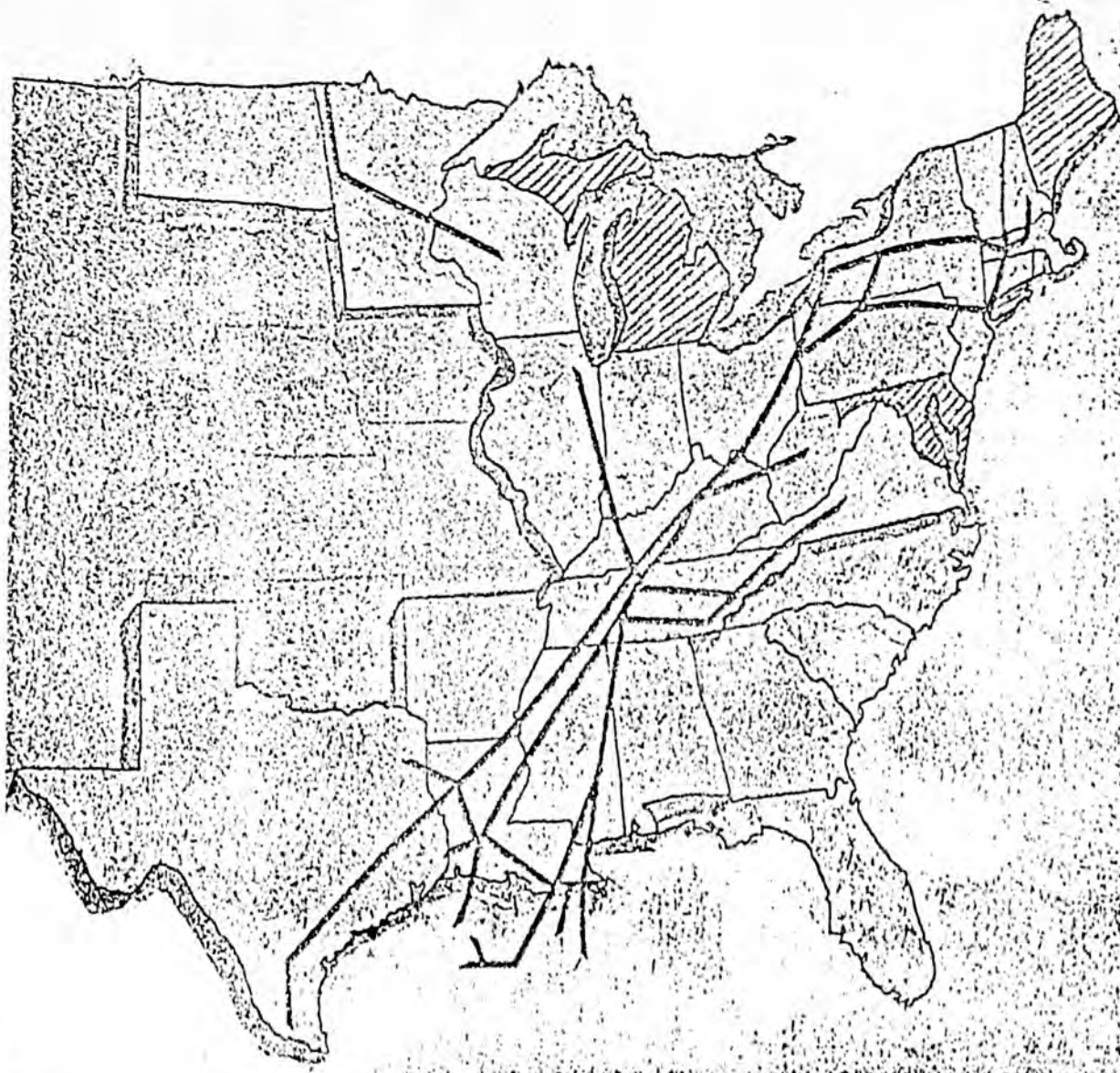
MARKET AREA

Market Impact

State	1975 ¹ Natural Gas Consumption (Bcf)	Tenneco's Share of Total State Gas Market	Population ²
Alabama	260	10%	3,577,000
Arkansas	270	<1	2,052,000
Connecticut	64	46	3,088,000
Illinois	1,130	16	11,131,000
Indiana	488	<1	5,330,000
Kentucky	208	13	3,357,000
Louisiana ³	1,376	<1	3,764,000
Maine ²	2	91	1,047,000
Maryland ²	147	20	4,094,000
Massachusetts	153	53	5,860,000
Michigan ²	902	6	9,098,000
Minnesota	318	2	3,917,000
Mississippi	208	4	2,324,000
New Hampshire	8	72	808,000
New Jersey	279	6	7,330,000
New York	571	27	18,111,000
North Dakota	26	21	637,000
Ohio	951	21	10,737,000
Pennsylvania	698	27	11,835,000
Rhode Island	22	23	937,000
Tennessee	225	39	4,129,000
Texas ³	3,911	<1	12,050,000
Virginia	123	20	4,908,000
West Virginia	172	19	1,791,000
Wisconsin	367	14	4,566,000
TOTAL	12,879		136,428,000

% of
United States 68% 65%

¹Gas consumption based on Gas Requirements Committee, September, 1976 Report. Population data based on 1975 Statistical Abstract of the United States.
²Served indirectly through another wholesaler.
³Louisiana provides 75% of Tenneco's gas. Texas provides 16%.



Source: "Why Tenneco" published by Tenneco
1976

DON YOUNG
CONGRESSMAN FOR ALL ALASKA

COMMITTEES:
INTERIOR AND INSULAR
AFFAIRS
MERCHANT MARINE AND
FISHERIES

Congress of the United States

House of Representatives

Washington, D.C. 20515

January 28, 1977

WASHINGTON OFFICE

1210 LONGWORTH BUILDING
TELEPHONE 202/225-5765

DISTRICT OFFICES

115 U.S. FEDERAL BUILDING
ANCHORAGE, ALASKA 99501
TELEPHONE 907/279-1587

202 U.S. FEDERAL BUILDING
FAIRBANKS, ALASKA 99701
TELEPHONE 907/456-6949

Exhibit 4

The Honorable John Rader
President, State Senate
Juneau, Alaska

Dear President Rader,

Thank you for your letter of January 13 requesting my views on the approval of the contracts for the sale of the State's royalty gas to Tenneco Alaska, Southern Natural Gas and El Paso Natural Gas. I welcome the opportunity to respond to these agreements and hope they will receive speedy approval by the legislature.

The sale of the State's royalty gas is a unique and highly significant element in the final decision for a route for the transportation of the North Slope natural gas to the lower fortyeight states. The difficult task of gaining first Congressional approval for Section 13(b) of the Alaska Natural Gas Transportation Act and later presidential approval for the Act will only be brought to fruition upon the successful sale of the State's royalty gas. I have reviewed the contracts at some length and would like to comment on several points contained in them.

I am impressed with the straightforward approach of the contracts. An acknowledgement of the State's desires and expectations to the purchasers of the gas will insure a well understood relationship between the parties. The people of Alaska can only benefit from this relationship.

Next, and this should be carefully considered by the Legislature, the price of the State's gas has not been established and will be subject to change by the Federal Power Commissions actions on the price of natural gas in the rest of the nation.

Overall, the protection of the State's interest is impressive throughout the contracts and is the basis for my support for the mechanics of the contracts.

The current natural gas shortages in the lower forty-eight states is firm evidence of the possible reconsideration of the comprehensive deregulation of natural gas by the Federal Power Commission and the Congress. The greater awareness of the Nation's reliance on natural gas as a result of the shortages will only heighten the controversy surrounding the selection of a route for the delivery of North Slope natural gas. Since the announcement of the sale of the State's royalty gas to Tenneco, Southern and El Paso, it has been my view that the deliberations might have been forced off center in favor of the an All-Alaska route with the entry into the lobbying effort of two more established natural gas distribution firms. With the addition of Tenneco and Southern, both of which distribute natural gas to the Southern United States, key members of the House and Senate can be convinced of the favorable aspects of the All-Alaska route and the direct benefits to their constituents. Greater National interest in the North Slope gas question can only improve the chances for the selection of an All-Alaska route.

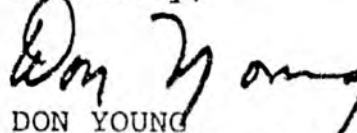
It is imperative that this effort not be jeopardized by lengthy discussions of the Legislature over the approval of these contracts. This is not to suggest that the Legislature should fail to carefully consider the proposed contracts. I would hope that upon examination of the contracts the Senate Special Royalty Gas Review Committee will conclude as I have that the sale should be approved and the Legislature will follow suit. If the joint efforts of the Congressional Delegation, the State and the people of Alaska are to meet with success, the existing momentum generated from the sale of the royalty gas should be allowed to continue.

One last point is of some importance to your consideration of the royalty gas sale. As you know, last Friday a gas treaty was signed between Canada and the United States. It is my hope that the U.S. will continue its good relations with Canada in this regard but one shouldn't reach false conclusions from the type of diplomatic exchange which is a part of our ongoing relationship with Canada. For example, the recent treaty which was signed by low-ranking officials of the State Department does not resolve critical questions which must be addressed should an overland pipeline be built through Canada. The questions of expanding the capacity of the line; the protection of U.S. equity in the line; the rate base; the Canadian native land claims; etc. have not been answered.

The two issues which we touched on in the treaty, the non-intervening of through-put and the non-discrimination of taxation are questions which in the long run will have to be answered by the Provinces and not by the U.S. All in all, the greatest obstacle to a Canadian pipeline is Canada and it is my hope that the Legislature will approve the contracts so that we can get on with it down here in Washington, and let the Canadians haggle among themselves.

Thank you for the opportunity to express my views on this important issue. I look forward to continuing my efforts to gain approval of an All-Alaska route for the natural gas line.

Sincerely,



DON YOUNG

Congressman For All Alaska

RUSSELL B. LONG, LA., CHAIRMAN

ARMAN E. TALMADGE, GA.
NCE HARTKE, IND.
ABRAHAM RIBICOFF, CONN.
BRY F. BYRD, JR., VA.
CLYDE NELSON, WIS.
VICTOR P. MONDALE, MINN.
MICHAEL GNAVELL, ALASKA
OTTO BENTSEN, TEX.
LESLAM D. HATHAWAY, MAINE
JOHN K. HASKELL, COLO.

CARL T. CURTIS, NEBR.
PAUL J. FANNIN, ARIZ.
CLIFFORD P. HANSEN, WYO.
ROBERT J. DOLE, KANS.
BOB PACKWOOD, OREG.
WILLIAM V. ROOTH, JR., DEL.
BILL BROCK, TENN.

United States Senate

COMMITTEE ON FINANCE
WASHINGTON, D.C. 20510

Exhibit 5

MICHAEL STERN, STAFF DIRECTOR
DONALD V. MOOREHEAD, CHIEF MINORITY COUNSEL

Honorable John Rader
Alaska State Senate
Pouch V
Juneau, Alaska 99811

Dear John:

Thank you for writing me on January 13 to solicit my views on (1) the proposed contracts for sale of Alaska State's royalty natural gas from the Prudhoe Bay field to Tenneco Alaska, Inc., El Paso Natural Gas Company and Southern Natural Gas Company, and (2) Senate Concurrent Resolutions Nos. 3-5, to approve these sales.

I find the contracts attractive in that they require the buyers to support a trans-Alaska route for a natural gas line from Prudhoe Bay, thereby building into the contract a strong incentive to work hard for such a line. In the event, however, than any other route is chosen and certified for gas from Prudhoe Bay, the Governor may terminate the contracts.

Furthermore, the provision whereby the State has the right to take back whatever gas it needs for in-State use is of obvious merit. This provision, I understand, includes the exchange of Prudhoe Bay gas for gas located elsewhere in Alaska if the exchanged gas is used in Alaska.

Commissioner Martin assures me that although the price provision in the contract is complex, the basic principle behind the term is simple: under all "reasonably foreseeable circumstances" the State will receive the highest price being paid for gas from the same reservoir and never less than would have been received had the State taken its royalty-in-value.

It also is possible under the contracts for the State, should the situation ever arise where it is advisable, to switch its position on the gas line route. If this occurred, the buyer may either terminate the contract or shift its support to the new route supported by the State.

5.1

page two

The contracts clearly recognize the Legislature's authority to approve or disapprove, as provided for in AS 38.06. The review and approval by the Legislature are both necessary and desirable actions.

Lastly, these contracts would see Alaskan gas potentially reaching consumers in 42 of the lower 48 states, since the three purchasers combined have markets in 42 states. This major concern, that Alaska's gas abundance reach as much of the rest of the United States as possible, cannot be overstated with my colleagues in the Congress.

I concur wholeheartedly in these contracts and in the Senate Concurrent Resolutions Nos. 3-5 and add my support to them all.

Thank you for the opportunity to express my views to you as Chairman of the Alaska Senate Special Royalty Gas Review Committee.

Sincerely,



Mike Gravel

cc: Honorable Clark Gruening
Chairman, House Special Committee
on Sale of Royalty Gas
Pouch V
Juneau, Alaska 99811

K M ASSOCIATES
Consultants
511 HEAVITREE LANE
SEVERNA PARK, MD. 21146

January 27, 1977

Exhibit ^d 6

Senate President John Rader
Alaska State Legislature
Pouch V
Juneau, Alaska, 99811

Dear Senator Rader:

Thank you for the invitation to testify before your Special Senate Royalty Gas Review Committee.

Westinghouse Electric Corp. has not been involved in any aspect of Alaska natural gas since mid-1976, but my consulting organization, KM Associates, is.

We do not now have adequately documented material sufficient for submission for the public record. We believe oral testimony, unsupported by data, is insufficient for your committee's purpose.

We do, however, feel the gas rights applicants have been less than candid about the pipeline proposals. Without intending any presumption, we ask the committee to find out several crucial details about the applicants' view of a new trans-Alaska gas pipeline. Specifically, we think well supported answers should be obtained for a number of questions which are contained in the attached list.

The questions are quite detailed and specific and, while the applicants may not be prepared for them, the applicants should have enough information to reply within a few weeks. The issues of a well defined market for the gas, a respectable wellhead value to the Alaska royalty gas and a supportable gas transmission cost estimate must be faced. Please pardon our scepticism about the applicants' plans but other applicants in other contexts (notably before the Canadian National Energy Board) have not been candid or straightforward.

We have been doing an intense study of the Prudhoe Bay associated gas issue and some of our observations will shortly be released in a brochure. We will forward this brochure to you as soon as it is available.

Although the entire story is not in on the gas pipeline proposals, a mounting collection of evidence suggests the pipelines

6.1

K M ASSOCIATES
Consultants
511 HEAVITREE LANE
BEVERNA PARK, MD. 21146

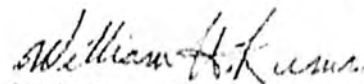
Senate President John Rader
January 27, 1977
Page 2

have very serious problems. We believe the wisest course for Alaska is to do nothing about gas rights sale at this time. We realize Alaska does not want to be steamrolled by the FPC and the lower 48 interests but the Alaska royalty share is protected somewhat from sequestration by PL 94-586. A more important point, perhaps, is that the pipelines are a very long way from being operational. Enclosed are some of the illustration from our forthcoming brochure.

We have also taken the liberty of advising Dr. Sullivan S. Marsden of Stanford University of your interest and the hearings. He is sending his material directly to you. His work is cited in the Department of Interior Environmental Impact Statement in the volume on "Alternatives to the Proposed Action", under "Alternative Transportation Systems", pages 123, 124.

Thank you for asking us to testify. When the needed study has been performed we would be happy to testify. It is to be hoped that the State will assist us in getting the study done and will not preclude the ALASKAN METHANOL APPROACH by precipitated action approving the sale of 1/8th of the gas to an as-yet-unbuilt gas pipeline.

Sincerely,


William H. Kumm
Principal
KM Associates

enclosures

WHK:agk

QUESTIONS FOR ROYALTY GASAPPLICANTS

January 1977

- 1) What is the expected cost of the entire gas transmission project in current dollars - including the North Slope gas processing plant, the pipeline, the liquification plant, the tankers, the lower 48 terminals and the re-gassification plant?

Allowing for interim capital charges, what is the ultimate "net base" investment expected?

- 3) What are the expected operating costs in current dollars?
- 4) What will be the planned offer price to the lower 48 distribution companies? That is, what "city gate" price will the distribution companies have to pay?
- 5) What is the projected price of non-Alaska gas in the projected sales period? Will North Slope gas be more or less costly?
- 6) If the applicants expect the North Slope supply to require a higher price than other lower 48 supplies of gas, how will the premium price gas fit into the regulated utility price structures?
- 7) What customer categories do the applicants expect to serve? Applicants need to identify year round base loads, in areas such as home heating, industrial process fuel, electric utilities, and petrochemical.
- 8) What is the applicants' estimate of the "netback" value of the North Slope gas? Will the use of the gas cap affect oil production? Will costs or charges be levied onto the gas cost structure if oil production is adversely affected by use of the gas cap?
- 9) If the FPC rules in favor of a non-trans-Alaska route, for the gas pipeline, what plans do the applicants have for disposal of their gas rights? Do the applicants propose to find an alternative to the gas pipeline? Would the applicants propose to retain their rights to the gas and ship it through the FPC certificated pipeline for separate lower 48 distribution?
- 10) Do the applicants plan to acquire other gas rights? What value do the applicants project for the non-Royalty gas?
- 11) What methods of finance do the applicants foresee for the trans-Alaska pipeline route? Can the applicants offer any guarantee that the trans-Alaska pipeline can be financed?

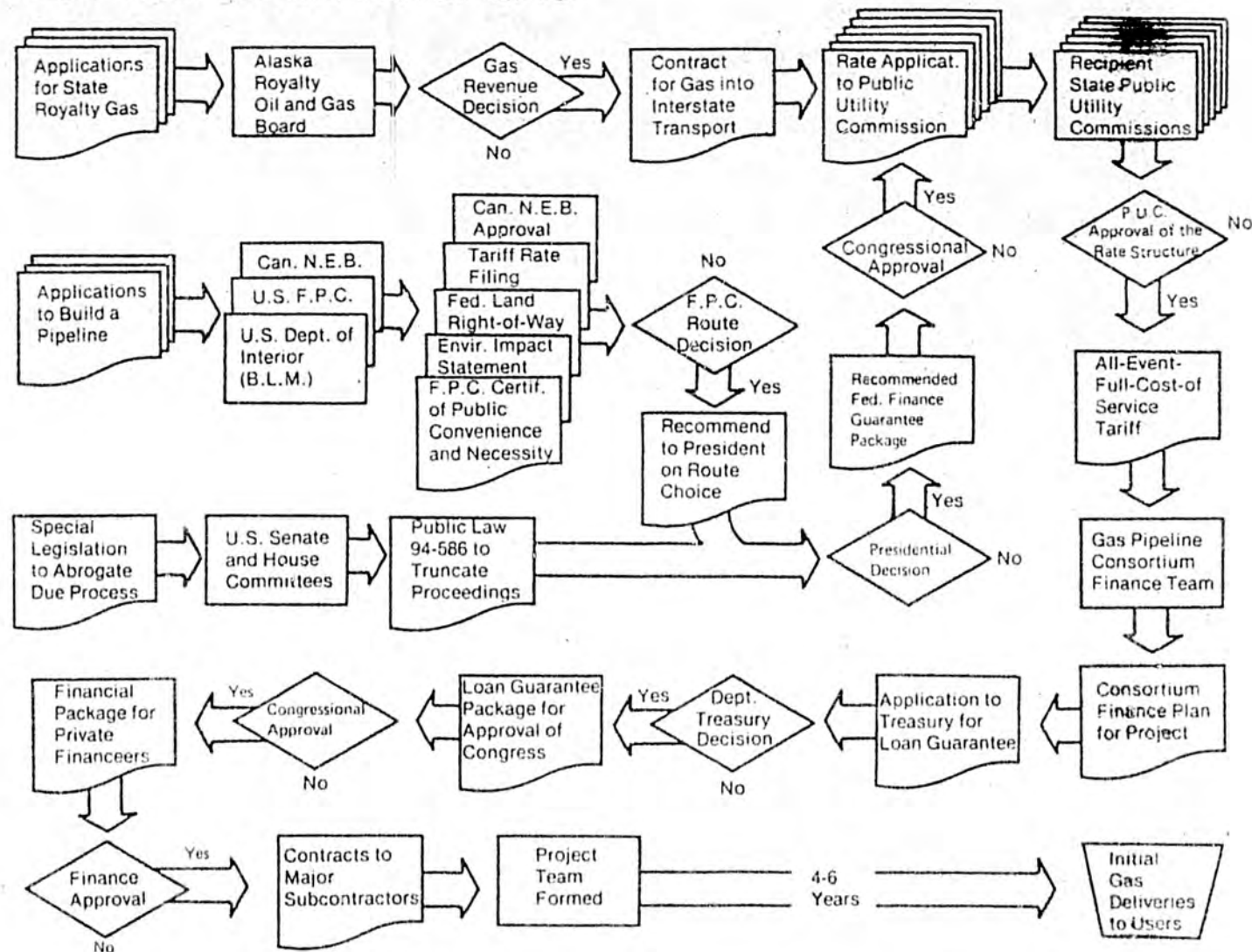
- 12) Do the applicants plan to request of the FPC an "all-events tariff"? That is, will payment floor guarantees be necessary or desirable?

THE ALASKAN
METHANOL
WAY

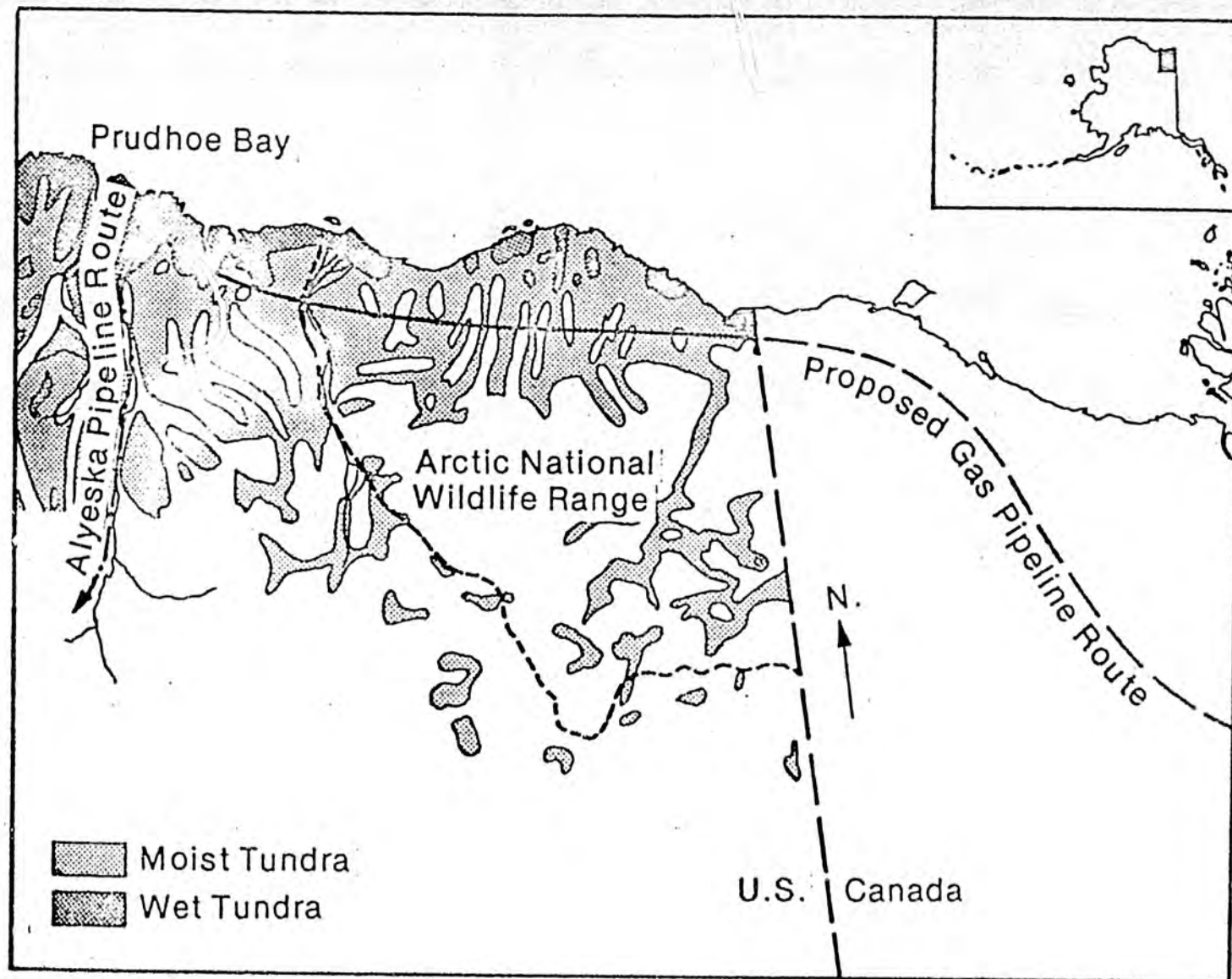
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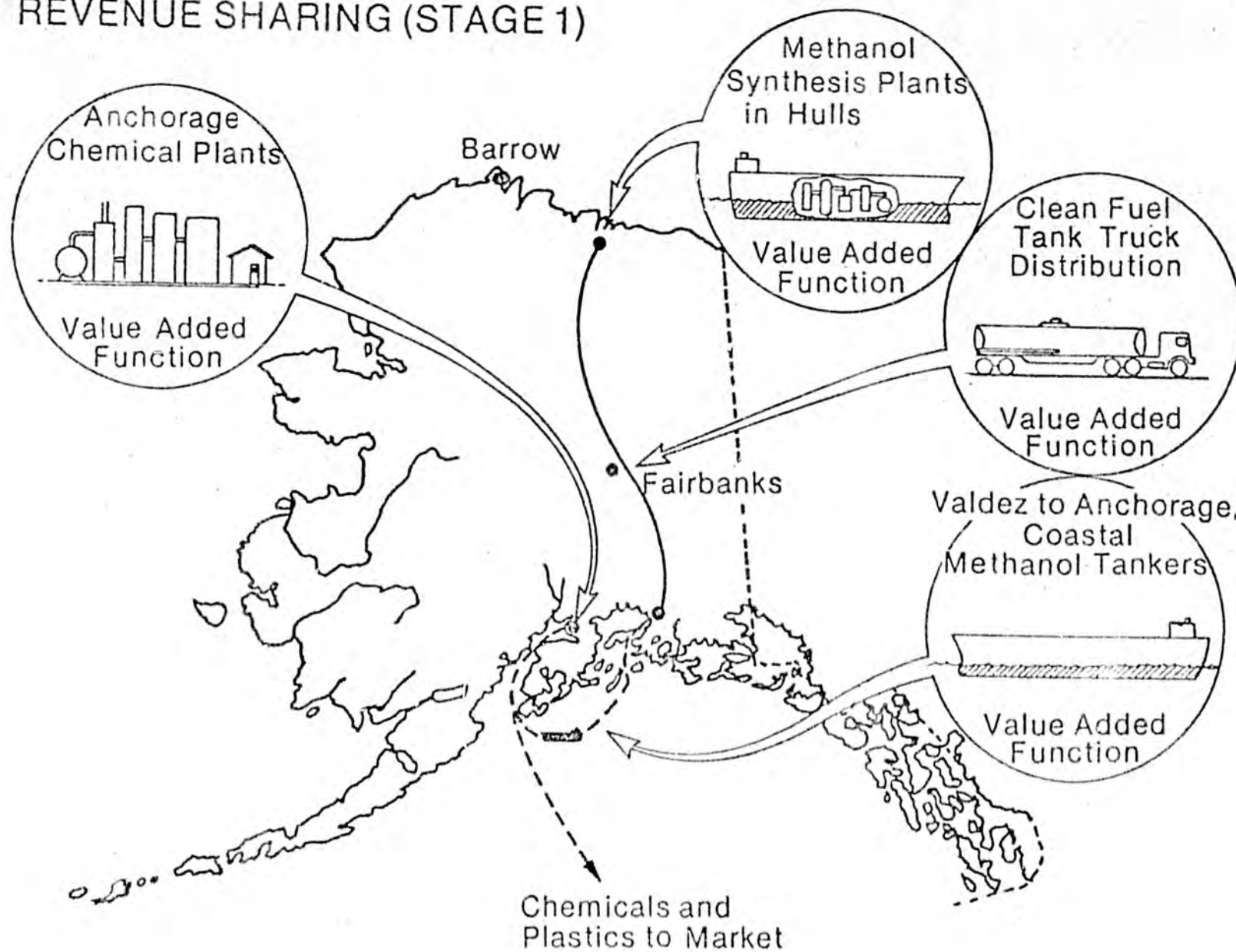
THROUGH THE MAZE WITH GAS



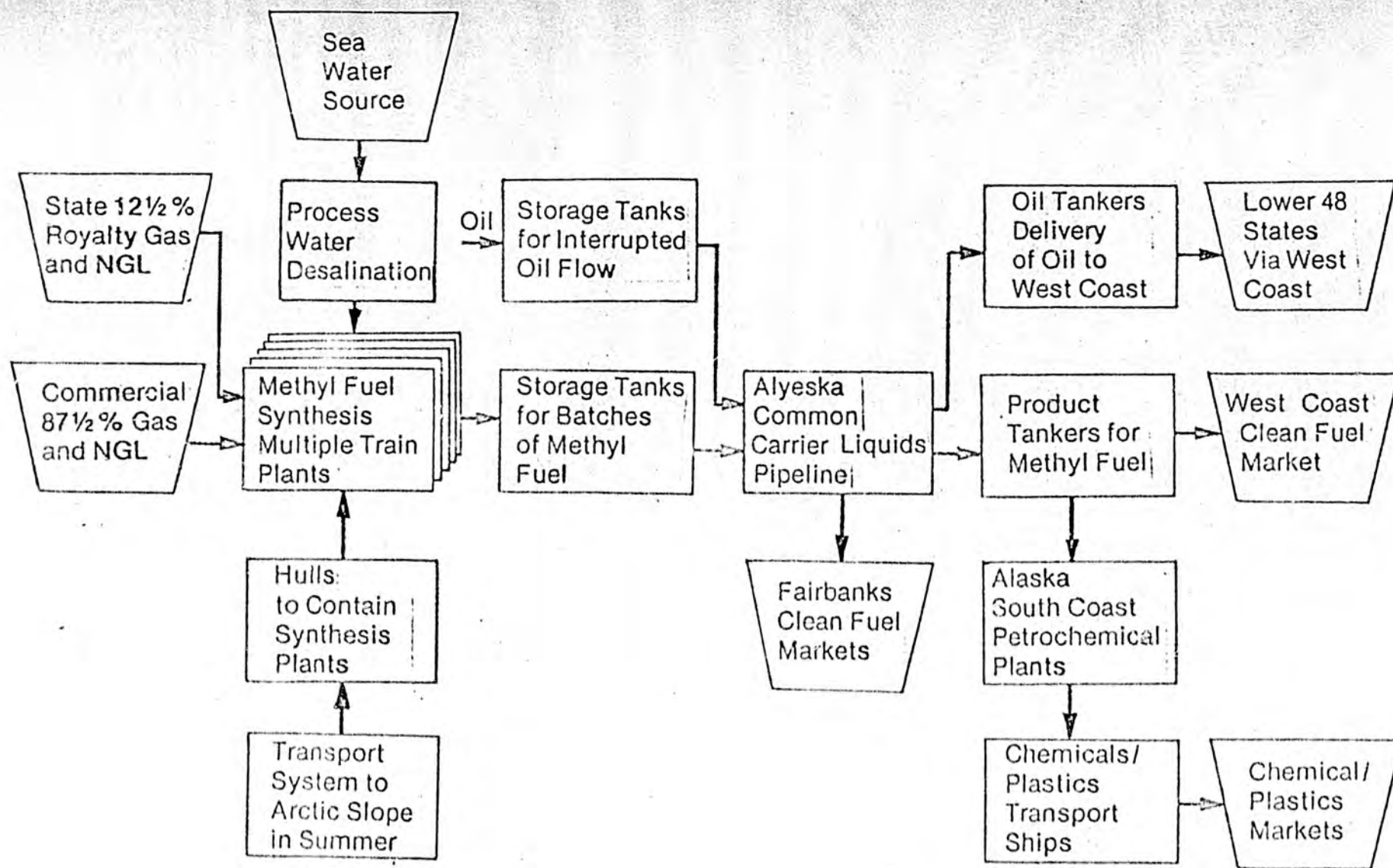
THE ENVIRONMENTALISTS LAST STAND



REVENUE SHARING (STAGE 1)



STAGE I SYSTEM ELEMENTS



THE IDEA

An Unmarketable Commodity |

- Solution Gas From Prudhoe Bay |

+ |

A People's Dilemma |

- Maximize Alaska's Royalty Oil and Gas Value |

+ |

Surplus Capacity |

- The Alyeska Liquids Pipeline |

+ |

Imagination |

= |

The Alaskan Methanol Way

TELEGRAM

RCA ALASKA COMMUNICATIONS, INC.
PHONE: 586-6440
JUNEAU, ALASKA 99801

EXHIBIT # 7

Alaska Farmland International
Energy Co.

1977 JAN 31 PM 9 37

02059 N. ANCHORAGE ALASKA 501 01-31 0540P AST

PMS SEN JOHN RADER .

POUCH V 1374

JUN

I WILL BE UNABLE TO ATTEND SENATE ROYALTY GAS
REVIEW HEARINGS TOMORROW. IT IS MY WISH HOWEVER,
TO CONVEY TO THE COMMITTEE SOME COMPANY AND
PERSONAL FEELINGS REGARDING THE THE CONDUCTANCE OF
NEGOTIATIONS IN OUR EFFORTS TO PURCHASE A PORTION
OF PRUDHOE BAY ROYALTY GAS. IT SHOULD BE MADE
CLEAR THAT FARMLAND INTERNATIONAL ENERGY CO.
OR THE PARENT COMPANY FARMLAND INDUSTRIES
INC. NO LONGER MAINTAIN AN INTEREST IN THE PURCHASE
OF THE ROYALTY GAS. REASONS FOR NO LONGER HOLDING
AN INTEREST SHOULD BE CLEAR IN DEPARTMENT OF NATURAL
RESOURCES CORRESPONDENCE ON THE MATTER. WHEREIN
WE EXPRESSED DISPLEASURE WITH THE MISLEADING
TACTICS ENCOUNTERED DURING THE COURSE OF OUR
ATTEMPT AT NEGOTIATIONS WITH HIGHLY PLACED OFFICIALS.
RESULTING IN THE PARENT COMPANIES DECISION NOT TO
PURSUE THE MATTER. AS FARMLANDS ALASKAN MANAGER
AND A CITIZEN OF ALASKA I HOLD PERSONAL FEELINGS

AGO 800558

ABOUT THE PROPOSED SALE OF ALL THE PRUDHOE BAY ROYALTY GAS TO 3 COMPANIES AS FOLLOWS; 1. I QUESTION UNDER WHAT AUTHORITY THE STATES NEGOTIATORS SELECTED THREE LARGE COMPANIES AND VIRTUALLY ELIMINATED EVERY OTHER PROPOSING COMPANY ON THE GROUNDS THAT THEY COULD NOT SHOW SUFFICIENT POLITICAL PROWESS TO QUALIFY OR THAT THEIR PROPOSALS WERE COMPLICATED THE ISSUE UNQUOTE. TO QUOTE COMMISSIONER MARTIN IN THAT THEY JIXED PROPOSALS TO DEVELOP INSTATE INDUSTRY AND PROVIDE GAS LINE SUPPORT WHEREAS, THE SELECTED THREE PROMISED SOLELY TO PROVIDE POLITICAL SUPPORT FOR A SYSTEM WHICH HAS NOT BEEN PROVEN TO BE IN THE BEST INTEREST OF ALASKA OR OF THE UNITED STATES OF AMERICA. 2. I QUESTION WHAT SUPPORTING MATERIAL WAS USED TO SEEK AN AMENDMENT TO THE ALASKA NATURAL GAS TRANSPORTATION ACT OF 1976 ALLOWING THE STATE TO RETAIN CONTROL OVER ITS ROYALTY GAS UNLIKE OTHER STATES. IT SEEMS UNLIKELY THAT A GAS SALE TO EXPORT 100 PER CENT OF THE GAS WOULD HAVE INFLUENCED THIS LEGISLATION, YET VERY LIKELY THAT PROPOSALS TO UTILIZE ROYALTY GAS OR A PORTION THEREOF WITHIN ALASKA WOULD HAVE BEEN EFFECTIVE AND MOST LIKELY WAS. 3. I QUESTION THAT POLITICAL CLOUT ALONE IS A SUFFICIENT REASON TO SELECT A BUYER COMPANY WHILE NUMEROUS INSTATE

USE PROPOSALS WERE THROWN OUT. VIRTUALLY ELIMINATION
THE POSSIBILITY OF ENTICING INDUSTRIAL DEVELOPMENT
THROUGH THE SALE OF ROYALTY GAS AND THAT FUTURE
ROYALTY GAS CAN BE COMMITTED TO A COMPANY BECAUSE
IT IS UNHAPPY WITH THE VOLUME INITIALLY COMMITTED
AND WITH THE STATES ABILITY TO RECALL THE GAS
FOR INSTATE USE. 4. I BELIEVE THAT DEPARTMENT OF
NATURAL RESOURCES DRAFT STIPULATIONS REGARDING
THE PRIVATE DEVELOPMENT OF INDUSTRY AS ADVANCED
TO ALASKA PETROLEUM COMPANY, AND TO FARMLAND FOR TWO,
ARE DESIGNED TO DISCOURAGE DEVELOPMENT IN ALASKA.
5. I BELIEVE THE SO CALLED QUOTE POLITICAL CLOUT
UNQUOTE WE ARE SUPPOSED TO RECEIVE IF THE GAS SALES
ARE APPROVED BY THE LEGISLATURE WILL SERVE MOSTLY
TO INSULT THE BASIC INTELLIGENCE OF OUR U S CONGRESS
AND WILL ALIENATE ALASKAS INTERESTS WITHIN THAT
BODY FOR MANY YEARS TO COME. 6. I BELIEVE HEARINGS
SHOULD BE CONDUCTED ON THIS MATTER IN BOTH FAIRBANKS
AND ANCHORAGE. RESPECTFULLY SUBMITTED.

CC LESLIE SWANSON

POUCH V

JUNEAU ALASKA

HALL GREEN

Tennessee Gas Transmission
A Tenneco Company

Tenneco Building
P.O. Box 2511
Houston, Texas 77001
(713) 229-2131



January 18, 1977

Exhibit # 8

Mr. Richard Maullin
Chairman
California Energy Resources Conservation
and Development Commission
1111 Howe Avenue
Sacramento, California 95825

Dear Mr. Chairman and Members of the Commission:

The purpose of this letter is to provide comments directed essentially toward Volume IV of your draft Biennial Report: "Alaskan Natural Gas: Criteria for Selection of a Transportation System."

Tennessee Gas Transmission and its sister company Tenneco Alaska, Inc. have not been an active participant in hearings leading to publication of your draft Biennial Report. We have, however, communicated with your staff concerning some issues discussed in the Report.

Recently Tenneco Alaska, Inc. signed an agreement with the State of Alaska to purchase a portion of the State's Prudhoe Bay royalty natural gas; a copy of that agreement is attached at Tab A. One term of that contract, which is presently being considered by the Alaska legislature, provides that we will support a transportation system for Prudhoe Bay gas involving a Trans-Alaska pipeline, a liquefaction facility in Southern Alaska, and trans-shipment to the lower 48 by LNG tanker. As provided in the agreement, we may lose the right to purchase Alaska's gas if that system is not selected.

Prior to signing that agreement, we were not committed to any of the three competing systems for transporting Alaskan natural gas to the lower 48 states. Before agreeing to support the Trans-Alaska transportation system our Company analyzed many of the same issues discussed in your draft Biennial Report for we risk the loss of our investment made in supporting the route if that route is not selected. We agreed to support that delivery system because we have concluded that it is more in the national interest of the United States than the two competing delivery systems and, for this reason, is more likely than either of them to be designated by the President pursuant to Section 7 of the Alaska Natural Gas Transportation Act of 1976.

In the following portions of this letter I will set forth, though necessarily in somewhat summary fashion, many of the considerations behind our conclusion that the Trans-Alaska delivery system has national interest advantages over the competing systems. I am hopeful these

AGO 800561

8.1

TENNESSEE GAS TRANSMISSION COMPANY

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comments will be useful to you not only in preparing your final Biennial Report but also in preparing comments to the President pursuant to Section 6 of the Alaska Natural Gas Transportation Act of 1976.

The criteria we applied in reaching our decision were essentially the same as those outlined on pages 9-10 of Part IV of your Biennial Report. Since we do not have customers in California, we were not directly concerned with your criteria 8 and 10; however, we recognize that these issues are appropriate for consideration by the State.

In addition to the criteria listed in your report, we also considered the following specific criteria:

- Future expansibility of the delivery system to accommodate new discoveries of Alaskan natural gas;
- Consistency of the delivery system with probable future U.S. energy policy.

To a degree we agree with the statement at page 9, Part IV, of the draft report that:

Given the difficulties in siting and regulating operations of liquefied natural gas (LNG) terminal facilities, El Paso's proposal to transport North Slope gas by pipeline to Southern Alaska and then to liquefy it and transport by ship in the form of LNG would place California in a position of unnecessarily high reliance on a form of gas delivery more appropriate for import projects for which there is no overland pipeline alternative.

The degree to which we agree is that if the proposed pipeline projects crossed only U.S. territory thereby eliminating the additional levels of governmental controls and regulations and if they did not give rise to serious native claims issues, we believe the pipeline delivery system proposed by Arctic Gas would be preferable to an LNG delivery system from a "national interest"--as opposed to a California or an Alaskan point of view, even though the Arctic Gas Route presents some very difficult environmental problems and some unique Arctic construction problems. For reasons discussed below, we do not have the same view of the Alcan route.

We believe, however, that it is not possible to ignore or minimize the significance of the fact that both of the competing pipeline proposals must transit a very significant portion of Canadian territory and that this fact gives rise to many serious questions concerning financability, timely completion, operating costs, and the expansibility of these projects. In fact, under the test quoted above, we seriously doubt that, as a practical matter, there is an available "over-land pipeline" alternative to the Trans-Alaska delivery system because legitimate and foreseeable Canadian interests

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will preclude approval and completion of a trans-Canada pipeline within the time frame within which Alaska gas must reach our lower 48 states if our national interests are to be served.

Our assessment of these issues has been made from the perspective of a company that is by no means anti-Canadian. We have substantial business interests in Canada, and we intend to maintain and, to the extent possible, further those interests. Moreover, we have the highest respect for the ability of Canadian leaders to reach and implement decisions that are in the interest of the Canadian people. It is precisely for these reasons, however, that we believe the Canadian government will not reach a decision within the near future (i.e., the next two years) to grant necessary permits for, and to allow the actual construction of either the proposed Arctic Gas pipeline (with or without a Western Leg) or the proposed Alcan pipeline.

The salient points of our analysis are as follows:

a. Neither of these projects is necessary to assure that projected Canadian demand for natural gas can be met by Canadian supply within the next five to seven years.

--- As recent testimony before the NEB reveals, there are substantial unconnected supplies of natural gas now available in Canada other than discoveries in the Mackenzie Delta. These supplies could be connected and delivered through existing delivery systems to markets in Canada.

--- Demand in Canada has not been increasing at previously projected rates. Prices have increased more in that country than in this country, which has had a dampening affect upon demand.

--- If interim supplemental supplies are necessary within approximately five to seven years, there are other alternatives available to Canadians. As an example, Tenneco LNG Inc. has contracted to land the equivalent of a billion cubic feet per day of Algerian LNG in New Brunswick of which up to 17% is available for Canadian consumption.

b. Available evidence indicates that reserves sufficient to sustain Canadian participation in a major pipeline project are likely to be proven in the Canadian Arctic Islands before they are proven in the Mackenzie Delta.

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- Current reserves discovered in the Arctic Islands total 15-16 Tcf. Threshold volumes sufficient to justify a pipeline market outlet range from 20 to 30 Tcf depending upon pipeline size and desired deliverability.
- Two new ventures have recently been consummated which will commit sufficient exploratory funds in the Arctic Islands to insure the discovery of threshold reserves. In the fall of 1976, Home Oil Company agreed to purchase \$30.5 million of Panarctic common stock with the funds to be allocated to exploration over a three-year period. The second venture involves a commitment by a consortium composed of Imperial, Gulf, Petro-Canada and Panarctic to spend \$80 million for Arctic Island exploration over the next five years. These new funds, combined with other monies destined for Arctic exploration, will support the activity level necessary to discover the reserves required to meet future Canadian demand plus the possibility of additional future exports to the U.S.

c. Approval and implementation of either the Arctic Gas or the Alcan project would have negative economic impacts in Canada which would not be off-set by economic advantages, at least in the absence of a strong Canadian demand for Mackenzie Delta gas. In any event there are insufficient proven reserves in the Mackenzie Delta to provide the daily deliverability required to justify the project.

- Canadian law and regulations require majority equity ownership of facilities located in Canada and that, to the extent possible, such facilities be built by Canadian materials and labor. Fulfillment of these requirements will preclude the implementation of any other substantial gas pipeline project in Canada for the next several years and could deny financing to other substantial public works, or energy-related projects in other parts of Canada during this same time period.
- Implementation of either of these projects will have an inflationary impact in Canada that will be nationwide.
- The primary benefits to be derived from these projects will be jobs and tax base in Western Canada, where unemployment is lower than in other parts of Canada and where per capita income is higher.
- The negative economic impacts of these projects will be felt primarily in Eastern Canada where there is higher unemployment, lower per capita income, a greater population,

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political division, and where a substantial portion of economic activity is devoted towards the manufacture of products for export, which activity is very directly and negatively impacted by inflation.

d. Legitimate native claims, socio-economic and environmental concerns expressed by many Canadian citizens will be voiced in the forthcoming Berger Commission report. The existence of this report, regardless of its conclusions, will make it difficult for the Canadian government to override these concerns and approve and allow the prompt implementation of either the Gas Arctic or Alcan projects without an extended period of debate.

--- All indications we see from Canadian news reports are to the effect that there is substantial opposition by the native peoples and by environmental and other groups in Canada to either the Arctic Gas or the Alcan projects.

--- While opposition to the Alcan project appears to be less than opposition to the Arctic Gas project, the benefits to Canada are much less from the Alcan project than from the Arctic Gas project because Alcan will supply no Canadian gas to Canadian markets.

e. The facts under paragraphs a through d provide the Canadian government an opportunity and sound reasons to delay at least two years the decision whether Mackenzie Delta gas or Canadian Arctic Island gas should be the next source of Canadian gas to bring to Canadian markets. Proposals that do not depend upon approval of the Arctic Gas or the Alcan project are on the drawing boards for both such projects--i.e., the Foothills project for Mackenzie Delta gas and the Polar Gas project for Canadian Arctic Island gas. Many complicated considerations will bear upon a Canadian decision as to which project should proceed first. It would not be in the Canadian government's interest to make a precipitous decision on that issue, which would be the case if they were to approve the Arctic Gas project or the Alcan project within the next year or two.

f. Other, more fruitful avenues of U.S.-Canadian cooperation are available than the Arctic Gas or Alcan projects.

--- Success in any jointly-approved and supported major energy project will be important to both the U.S. and the Canadian governments. For reasons discussed in this letter, both the Arctic Gas and the Alcan projects involve substantial risks of delay, financial difficulties, and of disputes over future expansibility and provincial taxes. Both the U.S. and Canadian federal governments will want to avoid disputes over these issues.

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- The most immediate prospect for successful cooperation is the Tenneco-Algerian LNG project which is the subject of filings before the NEB and FPC on December 20, 1976.
- The Polar Gas Project is also a possible avenue of successful U.S.-Canadian cooperation in the energy area. We expect that project to be the subject of a filing before the NEB in the last quarter of 1977.
- U.S.-Canadian cooperation may be required to implement a delivery system to take surplus West Coast oil to our Midwest.

A review of the submittals to the National Energy Board concerning the proposed Arctic pipelines reveals some divergence of opinion as to which route or if any proposed route is in the best interests of Canada. In the near future we will consider commissioning a study by a neutral, respected Canadian expert to assess the validity of the points made under paragraphs a through d above and to determine the probable net economic benefits to the Canadian economy and the various geographical areas of Canada of the various alternatives available to Canada. If such a study should reveal that it is not in the national interest of Canada to grant the necessary approvals and allow implementation to begin for either the Arctic Gas or the Alcan projects within the next two years, we believe that these projects should not be considered by U.S. authorities as practical alternatives to a Trans-Alaska LNG system for delivering Prudhoe Bay gas to the lower 48 consistent with United States' national interest. The supply/demand picture in the lower 48 states requires the promptest practical delivery of Prudhoe Bay gas to our markets. The critical shortage of domestic natural gas supply existing today due to the extremely cold and prolonged weather east of the Rockies has highlighted these requirements.

We believe the following considerations also support the conclusion that the Trans-Alaska delivery system is in the national interest and will be approved by the President.

i. Once construction starts, timely completion of the Trans-Alaska system is more reliable than timely completion of either of the other projects. Risks of construction delays for the Arctic Gas project are substantially greater than they are for the Trans-Alaska project, as revealed by Department of Interior reports. Both Arctic Gas and Alcan face purely internal Canadian issues, such as native claims. As your report so appropriately points out beginning at page 11 of Part IV, decision makers must consider the probable completion date, rather than the date when permits are granted, in determining what project is in the national interest.

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ii. The Trans-Alaska project will create more U.S. jobs and generate more U.S. taxes than either of the competing systems.

iii. The Trans-Alaska system can much more readily be financed for the reasons cogently set forth in the December 16, 1976, summary brief of El Paso filed in the FPC proceedings (CP76-96, et al) at pages 13 to 16. This is a matter of extremely great practical and political significance as reflected by Section 7 of the Alaska Natural Gas Transportation Act. It would be a serious mistake to believe that these financing problems will not materially delay both the Alcan and Arctic Gas pipeline routes after necessary governmental approvals for the project have been obtained.

iv. Present information indicates to us that the Canadian government may not reach a decision on this issue prior to the end of 1978, while the Alaska Natural Gas Transportation Act requires a decision from the President no later than the end of 1977. Arctic Gas Pipeline indicated in mid-December, 1976, that final government approval of the project could not be expected before April 15, 1978.

v. If the U.S. government takes action to reject as a practical matter the Trans-Alaska delivery system before the government of Canada has taken all necessary steps to assure that it will grant permits for and allow the promptest practicable completion of one of the competing pipeline alternatives, the United States will be subject to a serious bargaining disadvantage vis-a-vis the Canadian government. The Canadian government's responsibility is to its citizens, and this responsibility will require it to take advantage of its bargaining position.

vi. Because onshore and offshore Alaska will be the most prolific area of exploration for energy in the lower 48 states during the next 20 to 30 years, national policy should favor the development of delivery systems to take that energy (oil and gas) from the West Coast to other parts of the United States. (Existing delivery systems from the Gulf Coast to the West, East and Midwest reflect the fact that the Gulf Coast has been our major source of energy supply.) Natural gas will probably be found in substantial quantities in various parts of Alaska, onshore and offshore. West Coast LNG facilities will facilitate delivery of this gas to the Eastern part of our nation. They will also facilitate the importation of LNG from Indonesia and Latin America as natural gas in those areas becomes available for our markets.

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vii. There will be substantial U.S. opposition to the Arctic Gas proposal because of its impact upon the Arctic Natural Wildlife Range. This opposition can take many forms and can delay timely completion of that project, even if it is approved. The prospect of such delay will be a major factor in any decision looking toward the promptest practicable implementation of a delivery system from Prudhoe Bay gas.

viii. Close scrutiny reveals, as reflected in the Staff report of the FPC, that the Alcan project offers no substantial economic or environmental benefits to the U.S. compared to the Trans-Alaska project. In fact, it is economically inferior to the Trans-Alaskan route and involves serious environmental and conservation problems that are avoided by that route. It requires many more miles of pipeline and, therefore, many more real, non-renewable resources than either of the other projects. It also involves substantial risks that the project will not be able to be expanded to accommodate future discoveries of Alaskan gas. Moreover, as mentioned, since the project offers very few benefits to the Canadian nation and several detriments, its approval and implementation is highly improbable. Its apparent attractiveness is that it is a "compromise" between two vigorously competing projects. But the real interests involved in the selection of a delivery system for Alaska gas are so important that it is unlikely that this quality alone will justify approval of the Alcan route.

We hope these comments are useful to you. We would be happy to meet with you or your staff to discuss them in more detail.

Very truly yours,

TENNESSEE GAS TRANSMISSION COMPANY

Robert C. Thomas
Senior Vice President

RCT:kl

Attachment

Exhibit 9

SECURITIES AND EXCHANGE COMMISSION
Washington, D. C. 20549

Form 8

AMENDMENT TO APPLICATION OR REPORT

Filed pursuant to Section 12, 13 or 15(d) of the
Securities Exchange Act of 1934

For the Month of January 1976

Tenneco Inc.
P. O. Box 2511
Houston, Texas 77001

AGD 800569

9.1

SECURITIES AND EXCHANGE COMMISSION
Washington, D. C. 20549

FORM 8

AMENDMENT TO APPLICATION OR REPORT
Filed pursuant to Section 12, 13 or 15(d)

of

THE SECURITIES EXCHANGE ACT OF 1934

TENNECO INC.

(Exact name of registrant as specified in charter)

AMENDMENT NO. 1

The undersigned registrant hereby amends its Current Report on Form 8-K for the month of January 1976 by providing information for the following item as set forth in the pages attached hereto:

ITEM 13

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this amendment to be signed on its behalf by the undersigned, thereunto duly authorized.

TENNECO INC.

By EDWARD J. HARRISON
Edward J. Harrison
Senior Vice President and
General Counsel

Date: February 13, 1976

Item 13. Other Materially Important Events

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In March 1975 the management and the Audit Committee (composed of four outside directors) of Tenneco Inc. reviewed certain payments to foreign business consultants during 1974 in connection with the acquisition or proposed acquisition of properties or materials from foreign governments or agencies thereof. It was concluded at such time that the payments were for valid business purposes and that there was no indication the payments were illegal or improper. Accordingly, no action was taken. Later in 1975, however, the matter was reconsidered by management because of the publicity concerning the new and emerging concept of "sensitive payments" and the concern expressed by various Securities and Exchange Commission (the "Commission") representatives with respect thereto. At a meeting in October 1975 the Audit Committee, with the concurrence of the full Board of Directors, determined that in light of the information presented at the meeting concerning such 1974 payments and the recent publicity concerning foreign and domestic bribes and political activities of an illegal or questionable nature by other corporations, management should undertake at once a full and complete review of the Company's foreign and domestic operations. Tenneco Inc. and its subsidiaries are hereinafter referred to as the "Company" unless otherwise indicated. The Audit Committee authorized Arthur Andersen & Co., the Company's independent public accountants, and Baker & Botts, the Company's outside legal counsel, to assist in such review. The Commission was promptly advised that, in compliance with the Commission's publicly enunciated and recommended voluntary disclosure program, the review was being made for the period beginning January 1, 1970 and that a report to the Audit Committee and to the Commission would be made as promptly as practicable.

The review has been conducted by representatives of Arthur Andersen & Co. and Baker & Botts, with the active assistance and cooperation of the Company's management. Interim reports by such representatives to the staff of the Commission were made on October 30, and December 18, 1975 and January 20, 1976. Reports to the Audit Committee, and to the full Board of Directors, were made on December 10, 1975 and January 7, 1976.

Information was obtained through written inquiries and personal interviews of executive personnel and other employees of the Company and of certain foreign consultants. Approximately seventy-five such persons have been contracted in one manner or the other, or both. Although no pattern of improper or questionable conduct was revealed either in foreign or domestic operations reviewed at the direction of the Audit Committee, there have been reports of apparently improper or questionable practices in certain instances.

The Company uses numerous local attorneys, advisers, consultants and agents in connection with certain of its foreign operations in approximately 24 countries. These individuals are independent businessmen, many of whom have written contracts with the Company relating to specific countries or areas or to specific projects. During the period January 1, 1970 through September 30, 1975, the Company made or accrued payments aggregating approximately \$12 million to such persons (or entities designated by them). Although it is not feasible to state with substantial certainty that none of the payments during such period, other than those described in the following paragraph, were indirectly for the

use or benefit of employees of foreign governments or agencies thereof, the investigation did not reveal the existence of any other payments to foreign government employees or military personnel or that any such payments were being "kicked back" to the Company or its employees or used to create a "slush fund" of any kind. However, in some cases the payments are made to the consultant or his nominee outside the country of his residence and verification of the end use of the payments is not feasible. The question of whether local laws of the countries involved are being violated by making such payments to the consultant or his nominee outside the country of his residence is being reviewed and will be reported to the Audit Committee.

Of the payments reviewed for such period, (i) \$10,000 is known to have been paid to a foreign government employee, (ii) \$25,000 is known to have been invested in a U.S. concern in which one or more foreign government employees probably have a beneficial interest, (iii) approximately \$500,000 was paid to the military and to certain military personnel in a foreign country for protection of a subsidiary's employees working in remote, dangerous locations and for rental of military aircraft and related equipment and (iv) a local sales manager of a subsidiary purchased in 1975 out of the subsidiary's petty cash fund merchandise valued at approximately \$480 and gave same to three employees or officials of a foreign government purchasing office or agency to which the subsidiary was selling equipment. The two payments totaling \$10,000 were improperly described on the books of the Company and may have been improperly deducted for U.S. income tax purposes. The \$25,000 investment is properly described on the books of the Company. The payments totaling \$500,000 for military protection and equipment were properly described on the Company's books and are considered properly deductible for U.S. income tax purposes because of the absolute necessity of military protection in that particular country. The \$480 payment was not correctly described on the Company's books.

In connection with negotiations involving proposed long-term, multi-billion dollar purchases of raw materials from certain countries, consultants have contractual commitments to receive from the Company additional sums aggregating up to approximately \$12.0 million (subject to adjustments, not presently subject to determination, under certain circumstances because of fluctuating currency exchange rates) plus out-of-pocket expenses upon successful conclusion of all phases of such arrangements.

Under contractual arrangements in four countries, the Company has made scholarship payments from time to time aggregating \$330,000 for the five years and nine months ended September 30, 1975.

In connection with certain sales of products through independent dealers in foreign countries, the Company follows the practice, where requested by such dealers, of withholding all or a portion of the dealer's commission as an account payable to the dealer or of paying all or a portion of the dealer's commission to a bank account outside the country in which the dealer resides. Such deposits are made by check directly to the dealer's designated bank account. Commissions not paid by check are either disbursed in cash or by credit

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against amounts due the Company. The payments are properly described on the Company's books and the Company's tax returns. The question of whether local laws of the countries involved are being violated is being reviewed and will be reported to the Audit Committee.

The Audit Committee of the Board of Directors has directed management of the Company to formulate procedures and policies to eliminate possible irregularities in connection with foreign operations and to present such procedures and policies to the Audit Committee and the Board of Directors for review, comment and approval. Thereafter, management will be charged with the responsibility, through internal audit procedures and such other techniques as may be deemed reasonably necessary (including disciplinary action, and, where appropriate, dismissal for violations), of insuring compliance with such procedures and policies on a company-wide basis. In this connection, and in addition to broader policy statements to be enunciated with respect to U.S. and foreign business operations in general, management intends to recommend the affirmation of substantially the following policy regarding payments which may be made in any country in connection with the purchases of products or raw materials or the sale of products or services:

"The Board of Directors and management of Tenneco Inc., having due regard for and recognition of the responsibilities arising from and attendant to international operations, hereby affirm the corporate policy of Tenneco Inc., its subsidiaries and divisions to the effect that all employees and agents are to comply with the ethical standards and legal requirements of each foreign country in which business is conducted."

Commencing in 1966 or 1967 many high-level executives of the Company made annual cash contributions of \$2,000 each to a fund to be used for political contributions. It is reported that approximately twenty executives made contributions each year and that the fund did not exceed \$40,000 in any one year. It is reported that this fund was discontinued after 1973. Under applicable Federal law, the legality of the fund turns primarily on "voluntariness". If there was direct or indirect coercion or inducement, whether in terms of advancement or company cars or other job perquisites, the fund would probably be deemed illegal. "Voluntariness" is a subjective determination by each individual participant, and most participants would probably state that their contributions were made voluntarily. For this reason, it is believed that the establishment of the fund did not violate Federal law.

Another employee fund was established at the Newport News Shipbuilding subsidiary before it was acquired by the Company in 1968. Cash contributions were made to the fund by high-level executives of the subsidiary. It is believed that contributions were made only once in the aggregate amount of approximately \$10,000. The fund presently has a balance of \$2,370 and is in the custody of the subsidiary's general counsel. Disbursements from the fund were made at the direction of the President of the subsidiary. The establishment of the fund is considered to comply with applicable Federal law on the basis that contributions were made voluntarily.

Recipients of campaign contributions from the Company's executive fund are believed to have been generally

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determined by the chief executive officer of the Company. During the fund's existence from 1966 or 1967 until 1973, campaign contributions were made in Federal elections and in state and local elections. It is believed that contributions in state and local elections were made primarily in Texas and Louisiana. Contributions from a voluntary employee fund are specifically permitted by Federal election law and the Supreme Court has held that such voluntary employee funds were permissible prior to enactment of such election law. It is believed that such contributions are also permissible under Texas and Louisiana law, although no specific statutory authority exists, because of analogous Federal judicial precedent exempting voluntary employee funds and the intent of the law to prohibit only contributions of corporate money.

Contributions were made from the Newport News Shipbuilding employee fund in one Federal election and various state and local elections in Virginia. The contribution to the Federal election is believed to comply with Federal election law on the basis that the contribution was made from a voluntary employee fund. The state and local contributions are likewise believed to be permissible. In any event, state and local corporate contributions are permitted by Virginia law.

During the period from January 1, 1970 through December 1, 1975, three subsidiaries, Tenneco West, Inc., Heggblade-Marguleas-Tenneco Inc. and Stockdale Development Corporation, made campaign contributions in California elections aggregating approximately \$180,000. State and local corporate campaign contributions are permissible under California law.

It has been reported that since 1970 two corporate campaign contributions of \$100 each were made by local sales managers of a subsidiary, J. I. Case, in connection with state or local elections in Rhode Island and Florida, in both of which states corporate campaign contributions in state and local elections are believed to be permissible. In one or, perhaps, both of such cases, the contribution was not correctly described on the subsidiary's books and/or was improperly deducted for tax purposes.

Beginning prior to 1970 and continuing until August 1972, it is reported that cash amounts ranging from \$200 to \$2,000 were given on several occasions by the President of a subsidiary, Midwestern Gas Transmission Company, to state public utility commission chairmen in Indiana, Illinois, Kentucky and Wisconsin. The subsidiary officer states that the money was understood to be given in turn by the recipients to various charitable projects of their choice. In 1972 the same subsidiary officer gave \$2,000 in cash to the chairman of the Pennsylvania Public Utility Commission. The officer states that the Pennsylvania chairman requested the money for use as a contribution to a charitable dinner in Washington, D.C., honoring a U.S. Senator from Pennsylvania. The money was given to the Pennsylvania chairman several months after the dinner, and the Pennsylvania chairman states that the money was applied as a reimbursement of his contribution to the dinner. Two other employees of the Company state that they believe or had heard that the money was given to the Pennsylvania chairman to obtain his influence with the head of the General Services Administration, which was participating as an

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intervenor in a Federal Power Commission regulatory proceeding, Rate Proceeding 71-6, to which a Company division, Tennessee Gas Pipeline, was a party. The subsidiary officer who delivered the payment and the Pennsylvania chairman deny that this payment had any connection with such proceeding. The money was given to the Pennsylvania chairman several months after the regulatory proceeding had been ultimately resolved in a manner favorable to the division. The Company's executive fund may have been the source of these payments, although this has not been clearly determined since there are no records of disbursements from the fund and the recollections of the subsidiary President and the administrator of the fund differ.

Beginning on October 27, 1970, and continuing until September 1975, a subsidiary, Tenneco Oil Company, made payments of \$2,000 per month to the sheriff of a Louisiana parish who is also an attorney. There are conflicting statements regarding the reason or reasons for the payments. The payments were approved by senior management of the subsidiary, but there is no evidence that the Board of Directors or high-level management of Tenneco Inc. were aware of the arrangement. The sheriff is presently under investigation by officials of the U.S. Department of Justice, and the Company does not believe that it would be appropriate to comment further about the matter pending resolution of such Federal investigation.

In June 1970, a \$2,000 cash campaign contribution was made to a State District Judge in Louisiana for use in his race for a Louisiana appellate court seat. Approximately eighteen months prior to the contribution, the Judge had granted an injunction against violence on the picket line in connection with a union strike at the plant of a Company subsidiary, Tenneco Oil Company. Approximately two months after the contribution was made, the union filed a motion to dissolve the injunction, which was denied by the Judge in late 1970. The \$2,000 was given to the Judge by a local employee of the subsidiary. The payment was approved by senior management of the subsidiary, but there is no evidence that the Board of Directors or high-level management of Tenneco Inc. were aware of this payment. The money probably came from either the personal funds of an officer of the subsidiary or the Company's executive fund, and not from corporate funds. It is believed that the campaign contribution did not violate the Louisiana prohibition against corporate contributions which was then in effect because the money probably did not come from corporate funds.

In 1972 contributions of \$1,000 each were made by a subsidiary, Tenneco Oil Company, to two Louisiana District Judges and a Louisiana District Attorney who were running for re-election, all in the same parish. The contributions were made in cash by an employee from the subsidiary's working fund account. The payments were incorrectly described on the subsidiary's books and improperly deducted for tax purposes. The contributions were approved by senior management of the subsidiary, but there is no evidence that the Board of Directors or high-level management of Tenneco Inc. were aware of the payments. The contributions violated the then existing Louisiana prohibition against corporate campaign contributions.

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Tenneco proposes to turn over to the Internal Revenue Service the relevant information relating to the foregoing matters and to amend tax returns and make additional payments where appropriate. It is not considered at this time that material income tax deficiencies will result.

At its meeting in October 1975 the Audit Committee of the Board of Directors approved and adopted the following policy statements:

1. The use of assets of the Company or any subsidiary for any unlawful or improper purpose is strictly prohibited;
2. No undisclosed or unrecorded fund or asset of the Company or any subsidiary shall be established for any purpose;
3. No false or artificial entries shall be made in the books and records of the Company or its subsidiaries for any reason, and no employee shall engage in any arrangement that results in such prohibited act;
4. No payment on behalf of the Company or any of its subsidiaries shall be approved or made with the intention or understanding that any part of such payment is to be used for any purpose other than that described by the documents supporting the payment;
5. Any employee having information or knowledge of any unrecorded fund or asset or any prohibited act shall promptly report such matter to the chief executive officer or general counsel of Tenneco Inc.;
6. All executive officers of the Company shall be responsible for the enforcement of and compliance with this policy including necessary distribution to ensure employee knowledge and compliance;
7. Appropriate officers and employees will periodically be required to certify compliance with this policy; and
8. This policy is applicable to Tenneco Inc. and all its domestic and foreign subsidiaries.

The Audit Committee has also directed management to implement procedures for insuring compliance with such policies and to report to the Audit Committee and to the Board of Directors with respect thereto. Following such report and review thereof by the Board of Directors of the Company, a definitive statement of such policies and procedures will be distributed on a company-wide basis.

The matters described herein have been voluntarily disclosed by the Company, and the Company has advised the staff of the Commission that its documents, books and records relating to the investigation ordered by the Audit Committee will be made available at the Company's offices for examination by the staff of the Commission upon request.

In keeping with the practice of other companies reporting matters of the type described herein, the Company

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SECURITIES AND EXCHANGE COMMISSION
Washington, D. C. 20549

Form 8

AMENDMENT TO APPLICATION OR REPORT

Filed pursuant to Section 12, 13 or 15(d) of the
Securities Exchange Act of 1934

For the Month of January 1976

Tenneco Inc.
P. O. Box 2511
Houston, Texas 77001

AGO 800577

9.9

SECURITIES AND EXCHANGE COMMISSION
Washington, D. C. 20549

FORM 8

AMENDMENT TO APPLICATION OR REPORT

Filed pursuant to Section 12, 13 or 15(d)

of

THE SECURITIES EXCHANGE ACT OF 1934

TENNECO INC.

(Exact name of registrant as specified in charter)

AMENDMENT NO. 2

The undersigned registrant hereby amends its Current Report on Form 8-K for the month of January 1976 by providing information for the following item as set forth in the pages attached hereto:

ITEM 13

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this amendment to be signed on its behalf by the undersigned, thereunto duly authorized.

TENNECO INC.

By

M. W. Meyer
M. W. Meyer
Assistant Secretary

Date: February 23, 1976

Item 13. Other Materially Important Events.

9.10

On February 13, 1976 Tenneco Inc. filed Amendment No. 1 to its Form 8-K Current Report for the month of January 1976, containing in part the following statements:

"Beginning prior to 1970 and continuing until August 1972, it is reported that cash amounts ranging from \$200 to \$2,000 were given on several occasions by the President of a subsidiary, Midwestern Gas Transmission Company, to state public utility commission chairmen in Indiana, Illinois, Kentucky and Wisconsin. The subsidiary officer states that the money was understood to be given in turn by the recipients to various charitable projects of their choice."

By affidavit dated February 23, 1976 George Perrine made the following statements:

"I was President of Midwestern Gas Transmission Company from 1961 until August 1972. I am presently a consultant to Tenneco Inc. Although I gave the information quoted above in substantially the language therein to Tenneco Inc. representatives, upon further reflection I am unable to recall any names, dates or amounts or whether any sums were actually delivered to public utility commission chairmen, members or employees in any of the states of Indiana, Illinois, Kentucky or Wisconsin or elsewhere. Because of such inability to recall specific information, I have concluded that my original statement was in error."

Item 14. Financial Statements and Exhibits.

(b) Exhibits

1. Affidavit of George Perrine dated February 23, 1976.

THE STATE OF TEXAS §
COUNTY OF HARRIS §

9.11

AFFIDAVIT OF GEORGE PERRINE

BEFORE ME, this day personally appeared George Perrine, who, after being duly sworn, deposed and said:

I.

My name is George Perrine. I have personal knowledge of every statement made in this Affidavit and am fully competent to testify about the matters stated herein.

II.

I understand that Tenneco Inc. has filed Amendment No. 1 on Form 8 amending its Current Report on Form 8-K for the month of January 1976, and that the following appears as part of said Amendment:

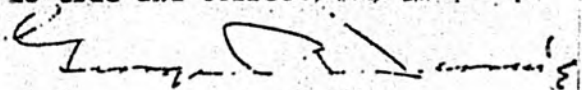
"Beginning prior to 1970 and continuing until August 1972, it is reported that cash amounts ranging from \$200 to \$2,000 were given on several occasions by the President of a subsidiary, Midwestern Gas Transmission Company, to state public utility commission chairmen in Indiana, Illinois, Kentucky and Wisconsin. The subsidiary officer states that the money was understood to be given in turn by the recipients to various charitable projects of their choice."

III.

I was President of Midwestern Gas Transmission Company from 1961 until August 1972. I am presently a consultant to Tenneco Inc. Although I gave the information quoted above in substantially the language therein to Tenneco Inc. representatives, upon further reflection I am unable to recall any names, dates or amounts or whether any sums were actually delivered to public utility commission chairmen, members or employees in any of the states of Indiana, Illinois, Kentucky or Wisconsin or elsewhere. Because of such inability to recall specific information, I have concluded that my original statement was in error.

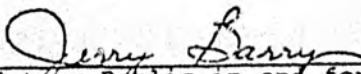
Further, the affiant sayeth not and I have read
the foregoing Affidavit and it is true and correct.

9.12



George Perrine

SUBSCRIBED AND SWORN TO before me by George Perrine
on this 23rd day of February, 1976.



Notary Public in and for
Harris County, Texas

My Comm. Expires

February 2, 1977

77

WRITTEN STATEMENT BEFORE

SPECIAL COMMITTEE OF ALASKA LEGISLATURE

HEARINGS HELD ON JANUARY 31 — FEBRUARY 2, 1977

Southern Natural Gas Company (Southern) is the major supplier of natural gas in the southeastern United States. The Company provides service to numerous markets in Louisiana, Alabama, Georgia, South Carolina and Mississippi and portions of Tennessee. Southern also supplies gas to a portion of northern Florida through its wholly-owned subsidiary, South Georgia Natural Gas Company.

CORPORATE STRUCTURE AND
FINANCIAL ASPECTS OF SOUTHERN

Southern is a wholly-owned subsidiary of Southern Natural Resources, Inc. (SNR), which is a diversified billion dollar company. Attached is an organizational chart of SNR (Attachment No. 1). SNR is the parent company for seven energy-related and natural gas pipeline companies. In addition to Southern and South Georgia Natural Gas Company, which are natural gas pipeline companies, Southern Energy Company will own and operate a liquefied natural gas (LNG) receiving terminal near Savannah, Georgia. Southern Deepwater Pipeline Company is a 50% participant in Sea Robin Pipeline Company, which operates a large offshore gas supply system in the Gulf of Mexico. The Offshore Company is one of the world's largest contract drilling firms and is principally engaged in drilling for oil and gas in offshore and onshore areas around the world. SONAT Exploration Company is engaged in oil and gas exploration and production activities. Southern Forest Products, Inc. holds a 50% interest in Boise Southern Company, a forest products joint venture.

The common stock of SNR is listed and traded on the New York Stock Exchange and the Pacific Stock Exchange. SNR has approximately 10,000,000 outstanding common shares and 22,000 shareholders located in every state of the union and in many foreign countries.

SNR and its system of companies enjoy a very sound financial reputation. Indicative of SNR's sound financial condition is its rating included in Forbes, January 1, 1977 rating of utilities. In this connection, SNR's 5-year rank is No. 1 among other natural gas utilities in return on equity, return on total capital and growth in earnings/share (Attachment No. 2).

Southern also has outstanding debt securities, some of which are listed on the New York Stock Exchange. The Moody's ratings of Southern's debt securities are equal or superior to the ratings of debt securities of other pipeline companies participating in the Alcan Gas pipeline project and the Arctic Gas pipeline project (Attachment No. 3).

PIPELINE SYSTEM AND
OPERATIONS OF SOUTHERN

In 1930, when it began operations, Southern operated a 1,250 mile pipeline with 15,000 total installed compressor horsepower. Today, the Company operates a 7,700-mile pipeline system with 399,364 compressor horsepower, which traverses the southeastern portion of the United States. Attached is a map depicting its pipeline system (Attachment No. 4).

Southern sells gas for resale to 9 distributing companies, to 102 municipalities and gas districts and to 3 connecting interstate pipeline companies. It also makes direct sales of gas to 67 industrial customers located throughout the southeast. These industrial customers are very important to the economy of the southeast, and some are major U. S. companies. Attached is a list of the major resale customers and its direct industrial customers (Attachment No. 5). The population of its market area is about 7,000,000.

Through a subsidiary, Southern owns 50% of a major gas supply system, known as Sea Robin Pipeline Company, which consists of 335 miles of pipeline extending into the Gulf of Mexico from Louisiana. At the time this gas supply system was built, it was one of the largest offshore pipeline projects in history -- it was the first offshore project to use 36-inch diameter pipe in the Gulf of Mexico and the pipeline system reached further into the Gulf than any previous pipeline project. Sea Robin commenced operations in 1970 and today represents a gross investment of approximately \$175,500,000, of which Southern is a 50% participant. Attached is a picture of a typical drilling platform located offshore, Louisiana; after drilling is completed, production facilities will be installed as the platform and the facilities will be tied in to Sea Robin's system (Attachment No. 6).

The Company is a participant in a unique project to import liquefied natural gas (LNG) into the United States from Algeria. This is the first (and only) major base load LNG project which has received all necessary government approvals. Through a subsidiary, Southern is constructing and will operate an LNG terminal on an island near Savannah, Georgia (see page 3, infra) for further details regarding this project.

In 1977, the Company will sell about 555 billion cubic feet of gas from its pipeline system. The rated delivery capacity of the pipeline system is 2.230 billion cubic feet per day.

SOUTHERN'S GAS SUPPLIES

The Company presently obtains its gas supplies from 153 oil and gas fields in south Louisiana, the Gulf of Mexico offshore Louisiana, north Louisiana, east Texas, Mississippi and from one source in Alabama. It presently purchases over 50% of its gas supplies in the Gulf of Mexico. While this percentage is increasing each year, a substantial portion of the oil and gas provinces offshore in the Gulf have been leased (Attachment No. 7), which means that Southern will have to broaden its search to meet the gas requirements of the southeastern United States.

Since the late 1960's, the Company has been unable to acquire enough gas to replace that used on its system each year. Because of this, Southern notified all of its customers in 1970 that it could not accept any new customers or increase the contractual volumes it was obligated to deliver to existing customers until the gas supply situation improved. Unfortunately, this situation has not improved, either on Southern's system or nationwide. Indeed, the severe winter now being experienced in the southeast and other parts of the nation has seriously aggravated the nationwide critical gas shortage.

Recognizing that the natural gas shortage was developing, Southern in the late 1960's intensified its efforts to obtain new gas supplies and undertook unique and innovative gas supply programs. These efforts include:

- In recent years, major investments by Southern, at a cost of about \$243 million, in offshore natural gas pipeline systems in the Gulf of Mexico (the area which the Company has relied on for virtually all of its new gas reserve additions).

- Prior to 1970, the Company and its affiliates owned interests in 13 offshore Gulf of Mexico blocks — since 1970, Southern and its affiliates have made successful bids, totaling approximately \$69,000,000 for interests in 33 additional offshore federal blocks. Also, Southern and its affiliates have substantially expanded their own exploration programs — they now own interests in 39 oil and gas fields. Attached is an artist's rendition of a gigantic production platform now being constructed for one of these fields located in the Gulf (Attachment No. 8).
- Southern aggressively pursued the FPC's advance payment program as a means of obtaining new domestic gas supplies — during that program's existence, it made a cumulative total of \$151,000,000 in advance payments.
- Another major and significant step was Southern's development of the Muldon Gas Storage Field in northeastern Mississippi several years ago. This field, representing an investment of over \$63,000,000, is one of the largest underground gas storage fields in the U. S. which is owned by a single company. It has become a major factor in helping the Company meet its winter peak delivery obligations. This storage field, under normal conditions, can provide Southern with 34% of its winter peak-day requirements. It can be of great utility in accomplishing the distribution by substitution and exchange of the Prudhoe Bay gas into Southern's service area. Attached is a picture of the Muldon Gas Storage Field facilities (Attachment No. 9).

Also, as the Company saw the gas supply shortage beginning to threaten in the 1960's, it initiated studies, internally and through outside consultants, to determine the most appropriate means of supplementing the depleting domestic gas supplies. The studies concluded that over and above the major initiatives described above, Southern must undertake non-conventional, non-traditional gas supply efforts if it hoped to supply the existing requirements of its customers in future years. The studies also concluded that, at that time, the first, most immediate, viable non-traditional supplementary supply available to Southern was the importation of liquefied natural gas (LNG) from overseas.

LNG PROJECT

Southern's LNG project was mentioned earlier (p 2, supra). Since the Trans-Alaska pipeline project involves LNG facilities of a similar nature, it is appropriate to discuss in some detail how the Company handled the various aspects of its LNG project. In particular, the discussion will focus on the technical and environmental features of the LNG project. Southern's expertise in all phases of LNG projects, described below, comprises the type of expertise that Southern will bring to the Trans-Alaska pipeline project.

In 1970, Southern contracted to purchase LNG to be imported from Algeria. A prime mover in this project is a subsidiary of El Paso Natural Gas Company, which had agreed to purchase the LNG from Sonatrach, the Algerian national oil company, and to transport it to the USA. Southern became one of three east coast USA purchasers to contract, in turn, for the purchase of the LNG from El Paso.

This was the first base load LNG project ever proposed for the USA — and, although others have since been proposed, it is the only one which has received all of the necessary governmental approvals. However, the LNG to be supplied through this project represents a supplementary gas supply source and does not answer the nation's and the southeast's desperate need for significant new domestic gas supplies.

At the time of the project's inception, the Company realized that the project could only succeed through a concerted effort between it and many other people, and groups, including state and federal governmental officials, federal and state legislators, Southern's customers, environmental groups and state Public Service Commission officials. The project required the support and approval of all of these groups -- which was achieved as a result of concerted efforts spanning a period of several years.

With the support and approval of all these groups, there were two principal objectives: (1) to construct and operate energy transmission systems to get the energy from the source to the market, and (2) the need and concern to have these facilities constructed and operated in a manner that would be compatible with the local environment. The input of all groups was necessary to accomplish the objectives. As aforesaid, these efforts spanned a period of several years.

From day one, Southern concluded it should locate, design, construct and operate its LNG terminal and connecting pipeline facilities in a manner that would cause minimum degradation to the environment. With this mandate, the Company sought the advice of leading authorities in the environmental community, local environmental groups, concerned citizens and political forces in the area. All of these groups concluded that Southern had approached the problem in an intelligent fashion and gave their support to the project - with the result that there have been no environmental roadblocks with the Company's Savannah terminal facilities. As a result of the support of these groups and their team efforts with Southern, this LNG importation project has received all required local, state and federal governmental approvals (which included about 90 permits and authorizations).

In order to select an environmentally preferred site for the LNG terminal, Southern conducted an exhaustive study of every port on the lower Atlantic Seaboard from Jacksonville, Florida, to Charleston, South Carolina. Many of the ports investigated were rejected because of physical or environmental reasons. The ultimate selection of the Elba Island location, approximately five miles downstream from Savannah, Georgia, was a sound choice. This island is in a very remote area although it is in the general vicinity of a highly industrialized city, Savannah, Georgia. The island is completely surrounded by water and consists of approximately 850 acres which had been created from many years of maintenance dredging of the channel in the Savannah River. It is located approximately eight miles upstream from the mouth of the Savannah River with an unobstructed, reasonably straight channel to the open sea. It was necessary to build a 2.6 mile road and 1,780 foot high-rise bridge over an alternate channel of the intercoastal waterway to Elba Island. However, for the most part, this road was constructed on an old abandoned tramway in order to preserve and cause a minimum amount of damage to the marsh areas in the vicinity. The road and bridge were constructed in record time of only six months. During the design and construction phase of the terminal facility the environment and safety issues were of foremost importance. As an example, only approximately 120 acres of land were cleared of the total 850 acres on the island for the plant site. A greenbelt of trees between the plant site and the Savannah River was left for aesthetic considerations. Southern has considered and designed into the facility the ultimate in safety facilities. The latest in monitoring and fire protection equipment has been installed in order to provide the greatest possible degree of safety.

Initial plans called for the use of river water circulated through open rack vaporizers to heat the LNG and convert it back into a gas. The Company engaged Skidaway Institute of Oceanography, a unit of the University System of Georgia, to make a one-year study of the water quality and marine biology in the waters surrounding Elba Island and what effect the use of river water to convert the LNG back into a gas might have on the water quality and marine biology. This study concluded that the effect would be a reverse pollution and a benefit to the Savannah River. The discharge water from the plant would be five degrees cooler than the intake water in addition to having the oxygen content of the water increased by virtue of going over open rack vaporizers. Both of these effects would have a beneficial effect on the quality of the water and the marine biology.

At the recommendation of environmental consultants all facilities were constructed and painted in a manner to blend in with the environment. As an example, the three 400,000-barrel LNG storage tanks were painted a pastel blue to blend in with the skyline. Throughout the construction of the Savannah Terminal facilities an environmental consultant from the Institute of Ecology of the University of Georgia was employed to monitor all construction activities to insure that these activities would be compatible with the environment and that they would not result in any adverse pollution of the waters surrounding Elba Island or the general vicinity.

In order to transport the revaporized LNG into Southern's existing facilities near Savannah, Georgia, it was necessary to construct a pipeline from Elba Island to these facilities for a distance of approximately 13½ miles. Approximately 80 percent of the route is through marsh areas subject to 7½ foot tides twice each day. In addition, it was necessary to cross several miles of the Savannah National Wildlife Refuge which is principally a wildfowl feeding ground. In order to assure an absolute minimum chance of ever having to go back in this area during the life of the facility, the Company constructed two parallel 30-inch pipelines and installed pipe with a wall thickness equivalent to that installed in congested areas - the idea being that once the pipelines are laid, it is anticipated that they will not have to be disturbed in the future. Southern's careful planning in this matter will also permit the expansion of its regasification facilities without another intrusion into this environmentally sensitive area.

Prior to the announcement of the LNG project, Southern held many meetings with the Fish and Wildlife Service, which has jurisdiction over the Savannah National Wildlife Refuge, to seek their assistance in planning the location of the pipelines and a method of construction which would minimize any possible environmental damage to the Refuge. Through the joint effort of the Fish and Wildlife Service and Southern, an acceptable route was determined. The Company developed construction techniques which would further minimize any damage to these environmentally sensitive areas. In developing these construction techniques, Southern relied upon its almost 25 years of experience in constructing pipelines and facilities in the marshlands and offshore areas of South Louisiana. Southern was one of the first companies to extend its pipeline system through the environmentally sensitive areas of South Louisiana and into the deep waters of the Gulf of Mexico. At the time of constructing its West Delta and Main Pass Pipeline Systems in the Gulf of Mexico, these systems incorporated the largest diameter pipe laid to date in these depths of water. A few years later the Company constructed the Sea Robin Pipeline System which, as mentioned earlier (page 2, supra), at the time of construction was the largest offshore system in existence and it extended further from shore than any previous pipeline. The technical expertise and knowledge gained by the Company from these operations, along with its knowledge and experience in construction of pipeline facilities since 1929, have been very

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beneficial in designing and constructing pipelines in environmentally sensitive areas. Although Southern has not constructed pipelines in arctic areas, the experience gained in the lower 48 states and the Gulf of Mexico will most certainly be beneficial and add to the expertise of others in developing techniques to minimize any degradation of the environmentally sensitive Alaskan area.

The construction techniques developed for the twin 30-inch pipelines crossing the Savannah National Wildlife Refuge consisted of four push sites at accessible areas where the pipe could be fabricated from ramps and pushed into place by means of flotation attached to the pipeline until it reached its final location in a narrow backhoe ditch. At this point, the flotation was removed from the pipeline allowing it to sink to the bottom of the ditch and the pipelines were backfilled to their normal condition. In order to minimize the loss of spoil in the backfilling operation it was decided to dig the first ditch for the first pipeline and after installing that line while digging the ditch for the second pipeline to place the spoil from the second pipeline into the ditch for the first pipeline. This resulted in a minimum handling of the spoil and, consequently, a minimum reduction in the spoil available for backfilling operations. All of this effort resulted in considerable additional construction expense; however, it provided a minimum of disturbance and maximum recovery to the area as is indicated by the attached photograph. Attachment No. 10 shows the after construction, restoration and natural growth after one growing season in the Savannah Wildlife Refuge. The black dots on either side of the photograph represent the center line of the pipeline right-of-way. As shown by this photograph, the regrowth after construction of the pipeline indicates a remarkable recovery and from an eye level standpoint it is difficult, if not impossible, to determine the actual location of the pipeline route.

In addition to all of these efforts, Southern contracted with the Institute of Ecology of the University of Georgia to provide an environmental consultant to monitor the entire pipeline construction. Southern also funded a regrowth study which has been underway for approximately a year and a half to study the regrowth conditions in the marsh areas. (This is one of the first regrowth studies actually conducted after installation of pipelines through marsh areas and has been most beneficial to the environmental community and to Southern.)

The natural gas to be liquefied and sold to El Paso Algeria for the El Paso Algeria LNG Project originates in the Sahara Desert in Algeria. Natural gas from this field is gathered and routed to a liquefaction plant at Arzew, Algeria on the Mediterranean Coast. The gas is then liquefied by the use of a refrigerant system. The LNG is then stored in tanks at Arzew to await shipment. El Paso Algeria is constructing a fleet of nine (9) tankers specially designed with insulated cryogenic cargo containment systems to transport the supercold LNG from Arzew across the Atlantic for about 3,995 nautical miles to Savannah, Georgia and Cove Point, Maryland on a combined fleet basis. Attached is an artist's rendition showing the LNG tanker route from Arzew to Savannah (Attachment No. 11). Each ship will have a nominal cargo capacity of 125,000 cubic meters (approximately 2,700,000 Mcf). Typically, the overall length is 935 feet and the width is 140 feet, but dimensions of the vessels will vary depending upon the type of cryogenic containment system employed. Attachment No. 12 is a picture of one of the LNG tankers. It will take approximately 21 days to make the round trip between Arzew and Savannah. During the course of a year, fifty (50) shiploads of LNG, or approximately one shipload every seven days, will be delivered to the Savannah terminal. This amounts to approximately three million short tons of cargo that will be unloaded annually at the Savannah terminal. The cargo onboard the ship when it arrives will be at atmospheric pressure and a temperature of approximately -260°F. After re-gasification through the Savannah terminal, the gas will be transported by pipeline through the Company's eastern

market area. (As mentioned earlier, two 30-inch pipelines had to be installed to hook up the Savannah terminal to the Company's existing pipeline system.)

In order to receive, store and regasify the LNG, Southern's LNG team became intimately involved in the design and construction activities of its consultants and contractors. The major consultants and contractors employed were Bechtel, Incorporated for the process and civil design and construction; Raymond Technical Facilities for the design of the South Channel bridge and unloading dock; Raymond International for construction of the South Channel bridge; Gulf Foundations for the construction of the unloading dock; Chicago Bridge and Iron Company for the design and construction of the LNG storage tanks; University Engineers for the design of a fire prevention and control system; and Walter Kidde Company for the installation of the fire prevention and control system. Personnel of the Company have been involved in all decisions and most daily problems encountered by the contractors listed.

To construct the dock at the Savannah terminal to unload the LNG from the tankers, and to allow the tankers to be turned around, involves considerable dredging. Dredging for dock construction has been accomplished and this involved the removal of about 500,000 cubic yards of material. Maintenance dredging in the dock area and initial dredging of the turning basin involves the removal of approximately four million more cubic yards of material. Numerous discussions were conducted with Federal, State, and local groups to gain authorization to dredge, and once dredging activities started close coordination had to be maintained with certain of the approving agencies.

Design and construction of the LNG process facilities, as well as others, necessitated that consideration be given to earthquake criteria, that an extremely effective quality assurance program be designed, implemented and followed, and that effects of cryogenic temperatures be evaluated in all calculations. The Elba Island facility design was subjected to a cryogenic safety review by consultants from the National Bureau of Standards working for the FPC which concluded after considerable study that the LNG terminal can be expected to operate safely.

LNG delivered by the tankers at the Savannah terminal will be stored in the three 400,000 bbl. insulated tanks. These tanks are of identical capacity and structural design. These tanks are erected on a reinforced concrete and pile foundation with air space between the concrete pile cap and ground to prevent soil freezing and heaving. These tanks will normally store the LNG at about -260 F and can operate up to pressures of 2.0 psig before venting. The maximum daily boil-off rate will be less than 0.06% of full liquid volume. Construction is of the double wall type, with an inner aluminum tank and an outer carbon steel tank. Each tank holds approximately the equivalent of 1,380,000 Mcf of gas and is supported by more than 600 pilings. These tanks are designed to withstand a Zone 3 earthquake. Tank design and construction are essentially complete.

The Elba Island facility has a very sophisticated fire prevention and control system. All major process equipment on the plant site is protected from fire by a combination of dry chemical and foam systems. The fixed dry chemical system is used to extinguish any LNG fires which might occur and is automatically activated when flames are sensed, or the system may be manually actuated from the control room. The fixed foam system is primarily used for controlling boil-off vapors should LNG accidentally be spilled. This system is actuated automatically by means of cold sensors, or it may be actuated manually from the control room. The plant also has an underground fire water loop with hydrants and nozzles located

throughout the facility for extinguishment of non-LNG fires. Water from the system will also be used as a heat shield to protect structures or equipment from any fires that might occur elsewhere in the plant. Two fire trucks have been purchased. One is strictly a firewater truck and will be used to combat grass fires that might occur. The second truck contains a dry chemical unit and also has a foam generator. This vehicle will be used to supplement the fixed foam and dry chemical systems and is needed to serve areas not covered by the fixed systems.

The Company is very familiar with all facets of shipment of LNG by cryogenic tankers. At one point in time on the Algerian LNG-I project, Southern had the option to own one of the tankers and, as a result, made extensive studies into the construction and operation of LNG tankers. Also, through an affiliate company, The Offshore Company, which is one of the largest offshore drilling firms in the world, Southern is thoroughly familiar with the planning, design, construction and operation of mammoth offshore drilling rigs and the transportation of these rigs and other ocean transportation on the high seas. The Offshore Company has developed sophisticated patented systems for offshore drilling rigs and is thoroughly familiar with the shipyard construction of these rigs and other large ocean-going vessels. Attached is a photograph of one of The Offshore Company's Discoverer-Class drillships. Offshore's Discoverer Seven Seas is a very large self-propelled drillship capable of drilling in water depths of 6,000' (Attachment No. 13). The technical expertise of The Offshore Company will add much to the LNG shipping aspects of the project.^{1/}

The necessary facilities in Algeria, the required LNG tankers and Southern's receiving terminal at Savannah are now in advanced stages of construction.

In summary, through advanced planning and cooperative efforts of all concerned, Southern overcame possible environmental and other problems related to this project. This result was quite unique, considering the problems which others have faced. The Company expects to receive the first shiploads of LNG in early 1978. The total investment of Southern in the LNG terminal and related pipeline facilities is in the order of \$170,000,000.

Attached is an artist's rendition of how the LNG terminal will look when it is completed, and two recent aerial photographs showing the state of completion of these facilities (Attachments Nos. 14, 15 and 16).

Although this LNG project is essential to the southeast, it by no means diminishes the need of the nation and the southeast for new domestic gas supplies. In fact, the Southern-Algeria LNG project is expected to only supply 15% of the requirements of Southern's customers.

^{1/} Offshore operates one of the largest fleets of offshore mobile drilling units in the world. Its fleet includes self-elevating mobile platforms, drilling tenders, drilling rigs for self-contained platforms, an inland drilling barge, self-propelled drillships, a self-propelled, self-elevating drillship, and a self-propelled, semi-submersible drilling vessel. Offshore also owns and operates workboats, land drilling units and various transportation equipment. In addition to providing contract drilling services, Offshore also provides services for others in engineering, design and construction of offshore drilling equipment. In this area, Offshore and its subsidiaries own or are licensed to use over 70 United States patents relating to equipment used in the drilling industry. These patents expire at various dates from the present until late 1992.

OTHER ACTIVITIES OF SOUTHERN

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The Company is studying the feasibility of purchasing additional LNG. For example, Southern is in close touch with every major potential source of new LNG that logically could come into the east coast -- such as Algeria, Venezuela, Nigeria, Iran, the Arabian Gulf, etc. The LNG terminal at Savannah, one of the only two base load LNG facilities approved by the FPC, puts Southern in an advantageous position to purchase LNG from these sources. Also, the Company is studying the feasibility of other synthetic fuels, such as coal gasification.

But, while LNG and other synthetic forms of energy are needed to supplement dwindling gas supplies, they do not take the place of new domestic gas supplies. There can be no question that the southeastern United States is in dire need of new domestic gas supplies -- such as Alaska royalty gas.

SOUTHERN SUPPORTS AN ALL-AMERICAN ROUTE

The Company believes that an Alaska natural gas transportation project which follows an all-American route has several significant advantages over projects which cross Canada (see Attachment No. 17). Primary among the advantages of an all-American route are the time required to bring Alaskan gas to the lower 48 markets and the greater positive impact on the United States economy. Environmental considerations and the ultimate widespread geographic distribution of Alaskan gas (which will be distributed to 43 states) are also important factors in favor of a Trans-Alaska natural gas transportation system.

Considering the severe winter which a major portion of the United States has experienced this year (Southern's market area in the southeast is experiencing its coldest winter ever recorded), the Company believes a critical factor in the selection of an Alaska natural gas transportation system is how quickly Alaskan gas can reach the lower 48 markets. El Paso Alaska estimates that its project can commence deliveries of Alaskan gas to the lower 48 markets approximately 5 years after the construction commences with deliveries of full volumes 10 to 12 months thereafter. The sponsors of the Arctic Gas project estimate that their project can commence deliveries to United States markets after 5½ years of construction. But this estimate is subject to challenge. The Department of the Interior made a study which concluded that the risk of delay in an Alaska-LNG project would be about half of that for an Arctic Gas project. Also, El Paso Alaska commissioned the Green Construction Company, one of the Alyeska pipeline contractors, for an independent study of the proposed Arctic Gas construction schedule. This study concluded that the Arctic Gas project had nearly a 100% probability of experiencing 1.5 to 2 years' delay, which would result in a cost overrun of approximately \$2.7 billion.

Southern believes the earlier delivery of additional gas supplies to the lower 48 markets by the Trans-Alaska pipeline will have a significant positive impact on the national economy. In addition, this project offers several other positive impacts on the economy. It has been estimated that the Trans-Alaska pipeline project would result in 749,000 man years of direct and induced employment in the United States as compared to 245,000 man years of direct and induced American employment resulting from the Arctic Gas project. This additional employment will improve the likelihood of achieving the national goal of reducing unemployment. Further reductions in unemployment are likely to result from the fact that the Trans-Alaska pipeline project is projected to have a net economic benefit of from \$0.9 to \$1.9 billion larger than that of the Arctic Gas project. A third economic benefit of a Trans-Alaska project is the amount of revenues it will provide to all levels of government. It is estimated that this project will generate \$19.2 billion in United States income taxes, Alaska ad valorem taxes, and miscellaneous taxes. In

addition to the direct benefit the State of Alaska will receive from its share of these tax revenues, it is estimated that the State's economy will greatly benefit from an estimated \$5.44 billion in direct expenditures made in Alaska on construction payrolls, goods, services and pipeline facilities.

Southern is convinced that a major advantage of the Trans-Alaska pipeline project is the limited environmental impact it will have. This project avoids the unique Arctic National Wildlife Range. In the Company's opinion, this factor alone gives it an overwhelming advantage in this area. The Trans-Alaska pipeline project, however, has another significant environmental advantage: the proposed realigned route will utilize the Alyeska oil pipeline workpad for nearly its entire length of the State. In this manner, a separate cut across the State's wilderness will be avoided. Only where the gas pipeline diverges from the Alyeska pipeline, its last 42 miles, will the project invade a part of the State's pristine environment. Southern believes the small incremental impact of the natural gas pipeline on the State of Alaska's environment and the preservation of the Arctic National Wildlife Range make the Trans-Alaska pipeline project environmentally preferable to the competing projects.

Finally, the Company anticipates that the Trans-Alaska pipeline project will bring Alaska natural gas to 43 of the lower 48 states. This represents a very broad geographic distribution of Alaska's royalty gas in the lower 48 states.

THE ROYALTY GAS PURCHASE CONTRACT IS BENEFICIAL TO ALASKA

Southern believes that the royalty gas purchase contract between it and the State of Alaska is a mutually beneficial arrangement. While the Company will receive much needed gas supplies, this contract contains many favorable aspects for the State of Alaska. In addition to the favorable terms contained in the contract itself, by entering into this arrangement Alaska received the benefit of gaining an enthusiastic participant in support of the Trans-Alaska pipeline project. From the time the royalty gas agreement was concluded, the Company has repeatedly gone on the public record in support of the project. Southern has stressed the reasons listed in the above section in endeavoring to build public support for an all-American gas transportation system.

Concerning the contract itself, the State has the benefit of two unique contractual provisions. First, the contract provides that Southern will reimburse the State for Southern's pro rata share of any costs attributable to the preparation and transportation of the State's royalty gas incurred by the State as a result of its decision to take its royalty gas in kind. Second, and probably the most advantageous provision in the contract to the State, the State has the right to reclaim its royalty gas when it has a need to use this gas within the State. If the State exercises this right, the contract gives Southern the right to purchase surplus royalty gas from the State to replace any gas which it so reclaims. However, the gas used in repayment will be surplus gas, i.e., gas which would be exported from Alaska anyway. In addition, the only gas eligible to be used as replacement gas is that gas moving through the Prudhoe Bay pipeline.

The contract provides for a mutually beneficial price for the gas. The State of Alaska will receive the best price paid for gas from the Prudhoe Bay Field, but Southern is not required to pay any premiums or extra charges.

Finally, Southern believes it is to the State's advantage that the sales contract is for a stated amount of gas. This enables the State to know the precise maximum amount of gas it has committed from the Prudhoe Bay Field. Also, the contract is for a stated term, 20 years, but is considered completed if the maximum volume designated in the contract is delivered at an earlier date.

SOUTHERN'S NEED FOR ALASKA'S ROYALTY GAS

In spite of its intensified efforts, Southern's domestic gas supply additions have diminished drastically in recent years. During the five-year period 1971-75, the Company was successful in adding under new contracts reserves amounting to only 40% of the total gas consumed during that period. Thus, Southern considers the Alaska royalty gas from the Prudhoe Bay Field to be a very significant and important source of new domestic gas supplies for its customers in the southeastern United States. No other Prudhoe Bay gas has been contracted for markets in the southeastern United States.

Southern's farsighted gas supply efforts have enabled it to maintain service to its customers without curtailment of high priority users until this severe winter season. The present gas shortage situation resulting from this abnormal winter underscores Southern's need to add significant new gas reserves to its system. At the time of commencement of deliveries of the Prudhoe Bay gas, the Company will be serving only users of the very highest priorities. The addition of a portion of Alaska's royalty gas to Southern's supplies will, therefore, be vital to Southern's ability to serve high priority gas users. This fact is completely demonstrable and clearly substantiates Southern's vital need for this gas.

The gas supply situation in the southeastern United States is critical. Southern went into this winter with enough gas from its conventional sources, a full storage field and every expectation of being able to serve the essential requirements of all the residences, small businesses, and industries in the southeastern states that its customers serve. However, the southeast has experienced unprecedented cold weather for almost the entire period since October 1. This has been the coldest winter since before the turn of the century in Southern's service area. Temperatures during the last quarter of 1976 averaged approximately 45% lower than in any previous winter. January has been even colder. The much colder weather means that gas which Southern was able to sell last winter to industries must now be dedicated primarily to heat homes and hospitals. Also, as a consequence of the severe cold, Southern has had to withdraw from its storage facilities at a much faster rate than anticipated.

The southeastern United States must receive gas from new supply sources, such as the Alaska reserves. As vividly illustrated by Attachment 18, the southeastern United States is experiencing substantial economic growth and must be assured of adequate gas supplies.

SUMMARY

A brief review of the highlights of this statement accents the mutual benefits which Southern and the State of Alaska will derive from the approval of the royalty gas sales contract.

First and foremost, for Southern the approval will commit an extremely important gas supply to its customers, and for the State it will begin the foundation of a strong revenue base to be derived from the sale of this gas. There is no question that new gas supplies are desperately needed in the southeastern United States.

Second, Southern brings a vast amount of experience in the construction and operation of all types of pipelines. This technical experience encompasses not only pipeline construction in environmentally sensitive areas such as the Savannah Wildlife Refuge, but also the planning and construction of an LNG terminal and related facilities.

Finally, Southern and the State of Alaska have been enthusiastic supporters of a trans-Alaska pipeline project since this agreement was concluded. The national and local economic benefits of such a project are well-known. The approval of the royalty gas contract will be an additional factor both parties can present to the public in their efforts to build support for a trans-Alaska pipeline project and thereby increase the probability that these economic benefits will be realized.

Peter G. Smith, President
Southern Natural Gas Company

For further information, attached is a copy of Southern Natural Resources, Inc.'s 1975 Annual Report to Stockholders (Attachment No. 19).



Northern Perspectives

Exhibit 11

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AN INKBLING OF THE LONG JOURNEY

Arlon R. Tussing

There are, I believe, serious questions about the viability of the transportation systems proposed by both the Arctic Gas consortium and the El Paso Company for taking Alaska natural gas to U.S. markets. An investigation I conducted in 1975 on the economics of the two proposals for the State of Alaska raised the possibility that the cost of delivering the gas might actually exceed its value to consumers. At best, it appears that both projects, as proposed by their sponsors, are so risky that it may not be possible to finance them privately, even if their political and regulatory problems can be overcome — itself a questionable issue.

Both U.S. projects face the following risks:

Gas supplies: Production from the Alaska North Slope, and in the case of the Arctic Gas proposal, from the Mackenzie Delta, may be substantially less than the design capacity of either transportation system, meaning that each unit actually carried would have to bear a larger portion of the system's fixed costs than projected by its sponsors.

Delays and capital cost overruns: Actual construction costs may exceed estimated costs by substantially more than the effect of general inflation. The Arctic Gas project involves construction and operating technology untested in North America, while its route traverses hundreds of miles of difficult Arctic terrain where there has been no previous construction of either pipelines or roads. El Paso proposes a system of unprecedented pipeline pressures and a huge scale-up of existing liquefied natural gas (LNG) technology. New technology, unfamiliar environments, and a large scale — relative to previous projects, are exactly the ingredients of the most spectacular cost overruns. Arctic Gas, for example, envisions a system from Alaska across Canada, and into the Lower

48 States with an estimated cost in 1975 dollars of about 8½ billion. I would not be surprised to see the total cost of either project exceed \$20 billion, including interest on funds used during construction.

Experience in North America with big, custom-engineered construction projects has been that they normally cost two or three times their original projections, even including an allowance for inflation. Cost estimators are like accountants in that they prefer a solid,

empirically based figure to a realistic figure. They do attempt to project the increase in anticipated labour rates and in the prices of specific materials but they don't take into account the fact that huge projects, particularly if they involve new technology or a remote construction site, usually don't work the first time around, nor that both the purchaser and the licensing authorities change their minds several times in the course of planning and construction. The cost engineers don't appreciate that



"It's new, man—it's bound to have a few little bugs."

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such projects are usually clumsily managed and subject to a number of re-organizations during their design and construction. They don't allow for the fact that materials and equipment are always late and often mis-specified or defective, or that enterprises of this sort suffer not normal, but abnormal labour cost increases. Because of their size and urgency, they are especially vulnerable to wage pressure, even more so to featherbedding, and often to racketeering.

The Alaska oil pipeline was initially estimated at something less than one billion dollars in 1969. It will finally come in at a cost between eight and ten billion. This particular project is an especially horrible example because it has suffered from each of the diseases I mentioned. But it isn't unique. Nuclear generating plants in the United States have been coming in at four to five times their projected cost per on-line kilowatt.

On this basis the cost of the Arctic Gas project could easily become twenty billion dollars. Let's assume it will cost twenty billion and also that the project is to be paid for in 20 years, that is, a five percent amortization. Let's also assume that the investors should receive a 15 percent pre-tax rate of return on total assets.* Under a conventional utility accounting scheme, the project would need a first year cash flow of four billion dollars just to cover its fixed costs. On a discounted cash flow basis the annual fixed charge would be about \$3.2 billion.

With a throughput of something like a trillion cubic feet per year, we are talking of \$3.20 to \$4.00 per thousand cubic feet (mcf) for the capital plant just to get the gas into the existing distribution systems in the Lower 48 states and eastern Canada. If less gas can be delivered, as is likely, the cost would be even higher. This charge doesn't include the cost of developing the gas fields, any return to the producers, royalties, operating costs or costs of distribution.

Market: Both El Paso and Arctic Gas insist that the natural gas shortage in the United States is an absolute one, and that Lower 48 markets will accept North Slope natural gas at any price. Not everyone agrees; the Federal Energy Administration, for example, estimates that no market for Prudhoe Bay gas would exist in 1985 at a "city gate" price exceeding \$2.40 per million BTU (in 1975 dollars). The Interior Department's study reaches a similar conclusion. This price could easily be exceeded even without implausibly large

Experience in North America with big, custom-engineered construction projects has been that they normally cost two or three times their original projections, even including an allowance for inflation. New technology, unfamiliar environments, and a large scale — relative to previous projects, are the ingredients of the most spectacular cost overruns.

cost overruns or shortfalls in gas supplies to the system.

One assumption of the studies mentioned here is that natural gas field prices are free of Federal Power Commission (FPC) controls, and that the Alaskan gas is priced incrementally. Even relaxing these assumptions, however, it is not at all clear how much customers would be willing to pay on a year-round basis for the quantity of gas that would be carried by this system. The gas delivered through such a pipeline would be a base load supply delivered into southern distribution systems which have typical load factors in their premium markets of less than 40 percent. The seasonal swing in residential and commercial demand is one reason why about half the natural gas produced in the United States is now being burned as a boiler fuel. Some of the gas from the Arctic would have to be "dumped" in the boiler fuel market in competition with heavy fuel oil at an equivalent of about \$2.00 or coal at about \$1.00. The cost of Arctic gas delivered into the distribution system for premium customers could therefore reach \$5.00, \$6.00 or even more, per million BTU. Six dollar gas is about equivalent to oil at \$30.00 per barrel. It would seem on its surface that there ought to be some question about the economic wisdom of such a project.

Political, regulatory and other institutional issues: Each project would face serious political and legal obstacles, even after it received a certificate from the Federal Power Commission. Lack of co-ordination in U.S. and Canadian approvals, for example, could block or delay construction of the Arctic Gas system, while there is some chance that resistance in California to port and terminal facilities would jeopardize completion of the El Paso system. The Arctic Gas system is, significantly, opposed by the governments and the preponderance of public opinion in both Alaska and Alberta, and the El Paso system is widely opposed within the state

of California, where the liquified natural gas would be landed. The major environmental organizations are hostile to both projects. Neither they nor various local interest groups are likely to abandon every attempt to obstruct or delay construction simply because the system has been sanctioned by the Federal Power Commission.

Financing problems: The financial consequences of the risks I have listed are magnified by the fact that neither project can be built in smaller self-sustaining stages. Either would be a large integrated system which could not carry any gas or produce any cash flow until it was completed. Most of the capital invested (\$10 to \$20 billion or more) would therefore be exposed to these risk factors for at least the entire planning and construction period.

Private leaders simply will not accept risks of this sort, and neither project's sponsors are financially large enough to carry them, even if they were willing to do so. They do not in fact seem to be willing, as they both propose tariff conditions which would protect their own profits as well as their debt service obligations against "all events". Only the federal governments and/or, perhaps, potential gas consumers are in a position to carry financial risks of the size associated with either of the systems.

Accordingly, El Paso proposes to use federal loan guarantees (under an existing programme) for its LNG tankers and spokesmen for Arctic Gas have suggested that governments indemnify the sponsors against cost overruns exceeding 40 percent (nearly certain, in my judgement). But, more importantly each applicant proposes to rely on "full cost of service all-events tariffs" to cover their debt service obligations and to ensure a return on their equity. These tariffs provide, in brief, that consumers are required to pay the debt service and operating costs of the transportation system (plus a profit to the owners) no matter how great these costs are and whether or not the customers receive any gas. Arctic Gas's tariff would begin to run as soon as gas was first delivered; El Paso's would begin 60 months after approval of its project, even if it were never completed.

The proposition that consumer should bear or share in the risks associated with a project which benefits them is not in itself unreasonable, provided that the economic expectations of the project are clearly favourable and the risks are of a reasonable magnitude. But with these projects there are good reasons for doubt on both scores. Moreover, even if the Federal Power Commission were to approve "all-events tariffs, local gas distributors would not

*Based on a multiple of 15 percent debt at an average interest rate of 10 percent, a 15 percent after tax return on equity, and a 50 percent average tax rate on profits.

sign contracts containing such tariffs unless they were assured in advance by their state regulatory commissions (as well as by their own market analyses) that they would be able to pass these charges through to their own customers. Responses by the state commissions to Federal Power Commission enquiries suggest that there is almost no chance that they would give such advance approval.

These considerations lead inexorably to the conclusion that neither system can be built in the form proposed by their sponsors without either substantial federal financial backing, Federal Power Commission authority to preempt the jurisdiction of state utility commissions over the tariffs of local distributors, or both. No plausible proposals of either sort have yet been made, either by the applicants or by any of the responsible federal agencies.

Perhaps the most chilling prospect is that the Federal Power Commission (and the National Energy Board, in the case of the Arctic Gas project) would license one of the projects on the basis of conventionally estimated costs. The Commission would permit the transmission companies to begin collecting interest on construction debt before the project goes on line, and on that assurance the capital market would provide the sponsors with three or four billion dollars for engineering studies, site preparation and materials acquisition.

At the completion of this first phase, the sponsors will try to borrow the money for actual construction. At this time the cost estimators will have brought the figure up to \$13 or \$14 billion or more. After some point even all-events tariffs would not assure debt repayment, so that the money just won't be there to finish the system.

But a commitment would have been made. The transmission companies and their customers will come to Congress (and the Canadian government) with figures that show the present benefits will still exceed the present costs, because sunk costs don't matter (except to the investors). They'll talk about the pressing need of consumers who don't have any alternative in sight (because they have been counting on Arctic gas), they'll talk about energy self-sufficiency, and they'll talk employment and the balance of payments. If Congress and the Canadian Parliament have any inkling now about the long journey on which they are about to embark, they may hesitate.

In summary, there seem to be two problems that work together to make questionable the completion of either project as proposed: each of them requires too large an initial capital, and

that capital would be exposed to too many large risks. Once these are recognized as the critical problems to be overcome, it is obviously worthwhile to investigate whether there might not be some alternative system (or modification of one of the applicant's systems) which could begin with a smaller investment and perhaps be expanded in stages after gas and income begin to flow, a system with a smaller potential for cost overruns, and one which would raise less opposition on environmental, development or economic nationalist grounds.

The proposition that consumers should bear or share in the risks associated with a project which benefits them is not in itself unreasonable, provided that the economic expectations of the project are clearly favourable and the risks are of a reasonable magnitude. But with these projects there are good reasons for doubt on both scores.

The Fairbanks-Alcan route: One system which seems to have the possibility of meeting some of the criteria mentioned here would be an overland natural gas pipeline along the general route of the Trans-Alaska oil pipeline to a point about 100 miles south of Fairbanks, and along the general route of the Alaska Highway into northern British Columbia or Alberta. Such a route has been suggested as an alternative for the Arctic Gas system by various parties, including the FPC environmental staff.* Simply as an optional way of completing the Arctic Gas proposal, however, the Alaska Highway route would result in higher costs, because an additional separate pipeline leg would be required to bring the Mackenzie Delta gas reserves to market.

Use of the Alaska Highway routing would at first seem to have only two advantages over the system proposed by Arctic Gas: a reduction of the likelihood of major cost overruns because the new system would follow existing transportation corridors, where construction conditions are less extreme and better

known, and less intense environmental opposition because this route has far fewer river crossings, would not invade the Arctic Wildlife Range, and follows a corridor already affected by development.

Coupled with two other changes relative to the Arctic Gas proposal, however, an Alaska Highway system would appear to be considerably cheaper. In initial capital outlay, and still competitive or even superior in terms of expected transportation tariffs for Prudhoe Bay gas. The first of these two variations is to use, as much as is practical, conventional technology and existing transportation facilities in the United States and Canada. The second is to postpone construction of a transportation system to serve the Mackenzie reserves.

Northwest Pipeline Company, a U.S. company, together with three Canadian companies, Westcoast Transmission, Alberta Gas Trunk (AGTL), and Foothills Pipeline Co. (a joint venture of the other two) has formally proposed to build a system from Prudhoe Bay along the oil pipeline route to Fairbanks, then following the Alaska Highway to Fort Nelson, British Columbia and Zama Lake, Alberta, where the gas would enter existing Canadian transmission facilities. These facilities would be expanded where necessary to accommodate the increased volumes.

The pipeline concept proposed by Northwest and its Canadian partners would have several technical and financial advantages over the other two systems. It uses a 42-inch pipe, conventional technology, a corridor where there has already been highway and/or pipeline construction, and maximum employment of existing facilities. By virtue of these changes, the initial capital cost outlay before any gas or cash could begin to flow might be held considerably lower than the cost officially anticipated for the Arctic Gas system. The likelihood of large cost overruns, as well, would be much reduced by these features. Whereas ultimately, higher volumes would be required to cover the investment, the system could begin to operate with a flow of as little as a billion cubic feet per day. And, in my judgement, the political and regulatory barriers to an Alaska Highway system would be far less formidable than for either of the other two systems.

The system proposed by Northwest, Foothills, et al, may not yet be the cheapest way of moving Alaska gas to the United States Midwest and East. The Alcan proposal presented to the FPC and NEB still includes the 1117 mile Northern Border pipeline which is part of the Arctic Gas system. The sys-

*In September 1976 the FPC staff issued an Alcan system supplement to the Final Environmental Impact Statement on Alaska natural gas transportation systems. The supplement urges "that none of the proposals be approved as proposed. It concludes that the Arctic gas proposal would be environmentally superior to other alternatives if the leg to the Western United States were dropped (and that area were served with Alaska gas by displacement) and the Fairbanks Corridor (Alcan Highway) route were adopted. The FPC staff did not endorse the Alcan proposal of Northwest and Foothills "because it lacks the necessary expansion flexibility."

tem with the lowest initial capital cost, however, seems to be one which would expand the Trans-Canada pipeline and the Great Lakes pipeline, instead of building an entirely new line across the Prairies. Both the U.S. and Canadian partners in the Alcan project understand the advantages of maximizing the use of existing facilities, and I can only speculate on the reason for retaining Northern Border. The Trans-Canada Pipeline Company, which is part of the Canadian Arctic Gas group, may be unwilling to co-operate with a rival proposal at this time, although there is no reason to suppose that Trans-Canada's facilities would not be available to move Alaska gas if the Arctic Gas proposal were to be rejected by the National Energy Board.

There is good reason to believe that the announcement by Northwest makes the State of Alaska's commitment to support El Paso obsolete, and that this support may deteriorate rapidly. The Northwest project would avoid most of the state's environmental objections to the Arctic Gas system; it also makes gas available in the Fairbanks area and involves almost as much pipeline construction within the state as would the El Paso system. Because it does not involve an LNG terminal, however, the boom resulting from building a pipeline along the Alaska Highway would be substantially smaller than the boom that would be generated by the El Paso project.

Alaska and the Alcan proposal: According to preliminary estimates from the University of Alaska's Man in the Arctic Program, construction of the Arctic Gas system would add \$19 million to the state's gross product and three thousand persons to the state's population in the peak year of construction. The El Paso system would increase gross product by \$235 million and population by 24 thousand, while the Alaska Highway pipeline routing would increase Alaska's gross product by \$111 million and population by 15 thousand. These calculations do not take account of the fact that Haines and Skagway would undoubtedly be major ports of entry for materials and equipment destined for construction activities in Yukon Territory.

For these reasons, the Northwest proposal seems at the very worst to be a workable compromise that would be acceptable to almost every important Alaskan interest group. The newly proposed system may, however, be more attractive to Alaskans than as just a fallback position or a workable compromise. Northwest Pipeline's approach to the state contrasts sharply with the "take it or leave it" stance of both of the original

applicants. Northwest has at least informally suggested that the state take an equity share in the pipeline system and take part in its planning and operation. The company also has approached, or plans to approach, Alaska-based corporations for participation, including the Inuit-owned Arctic Slope Regional Corporation and the Athabaskan-owned Doyon, Ltd., and has suggested that a block of shares in the enterprise be offered to the general public in Alaska. The effect of these innovations would be to ensure that the system within Alaska would be closely identified with local interests and be responsive to them.

Regional interests outside of Alaska: The Alaska Highway pipeline proposal offers significant advantages over the two other proposed systems to a wide variety of regional and sectoral interests outside of Alaska.

British Columbia

For British Columbia, introduction of Prudhoe Bay gas will more fully utilize the existing facilities of Westcoast Transmission, and thereby reduce the cost of British Columbia gas delivered to consumers in the province. Construction of the pipeline would provide a stimulus to the development of northern British Columbia and Yukon Territory, and strengthen the territory's links with market and financial centres in British Columbia. The proposal is now being discussed in the province as a possible justification for extending the British Columbia Railway to Whitehorse and eventually to Fairbanks. For these reasons, the provincial government has endorsed, and is reportedly considering joining in the pipeline project, perhaps as an equity participant.

Alberta

The project could be supported by the crucially important Province of Alberta (which now opposes the Arctic Gas application) because it would contribute to the optimum use of Alberta's own gas transmission system, rather than establishing a competing trunkline through the province. Unlike Arctic Gas, moreover, the new system would not in the immediate future compete with, and require the shutting in of, Alberta gas now dedicated to markets in eastern Canada.

Canada

For Canada as a whole, the Alaska Highway proposal would postpone the necessity of deciding when how and by whom the Mackenzie Delta — Beaufort Sea region was to be developed, and whether that region or the Arctic Islands should take first priority for develop-

ment among Canadian frontier regions. By reducing the total amount of new construction and shifting a substantial part of the construction out of Canada and into Alaska, the Alaska Highway system would reduce the stress on Canadian capital and labour markets and on the nation's foreign exchange position.

Pacific Northwest

The system proposed by Northwest Pipeline is by far the most economical method of moving North Slope gas into the Pacific Northwest, and it is for that reason supported by the gas distributors of the region. In contrast to the Arctic Gas proposal (which is a second-best gas supply alternative for the Northwestern states), construction of an Alaska Highway system would rely mainly on Seattle-Tacoma and other ports in the region as supply and transportation bases for the northern half. The Alaska Highway route would not make as large a contribution to Port of Seattle activity and revenues as would El Paso's LNG project but the latter is not in my judgement likely to prevail, and the Alaska Highway system therefore offers maritime interests and construction in the Northwest the greatest volume of business they are actually likely to obtain from any Alaska gas transportation system.

California

For California, the Alaska Highway system offers a comparatively economic and (because it utilizes conventional technology) reliable source of incremental gas supply. Unlike the El Paso project it would not raise novel safety issues nor would it threaten to displace California's present low price gas from the Permian Basin in favour of high price LNG imports from Alaska.

Midwest & East

For the United States' Midwest and East, the Alaska Highway project (like the Arctic Gas project) would provide an assured supply of natural gas directly into the market areas where the shortages are most acute. Because of its smaller risk of construction delays and cost overruns, however, the Alaska Highway system should, on balance, be preferable. By preserving Canada's option to develop the Arctic Islands and the Polar Gas pipeline earlier than the Mackenzie Delta and Beaufort Sea, the Alaska Highway proposal may offer a better possibility (however remote) of increasing producible and transportable Canadian reserves to such a quantity that the Canadian government would be willing to consider new export commitments.

There cannot help but be some losers. First, of course, are those gas transmission companies whose projects would be turned down and the construction and service firms who hoped to build a bigger system or a different system from the one which is finally approved. There is Exxon, whose affiliate Imperial Oil is part of the Canadian Arctic Gas group, and other producers with interests in the Mackenzie, who would be deprived of an early hookup to their Arctic reserves, however superfluous that hookup may be at the present time from the standpoint of Canada's energy economy. Finally, there are those who would expect to build and operate the LNG tankers if the El Paso project prevailed, together with those (in the Port of Seattle, for example) who hope for a larger demand for their transportation and other services than an Alaska Highway project can generate.

For Canada as a whole, the Alaska Highway proposal would postpone the necessity of deciding when, how and by whom the Mackenzie Delta-Beaufort Sea region was to be developed, and whether that region or the Arctic Islands should take first priority for development among Canadian frontier regions.

On balance, however, if we take into account the lower front-end cost, the smaller vulnerability to cost overruns, and the widely agreed-upon environmental advantages of the Alaska Highway route, a system similar to that proposed for the Alcan may be the best practical alternative for almost every region in both Canada and the United States. Together with its broad acceptability to Alaskans these considerations make a system like that proposed by Northwest and Foothills a possible winner despite its late entry into the competition.

Arlon R. Tussing

Arlon R. Tussing is a professor of economics at the University of Alaska. He has done extensive research and writing on northern oil and gas development and has served as chief economist for the U.S. Senate's National Fuels and Energy Policy Study, headed by Senator Jackson. He is currently completing a term on Alaska's Royalty Oil and Gas Development Board.

What's in it for Canada?

The probable reception of any Alcan proposal by Canadian authorities has been a most difficult issue to forecast. A major appeal of the Arctic Gas project is purportedly its early (if not necessarily more economical) attachment to the Mackenzie reserves. Without this feature, it may be asked, what is the advantage to Canada of accommodating the United States in moving Alaska gas?

The attachment of the Mackenzie reserves may, on the other hand, be seen as a major disadvantage of the Arctic Gas system, from at least one Canadian standpoint. There is no particular reason why Canada should not accommodate the United States with a transit line across Canadian territory; after all, a substantial portion of Canada's oil and gas supplies transits the United States. There would seem to be little objection in Canada on nationalistic grounds to American gas moving in either an American or a Canadian-owned pipeline across Canada. The Mackenzie project, in contrast, raises the issue of an American-dominated consortium developing an important frontier area of Canada. The fact that an early Mackenzie connection is being justified in the United States by the (doubtful) proposition that it would lead to greater Canadian exports to the United States aggravates its potential difficulties in Canada. Both its timetable and logistics would be dictated by the convenience of the American interests. The native claims and environmental complications of this route are also well known.

If Congress and the Canadian Parliament have any inkling now about the long journey on which they are about to embark, they may hesitate.

The 60 trillion cubic feet of proved reserves in the western provinces are enough to sustain the expected growth of Canadian demand plus present export contracts for about ten years. This would be the case even if there were no further discoveries, but recent exploratory results in Alberta have been rather encouraging, more so in fact than in the delta area. For this reason a decision on an Arctic pipeline carries much less urgency for Canada than it does for the United States.

More importantly, however, a decision today in favour of immediate development of the Mackenzie Delta-Beaufort Sea region can be seen to prejudice whether that region or the Arctic Islands (where recent exploration seems to have been more successful) shall be developed first. Either project could strain the capacity of domestic capital markets so that simultaneous construction of two major pipeline systems under Canadian majority ownership is almost out of the question.

It is not obvious which of several competing considerations is likely to be dominant in the eventual decision by the National Energy Board and the Cabinet, but on balance there now appears to be a favourable climate for a co-operative project with the United States concerning Alaskan gas. If the Alcan project were not a serious contender, this means that the Arctic Gas proposal would be approved. The Maple Leaf project is not timely either in terms of known reserves or in terms of Canadian demand, and it is not a serious contender at this time.

A decision in favour of Arctic Gas would, however, be a reluctant one and would be opposed from many quarters within the Canadian federal government, by several provinces and by a large body of Canadian opinion. These objections rest on a broad range of environmental, economic, nationalistic and native claims considerations, and most decisively perhaps on the fact that the approval of Arctic Gas might effectively preclude or postpone for many years the Polar Gas alternative. For these reasons, my own tentative judgement is that the Canadian government will — once it has had an opportunity to consider the alternative — welcome the opportunity to avoid an early decision one way or another regarding the Mackenzie. This is likely the biggest benefit to Canada from the Alcan proposal.

Arlon R. Tussing

Exhibit 12

NATURAL GAS SUPPLY
OUTLOOK FOR
THE WEST

SUMMARY OF COMMENTS

BY

ARLON R. TUSSING

AT

NATIONAL ECONOMIC RESEARCH ASSOCIATES, INC.

WORKSHOP ON ECONOMIC GROWTH IN THE WEST

AND RELATED ENERGY PROBLEMS

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1. It no longer means much to speak of a gas supply outlook for the Pacific states as distinct from the outlook for the contiguous 48 states as a whole. With a nearly complete nationwide gas transmission network and transmission loads that are stagnant or declining, an abundance or shortage of gas in one region can be shifted to any other region or spread evenly across the country, without major investments in new transportation capacity.

2. The emergence of a single national market for natural gas is of course inhibited by FPC wellhead price controls, which discourage both interstate sales generally and reallocation of gas among interstate purchasers. And existing long term sales contracts together with the need for certification and abandonment proceedings before the FPC and state commissions make even the most economically logical exchange and displacement arrangements difficult to put into effect.

3. Nevertheless, if institutional obstacles effectively prevent the smoothing out of gross regional disparities in gas supply, we can expect Congress to give the FPC authority to reach into intrastate markets, to allocate new natural and synthetic gas among regions, and perhaps even to reallocate flowing gas among interstate pipelines.

4. Congress would surely direct the FPC to allocate gas nationally if it were to approve any LNG system for the delivery of North Slope natural gas, which would require large areas of the United States to receive new gas supplies by displacement rather than directly. Approval of a MacKenzie or Alcan system without a western leg would also strengthen the demand that the FPC have direct allocation authority. Such an outcome would be unfortunate because any non-market allocation system would blunt the incentives of transmission companies and gas utilities to solve their own supply problems.

5. It is possible to make some broad generalizations about both the commodity value and the cost of gas on a national scale. The demand for gas can be separated into three main components: (a) a premium market in which only electricity is a competitive energy source, (b) an intermediate market in which refined petroleum products (distillate fuel oil, naphtha, propane, etc.) are effective substitutes, and (c) the "black fuels" market in which natural gas can displace coal and residual fuel oil only when it is cheaper.

6. The intermediate market, which is composed of household and small commercial space heating, and use for crop drying, in combustion turbines and for chemical feedstocks

(plus utility boiler fuel in times and places with severe air quality problems), is by far the major part of total consumption, so that all plausible projections of United States natural gas supplies through 1990 fall into this intermediate segment of the demand function. For this reason the long-term commodity value of gas will be equivalent, more or less, to the cost of refined petroleum products. Assuming that the real price of imported crude oil remains about the same as it is today, we can anticipate a long-term demand price for gas of \$2.50 to \$3.00 in 1976 dollars.

7. The demand price for gas will be somewhat higher than that of distillate fuel oil if total gas supplies continue to decline over the period, because the alternative to gas for many consumers will not be simply the substitution of a petroleum product but will also include the cost of converting or replacing existing gas-burning equipment.

8. The average (rolled in) cost of gas will be just about equivalent to this commodity value or demand price. Pipelines and distributors will continue to get some quantity of gas purchased on long term contracts or controlled at less than its commodity value. They will therefore be able to augment these low price conventional supplies with just enough high cost gas "supplements" at \$4, \$5, \$6 or more per Mcf, to bring their average price up to the demand price.

9. For this reason deregulation (or the level of regulated gas prices) can not be expected to have a great effect on the average price consumers pay for gas.

It might, however, have a powerful influence on how much gas is available at that price (although the direction of this influence is not obvious -- see footnote), and upon the economic cost to the nation as a whole of its gas supply.

(The national economic cost would be lowest under deregulation, but the larger part of the net benefit would be captured by gas producers rather than by consumers.).

10. The most certain and economical source of additional gas for premium and intermediate markets are the volumes now being burned under industrial and electric utility boilers and as refinery fuel. End use controls

The question hinges on the responsiveness of conventional gas supplies to price. If supply is relatively price-inelastic, the main impact of deregulation or higher wellhead prices would be to transfer revenue to gas producers and royalty owners at the expense of the pipelines and distributors. Since the latter would otherwise have used this revenue to finance the purchase or production of high-cost gas supplements, total gas supply would be less than it would be at the old regulated prices. On the other hand, if the supply of new reserves of conventional gas is highly responsive to price (as I believe is more likely), an additional dollar paid to the gas producers will elicit a greater volume of gas than the same dollar spent on such projects importing LNG or manufacturing SNG from coal or oil.

by the FPC and state authorities are already encouraging such a shift. But in order to employ existing reserves most efficiently around the year, elimination of interruptible sales for low-priority use must go together with investments in storage facilities and in increased peak deliverability in the field. Incentives for the latter adaptation are now blunted by price controls, but added storage is probably a worthwhile investment for almost every gas transmission company or utility.

11. The main supplemental sources of gas appear to be Canadian pipeline imports, LNG imports, Alaskan natural gas and SNG from coal and petroleum.

12. The price of future Canadian imports is reasonably predictable, but their volume is not. The Canadian federal government and Alberta have adopted an explicit commodity value standard for gas pricing in both domestic and export markets (though it is being implemented more slowly for Canadian consumers), and there is little reason to believe that this policy will be changed.

13. The approximately 60 TCF of presently proved reserves in the Western Provinces are sufficient to serve projected Canadian demand plus existing export commitments for about 10 years without creating deliverability problems. A continuation of recent Alberta discovery

trends may be sufficient to assure that existing export contracts will in fact be honored. But there is no development, short of huge discoveries (perhaps another 60 TCF) in the Arctic that would be likely to induce the Canadian government to approve new export commitments.

13. The sufficiency of present supplies to Canada for about ten years, means

that any Mackenzie or Polar pipeline will be superfluous to Canada's needs for at least that period, unless reserve volumes justifying exports are developed. This implies that there is no urgency for Canada in an early determination regarding the desirability, scale or timing of a Mackenzie Valley pipeline.

14. Large LNG import projects, coal gasification, and facilities to deliver gas from the Alaskan (and/or Canadian) Arctic to Lower 48 markets share several features which raise serious questions about their economic viability or practical feasibility. Each of them requires large, "lumpy" investments -- in the billions or tens of billions of dollars -- and involves unproved technology or a substantial scale-up of proved technology. Some proposals involve a unique physical or institutional environment (e.g., the Arctic Gas proposal and Indonesian LNG)

in which no engineering projects of their magnitude has ever been attempted. Each of them involves numerous regulatory jurisdictions, including more than one sovereignty or quasi-

sovereignty (states and provinces). Each of them involves major environmental and safety issues, real or imagined, usually in more than one regulatory jurisdiction.

15. The construction and operating cost projections offered by the proponents of each of these gigantic capital-intensive projects are already near the margin of economic feasibility, even assuming the absence of major delays, technological or engineering false starts, or cost overruns.

16. Recent experience with military procurement, nuclear power plants, the Trans-Alaska pipeline and other large custom-engineered construction projects indicates that all the large supplemental gas projects are exceptionally vulnerable to delay and cost-overruns, if not to non-completion.

17. The scale of these projects typically exceeds the net worth of their sponsors, precluding conventional secured financing. Uncertainty about construction costs and completion dates, aggravated by political and licensing uncertainty make no-recourse debt financing equally improbable. Each project therefore probably requires government loan guarantees (increasing their vulnerability to political opposition) and/or all-events tariffs, which state commissions are unlikely to approve.

18. In short, I believe that the odds are against any supplemental gas supply facility with a total projected capital cost of greater than \$1 billion. The chances that all the supplemental gas projects considered necessary to provide an adequate gas supply to any region (e.g., California) will be actually completed, is nil.

19. Of the three proposals for transporting North Slope gas, the Alcan project is in my judgment the most credible, even though the comparison of pro-forma cash flow projections would seem to favor Arctic Gas. By using conventional pressures, pipeline size and construction technology, already developed transportation corridors, and existing pipeline routes and systems in Western Canada, Northwest Pipeline's Alcan proposal avoids or mitigates the major sources of cost overruns. Moreover, Alcan is the only proposal of the three which does not depend for its feasibility on larger volumes of gas than can be assured from presently proved reserves.

20. The Alcan proposal is probably the least vulnerable of the three to political opposition on regional or sectoral grounds. It does not involve the siting and safety issues of the LNG system, but unlike Arctic Gas, it is favored or at least is not vehemently opposed by any of the states or provinces (including Alaska and Alberta) which it must transit. The Alcan concept is the one favored by the major U.S. environmental organizations. Native claims issues, moreover, seem to be closer to resolution in the Yukon than in

the Northwest Territories.

21. The synthesis of pipeline quality gas from petroleum does not suffer from most of the handicaps of coal gasification or of the other capital-intensive sources of natural gas supplements. Here again, as in the case of the alternatives for transportation of Alaska gas, a priori cost comparisons may be deceptive. SNG from oil appears to be more costly than SNG from coal, but this comparison ignores the fact that it is a proved technology on a commercial scale, that its optimum economic scale of plant is an order of magnitude smaller, and that the feedstock is (barring a new embargo) available in unlimited quantities.

22. The smaller scale and general abundance of feedstocks for SNG plants using petroleum fractions (naphtha or LPG) means that each plant can be located within the consuming state, (freeing it from FPC jurisdiction), within the service area of the pipeline or utility which distributes it (reducing local opposition), and in a site chosen for environmental acceptability (rather than one dictated by location of the resource or by proximity of a deep water harbor). For all of these reasons, I suspect that the West Coast gas industry's ultimate recourse when almost everything fails (as it probably will) is the construction of decentralized SNG plants using naphtha feedstocks from overseas (or even Alaskan) topping plants which ship their residual crude oil fractions to Japanese or Atlantic customers.

12.9

23. The best bets for new pipeline gas supplies, I believe, come from state-of-the-art technologies and scales of effort, not from ten year leaps into the future and tenfold leaps in size. The source of gas that best meets this standard is conventional natural gas conventionally extracted. Exploration for gas (and for oil, which is found in similar environments by the same techniques) is an entirely different kind of business from producing synthetic fuels or building major gas transmission projects or the maximum scale electrical generating plants. The minimum unit of physical capital, a single wildcat well for instance, ranges in cost from tens of thousands of dollars to several millions -- a scale on the order of one thousand times less than the investment thresholds for coal gasification, oil shale, nuclear power or Arctic gas transmission.

24. There are literally thousands of enterprises in the oil and gas producing industry, with perhaps hundreds that are large enough and progressive enough to stand on the cutting edge of new technology. The journey to new frontiers of gas exploration and recovery, whether they are technological frontiers, deeper or stormier water, permafrost or deep rocks, can be taken in small steps, with part of the industry consolidating information and techniques from the last step while other firms take the pioneering risk.

12.10

Onshore, the payoff to exploration investment can be a matter of weeks, and is seldom more than two years. Off-shore and in the Arctic, it may be three, five or seven years, but seven years is probably the minimum lead time for the big-ticket gas supply projects.

25. Regarding the potential price-responsiveness of natural gas supply, there are an incredible number of different opinions. It is obvious, however, that FPC price controls are not a major obstacle to exploration and development in any state large enough to have a significant intrastate gas market: these include present net exporters of gas like Texas and Louisiana as well as net importers like California. It has now been three years since the Arab embargo and the energy price revolution, so that some evidence one way or another on the price responsiveness of conventional onshore gas supply ought to be available before long.

26. Price controls on gas may or may not be an effective deterrent to development of new gas resources on the Outer Continental Shelf, but they are not the major deterrent. It is unfortunate that environmentalist opposition to energy development has been most effective here, because the OCS oil and gas will be in my judgment/least environmentally harmful source of large new supplies of primary energy for the United States, as well as the least costly in terms of real economic resources.

27. In summary, small seems indeed to be beautiful in energy supply alternatives. Or, at least, small is practical given today's political and financial realities. At the same time, I would urge along with the ecologists that diversity is stable, and so is decentralization. Diversified and decentralized systems are also more predictable in the aggregate. For this reason, a strategy for gas supply which depends mainly on a few large coal gasification and Eastern Hemisphere LNG projects and on the Arctic Gas pipeline stands a large risk of total failure. A strategy which puts even half of the capital projected for these projects into storage and increased peak deliverability, into conventional and modestly innovative onshore and offshore gas exploration, into SNG from naphtha facilities, into small LNG projects (as in Cook Inlet), and into a minimum scale transportation system for North Slope gas (like the Alcan system) may not yield the grandiosely optimistic projections for 1985 or 1990 gas supply which industry and government agencies like to put on their charts. Such a strategy will, however, surely and predictably produce enough gas at acceptable prices to serve the premium markets, and will continue to make some contribution to satisfy the intermediate market.

EL PASO NATURAL GAS COMPANY
NATURAL GAS CONSUMPTION FOR THOSE
STATES SERVED WHOLLY OR IN PART
Calendar Year 1975

Exhibit 13

<u>STATE</u>	<u>EPNG SALES</u>	<u>TOTAL CONSUMPTION</u>	<u>EPNG PERCENT OF TOTAL CONSUMPTION</u>
Arizona	164,704 MMCF ¹	164,704 MMCF	100.0%
California	1,008,158 MMCF	1,807,604 MMCF	55.8%
Colorado	120 MMCF	290,798 MMCF	<1%
Nevada	28,590 MMCF	60,446 MMCF	47.3%
New Mexico	43,336 MMCF	167,220 MMCF	25.9%
Oklahoma	11 MMCF	639,575 MMCF	<1%
Texas	34,627 MMCF	3,911,026 MMCF	<1%
Utah	19 MMCF	123,098 MMCF	<1%

¹ MMCF = millions of cubic feet

NATURAL GAS CURTAILMENT IN 1976
AND ESTIMATED CURTAILMENT IN 1981
1976

	<u>VOLUME</u>	<u>% OF REQUIREMENT</u>
P 1	0	0
P 2	1,731 MMCF	1%
P 3	35,666 MMCF	16%
P 4	2,862 MMCF	21%
P 5	219,809 MMCF	65%
TOTAL	260,068 MMCF	19%

1981

	<u>VOLUME</u>	<u>% OF REQUIREMENT</u>
P 1	83,071 MMCF	15%
P 2	143,261 MMCF	52%
P 3	254,693 MMCF	100%
P 4	11,440 MMCF	100%
P 5	348,723 MMCF	100%
TOTAL	841,188 MMCF	58%

prepared by El Paso

What is the Alcan Pipeline Project?

The Alcan Pipeline Project is the proposal of the Alcan Pipeline Company, a wholly-owned subsidiary of Northwest Pipeline Corporation, headquartered in Salt Lake City, Utah. Northwest Pipeline owns and operates a 4,400-mile pipeline system extending from the San Juan Basin in New Mexico and Colorado to the Canadian border, serving natural gas customers in seven western states. The company supplies all of the natural gas consumed in Idaho, Oregon and Washington and part of the gas used in Nevada, Wyoming, Utah and Colorado. Northwest Pipeline has assets of more than \$500 million.

On July 9, 1976, the Alcan Pipeline Company filed a request with the Federal Power Commission seeking authorization to construct a 731-mile pipeline in Alaska, utilizing the Fairbanks Corridor / Alcan Highway Route. This pipeline will be part of a proposed new pipeline system to transport natural gas from the Prudhoe Bay on Alaska's North Slope to markets in the lower 48 states.

The planned pipeline would follow established utility and highway corridors in Alaska and Canada and would utilize existing Canadian pipeline systems to deliver the gas to the United States border. This conforms to the Mineral Leasing Act which calls for joint use of rights-of-way to prevent unnecessary scarring of public lands.

Four Canadian Companies — Westcoast Transmission Company Limited; The Alberta Gas Trunk Line Company Limited and its subsidiary, Alberta Gas Trunk Line (Canada) Limited; and Foothills Pipe Lines Ltd. — have entered into an agreement with Alcan and Northwest Pipeline to transport the Prudhoe Bay gas through Canada to the U.S. border and have filed the necessary applications for Canadian regulatory approvals.

Alcan Pipeline's project will be designed to transport all of the Prudhoe Bay gas, up to approximately 2.4 billion cubic feet per day, through a 42-inch diameter pipeline. The pipeline will follow the Alyeska oil pipeline for ap-

Facts about Alcan

The Alcan Pipeline Project is one of three systems currently being considered by the Federal Power Commission for the transportation of Alaskan gas reserves to markets in the lower U.S.

The Alcan Pipeline Route will parallel the Alyeska oil pipeline for 539 miles to Delta Junction, at which point it will proceed along the Haines utility corridor and the Alcan (Alaska) Highway to Fort Nelson, British Columbia and Zama Lake, Alberta. Existing Canadian pipelines will carry the Alaskan gas for redelivery to U.S. transmission companies at three points along the U.S./Canadian border.

New Pipeline: 1,806 new pipeline miles — 731 in Alaska and 1,073 in Canada.

Diameter: 1,499 miles of 42-inch pipe and 307 miles of 36-inch pipe.

Capacity: 2.4 billion cubic feet per day (expandable to 3.1 billion) within three years of operation. Initial capacity of 1.2 billion cubic feet per day.

Cost Estimate: In 1975 dollars, the Alaskan portion of the Alcan Project will cost \$2.3 billion, and the Canadian portion will cost \$2.4 billion. Alcan's total costs, including additional facilities in the lower 48 states, are \$6.3 billion.

Comparative Costs are \$10.4 billion for Arctic Gas and \$6.6 billion for El Paso.

Canadian Associates: Alberta Gas Trunk Line Company Limited and its subsidiary Alberta Gas Trunk Line (Canada) Limited; Westcoast Transmission Company Limited; and Foothills Pipe Lines Ltd.

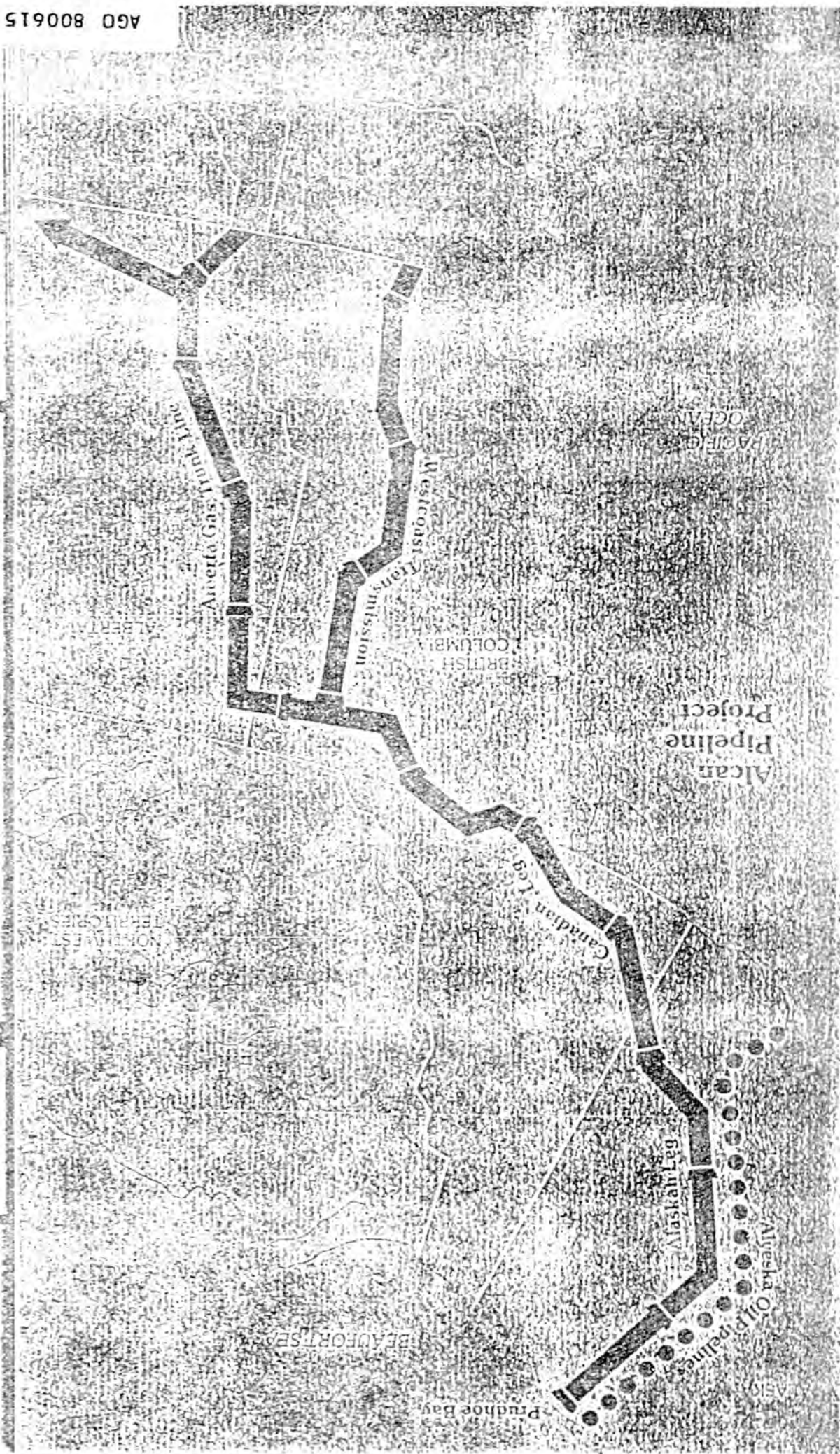
Alcan's Advantages:

- Lowest total investment for transporting Prudhoe Bay gas.
- Lowest delivery costs.
- Earliest delivery date.
- Provides stable economic growth base for the Alaskan interior.
- Least environmental impact.
- Year-round access to all facilities.
- Can be built independent of Canadian decision to develop its frontier gas reserves.



14.1

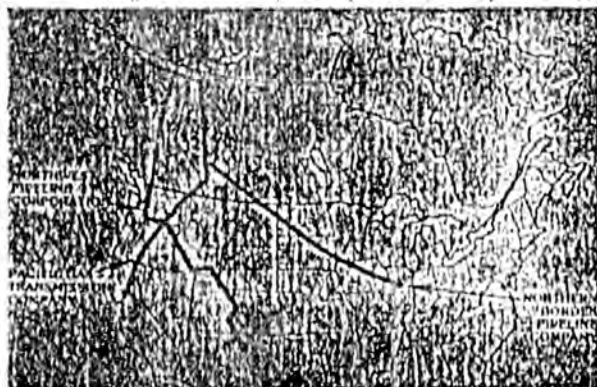




proximately 539 miles to Delta Junction, south of Fairbanks, where it would then parallel the Alcan (Alaska) Highway to the Yukon border.

At the Alaskan/Yukon border gas would be delivered to a new pipeline to be constructed by a Canadian company, Foothills Pipe Lines Ltd., which would continue the transportation of gas through a 42-inch pipeline along the Alcan Highway to the Yukon-British Columbia border and then by Westcoast Transmission Company Limited to Fort Nelson, British Columbia.

At Fort Nelson, a portion of the gas would be diverted into the expanded existing system of Westcoast for ultimate delivery to the United States at an interconnecting point on the border near Sumas, Washington, where the gas will be received by the Northwest Pipeline system for delivery to western markets.



The Alcan Project will provide for direct pipeline delivery of Alaskan gas to markets in the lower 48 states.

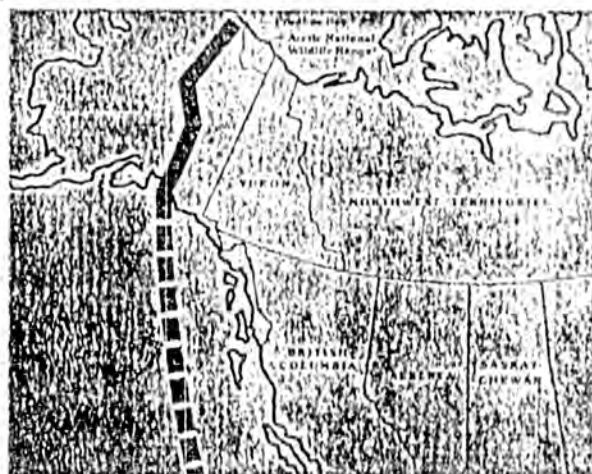
The remainder of the gas would be transported from Fort Nelson to Zama Lake, Alberta, through a new pipeline for delivery at Zama Lake to Alberta Gas Trunk Line Company Limited. Alberta Gas Trunk Line would then transport the gas through its expanded existing system for delivery to Enpress, Alberta, and to Coleman, Alberta where the existing Alberta Natural Gas Company line would carry the gas to Kingsgate, British Columbia for delivery to the Pacific Gas Transmission system, which would transport the gas to California.

From Enpress, Alberta, Foothills would construct a new pipeline to Monchy, Saskatchewan and from there, gas destined for the Midwest and Eastern regions of the United States could be delivered through the Northern Border Pipeline, presently pending before the FPC.

What are the Alternative Proposals?

The El Paso Natural Gas Co. proposes to construct a trans-Alaska pipeline that would roughly follow the Alyeska oil pipeline. Under El Paso's proposal, gas would be liquefied in Alaska and transported as LNG to southern California where the gas would be delivered from the West Coast to the rest of the U.S. by a displacement mechanism which has not yet been defined.

The proposal of the Arctic Gas Group is an all-land route that would begin in Prudhoe Bay, cut straight across the virgin wilderness areas including the Arctic National Wildlife Range, to Canada's Mackenzie Delta, then south to the U.S.-Canadian border, where proposed companion lines would carry the gas to the eastern and western U.S.



TRANS-CANADA ROUTE OF ARCTIC GAS

Economic Advantages of Alcan

The total cost of the Alcan Project, including facilities for transporting the gas within the lower 48 states, is \$6.3 billion in 1975 dollars. This compares with \$10.4 billion for the Arctic Gas proposal and \$6.6 billion for the El Paso proposal.

The lowest total cost is a major advantage. The Alcan Project will almost certainly be easier to finance. Capital, like natural gas, is a resource that is limited but very necessary.

This lower total cost makes Alcan transportation costs lower. Figures filed with the Federal Power Commission show that Alcan will be able to transport Alaskan gas to the U.S. at a lower cost than either of the competing projects. We estimate the transportation cost of our service to markets in the lower U.S. to be \$1.35 per million BTU, compared to \$1.59 per million BTU for Arctic Gas, 24 cents higher than Alcan. El Paso's transportation costs, on a comparable basis, are expected to be \$1.69 per million BTU, 34 cents higher than Alcan.

There are many reasons for Alcan's lower total cost and lower transportation cost figures. One is that Alcan is following existing highway and utility corridors all the way. Additionally, use of the existing oil pipeline construction work pad, communications system, airfields and all-weather roads will allow work to begin immediately with a minimum of preliminary construction.

Transporting equipment and supplies to the construction site is a major logistical problem. Without existing roads, the problem is multiplied many times.

New Construction Pad

Arctic Gas proposes construction of snow roads and would have to bring much equipment in by air. Under the Arctic Gas plan, pipeline construction would take place from snow roads during the short winter construction periods.

However, the northern reaches of Canada and the area along Alaska's North Slope are semi-arid regions, with only about 10 inches per year and occurring mostly in summer.

Therefore, annual snowfall would be insufficient for the construction of snow roads and the manufacture of artificial snow would be required. However, Arctic Gas has no prototype machine to produce the snow necessary for the roads.

Even if it were possible, most experts doubt that the snow roads would prevent damage to the highly sensitive arctic soil. They also doubt that there's enough water to make the snow to construct the roads and even if the water can be found, utilizing it in this fashion would almost certainly damage fish populations irrevocably. Use of ocean water is clearly impossible because the high salt content would create permanent damage to the arctic soil and wildlife. In short, Arctic Gas is relying on a totally unproven concept.

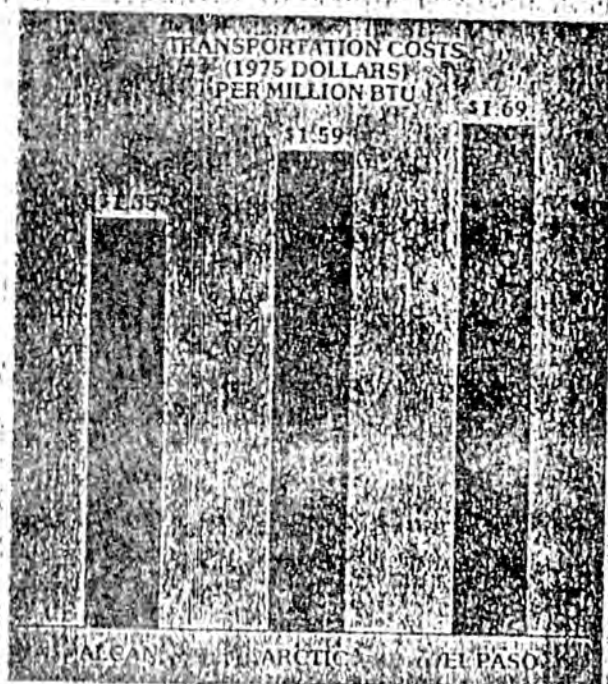
El Paso's prime route generally follows the Alyeska oil line but would require construction of a new work pad. El Paso has filed an alternative route which would utilize 79 per cent of the Alyeska work pad, but still proposes its prime route which would lead to much duplicated work and increased environmental impact.

When the Alcan route departs from the Alyeska oil line but would require construction of a new work pad. El Paso has filed an alternative route which would utilize 79 per cent of the Alyeska work pad, but still proposes its prime route which would lead to much duplicated work and increased environmental impact.

Cost of the Alcan Pipeline Project is \$4.4 billion less than that of Arctic Gas and \$300 million below El Paso's project.



14.5



Alcan delivery cost per million BTU, an all-important cost to the consumer, is the lowest.

route of the oil line near Delta Junction and continues southeast following the Haines pipeline corridor and the Alcan Highway, the highway itself will provide access to all construction areas and will enable Northwest to get supplies and equipment to the work site more quickly and with less expense.

We believe that utilizing facilities presently available is an important way to keep costs down.

Another area in which we adhere to this philosophy is in the utilization of existing Canadian pipelines. Our Alcan route would tie in to West coast Transmission Company facilities at Ft. Nelson, British Columbia and to Alberta Gas Trunk Line facilities near Zama Lake, Alberta. These Canadian lines have excess capacity at present and can be "looped" to handle more of the Alaskan gas as it comes on stream.

Unlike Arctic Gas, we see little reason for an entirely new pipeline in areas where existing pipelines can do the job. This is another reason why Northwest can deliver the gas two years sooner than Arctic Gas or El Paso.

Time Means Money

Those two years mean money. If men and equipment are on the job two years longer, it simply stands to reason that costs will be substantially higher, not only because of the amount of time but because of inflated unit costs of labor and equipment.

Constructing the Alcan route as quickly as possible is another way we plan to hold costs down.

Our Canadian associates in the Alcan Project have North America's greatest experience in gas pipeline construction through permafrost. This experience will enable them to hold costs down and complete construction on schedule.

We also chose the 42-inch pipeline because it is the most economical method of transporting a daily volume of from 2.0 to 2.5 billion cubic feet of gas, as projected by Prudhoe Bay producers. Total recoverable reserves in the field are estimated at 26 trillion cubic feet, but Prudhoe Bay is essentially an oil field — not a gas field — and gas production above certain levels may cause an irreplaceable loss of oil in the gas cap. The State of Alaska has the responsibility of deciding how much oil and gas will be produced from the field, and one of the considerations is to adopt a plan which prevents undue loss of oil. For this reason it will be some time before the Prudhoe Bay field produces large volumes of gas. Our system is the only one with flexibility to handle small gas production rates and build up to the volumes which are realistically expected to be produced from the Prudhoe Bay field.

Half for Canada

Arctic Gas is proposing a 48-inch pipeline to carry up to 4.5 billion cubic feet daily. One-half of this capacity is dedicated to Canadian use for transportation of Mackenzie Delta reserves, destined exclusively for Canadian markets. Therefore, Arctic Gas is transporting only 2.25 billion cubic feet daily for U.S. markets. This compares with 2.4 billion cubic feet per day for the Alcan Project. We estimate that the Alcan line is adequate to carry all of the gas production which may be realistically expected from the Prudhoe Bay oil field.

AGO 800618

Although Northwest's proposal does not need Canadian gas to operate profitably, it should be pointed out that the Alcan Project is compatible with Canadian plans to develop Mackenzie Delta gas at a later date.

It is definitely in the U.S. national interest to develop Alaskan North Slope reserves quickly and to transport them to energy-hungry U.S. markets. But is it in Canadian interests to develop Mackenzie Delta reserves immediately? This is a question that only Canada can answer.

Some facts are known. The Arctic Gas proposal would force development of Mackenzie Delta gas in the early 1980's. However because of increasing prices and a corresponding reduction in demand — in conjunction with increasing supplies in British Columbia and Alberta — it may not be in Canada's national interest to develop the Mackenzie Delta reserves at this time.

Northwest's proposal gives Canada the option of developing these reserves at a time when they will be most needed to meet the country's long-term requirements. The Canadians have made quite a point of wanting to reserve Canadian gas for domestic use and it is highly unlikely that additional exports from Canada to the U.S. are forthcoming. The Alcan Project can be approved to deliver Prudhoe Bay gas independent of Canada's policy for developing frontier gas.

Environmental Advantages of the Alcan Plan

The pipeline route chosen by Alcan and Northwest has been widely acclaimed as environmentally superior to the other two alternatives. The Federal Power Commission environmental staff and the Department of Interior both favor the Alcan Highway route. This route also has won the support of the Sierra Club, Friends of the Earth, National Audubon Society, Wilderness Society and others, and some of their comments have been included in this brochure.

The reasons for their objections to the Arctic Gas proposal are primarily that it would gouge a pipeline corridor directly across the coastal plain of the Arctic National Wildlife Range, the only large, pristine arctic wilderness area and one of our national wildlife refuges.

Environmental and safety objections have prompted their opposition to the El Paso proposal. El Paso is proposing a complex system

Caribou calving grounds in the Arctic National Wildlife Range.





Alcan would affect no undisturbed wilderness areas.

of gas liquefaction, transportation and regasification in environmentally sensitive areas on a scale never before attempted and not yet proven.

Which brings up another point. These ingredients: new technology, sensitive environments and a large scale relative to previous projects are the major ingredients for mammoth-sized cost overruns. Dr. Arlon Tussing, former chief economist of the Senate Interior Committee and a professor at the University of Alaska, has said that he would not be surprised to see the cost of either the El Paso or Arctic Gas projects exceed \$20 billion.

The Alcan Project, however, has all of the ingredients for realistic costs and the lowest probability for cost overruns. Alcan proposes conventional technology — a 42-inch diameter line at normal pipeline pressures and only traverses environments where construction experience exists.

Environmentalists prefer route of the Alcan Pipeline Project



"(The Wilderness Society) is most pleased to see the filing by Northwest Pipeline Company — at the Federal Power Commission — to construct a transportation system along the existing TAPS Corridor and the Alcan Highway to connect with existing distribution systems in Canada. This route appears to us to be the most environmentally sound."

—Bar Cooke, The Wilderness Society

"The Fairbanks-Alcan corridor appears to be the most environmentally acceptable alternative because it uses a developed transportation corridor which will not degrade the wilderness character of the Arctic National Wildlife Range and obviates the inherent long-term risks of an All-Alaska, LNG system."

—Pamela Rich, Friends of the Earth

"A less elaborate system (than that proposed by either Arctic Gas or El Paso Alaska Company) would certainly benefit the consumer, and a proposal which utilizes existing corridors would have far fewer adverse environmental effects, lower operating and maintenance costs, and less chance of cost overruns than either of those proposed."

—Barbara Heller, Environmental Policy Center

"...there is increasing evidence that the Alcan Highway routing may be the most environmentally preferable of all the alternatives now before us."

—Brock Evans, The Sierra Club



Sheenjek the Arctic Range

"We believe that the Fairbanks highway alternative deserves further analysis and review so that it can be compared with the other two proposed routes. If your (the Senate Commerce Committee's) purpose is to assure more direct delivery of natural gas to the Midwest or Northeast, the Fairbanks route would do it."

—Cynthia E. Wilson, The National Audubon Society

"... the Center favors construction of the gas pipeline in a utility corridor that is already in use with the provision that the pipeline should utilize to the maximum extent facilities that are already built, including highways, construction pad, access roads, material sites, camps etc."

—Peter Scholer, Alaska Center For The Environment

"The staff concludes that... the Fairbanks Alternative... is the most environmentally acceptable system to transport Prudhoe Bay gas to the lower 48 states."

—Environmental Staff, The Federal Power Commission



"The Fairbanks Route, because it follows the Alaska Oil Pipeline and other transportation routes through Alaska and Canada, would avoid some of the impacts associated with the Applicant's (Alto Gas) proposed route through the Midwest and Northeast."

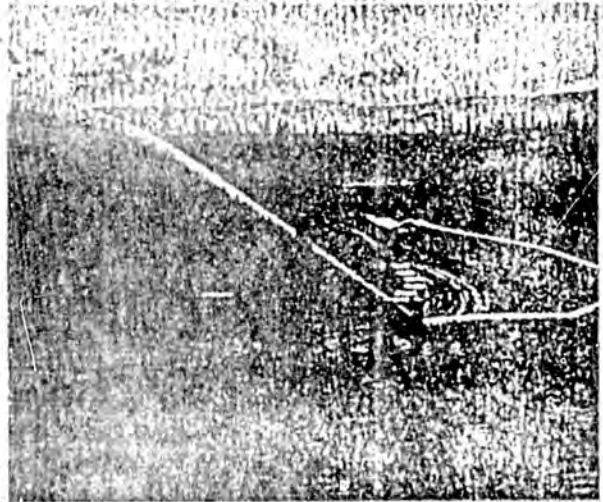
The Department of Interior

"The Fairbanks-Alaska route is the least environmentally damaging... while, at the same time, it is the most direct route to the lower 48 states."

Director, Bureau of Land Management

99

14.9



Alcan will utilize the Alyeska work pad.

Other Objections Cited

There have been other objections to the El Paso proposal. El Paso has proposed an LNG liquefaction plant site in an active earthquake zone at Prince William Sound in Alaska. In contrast the Alcan route follows a relatively placid zone north of the most active earthquake areas.

No less eminent a scientist than Dr. Edward Teller of the University of California called for a re-examination of the LNG safety issue. LNG tankers of the size proposed by El Paso have never before been built.

El Paso has proposed an LNG terminal at Point Conception, California, but faces considerable opposition. The Friends of The Earth organization recently reaffirmed its opposition to El Paso's proposed LNG plant sitings at either the undisturbed beach area of Point Conception or the alternative Los Angeles Harbor, which already is overly congested.

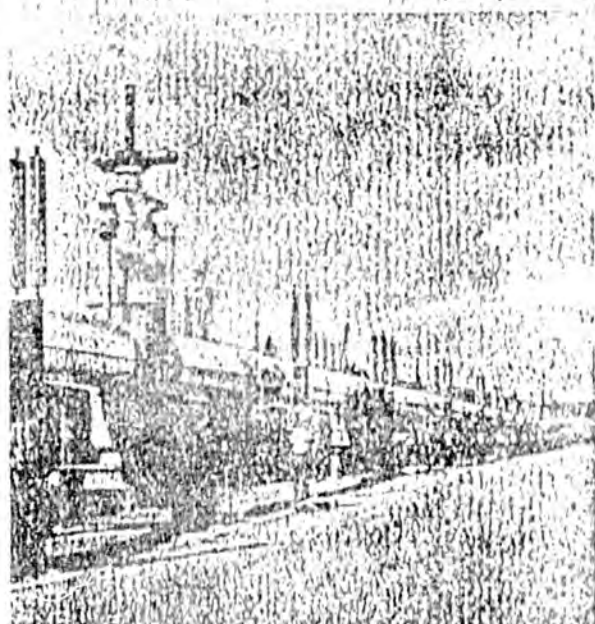
Also in order to site its LNG regasification plant at Point Conception, El Paso must receive approval from a number of California state regulatory agencies.

Uses Less Gas

Few doubt that Alcan will use less gas for transportation than El Paso. Not only does El Paso use gas for transportation but also for liquefaction operations. The pipeline system is also more reliable. Bad weather and rough seas could easily delay shipping, and under the El Paso plan the transportation is at sea.

The pipeline would continue carrying gas in all kinds of weather, and has the added advantage, should a mishap halt service temporarily, of having gas flow restored quickly.

In summary, Northwest's Alcan Project avoids the Arctic National Wildlife Range, disrupts no other wilderness areas, avoids earthquake zones, is more reliable than an LNG system, and would deliver the natural gas where it's needed and when it's needed.



Alcan follows Alyeska oil line for 539 miles from Prudhoe Bay to Delta Junction south of Fairbanks.



Alcan Pipeline (bottom) the Alcan Highway from Delta Junction to the Gulf of Mexico.

Canadian Issue

Supporters of El Paso have occasionally made exaggerated and sometimes outrageous claims about Canadian interests, institutions and intentions. They would have everyone believe that Alaskan gas will not be secure once it is in transmission systems owned by Canadian companies, that Canada will unfairly tax or otherwise impede the flow of Prudhoe Bay gas to the lower 48.

However, the U.S. and Canada recently initiated a treaty which protects the flow of Alaskan gas in transit through Canada and provides that any provincial taxes and duties must be nondiscriminatory. The movement and the rate of return allowed for transporting the gas will be regulated by Canada's National Energy Board (not by the provinces, as the NEB has exclusive jurisdiction over the pipeline of our Canadian partners).

Both Alberta and British Columbia have ad valorem taxes, as do the individual states in America, and British Columbia has a fuel tax. Like taxes in the U.S., these taxes would be applicable to the Alcan Project, but only as they are applicable to Canadian gas facilities. In both Alberta and British Columbia, Alaskan gas will be co-mingled with Canadian gas and, as a practical matter, the provinces cannot tax Alaskan gas without taxing the transportation of Canadian gas.

The proposed gas flow is merely a part of the huge economic trade that passes daily between the U.S. and Canada. For example, the oil from western to eastern Canada, some 510,000 barrels of crude per day, goes through pipelines in the United States. At Portland, Maine, Canada imports 437,000 barrels of crude oil per day which is transported to Montreal through the United States. All of these 947,000 barrels of oil are under the control of our federal government. Canada also transports approximately 40 percent of its natural gas supplies, or 315 million cubic feet daily, through transmission lines across the U.S. All of this gas is under U.S. government control.

We at Northwest Pipeline believe it's totally unrealistic to talk of Canada discriminating against gas flowing through its pipeline.

14.10

Gas For Alaska

The Alcan Pipeline Project would provide a sound and stable energy base for an expanding Alaskan economy. It is the only plan which provides a high degree of flexibility and is not locked into huge front-end investments.

Since Alcan's capital costs are lower, Alcan management can respond more quickly and positively to Alaska's future industrial requirements. Alcan provides many options for the development and delivery of Alaskan gas. One option is a spur line down the industrial corridor through Anchorage into the Cook Inlet area. Or if gas were discovered along the southern coastal area along the Gulf of Alaska, a spur could be run back to the Alcan line for redelivery of the gas to markets elsewhere in Alaska or to the lower 48 states. The Alcan system provides the flexibility to accommodate new gas discoveries in central Alaska.

As noted, the Alcan Pipeline will follow the old Haines pipeline as far as Haines Junction. If Alaska so desires, the existing spur from Haines Junction to the Haines/Slackway area could be put into service. The Haines line has the potential for transporting about 50 million cubic feet of gas per day. If Alaska decides to develop small industries in this area, Alcan will be able to supply the energy required.

These are only a few examples. There are dozens of other possibilities that could contribute to the long-term growth and stability of Alaska, including development of the petrochemical industry in Alaska and development of Alaska's vast mineral resources. The steps Alaska should take to develop new industry are for Alaska to develop. However industrial, commercial and agricultural development will soon follow gas availability, and in the long term this will provide the jobs and the economic base for orderly and continuing growth in Alaska.

14.11

Conclusion

If American Energy Independence is to become a reality, we must carefully consider the selection of a route and system for bringing North Slope gas to markets in the lower 48 states.

Northwest's Alcan Pipeline Project is the responsible, practical choice. The Alcan plan is in the best interests of the United States because it will bring the Prudhoe Bay gas reserves on stream two years earlier than the proposals of the Arctic Gas or El Paso, and our project will cost billions of dollars less than either of the two alternatives.

We also recognize the need to protect the state of Alaska from haphazard development, and we have designed our Alcan Pipeline in such a way that it will reliably supply the U.S. with vitally needed gas and not invade lands that are not already developed.

In Canada, we will follow the Alcan Highway through the Yukon and British Columbia and, therefore, will not invade Canada's wilderness areas. Because the Alcan Pipeline will not require additional volumes of Canadian gas to operate economically, our plan also will permit the orderly development of the frontier gas reserves at a time of Canada's choosing.

Northwest's Alcan Pipeline Project is superior in several ways: it saves time, money and the environment, and provides for the earliest delivery of Alaskan gas to U.S. markets.

We're convinced Alcan is the best plan — for Alaska, for the nation and for future generations throughout America.



Exhibit 15

COST ESTIMATES FOR GAS TRANSMISSION
LINE AND DISTRIBUTION SYSTEM FOR
MOVEMENT AND USE OF NORTH SLOPE NATURAL
GAS TO INTERIOR ALASKA.

(NORTH STAR BOROUGH AREA)

BY

Robert Dempsey

FOR

Petroleum Economics - Pet 497

University of Alaska

Fairbanks, Alaska

GENERAL PARAMETERS

In determining the cost of a transmission line and distribution system the following items were considered.

1. Approximately 400 miles of 24 inch pipeline from Prudhoe Bay to the North Star Borough area. \$1,000,000/mi.

2. Assume 10,000 residential hookups at \$2500 each. Tie in for major (industrial) users and physical plant necessary for the distribution system computed at \$25,000,000.

3. Interest rate for distribution system has been calculated using a most favorable municipal bond rate.

4. State royalty share (1/8) of calculated reserves in the Prudhoe Bay field. Approximately 3.5 trillion cu. ft. of natural gas. For the purposes of these calculations, we have estimated usage in the interior at 2 trillion cu. ft. over the 20 year period.

5. All major cost items were extrapolated from known arctic and sub-arctic construction costs.

15.2

COST BREAKDOWN TRANSMISSION LINE.

A. Capital Investment	\$ 400,000,000
B. Interest (20 year) See Computer Printout	401,502,000
C. Operations & Profit	350,000,000
	\$ 1,151,502,000 / 20 years

COST BREAKDOWN OF GAS DISTRIBUTION SYSTEM

A. Capital Investment	\$ 50,000,000
B. Interest (20 year) See Computer Printout	37,739,000
C. Operation & Reserves	200,000,000
	\$ 287,739,000

NOTE: This reserve figure allows for reinjection costs of surplus gas if necessary.

TOTAL PROJECT COSTS OVER 20 YEARS.	\$ 1,439,241,000
CONSUMPTION PER YEAR	100 billion cu. ft.
ROYALTY to STATE at FPC new gas price \$0.52/mcf	\$ 52,000,000 /yr or
	\$ 1,040,000,000 Total
COST PER mcf delivered to users in North	
Star Borough	\$ 1.24/m.c.f.

, GAS TRANSMISSION LINE

LOAN AMOUNT : 400,000,000
 INTEREST RATE (% PER YEAR) 8%
 YEARS 20

15.3

MIN MONTHLY PAYMENT 345.77
 ACTUAL MONTH PAYMENT 3,500,000
 PAYMENTS START(MT,YR) Jan 1980
 PRINT LINE EVERY ? PAYMENTS
 PRINT MAX OF ? LINES

MORTGAGE REPAYMENT SCHEDULE (8.00%)

MONTHLY PAYMENTS \$350.00

M-YR	INT PAY	PRIN PAY	TOT INT	BAL.	
0 0-80				400000.00	
12-80	2614.85	735.15	31692.55	391492.55	
12-81	2553.83	796.17	62678.99	382278.98	
12-82	2487.75	862.25	92900.70	372300.70	
12-83	2416.19	933.81	122294.22	361494.22	
12-84	2338.68	1011.32	150790.82	349790.81	
12-85	2254.74	1095.26	178316.03	337116.02	
12-86	2163.84	1186.16	204789.24	323389.24	
12-87	2065.38	1284.62	230123.14	308523.13	
12-88	1958.76	1391.24	254223.15	292423.14	
12-89	1843.29	1506.71	276986.88	274986.86	
12-90	1718.23	1631.77	298303.39	256103.38	
12-91	1582.80	1767.20	318052.60	235652.58	
12-92	1436.12	1913.88	336104.39	213504.38	
12-93	1277.27	2072.73	352317.89	189517.88	
12-94	1105.24	2244.76	366540.53	163540.52	
12-95	918.92	2431.08	378607.06	135407.05	
12-96	717.14	2632.86	388338.53	104938.52	
12-97	498.62	2851.38	395541.12	71941.11	
12-98	261.95	3088.05	400004.93	36204.94	
12-99	5.65	847.03	401502.68	0.	LAST PAYMENT 852.68

NOTE: multiply all results by 1000

GAS DISTRIBUTION SYSTEM

LOAN AMOUNT 50,000.00

INTEREST RATE (% PER YEAR) 6.5%

YEARS 20

MIN MONTHLY PAYMENT 372.79

ACTUAL MONTH PAYMENT 380,000

PAYMENTS START(MT,YR) Jan 1982

PRINT LINE EVERY ? PAYMENTS

PRINT MAX OF ? LINES

MORTGAGE REPAYMENT SCHEDULE (6.50%)

MONTHLY PAYMENTS \$380.00

15.4

M-YR	INT PAY	PRIN PAY	TOT INT	BAL.	
0 0-82				50000.00	
12-82	264.15	115.85	3210.26	48650.26	
12-83	256.39	123.61	6330.12	47210.13	
12-84	248.11	131.89	9353.54	45673.54	
12-85	239.28	140.72	12274.05	44034.05	
12-86	229.86	150.14	15084.76	42284.76	
12-87	219.80	160.20	17778.31	40418.31	
12-88	209.07	170.93	20346.87	38426.87	
12-89	197.62	182.38	22782.06	36302.06	
12-90	185.41	194.59	25074.94	34034.94	
12-91	172.38	207.62	27215.99	31615.99	
12-92	158.47	221.53	29195.04	29035.04	
12-93	143.64	236.36	31001.24	26281.24	
12-94	127.81	252.19	32623.01	23343.01	
12-95	110.92	269.08	34048.00	20208.00	
12-96	92.90	287.10	35263.03	16863.03	
12-97	73.67	306.33	36254.05	13294.05	
12-98	53.15	326.85	37006.04	9486.04	
12-99	31.26	348.74	37503.01	5423.01	
12-00	7.91	372.09	37727.86	1087.86	
3-01	1.83	337.62	37739.45	0.	LAST PAYMENT 339.45

NOTE: multiply all results by 1000

Exhibit 16

ECONOMIC ANALYSIS OF
ALASKAN ROYALTY GAS CONTRACTS

A Report to
STATE OF ALASKA: THE LEGISLATURE

January 1977

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16.7

I. INTRODUCTION AND SUMMARY

INTRODUCTION

Three contracts for the sale of the State of Alaska's royalty gas from the leases on the Prudhoe Bay oil and gas field have been negotiated by the State of Alaska with Tenneco Alaska, Inc., El Paso Natural Gas Company, and Southern Natural Gas Company. These contracts must be approved by a majority of each House of the Alaska State Legislature. The Legislative Affairs Agency, acting on behalf of the Alaska State Legislature, has retained Jensen Associates, Inc. to perform an economic analysis of the State of Alaska's Proposed Royalty Gas Sales Agreements. The economic analysis of these proposed agreements is presented in this report.

The purpose of our analysis is to determine if the contracts protect the interests of the State of Alaska. In this analysis, we were asked to examine two questions:

1. Is Alaska protected if the El Paso project is not the one selected? and
2. If the El Paso project is approved, does the contract provide favorable value to Alaska?

SUMMARY

Alaska will receive favorable benefits from royalty gas either by obtaining the highest possible price from the sale of gas into interstate markets or for soundly based use in Alaska. Because of the large volumes of royalty gas available and because of the possibility of additional gas discoveries near Alaskan markets for natural gas, the more important question for this analysis appears to be the price that Alaska can receive in interstate markets. Second, it is necessary to analyze the flexibility built into the contract to allow Alaska to use the gas for its own needs.

There is significant uncertainty about the price of the Prudhoe Bay royalty gas. Table I-1 illustrates this range where it shows the possibility of prices ranging from \$0.20 to above \$2.00 per Mcf. The uncertainties in the value of the gas and thus risks to Alaska are caused in part by uncertainties in energy markets, but much more importantly are caused by the uncertainties surrounding the legislation and regulation of natural gas.

The initial deliveries of Prudhoe Bay natural gas will occur at a time when--in our view--significantly increasing prices for energy world-wide are likely. Between now and 1985, we believe that the Organization of the Petroleum Exporting Countries (OPEC) is not likely to lose control of international oil pricing despite occasional periods of surplus and some degree of internal dissension within the organization. Beyond 1985, however, the possibility exists for sharply higher real world oil prices. This would result from continued growth of world oil demand combined with growing producing capacity limitations in many OPEC countries, thereby creating the conditions for shortage pricing by those few national oil suppliers who can still respond to world demand growth.

Between now and 1985, U.S. energy prices should rise because of (1) OPEC oil prices rising to keep pace with inflation in industrialized countries, (2) a rise in U.S. oil prices to approximate world oil levels as the current domestic price controls are relaxed or eroded, and (3) the U.S. beings to use higher energy prices to foster energy conservation as do Japan and the countries of Western Europe. Beyond 1985, much greater price uncertainty exists, but in our view, rising real prices are the most likely possibility.

The value of Prudhoe Bay gas netted back to the wellhead from No. 2 oil market values in California and the Midwest are shown in Table I-1 for 1980. Because the market price of No. 2 oil is expected to increase, and perhaps sharply, over the

TABLE I-1

RANGE OF POSSIBLE WELLHEAD PRICES FOR
PRUDHOE BAY NATURAL GAS

1980

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<u>Market Values via El Paso Project*</u>	<u>Dollars per million Btu</u>
Competing with No. 2 oil**	
Mid West	0.94
California	1.22
Competing with coal based synthetic natural gas	
Mid West	2.71 - 3.05
<u>Regulated Values</u>	
Opinion No. 770 National Rate on new gas	
\$1.42 plus \$0.01 per quarter from October 1, 1976	1.56***
Possible Alaska Area Rate****	0.20 - 0.45

* Assuming F.P.C. staff estimate of gas capital transportation costs and netback value for fuel cost.

** Equivalent Btu value with No. 2 oil giving natural gas a 10 percent form value premium.

*** If the prices are regulated using more recent drilling costs and discovery data, the cost based price should rise above that shown here.

**** Computed with only Alaska data including associated gas.

twenty-year contract life, the netback market values will be higher than the 1980 wellhead price shown.

The greatest uncertainty about price is caused by uncertainty over legislation and regulation. If new gas is deregulated and Prudhoe Bay gas qualifies as new gas, as it will under some bills, then market value pricing will prevail. If wellhead prices continue to be regulated, Prudhoe Bay prices remain uncertain. Recent national rate opinions by the Federal Power Commission (F.P.C.) have specifically excluded Alaska and Hawaii from both the rates and the cost calculations that underlie the rates. If Alaska is included in the national rates as currently computed based only on non-associated gas, the prices will change little from current calculations because of the small amount of Alaska non-associated gas. However, if the vintaging formula under the most recent national rate decision, (Opinion 770-A), were to prevail, in which well spud-date determined the vintage, then some gas would not qualify for the new gas rate. However, vintaging is not the source of great price uncertainty. If regulation does not include Alaska in the national rate and an area rate is set for Alaskan reserves as the associated gas of Prudhoe Bay sets the possibility for lower wellhead prices. Since some of the costs of exploration and development will be allocated to oil for an associated gas discovery, and the Prudhoe Bay field is large, the costs per Mcf of gas is low as shown in the sample calculation in Table I-1. However, such a calculation assumes that the F.P.C. will depart from its recent tradition of excluding associated gas from its national rate calculations as had been done earlier in F.P.C. history. In any case, regulatory decisions can have great impact upon the value to Alaska of the Prudhoe Bay royalty gas.

CONCLUSIONS

The termination clauses built into the contracts protect Alaska in the event that the El Paso project is not approved or that there is excessive delay in approvals.

If the El Paso project is approved or if the terms of the contract prevail under another pipeline route, then the pricing provisions and the reservation clauses become important. The most important question is how does the contract protect Alaska's interest in the face of considerable price, regulatory, and legislative uncertainty. Our conclusions are:

- Future wellhead prices of Alaskan natural gas will be determined either through regulatory processes as they are now, or through price negotiation should Congress deregulate natural gas.
- In the event of deregulation, the contract will play a significant part in price determination. The pricing clauses with periodic redetermination, assuming a proper clarification of the ambiguity of redetermination relative to Section 6.3, are sound.
- If wellhead price regulation remains in force, the role of price determination will remain with the Federal Power Commission, or possibly with Congress and the contract itself can do little to influence the price. It is important to recognize that the contract has adopted a passive stance, having tied itself to the efforts of the producers in obtaining a ceiling price. Since no real precedent for price setting of Alaskan associated gas exists at present within the F.P.C., and since the strength of the producers' gas is not known, the state might have a stronger future position by setting its own price precedent now in this contract under Section 6.2.
- In addition, there is ambiguity in the interpretation of the price including severance taxes on royalty gas under regulation. This may keep severance taxes or their equivalent from being collected on the royalty gas at a loss of \$50-\$150 million dollars. The ambiguity needs clarification either in the contract or through Alaskan severance tax legislation.

The clauses reserving gas for Alaska are very good and provide significant flexibility. The State can make both time and location exchanges when they provide a better value for natural gas to Alaska than by selling interstate.

Finally, favorable value of the gas will be brought to Alaska more by action outside the contract in legislation and regulation than by the contract itself.

II. SUMMARY OF CONTRACT

The proposed sales by the State of Alaska of 2.6 trillion cubic feet of Prudhoe Bay royalty gas to Tenneco Alaska, Inc., El Paso Natural Gas Company, and Southern Natural Gas Company are designed to help Alaska in three ways:

1. Promote the construction of a trans-Alaska gas pipeline system, with the associated benefit of making gas available close to people and industry;
2. Establish a gas pricing structure favorable to Alaska for sale of royalty gas outside the State; and
3. Protect future needs for gas within Alaska.

A brief review of the contract mechanisms designed to implement the above goals follows.

PROMOTE TRANS-ALASKAN PIPELINE ROUTE

Article I of the contracts (entitled Support for Trans-Alaska Pipeline) requires both the State of Alaska and the royalty gas purchasers to work actively for the selection of a trans-Alaska gas pipeline system. The provision in Article XI (Conditions Precedent) that the royalty gas contracts may be terminated by directive of the Governor of Alaska if another route is approved appears to give sufficient motivation to the buyer to work hard in its endeavors to seek passage of a trans-Alaska pipeline route. Alaska's interests are adequately protected on this point. Alaska may choose to support any trans-Alaska pipeline route, although the State has indicated a preference for that proposed by El Paso Alaska Company. Alaska may also terminate the contract if pipeline route approvals are not forthcoming by December 31, 1978 or if a route other than El Paso's is approved.

ESTABLISH FAVORABLE GAS PRICING STRUCTURE

In order to obtain favorable prices for Alaskan royalty gas, the contracts establish different pricing mechanisms depending upon the regulatory or non-regulatory status of the gas. Article VI (Price) identifies three regulatory situations which might occur:

Section 6.2: Federal Power Commission has jurisdiction at the time of first deliveries over royalty gas resale rates in interstate commerce;

Section 6.3: No Federal Power Commission rate-regulation exists for royalty gas for interstate resale at the time of first deliveries; and

Section 6.4: Federal Power Commission deregulation occurs after first deliveries of royalty gas have begun.

If Federal Power Commission jurisdiction applies, the initial price of the royalty gas is to be the highest applicable rate allowed and never less than the price paid producers for their gas from the same reservoir for comparable interstate sales. If regulation does not apply, then the initial price is to be the highest interstate price being paid producers for similar sales from the applicable Prudhoe Bay leases.

If deregulation occurs after first deliveries, the price is subject to redetermination with a provision for arbitration in the event that price accord can not be reached. Annual redetermination may occur thereafter at the request of either buyer or seller. In all cases, the gas price is adjustable up or down if the gross heating value is more or less than 1,000 British Thermal Units (Btu's) per cubic foot.

Since no specific prices are established in the contracts, our analysis focusses on three issues:

1. The likely U.S. and world energy marketing context facing Alaskan royalty gas in the period 1980 and beyond. Chapter III examines energy economic trends in the U.S. and world pressures on energy prices in that period;
2. The market value of Alaskan royalty gas at the time of actual deliveries (Chapter III); and
3. Possible pricing formulas that may apply in the event of price regulation existing at the time of royalty gas deliveries (Chapter III).

Two additional aspects of natural gas pricing--vintaging and severance taxes--are considered in our analysis.

Vintaging refers to the date assigned to an interstate gas sale to determine the applicable regulatory price. Severance taxes are state-imposed producer taxes on gas extraction. The implications of vintaging and severance taxes to the contracts are discussed in Chapter III also.

PROTECT ALASKA'S FUTURE GAS NEEDS

Alaska clearly desires to retain future access to Prudhoe Bay gas for internal requirements. Under Article III (Quantity), the State has the right to reduce the quantity of royalty gas for interstate sale by varying percentages throughout the life of the contract. Alaska may retain 25% of the royalty gas for the first five years and increase this amount by 25% in each subsequent five-year period over the life of the contract. Alaska also has the right to change the percentages of royalty gas taken for internal needs upon a 24-month written notice as well as to export products, such as ammonia, manufactured from its retained gas. While the three contracts also contain "take-back" provisions enabling the buyer to recoup the quantities retained by the State to meet internal needs, this applies only if additional surplus royalty gas is available. Chapter IV of this report considers possible situations in which Alaska retains royalty gas for internal usage.

Finally, in reviewing the royalty gas contracts, some concerns arose regarding specific contract language. While relatively minor, these points are outlined in Chapter V. It is also recognized that in the process of negotiating a contract, both parties must "give and take" on the various issues. Since Jensen Associates, Inc. was not involved in the negotiating process, we acknowledge that some of the matters on which we comment here may have been dealt with in the negotiations themselves. Nevertheless, the issues are outlined in the report in accordance with our obligation as consultants.

III. SALE OF PRUDHOE BAY NATURAL GAS

Alaska wants the most favorable price it can obtain for its royalty gas sold into interstate commerce. As we look ahead, we see considerable uncertainty about the price of energy in general and specifically about the price of natural gas in Alaska which may prevail when initial deliveries of royalty gas occur and for the subsequent twenty years over the term of the contracts. These uncertainties were apparently understood in the negotiation of the royalty gas contract. The contract pricing clauses simply state that the price shall be set at the highest price determined for comparable contracts, and if deregulation occurs, periodic price redetermination is established.

The uncertainty in price and thus risks in the payments to Alaska are created by forces outside the contract. These forces are markets and the course of natural gas regulation and/or legislation at the Federal level. This contract can influence the course of markets, regulation or legislation only slightly. However, the Legislature of the State of Alaska needs to be aware of and understand the causes behind these very real uncertainties about the price of Alaskan gas and their economic risk as it evaluates these contracts. Consequently, our evaluation of the contracts focusses more on contractual ability to adapt to changing price circumstances than upon the ability of the contracts to influence the prices.

In order to understand the extent and cause of the uncertainty about price of Alaskan royalty gas, we describe below the movement of energy markets in the United States and the world from 1975 to 1990, market value pricing of Alaskan gas which would prevail if deregulation of the wellhead price of gas were to apply to Prudhoe Bay gas, costs of alternate forms of energy for natural gas pipelines, and the impact and differences in pricing which regulation by a body such as the Federal Power Commission could bring to the price of Alaskan royalty gas.

ENERGY MARKETS IN THE UNITED STATES AND THE WORLD, 1975-1990

The Organization of Petroleum Exporting Countries (OPEC) has demonstrated since late in 1973 that it has considerable power to set the price of crude oil unilaterally in world markets. Western Europe, Japan, and increasingly the United States, as natural gas production declines, are dependent upon this imported oil which is the incremental source of energy in the industrialized nations and tends to set the price of all forms of energy. Consuming nations can influence price through controls or taxes to be more or less than the world market crude oil price. But controlling price below world market levels requires the nation to have its own energy production, as is true of the United States.

OPEC Production and Pricing

Table III-1 is the estimate of the world oil trade to 1985. The growing demands for OPEC oil production make a break-up of the cartel unlikely. We expect the United States to continue to rely upon imported oil, and, thus, be heavily subject to the world price of oil. The production of oil from OPEC nations should increase steadily but within productive capacities. In particular, Saudi Arabia, a country with the largest oil reserves in the world, should be able to accommodate increases in demand without strain to the mid-1980's.

The price of OPEC oil is not expected to decline, rather we expect the oil producing nations to attempt to maintain the value of their oil. As inflation continues in the industrial nations, the price of oil should increase apace to the mid-1980's.

Forecasts of oil, supply, demand and price are subject to an increasing range of error the further into the future the forecast is made. However, the contracts for royalty gas are scheduled to run for twenty years beyond the initial deliveries of gas which should occur sometime between 1980 and 1985.

TABLE III-1

16.14

WORLD OIL TRADE

(Million barrels per day)

	<u>1975</u>	<u>1980</u>	<u>1985</u>
IMPORTS			
United States	5.8	11.5	11.5
Western Europe	12.4	12.0	14.0
Japan	4.9	6.0	8.0
Net to Balance ^{1/}	4.3	6.5	9.5
OPEC PRODUCTION			
Total	27.4	36.0	43.0
Saudi Arabia ^{2/}	7.1	10.0	12.0

^{1/} Includes net imports (exports) of the Non-OPEC developing countries, the Sino-Soviet countries, OPEC internal consumption, stock changes, and adjustments.

^{2/} Includes 50% of Neutral Zone.

Source: Jensen Associates, Inc.

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Thus, most of the gas under these contracts will be delivered after 1985, the time horizon to which most international oil forecasters have recently chosen to limit their estimates. In order to understand how energy prices will behave in the latter part of the 1980's and beyond, it is important to review the likely trends in world oil consumption compared with the development of both non-OPEC and OPEC supply.

Oil will be a major source of energy into the 1990's and beyond. Even though non-traditional energy sources may begin to grow rapidly, they do so from a small base so that continued economic growth needs to be, for some years after 1985, fueled by oil. But as oil demand on OPEC production increases, production capacity limits for most of the OPEC countries could very likely be strained. It is not hard to see oil demand bumping up against capacity constraints most everywhere except in Saudi Arabia after 1985. If this were to happen, the conditions would be set for another dramatic upward shift in the price of oil. It is also possible to envision very effective conservation efforts and accelerated alternate energy supply programs being developed, in which case the strains on OPEC production capacity would not be severe and oil price increases would be moderated. However, it is difficult to envision a decline in OPEC production in the decade following 1985 which would place downward pressure on world oil prices unless the industrialized nations of the world were to sink into depression.

As the time of initial deliveries of royalty gas nears, the post-1985 energy supply and demand balances will become clearer. These forecasts should begin to have a significant impact upon domestic U.S. energy prices and government policy. The post-1985 conditions are unclear today and the range of uncertainty about energy prices is high. However, forces that would create sharply higher prices seem more likely than a worldwide depression that might force oil prices downward.

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U.S. Price Controls

At the current time, the price of oil in the United States is controlled by the Federal government at levels below the world price. However, the price for "new" oil is higher than for "old" oil in order to encourage further exploration and the development of additional supplies. The stated intention of the Energy Policy and Conservation Act is to allow the price of oil to increase and eventually for it to be decontrolled. Either as "new" oil becomes an increasing share of supply or oil price is decontrolled, the price of oil will increase more rapidly in the United States than in world markets as the U.S. prices catch up to the world prices.

U.S. Energy Conservation

There is a developing consensus in the United States that the conservation of energy is an important national objective. Currently, there is no equivalent consensus on how this objective is to be reached. There have been some attempts to use engineering standards mandated by regulation or legislation to promote energy conservation such as mileage requirements for new cars. Meanwhile, government policy has concentrated on keeping the price of energy low.

Other countries, such as Japan and those in Western Europe who have a longer history of oil imports than the United States, have relied upon the price system to bring about energy conservation. These nations increase the cost of energy to the consumer above world oil prices by taxation. Energy consumption in Japan and Western Europe is below that of the United States by more than can be explained by a difference in the standard of living. The use of the price system to bring about energy conservation has proven to be successful in other nations.

As the United States develops an energy conservation program, an increasing reliance upon higher energy prices to bring about conservation is to be expected. This, too,

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should reinforce both the OPEC determined price increases, the price increases of oil and other energy forms in the United States as oil market levels are approached, to bring about an even greater increase in the price of energy for the United States.

Conclusion

OPEC oil pricing, the phase-out of oil price control in the United States or an increasing proportion of "new" oil, and greater reliance upon higher prices to foster energy conservation all point to increased energy prices in the U.S. The extent of these increases is uncertain. However, the greatest uncertainty is about prices in the mid-1980's. The potential for oil demand running hard against world productive capacity exists. Sharply increased prices would result. But, if the industrialized nations can aggressively conserve energy and develop sources other than oil, or if economic growth falters, then OPEC oil production capacity will not be under the same stress.

In the event of deregulation, market forces would determine the field price of Alaskan North Slope gas. One way to anticipate this price is to forecast the market price of alternate fuels and to netback to the North Slope using the costs of transporting the gas to market. The theory is that the price of natural gas at the market (e.g., Los Angeles) would tend toward a level related to the price of alternate fuels, and that the field price resulting would be the market price less the cost of transmission.

We have computed the netback value of Alaskan North Slope gas based on the market prices of competing alternate fuels in Los Angeles and Chicago. This section describes the method and the results of this analysis.

Number Two Fuel Oil

The calculations which compare natural gas with fuel oil are based on the projected prices of No. 2 oil in Los Angeles and Chicago. In the case of Los Angeles, it was assumed that No. 2 oil would be refined primarily from Alaskan crude, priced to be competitive with Saudi Arabian light landed in Houston. The present price of Saudi Arabian light is \$12.09 F.O.B. Ras Tanura. This price can be inflated at 5% per year to 1980 and, with the addition of transportation costs, terminal costs and refinery margins, yields a projected price for No. 2 oil in Houston in 1980. Netting back to Los Angeles via crude pipeline results in a price for No. 2 oil refined from Alaskan crude and delivered in Los Angeles. A 10% premium must then be added to account for the fact that natural gas is often preferable on a Btu basis to No. 2 oil.

To compute a price for No. 2 oil in Chicago, we added to the price of No. 2 in Houston the cost of transporting the fuel by product pipeline to Chicago. Again we added 10% to reflect a premium for clean-burning natural gas.

In both Chicago and Los Angeles, it was assumed that the relevant price comparison was between No. 2 oil at the refinery

rack and natural gas at the city gate. The cost of local delivery to large volume industrial users was assumed to be small and approximately equal for either fuel.

SNG from Coal

Current estimates for the cost of producing gas from coal form a range of between \$3.00 and \$4.00 per million Btu. To obtain a 1980 price for coal-based SNG, we selected \$3.50 as a middle-range figure, inflated it at 8% per year for five years, and added projected transportation costs.

Netback Value

The netback value is computed in the following way. Suppose the projected market price of No. 2 in Los Angeles is \$3.50 per MMBtu. Adding 10% results in a market value for natural gas of \$3.85 per MMBtu, competing against No. 2 oil. In other words, pipelines could charge gas distributors in Los Angeles up to \$3.85 per MMBtu, the price of the competing incremental fuel source. The field price in Alaska is then determined by subtracting from \$3.85 the cost of transporting the gas from the field to Los Angeles. If the transport costs were \$2.00 per MMBtu, then the price that Alaska could charge for its royalty gas in the field would be \$3.85 minus \$2.00 equals \$1.85 per MMBtu.

It should be noted that transportation costs include the cost of gas used and lost along the respective routes. Consequently, transportation costs vary with the netback value which in turn varies with the projected market price of the competing fuel. In short, the higher the value of Alaskan North Slope gas, the more expensive it is to transport.

Tables III-2, III-3, and III-4 show netback values computed for the El Paso project and the Arctic Gas project separately.

Strictly speaking, netback values show what price would prevail for natural gas (regardless of source) in each market, assuming insufficient gas is available to replace the alternate

TABLE III-2

NETBACK VALUATION OF ALASKAN NORTH SLOPE GAS

BASED ON NO. 2 OIL

1980

(Dollars per million Btu)

El Paso Route

Price of No. 2 Oil (Incl. Premium)* - El Paso Transportation Costs** = Netback Value

Chicago	\$3.34	\$2.40	\$.94
Los Angeles	\$3.10	\$1.88	\$1.22

Arctic Route

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Price of No. 2 Oil (Incl. Premium)* - Arctic Transportation Costs** = Netback Value

Chicago	\$3.34	\$1.68	\$1.66
Los Angeles	\$3.10	\$1.40	\$1.71

* Assumes that the current price of Saudi Arabian light (\$12.09) will rise at the rate of 5% per year to 1980 and 7.4% per year from 1980 to 1985. These estimates are representative and merely reflect current expectations.

** Based on average fifth-year cost to the Mid West and California as published by the F.P.C. staff (12/7/76). Estimates assume 2.4 and 2.25 Bcf/d capacity for the El Paso and Arctic systems respectively. Gas lost or used as fuel in transit is valued at the netback value.

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NETBACK VALUATION OF ALASKAN NORTH SLOPE GAS

BASED ON NO. 2 OIL

1985

(Dollars per million Btu)

El Paso Route

Price of No. 2 Oil (Incl. Premium)* - El Paso Transportation Costs** = Netback Value

Chicago	\$4.59	\$2.61	\$1.98
Los Angeles	\$4.27	\$2.08	\$2.19

Arctic Route

Price of No. 2 Oil (Incl. Premium)* - Arctic Transportation Costs** = Netback Value

Chicago	\$4.59	\$1.79	\$2.80
Los Angeles	\$4.27	\$1.50	\$2.77

* Assumes that the current price of Saudi Arabian light (\$12.09) will rise at the rate of 5% per year to 1980 and 7.4% per year from 1980 to 1985. These estimates are representative and merely reflect current expectations.

** Based on average fifth-year cost to the Mid West and California as published by the F.P.C. staff (12/7/76). Estimates assume 2.4 and 2.25 Bcf/d capacity for the El Paso and Arctic systems respectively. Gas lost or used as fuel in transit is valued at the netback value.

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TABLE III-4

NETBACK VALUATION OF ALASKAN NORTH SLOPE GAS

BASED ON SNG FROM COAL

1980

(Dollars per million Btu)

El Paso Route

	<u>Price of SNG Delivered</u> [*]	- <u>El Paso Transportation Costs</u> ^{**}	= <u>Netback Value</u>
Chicago	\$5.46	\$2.75	\$2.71
Chicago	\$5.46	\$2.41 ^{***}	\$3.05

Arctic Route

	<u>Price of SNG Delivered</u> [*]	- <u>Arctic Transportation Costs</u> ^{**}	= <u>Netback Value</u>
Chicago	\$5.46	\$1.87	\$3.59
Chicago	\$5.46	\$1.61 ^{***}	\$3.85

* Current estimates place the cost of producing SNG from coal of between \$3 and \$4 per MMBtu in 1975 dollars. We have used \$3.50/MMBtu and inflated at 8% per year to 1980. Cost of transporting SNG assumed to be 32¢/MMBtu.

** Based on average fifth-year cost to the Mid West and California as published by the F.P.C. staff (12/7/76). Estimates assume 2.4 and 2.25 Bcf/d capacity for the El Paso and Arctic systems respectively. Gas lost or used as fuel in transit is valued at the netback value.

*** Assumes gas lost or used as fuel in transit is valued at \$1.00/MMBtu.

fuels. Of course, if all Alaskan gas were channeled into Los Angeles, saturation would occur and Los Angeles' market price of gas would fall. However, in the broader context of the national market, (which size is currently on the order of 55 billion cubic feet per day), the additional 3.5 billion cubic feet per day anticipated from Alaska may not be sufficient to render uneconomical even the most expensive alternate fuel sources now being contemplated.

Contracts

Section 6.3 of the contracts states that in the event of deregulation, prior to first deliveries of Alaskan North Slope gas, "the initial price for gas delivered hereunder shall be the highest price being paid by any interstate gas purchaser for gas under contracts. . . ." This provision appears adequate to insure that Alaska receives the full netback value based on the appropriate competing alternate fuel source, providing that the North Slope producers have marketed their gas judiciously; and with the price incentives inherent under deregulation, there is every reason to believe that they would do so.

Section 6.4 provides, moreover, for price redetermination in the event that the price of gas is regulated at the time of first deliveries and subsequently deregulated.

These two sections together provide that Alaska receives full market value for its royalty gas under deregulation, providing vintaging allows, whether or not deregulation occurs before or after the date of first deliveries. Moreover, inasmuch as Alaska contemplates taking royalty gas in kind, and selling it in the field, netback pricing serves to illustrate the market price potentially available to Alaska for its royalty gas.

In the event the sales of Prudhoe Bay gas contemplated in the contracts are found to be jurisdictional by the F.P.C., the price clause (Section 6.2) provides that

1. ". . . The initial price . . . shall be the highest area, national or ceiling rate allowed to be paid by any interstate gas purchaser to any working interest owner . . ."
2. "The price to be paid thereafter shall be subject to all periodic changes permitted in accordance with the . . . Rules and Regulations of the Federal Power Commission . . . or such other changes in price as may be permitted by any new area, national or ceiling rates . . . which may subsequently be established."

Thus, the value of the contracts depends upon the ceiling price which may be established by the Federal Power Commission. The contracts do not specify or assume that the nationwide rate established by the F.P.C. will apply to the contract sales. On the contrary, the contracts accept in advance, whatever rate-making method the F.P.C. might apply to sales of Prudhoe Bay gas. Moreover, the contracts tie the interests of the State of Alaska to the interests of the private companies producing Prudhoe Bay gas. The State will not receive a price for its royalty gas any higher than the cost-based price which the companies can justify to the F.P.C.

The National Rate and Alaska Gas

The current nationwide wellhead ceiling price for "new" natural gas in the United States is \$1.42/Mcf (plus 1¢/quarter beginning October 1, 1976), established in F.P.C. Opinions 770 and 770-A. However, these Opinions and the earlier nationwide rate Opinion 699-H all explicitly excluded the States of Alaska and Hawaii.¹ A simple decision could be made by the Commission to delete the exclusion and thus bring Alaskan gas under the

¹Title 18, U.S.C., paragraph 2.56a (f).

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nationwide ceiling. The difficulty with this approach is that the \$1.42/Mcf is a cost-based ceiling price, calculated using cost data from only the lower-48 states. That is, the exclusion of Alaska from the \$1.42/Mcf ceiling is not only a legal or procedural fact but also a computational fact. If the F.P.C. were to attempt to establish a single uniform national rate including Alaskan gas, the Commission would likely bring data on the cost of gas production in Alaska into the computation process.

One fundamental assumption underlying Opinions 699-H, 770 and 770-A is that most natural gas produced in the U.S. is from non-associated gas wells (wells which produce gas from reservoirs which do not also contain crude oil). For this reason the Opinions consider data on the drilling costs and drilling footage of gas wells only. All data on oil wells (many of which also produce gas) are excluded. If the F.P.C. were to revise the national rate to incorporate data on non-associated gas wells in Alaska, the national rate would not be much affected. The number of Alaskan non-associated gas wells and the quantity of Alaskan non-associated gas reserves are not large enough (relative to the national total) to have a significant impact upon the calculation of the national rate.

However, the inclusion of Alaska within the national uniform rate may be difficult precisely because of the fundamental assumption stated above, i.e. that most U.S. natural gas is produced from non-associated wells. Such an assumption, some may argue, is inapplicable to Alaska, where over four-fifths of natural gas reserves exist in conjunction with oil. For this reason, there is a reasonable possibility that the Commission will establish a separate area rate for all gas in Alaska or for casinghead gas from oil wells in Alaska.

An Area Price Ceiling for Alaska

The calculation of a wellhead ceiling price for all natural gas in Alaska, or for casinghead (associated-dissolved) gas alone, requires the allocation of costs between oil and gas. During the

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long history of F.P.C. wellhead price regulation, many methods have been proposed for making such an allocation. Most of these methods have been based upon a combination of two principles:

- That oil and gas may be substituted for each other as sources of energy and are valuable because of their energy content as measured in Btu's, and
- That oil, which has traditionally sold at a higher wellhead price per Btu than gas, should receive a premium value over gas.

A brief review of F.P.C. wellhead price regulation uncovered no instance in which the Commission had actually allocated costs between oil and gas in order to set an areawide ceiling price on associated gas (called "casinghead gas" in the area rate opinions). In setting area price ceilings between 1961 and 1974, the Commission established various categories of gas according to vintage date. The calculation of the price applicable to each vintage category was based entirely upon the costs of non-associated gas production. Newer vintages of gas received higher ceilings than did older vintages, due to inflation of drilling costs and declining sizes of gas discoveries. Casinghead gas was included in the older vintage and was not vintaged in its own right. Thus, "new" casinghead gas received a lower ceiling price than did new non-associated gas.

The most recent case in which the Commission allocated costs to arrive at a separate cost of service for casinghead gas was in the Phillips Petroleum opinion of September 1960, the last of the individual producer rate cases. In the Phillips opinion, the Commission used separate methods for allocating production costs and for allocating exploration costs. Production costs on leases producing both oil and gas were allocated in proportion to the relative costs of producing oil from oil-producing leases and of producing gas from gas-producing leases. Exploration costs (which were viewed as joint costs because, at that time, the F.P.C. did not accept the concept of directional exploration) were allocated first among oil-only leases, gas-only leases and joint-product

leases on the basis of net investment in each of these three categories of leases. Then the exploration outlays assigned to joint product leaseholds were divided between oil and gas using a modified Btu method. The number of Btu's contained in crude oil produced from the joint-product leases in the test year was multiplied by 4 as an "economic factor" reflecting the then-prevailing higher market value of oil than of gas. Thus, the following fraction of joint-lease exploration costs was assigned to gas:

$$\frac{\text{Btu's of gas produced}}{(4 \times \text{Btu's of oil produced}) + (\text{Btu's of gas produced})}$$

The Commission stated that "we are of the opinion that the proper economic factor to be applied to the straight Btu content of oil to allocate Phillips' test year exploration costs is 4, so that the cost relationship of finding one Mcf of gas to one barrel of oil will be about 1 to 24."

Estimation of Alaskan Natural Gas Ceiling Price

Keeping in mind the long span of time which has lapsed since the Phillips precedent for separating oil from gas costs, we have, nevertheless, calculated several hypothetical ceiling prices for Alaska natural gas. These were calculated under the assumption that the F.P.C. would set an area ceiling price for the State of Alaska as a whole, with no differentiation within the State. It was also assumed that the Commission would follow a method roughly analogous to the present method used in setting the nationwide rate (that is, the method used in Opinion No. 770-A) with the following modifications:

- Data pertaining to drilling cost, drilling footage and reserve additions would be drawn from Alaska's experience only. Successful drilling cost and footage would include both oil and gas wells.
- Lead times between capital outlays and start-up of production could be considerably greater than those used in calculating the Lower-48 ceiling, and
- Unit costs would be divided between oil and gas on a Btu basis, or a value-modified Btu basis.

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Working entirely from published data (the same sources used by the F.P.C. in setting the nationwide ceiling price), we calculated wellhead ceiling prices which ranged from under 20¢/Mcf to about 45¢/Mcf. The higher end of this range was calculated assuming a straight Btu division of oil and gas, which is the most favorable calculation from the gas producer's standpoint. No allowance was made in these calculations for any special capital outlay for waterflood or other enhanced oil recovery operation necessitated by the removal of the natural gas drive mechanism in the reservoir.

F.P.C. Jurisdiction Over Alaska Royalty Gas

The basic presumption of government regulation of an exhaustible resource is that economic rents should be captured by the private consumers of the resource rather than by the private firms or individuals who own and produce the resource. This presumption reflects the present distribution of political power and influence between the two groups, the consumers and the producers. The purpose of setting a ceiling price based upon cost calculations is to carry out this allocation of rents.

The State of Alaska, as a public rather than a private producer and owner of resources, may not be subject to the same political arrangement which underlies cost of service regulation. That is, in addition to the legal argument that a State is not a "person" within the meaning of the Natural Gas Act, there is also an economic and philosophical argument that a State is vested with quite different and much broader social responsibilities than is a private firm. For this reason, the State may be entitled to capture a greater share of the resource rents than has been awarded by the political process to private resource producers. The contracts for the sale of Alaska royalty gas, as they are currently formulated, establish price by reference to a ceiling price established for private producers. Such pricing by reference appears to abdicate the position that the State, even if subject to regulation, should not be subject to cost-based regulation. It would

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also appear to place the State in the position of accepting a regulated ceiling price established for private producers even if the State is not found subject to regulation.

As the representative of a diverse social group, the State may not wish to bind itself to prices received by private producers, because these prices may be determined without reference to the public nature of the State of Alaska.

As presently written, the contracts for the sale of Alaskan royalty gas do not mention the possibility that several ceiling prices might simultaneously apply to gas from the Prudhoe Bay area. Such a circumstance could arise from whatever "vintaging" policy is chosen by the F.P.C. to apply to Alaska gas, and could have a significant impact on the value of Alaskan gas.

"Vintaging" refers to the establishment of a date--such as the date of discovery of the reservoir or date of commencement of the well--which separates the produced gas into two (or more) categories for pricing purposes. For example, the current national rate for interstate natural gas is \$1.42 (plus 1¢ per quarter) for gas produced from wells commenced on or after January 1, 1975. Gas from wells commenced between January 1, 1973 and December 31, 1974 qualifies for a price of \$.93 (plus 1¢ per annum). In this example, the date of well commencement ("spud date") is the vintaging criterion.

At the present time, Alaska is in a unique position. No existing vintaging basis clearly applies to Alaskan gas. Thus, Alaska is limited in its ability to address future vintaging treatment of royalty gas through the terms of the sales contracts. Alaska can, however, strengthen its future position by clearly understanding the implications of vintaging and being prepared to act through regulatory intervention or otherwise at a future date. This chapter attempts to clarify the vintaging issues pertinent to royalty gas contracts.

Vintaging Under the Uniform National Rate

For Alaskan royalty gas to qualify for the highest national rate, under present vintaging methods, the gas must be produced from wells spudded in after January 1, 1975.

The "spud-in" date is the moment of drilling the first foot of a well regardless of the date of completion or recompletion. Well completion refers to the installation of permanent equipment for the production of oil or gas. The date of completion of an oil well or gas well is the date on which the installation of permanent equipment has been completed for the production of oil or gas as reported to the appropriate regulatory agency.

Depending upon the gas field or reservoir drilling development pattern, spud-in date may or may not be a vintaging basis favorable to Alaska. If most gas is produced from wells spudded-in after January 1, 1975, then Alaska may qualify for the highest available national rate for most of its gas if the national rate applies to Alaska. If the royalty share comes from wells spudded-in at a considerably earlier date than the January 1, 1975 cut-off, then Alaska clearly is in a less favorable position vis-a-vis the national rate. At the present time, wells spudded-in on or after January 1, 1973 and before January 1, 1975 receive separate national rate treatment from the F.P.C. while gas from wells commenced prior to January 1, 1973 receive rate treatment under F.P.C. Opinion No. 749 which has established a price of 29.5¢/Mcf nationally for "old" gas. Clearly, the maximization of Alaskan royalty gas revenues will depend on the type of vintaging mechanism allowed under regulation.

Other Vintaging Methodologies

In the evolution of gas pricing regulations, the Federal Power Commission has used various methods for determining the vintage of gas. Other regulatory vintaging methodologies have used contract date, type of gas, date of dedication to interstate commerce, and reservoir discovery date. Table III-5 details the vintaging mechanisms in national and area rate regulation as well as in two proposed 1975-76 deregulation bills.

TABLE III-5
SUMMARY OF NATURAL GAS VINTAGING APPROACHES RELATED TO INTERSTATE PRICE REGULATION

ALLOWED HIGHEST APPLICABLE RATE FOR:_____

VINTAGING APPROACH	Type of Gas		Qualifying Date for "New" Gas Vintage					
	Associated or Oil Well Gas	Non-Associated or Gas Well Gas	Spud-In Date	Recompletion Date	Date of Initial Interstate Dedication	Date of Contract	Date of Reservoir Discovery	RATE ESCALATION
1. <u>National Rate</u>								
a. Opinion 770-A (November 1976)	yes	yes	yes	no	no	no	no	yes
b. Opinion 770 (June 1976)	yes	yes	yes	yes	yes	no	no*	yes
c. Opinion 699-H (December 1974)	yes	yes	yes	yes	yes	no	no*	yes
2. <u>Area Rate</u>								
Permian Basin Opinion 468 (August 1965)	no	yes	no	no	no	yes	no	no
3. <u>1975-1976 Proposed Deregulation</u>								
HR 10480 Krueger- Broyhill Bill (October 31, 1975)	yes**	yes**	yes	no	yes	no	no	As Per Contract
S-3422 Pearson- Hollings Bill (May 12, 1976)	yes	yes	yes	yes	yes	no	yes	yes

*Date of discovery of a new gas reservoir on acreage previously dedicated to the interstate market was a vintaging criterion.

**If producer is not affiliated with a pipeline.

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Contract date and type of gas were used together in the first area rate vintaging methodology (Opinion No. 468 issued August 5, 1965). In this case, an established date (January 1, 1961) was the dividing date between old and new gas with new gas being that which was sold through a contract dated after the January 1, 1961 date. However, this system also vintaged gas on the basis of whether it was gas well gas or oil well gas. All casinghead gas (or oil well gas) was categorized as old gas; only post-January 1, 1961 gas well gas received new gas treatment. Similar vintaging methodologies were used in other area rates established by the F.P.C. with some variations as to the applicable contract vintaging date. The pricing implications for Alaskan royalty gas if vintaging occurs on a basis comparable to area rate regulation are considered elsewhere in this chapter. Alaska should understand, however, that by stating a contractual willingness to accept an area rate with its inferred vintaging mechanism, it may face future rate rulings that are either unanticipated or clearly less favorable than more recent pricing regulations.

Vintaging on the basis of first sales into interstate commerce (under contracts executed after a specified date) has also been used by the F.P.C. in the first uniform national rate (June 1974). This methodology has been superceded by well commencement date vintaging. Date of first sales into interstate commerce appears to be an attractive vintaging basis. It has a clear disadvantage, however, if the market value of gas is expected to rise over the term of the contract by committing all the gas to a price set when market value was lower.

Conclusions

1. No single vintaging method yet applies to Alaskan royalty gas and Federal Power Commission actions on this are uncertain.

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2. Revenues to Alaska for royalty gas sold interstate are highly dependent upon the vintaging method selected.
 3. No single vintaging system is clearly superior to all others, although in general, the more gas that falls into the "new gas" category or vintage, the greater are Alaska's opportunities to maximize royalty revenues.

Vintaging Under Proposed Gas Legislation

Numerous proposals to deregulate or reregulate natural gas pricing were introduced into the 1975-76 Congressional Session, and already in the current Congress eleven bills as of this writing have been proposed. Passage of a particular bill at this time is unclear. However, based on 1975-1976 bills, vintaging is likely to remain an issue in current proposed legislation of great economic significance to Alaska.

The importance of future deregulation or reregulation to Alaska's royalty gas contracts is the possibility that there may be multiple vintages applicable to the Prudhoe Bay gas. That is, depending upon the vintage method, there may be a deregulated and a regulated price in effect at the time of first deliveries.

SEVERANCE TAXES ON ROYALTY GAS

It is possible that \$50 - \$150 million^{1/} in revenue might be lost to Alaska from an interpretation of price in Section 6.2, 6.3, and 6.4. While the Alaskan severance tax legislation currently does not apply to state-owned royalty interests, the price clause should not preclude by omission the collection of a severance tax or revenue in lieu of severance taxes on Alaskan royalty gas in addition to the base price. Under F.P.C. regulation, the price paid to a producer by a pipeline for the working interest share will be adjusted upwards from the ceiling rate to cover severance tax. This payment for severance tax is in turn fully recovered by the pipeline. If a severance tax on the Alaskan royalty interest is not charged in addition to the highest allowable area, national or ceiling rate under some interpretations of the gas contract pricing clauses, the price for royalty interest gas will be less than the price paid by pipelines for the working interest portion. In the condition that Alaska is not subject to F.P.C. jurisdiction, the royalty gas will be sold at the highest price paid by a purchaser which appears to be wording that would cover severance taxes paid by the working interest holder. Given the amount of money involved, we suggest legal review on the point of collecting severance taxes. The possibility for a low price differential on Alaskan royalty gas may be eliminated in one of two ways:

- (1) legislative action to include the royalty interests taken in kind with that production which is subject to a severance tax, or
- (2) a change in the contract which sets the price of Alaskan royalty gas at the highest allowable price plus an adjustment in lieu of a severance tax.

^{1/} For sale of 2.6 tcf at \$0.50 to \$1.50 per million Btu assuming one million Btu per Mcf and a 4% severance tax.

IV. USE OF GAS WITHIN ALASKA

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The State of Alaska is permitted to reduce the volumes of gas sold under the contracts. Any reduction may be made on twenty-four months' notice, or up to specified limits on twelve months' notice, provided the gas is to be used for "domestic or industrial" purposes in Alaska.

As presently written, the contracts do not specify whether the withdrawn gas must be for current or anticipated domestic or industrial needs. It is possible that Alaska might predict or foresee a need for natural gas within the State which extends beyond the term of the contract, or an increasing demand for intrastate gas which will eventually exceed the total volume of royalty gas during the term of the contract. We see no contract impediment to a time exchange of royalty gas which might be worked out with the owners of the working interests.

For example, the province of Alberta follows a rule of protecting provincial requirements for a forecast 30-year period before permitting additional interprovincial sales. A similar rule could be applied by Alaska.

As shown in Table IV-1, natural gas consumption in Alaska during 1975 was 66.8 billion cubic feet, none of which came from the North Slope. If the total contracted amount of royalty gas (2.6 trillion cubic feet) were produced uniformly over a 20-year period, the annual volume of royalty gas would be 130 billion cubic feet. Thus, if all additions to intrastate natural gas consumption had to be drawn from the royalty gas in the contracts, then Alaskan gas consumption would have to triple over present levels before all the royalty gas would be withdrawn from the contracts.

Gas utility sales in Alaska grew at an average rate of 12.7% per annum from 1965 to 1975 and at a rate of 12.1% from 1974 to 1975. Total consumption of gas in Alaska rose from

TABLE IV-1NATURAL GAS CONSUMPTION IN ALASKA1975

<u>User</u>	<u>Sales by Gas Utilities Bcf</u> <u>1/</u>	<u>Total Consumption Bcf</u>
Residential	5.6	10.4
Commercial	6.4	8.5
Industrial	-	22.4
Electric Utilities	12.8	19.6
Other	5.9	5.9
Total	30.7	66.8

1/ Bcf = Billions of cubic feet

Sources: U.S. Bureau of Mines, Mineral Industry Surveys;
American Gas Association, Gas Facts 1975

42.0 Bcf in 1971 to 66.8 Bcf in 1975 or at an annual rate of 11.6%, as shown in Table IV-2. Growth of the natural gas industry has been from a fairly small base figure, so that a projection of recent rapid growth rates may be unrealistic, at least in areas already well served by gas. However, even if it is assumed that growth continues at the somewhat reduced rate of 6% per annum, Alaska's internal gas consumption would triple in about 18 years. If the slightly faster rate of growth of 10% occurs, consumption will triple in about 11 years. In either case, internal consumption would outstrip the annual volume of royalty gas before the end of the term of the 20-year contract. Moreover, the level of intrastate demand achieved by the end of the contract term could not be sustained by royalty gas from Prudhoe Bay beyond the productive life of that area. However, areas closer to Alaskan gas markets such as the lower Cook inlet may be the source of future growth in natural gas supply.

AMMONIA PRODUCTION

As a part of our economic analysis of the contracts for the sale of royalty gas, we have considered the possibility that Alaska might prefer to export manufactured products which use gas as a feedstock rather than exporting the natural gas itself. The principle argument would be that the value added (wages, salaries, profit) would thereby be retained for the Alaskan economy.

We considered, in particular, industries which are heavily dependent upon natural gas, such as ammonia manufacture. We determined that, if all of the Alaskan royalty gas were devoted to ammonia production, Alaska would then produce about 30% of the present U.S. level of ammonia output. Ammonia production in the U.S., although it is one of the most intensive industrial uses of natural gas, nevertheless consumes only a small fraction (a little over two percent) of total

16.39

TABLE IV-2

GROWTH OF NATURAL GAS CONSUMPTIONALASKA 1971-1975

<u>Use</u>	<u>1971</u> <u>Bcf</u> ^{1/}	<u>1975</u> <u>Bcf</u>	<u>Average Annual</u> <u>Rate of Growth</u>
Residential	6.9	10.4	10.3%
Commercial	7.5	8.5	3.1
Industrial	10.6	22.4	18.7
Electric Generation	10.3	19.6	16.1
Other	6.7	5.9	-3.2
Total	42.0	66.8	11.6%

^{1/} Bcf = Billions of cubic feet

Source: U.S. Bureau of Mines, Mineral Industry Surveys

16.46

U.S. natural gas production. The U.S. ammonia market simply could not absorb such a large increment in supply.

Moreover, planned additions to ammonia capacity in the lower 48 states are already quite large, amounting to 3.2 million metric tons per year, or a 22% increase over present capacity. As shown in Table IV-3, principal U.S. markets for ammonia fertilizers are in the Midwest, an area more accessible to ammonia plants in Texas, Louisiana or Alberta than to ammonia plants in Alaska. European markets for nitrogen fertilizer probably could be served more economically from the Persian/Arabian Gulf, and thus may not be a prospective long-run market for ammonia from Alaska.

16.41

TABLE IV-3UNITED STATES NITROGEN FERTILIZER CONSUMPTIONBY GEOGRAPHIC AREA1974(In 10⁶ Pounds)

	<u>Quantity</u>	<u>Percent of Total</u>
West Coast ^{1/}	1,301	7.8
Upper Midwest	10,096	60.8
Lower Midwest	3,111	18.8
Atlantic Seaboard	2,084	12.6
Total United States	16,592	100.0

^{1/} Includes Washington, Oregon, and California

Source: U.S. Department of Agriculture

This chapter comments on several specific details in the royalty gas contracts which appear to need clarification. Each point below is keyed to the section of the contract pertinent to the issue. We have suggested possible remedial actions in each case.

1. ARTICLE III (QUANTITY); SECTION 3.7(a):

This section refers to the terms under which the buyer may purchase additional quantities of surplus Alaskan royalty gas in the event that Alaska has previously implemented its option to remove contract gas for intrastate use. Section 3.7(a) continues to be applicable for a period of five years after expiration of the term of the contracts.

The governing price of surplus royalty gas offered to buyer after expiration of the contract and in the event of no other interstate bona fide purchasers is unclear. This section states only that,

"In the event there are no other interstate bona fide purchasers, the price shall be the price then being paid by Buyer for gas purchased under this Agreement."
(Underscoring inserted.)

Contract clarification of the applicable price is needed in the event deliveries have already been completed under the contract and no outside interstate purchasers exist.

2. ARTICLE VI (PRICE); SECTIONS 6.3 - 6.5:

Section 6.4 (deregulation after commencement of first gas deliveries) clearly provides for a price redetermination to occur as outlined in Section 6.5. Section 6.3, however, which provides for an initial price in the event of non-regulation existing at the time of first deliveries does not contain a price redetermination clause. Since Section 6.5 makes specific reference only to Section 6.4, it is unclear that price redetermination will also

occur in the event Section 6.3 is operative. Insertion of a clause in the contracts indicating that a price redetermination will occur in the event Section 6.3 applies is suggested.

3. ARTICLE VI (PRICE):

This Article of the contracts does not address a pricing situation in which the initial gas sales are not subject to F.P.C. regulation but, later in the contract term, become jurisdictional. Such a scenario could occur as a result of (1) judicial appeal of an initial F.P.C. ruling; (2) deregulation of gas prices conducted on a temporary or experimental basis, such as was proposed by President Carter during the election campaign; or (3) Federal action overriding the F.P.C. (e.g., creation of a general price and wage control policy).

TABLE 1F.P.C. NATIONAL RATE RULINGS

F.P.C. Opinion No.: 699

Date Issued: June 21, 1974

Definitions of
"new" gas:

- (1) Sales of natural gas in interstate commerce made from wells commenced on or after January 1, 1973.
- (2) Sales of natural gas in interstate commerce made pursuant to contracts executed on or after January 1, 1973 for
 - (a) gas not previously sold in interstate commerce (except under specified F.P.C. certificates); or
 - (b) where the sales were formerly made pursuant to permanent certificates of unlimited duration under contracts which expired by their own terms on or after January 1, 1973.

Applicable Rate: 42¢/Mcf with 1¢/annual escalation beginning January 1, 1974

F.P.C. Opinion No.: 699-H

Date Issued: December 4, 1974

Definitions of
"new" gas:

- (1) Sales of natural gas in interstate commerce from a well or wells commenced on or after January 1, 1973.
- (2) Sales made pursuant to contracts for the sale of natural gas in interstate commerce
 - (a) for gas not previously sold in interstate commerce prior to January 1, 1973 (except under specified F.P.C. certificates); or

16.45

TABLE 1 (continued)

F.P.C. NATIONAL RATE RULINGS

- (b) where such sales are initiated on or after January 1, 1973 provided the sale has not been certificated under the F.P.C.'s optional procedure.
- (3) Sales made pursuant to contracts executed prior to or subsequent to the expiration of the term of the prior contract where the sales were formerly made pursuant to permanent certificates of unlimited duration under such prior contracts which expired of their own terms on or after January 1, 1973, or pursuant to contracts executed on or after January 1, 1973, where the prior contract expired by its own terms prior to January 1, 1973.
- (4) Gas produced from newly discovered reservoirs located upon acreage previously dedicated to interstate commerce under a contract dated prior to January 1, 1973, shall have the rate determined by the date of reservoir discovery in lieu of the contract date.

Applicable Rate: 50¢/Mcf and 1¢/annual escalation beginning January 1, 1975

F.P.C. Opinion No.: 749

Date Issued: December 31, 1975

Definitions of
"old" gas:

Sales of natural gas in interstate commerce for resale from a well or wells commenced prior to January 1, 1973.

Applicable Rate: 23.5¢/Mcf prior to July 1, 1976;
29.5¢/Mcf on and after July 1, 1976. (This rate does not supercede existing higher area rates nor other specified F.P.C. established rates.)

F.P.C. NATIONAL RATE RULINGS

F.P.C. Opinion No.: 770

Date Issued: July 27, 1976

Definitions of
"new" gas:

- (1) Sales of natural gas in interstate commerce for resale from a well or wells commenced on or after January 1, 1975.
- (2) The sale is made pursuant to a contract for the sale of natural gas in interstate commerce for gas not previously sold in interstate commerce prior to January 1, 1975 (except under specified F.P.C. certificates), where the sale is initiated on or after January 1, 1975, provided that no certificate for the subject sale has been issued under the optional procedure.

Applicable Rate: \$1.42/Mcf and 1¢/Mcf per quarter commencing October 1, 1976

Definitions of
1973-1974 gas:

- (1) Sales of natural gas in interstate commerce for resale made from a well or wells commenced on or after January 1, 1973 and on or before January 1, 1975.
- (2) The sale is made pursuant to a contract for the sale of natural gas in interstate commerce for gas not previously sold in interstate commerce on or after January 1, 1973 (except under specified F.P.C. certificates), where the sale is initiated before January 1, 1975.

Applicable Rate: \$1.01/Mcf

TABLE 1 (continued)

16-47

F.P.C. NATIONAL RATE RULINGS

F.P.C. Opinion No.: 770-A

Date Issued: November 5, 1976

Definitions of
"new" gas: Sales of natural gas in interstate commerce
for resale from a well commenced on or
after January 1, 1975.

Applicable Rate: \$1.42/Mcf and 1¢/Mcf per quarter escalation
beginning October 1, 1976.

Definitions of
1973-1974 gas: Sales of natural gas in interstate commerce
for resale made from a well commenced on or
after January 1, 1973 and prior to January 1,
1975.

Applicable Rate: 93¢/Mcf and 1¢/Mcf annual escalation beginning
January 1, 1977

(NOTE: IN BOTH OF THE ABOVE DEFINITIONS, WELL DATE IS DEFINED AS
COMMENCEMENT OR SPUD-IN DATE REGARDLESS OF DATE OF
COMPLETION OR RECOMPLETION.)

UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

Exhibit 17

El Paso Alaska Company, et al)

Docket No. CP75-96, et al

REPORT TO THE COMMISSION

TO THE COMMISSION:

This is the second report to the Commission on the status of this proceeding. The schedule represented by the Commission to the Congress (attached to the first report dated January 21, 1976) called for the hearings to close by the end of May with an Initial Decision to be issued by September 1, 1976. While there has been some erosion of the schedule in recent weeks to the extent that it now appears that the hearings will continue through late June, it is not anticipated that this will cause the Initial Decision date to be extended. 1/ At this time, the applicants' cases in chief are completed; the key North Slope producers have submitted evidence both on Alaska exploration programs and reserve questions, and on corporate policy and regulatory matters; the answering cases of intervenors to applicants' presentations (except on environmental issues) have been heard; and examination of witnesses supporting the final environmental impact statement of the Department of the Interior is almost completed and that of the Environmental Task Force of the Federal Power Commission will commence next week. Except for the Department of State, which is now in the process of answering interrogatories prepared by the parties, all interested sister agencies and departments have appeared and presented witnesses on issues within their purview. It is anticipated that each interested agency having or intending to have a policy position will have stated it on the record before it closes.

1/ The slippage in the schedule has been caused principally by two factors: first, the inability of the Commission's Environmental Task Force to adhere to dates set for the submission of its evidence; secondly, the principal applicants have continued to modify and refine their applications necessitating the submission of additional evidence, e.g. Gas Arctic's switch to the McKenzie Delta route.

It is agreed by all active parties that specific placement of financing can only occur after the choice as to the successful applicant has been made. Nor can financing occur, as discussed at length in the prior report to the Commission and more fully below, without definitive sales agreements being in place so that the prospective equity holders (gas purchasers) can arrange financing on the basis of the reserves committed to them. Since the prior report in January, it has become evident both that (1) these contracts will not be entered into before the close of the hearing and (2) a condition subsequent in the certificate requiring that contractual commitments be filed after certification of a route is acceptable to all parties including the Commission's staff. It is expected that the additional time required to review these contracts, the financing plans, and other post-certificate requirements will occur contemporaneously and will be completed within a limited time. Expeditious Commission approval of sales contracts, particularly if most of the terms are spelled out in the transportation certificate, notwithstanding the fact that the contracts are not yet filed, and of the financial arrangements would be expected, and the evidence shows that actual construction of a transportation system would not be delayed if subsequent Commission review were completed by the summer of 1977.

Turning to the substantive issues, there are two principal areas of concern which continue to require attention. These arise, as previously stated, primarily because of the difficulty in arranging financing when the pipeline equity holders are unknown and even if known, would not be able to guarantee either repayment of debt or project completion. [As already stated, financing of either transportation system is contingent, in the first instance, upon producer sales contracts being in place so that prospective equity holders can seek firm commitments from the financial community. The key producers' witnesses on questions of corporate policy have unanimously declined thus far,

however, to give categorical present assurances with respect either to the time frame for execution of sales contracts or for deliveries of gas volumes. While their general attitude as to ultimate sales of their gas reserves is positive, their guarded position at this time is a reflection of their expressed concern respecting certain unsettled aspects of regulatory activities both on the part of the Commission and the Congress (Volumes 122 - 127). Specifically, they individually voiced their dislike of certain recent Commission regulations, some now under review, rejecting certain advance payment agreements and requiring possible application to Alaska natural gas of (1) minimum delivery obligations in producer certificates, (2) abandonment applications stemming from operations arising solely under field unitization agreements, and (3) disclosure by the Commission to their competitors of what they consider proprietary information. Further, they expressed distress that the Commission has not yet embarked upon a proceeding to establish a price for the gas and feared that an early sales contract would lock them into an adverse "cut-off" date either under possible vintage-pricing by the Commission or the possibility of a deregulation statute being enacted by Congress. From a technical point of view, they are apprehensive about selling gas prior to the approval of the unitization and production agreement which is unlikely to be effective prior to the end of 1976. 1/

None of the above-described concerns is based upon a legal inability to enter into sales contracts; they reflect basic policy considerations. Nor can most of the impediments suggested by the producer witnesses for justifying their reluctance to enter into sales contracts upon issuance of a conditional transportation certificate be resolved solely within the four corners of the present proceeding. Only Congress, for example, if it should choose to deregulate natural gas, is empowered to determine in the first instance whether and how it might apply to existing North Slope gas sales contracts. The conditions which are being

1/ Those producers' witnesses asked essentially supported the concept of the nationwide new gas rate applying to Alaska.

17.3

explored at this time, however, are designed to ensure that the producers enter into such contracts close upon the issuance of the transportation certificate by the Commission. The public interest clearly requires such agreements and it is fully anticipated that the climate will exist, based in part upon review of the producers' positions now displayed on the record, where the producers will be induced to enter voluntarily into timely definitive sales agreements.

The second area of concern is that the financing also cannot occur even if the equity owners are known absent both guarantees of project completion and repayment of the debt. The prospective pipeline equity owners for various reasons would not give these guarantees. Several suggestions requiring Commission approval of cost-of-service tariffs with "all events" provisos, which would have the effect of consumer guarantees to bond holders, have been advanced. Other suggestions have been made that additional credit worthy parties, such as the producers, could be induced to participate as either equity or debt holders. The producers have not as yet warmed up to this suggestion. Various forms of public participation have been suggested, but these are not held out as likely. In fact, the witnesses for the Department of the Treasury indicated that if the private sector was leery of what appeared to Treasury to be a reasonable and attractive certificate, Treasury would be unlikely to recommend committing public money to a venture rejected for business reasons by the private sector. One proposal which is now being briefed by the parties was advanced by El Paso and would permit interstate pipeline purchasers to modify their individual tariffs so as to provide, in effect, for direct consumer guarantee of debt financing. The various state public utilities commissions previously were invited to give their views as to certain tariff questions and the parties have been requested to serve upon them all trial briefs on tariff matters. 1/

1/ Numbers of responses were received and were copied into the record (Vol. 120, Tr. 19,184 et seq.; Vol. 125, Tr. 19,753).

17.4

A tentative briefing schedule has been adopted although no specific dates have yet been set. Trial briefs on tariff matters by some of the parties are expected this week. Briefs by applicants setting forth the full applications with suggested certificate conditions for implementation will be due about mid-May. Briefs by all parties on the environmental aspects will be due soon after the completion of that aspect of the case. Briefs on all remaining issues will not be due until after the close of the hearing.

As before, the discussion of these procedural and substantive issues is not intended to reflect the complete posture of the record or proceeding, but should serve to highlight the present problems and how they are developing on the record.

Respectfully submitted this 27th day of April 1976.

Nahum Litt

Nahum Litt

Presiding Administrative Law Judge

Copy to all Parties

Copies to all State Utilities Commissions

12:30 - 1775 K St. - 3rd Fl.

Rm 310

TO: Senator Radar

DATE: February 4, 1977

FROM: Jerry McCutcheon

Exhibit 18

I would like to add to my remarks of yesterday. When we discussed gas prices, I failed to mention the Donovan Shales, that underlie the Appalachian mountains. These shales and other type formations contain 2 quadrillion cubic feet, of which 500 trillion is expected to be recoverable. This is more than twice the proven reserves of the United States. It is expected that the gas can be produced for \$3.50 per MCF, which is substantially less than for what Alaska's gas can be delivered.

The El Paso system: During these hearings the El Paso system has been alleged to be able to operate on a volume as low as 2 BCFD. I believe the minimum filing for El Paso is 2.4 BCFD. However, the BLM study calls for 2.5 BCFD rising to 3.5 BCFD which is with a \$7 or \$8 billion line, which BLM admits is not possible. The gas system will cost \$14 to \$16 billion and this is admitted by the State Administration. The requirements for the El Paso system far exceed the ability of the Prudhoe Bay reservoir and can only be met at a totally unnecessary sacrifice of oil.

OMAR and the Chamber of Commerce brought to Alaska a Washington gas expert, Mr. John Camp. He is with a lobbying firm which represents the state of Louisiana in Washington for the purpose of trying to keep some gas in Louisiana. Mr. Camp sharply disagreed with OMAR stating that the State of Alaska should keep its gas in the ground and not become involved with an interstate pipeline.

Mr. Camp added that there is no way, regardless of how much money you spend for studies, that one can project the future growth and demand for in-state gas use. No matter what you project it is always severely underestimated, just as it was done in Louisiana and other states.

I do not believe there will be any further consideration of any gas line system if the State of Alaska will just tell the truth with respect to the reservoir producibility, cost of the gas system, the cost of the delivered gas, decreased demand caused by the higher prices, and the availability of cheaper alternatives.

It is only through practiced dishonesty by the State of Alaska and its representatives that the consideration of the gas line systems is being kept alive.

VINSON, ELKINS, SEARLS, CONNALLY & SMITH

ATTORNEYS AT LAW

1701 PENNSYLVANIA AVENUE, N.W.

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WASHINGTON, D. C. 20006

TEL: AC 202 296-5550 TELEX: 69650

January 28, 1977

Exhibit 19

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FIRST CITY NATIONAL BANK BUILDING
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TEL: AC 713 236-2222
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LONDON OFFICE
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House Special Committee and
Senate Special Committee to
Consider the Sale of Royalty Gas
The Legislature of the State of Alaska
State Capitol
Juneau, Alaska 99811

Gentlemen:

You have requested my review and analysis of the contracts by and between the Commissioner of Natural Resources of the State of Alaska acting pursuant to AS 38.05-.183(d), seller, and Tenneco Alaskan, Inc., El Paso Natural Gas Company and Southern Natural Gas Company, buyers. The contracts in question are each in two parts, one part denominated "General Terms and Conditions," and the other denominated "Royalty Gas Sales Agreement."

I express no opinion on matters relating to title, taxes, or compliance with State contracting requirements. My opinions here offered are limited, as requested, to a legal analysis of the contracts, and an assessment of the merits, and demerits, of the various provisions thereof.

To submit my opinions in these areas, I have reviewed the contracts in question, and a summary of Commissioner Martin's negotiations as furnished to me by the Office of the Attorney General of the State of Alaska. I believe these materials to be sufficient to render the requested analysis, but my comments are necessarily limited to the materials which were available to me for review.

I wish to make clear also that I do not arrogate to myself the formulation or expression of an opinion as to whether the contracts in question should, or should not, be approved by the Legislature. The vote of each member must necessarily be cast in terms of his own appraisal of the contracts, giving due and

19.1

appropriate regard to the constituency which he represents, their wishes and best interests, and his perception of where the interests of the State lie. It would be most presumptuous for me to offer an opinion on a matter so peculiarly within the responsibility of elected representatives, particularly when my exposure to the people, the economy and the planning of the State of Alaska is as limited as it is.

Finally, it must be clearly recognized that an analysis of contracts already negotiated, and an appraisal of whether those contracts are, on balance, "good" or "bad," if undertaken as an abstract proposition, can be most misleading and unfair to the negotiators. A contract takes shape through a process of bargaining, and many provisions may not be precisely as one of the contracting parties would wish. The provisions are forged through negotiation and compromise, and if one gauges the contract only by reading the final contract after the negotiation process has run its course, it might appear that certain agreements have been embodied in the contract which are less than desirable and which should be modified or eliminated. Were one familiar with the negotiation process, however, he might realize that the apparently undesirable provisions were in fact necessary if an agreement was to be reached. I would caution, therefore, against an interpretation of my comments and opinions as critical of the officials who negotiated on behalf of the State.

Having offered these preliminary explanatory comments, let me turn to the contracts themselves.

I append, as Attachment A, a detailed summary of the contracts, section by section. Rather than reiterate this summary, I would prefer to offer my generalized perception of the relative merits and demerits of the contracts in terms of probable benefits and areas of concern. The Committee may wish to explore the concerns which I set forth with the Commissioner of the Department of Natural Resources, for indeed his experience in the negotiation process may well substantiate the view that the contracts as presented to the Legislature, even though containing certain problem areas, do in fact represent the best bargain that could have been struck under all of the attendant circumstances.

* * * * *

I would speak first on a positive note, addressing the obvious benefits which accrue to the State under the contracts as submitted to the Legislature for approval. I suggest that the benefits are material and substantial and, specifically, there are the following factors to be considered:

1.

The State has secured an agreement for full reimbursement of all costs related to the State's taking of its gas in kind. (Article II, Sections 2.2 and 2.3.) I consider this to be a significant concession in behalf of the State. When the State takes its gas in kind, it is quite possible that the taking will occur at the point of production, so that all costs incurred downstream from that point, such as for transportation to a processing plant, processing, and redelivery to a pipeline transporter, must be borne by the State in ratio to its percentage of the production taken. I do not believe that anyone can guarantee that the State would not be exposed to claims for substantial costs resulting from the in-kind taking. The royalty sales agreement clearly insulates the State from cost exposure with respect to the initial arrangements necessary to an in-kind taking, whether or not the costs reimbursed to the State by the buyers of the royalty gas are collectable by the buyers in their jurisdictional resale rate structure.

2.

The State has sold only a portion of its Prudhoe Bay royalty gas, and has secured the contractual right to withdraw volumes sold under the contract for Alaska in-state needs. (Article III, Sections 3.1 through 3.6.) If an alternate market for the State's royalty gas develops between the present time and the time when the buyers under the contract are in a position to take delivery, the State may take and dispose of its royalty gas in any manner that it chooses, so long as such taking and/or disposition does not interfere with the State's ability to deliver to the buyers when they are in a position to take. (Section 3.8.) The State is not committed by contract to a warranted volume of gas to be sold and delivered under the contracts, and has no stated minimum delivery obligation. (Section 3.2.)

I consider these provisions to be extremely favorable to the State. It is prudent to retain a portion of the State's royalty gas even when a decision has been made to sell part of that royalty gas, since holding a portion free of commitment permits negotiation at a later time when operating conditions have been established, and when circumstances may indicate that significantly different contractual arrangements are in order. Thus, sale of 2.6 Tcf under the contracts in question, rather than a sale of all of the State's Prudhoe Bay royalty gas is, in my judgment, proper.

It has, of course, been essential from the outset that the future needs of the State for natural gas for in-state uses must be in some manner accommodated throughout a royalty gas sales arrangement. It would obviously be unacceptable for the State to sell its royalty gas for transportation out of the State without some provision for meeting future natural gas needs within the State. The arrangement worked out in the contracts to accomplish this objective is favorable to the State. The State may withdraw, over time and upon suitable notice, up to 100 percent of the gas contracted for sale under the instant agreements; the rights of withdrawal must, of course, be exercised for the sole purpose of the State meeting the intrastate domestic and industrial needs of the State of Alaska, and the withdrawal is scaled from 25 percent through 100 percent over 20 years; nonetheless, the withdrawal provisions are more favorable than I would have anticipated and they represent a major element of strength in these contracts.

3.

The State has excepted and reserved from the sale, all liquids removed from the State's royalty gas prior to its delivery to the pipeline (Article IV, Section 4.4), and the State has retained processing rights for the recovery of liquefiable hydrocarbons other than methane, whether exercised before or after delivery to the buyer. (Article IX.) If the liquids are not removed from the gas stream so that the liquid content of the gas stream delivered for sale produces a higher than 1,000 Btu per cubic foot average, the State will be compensated for the greater heating content through adjustment of the sales price. (Article VI, Section 6.6.)

These arrangements for the State to retain the benefits of the liquid content of the gas stream should prove beneficial to the State over the life of gas production from Prudhoe Bay. Liquids and liquid products can provide a significant source of additional revenue to the State if they are sold on the open market and, conversely, if there is need for liquid products in the State (such as a need for propane for its multiple uses, or a need for butane and natural gasoline as feedstocks for petrochemical or other operations), the State is free to direct the liquids and the liquid products to their highest and best use. The inclusion of these provisions in the contract is a distinct plus.

4.

The contract permits State withdrawal from the contract, without penalty, in the event of the occurrence of several different circumstances: If the State is prevented from taking its gas in kind by federal action, the sales agreements shall be void (Article II, Section 2.1); the contracts can be terminated if a decline in production results in nonprofitability to the State (Article VIII); the sales agreements may be terminated by the State if the State so elects following Federal Power Commission certification of an Alaskan gas transportation proposal, except that this right of termination would not exist if the Commission's grant of a certificate is to the El Paso project (Article XI, Section 11.5); and the State may terminate the royalty sales contracts if, by January 1, 1979, all regulatory approvals which the State deems necessary to enable the State to perform its obligations under or receive the benefits of the contract have not been received (Article XI, Section 11.2).

The cumulative effect of these termination options is sufficient, in my opinion, to safeguard the State against reasonably foreseeable adverse developments which might occur. Their inclusion in the contracts is of significant value to the State.

* * * * *

I must now turn to certain aspects of the contracts which are of concern to me. These relate to the pricing of the State's royalty gas when sold to the buyers under these contracts.

19.5

1. Section 6.1 imposes an upper limit on the price which the state will receive for its royalty gas, and this limitation will be operative unless and until appropriate Federal legislation deregulating Alaska gas is passed. The Section 6.1 limitation, in full, is as follows:

"In consideration thereof, the price which buyer shall pay seller for gas purchased hereunder shall be determined in accordance with Section 6.2 or Section 6.3 or Section 6.4 or Section 6.5 and shall be subject to the adjustment as provided in Section 6.6; however, the price paid seller for gas which buyer reflects in its rates to jurisdictional customers shall never be higher than the price buyer is permitted to retain in its jurisdictional resale rates so long as such rates are subject to regulation by the Federal Power Commission (or any successor governmental authority having jurisdiction in the premises)."

The underscored proviso is thus given controlling affect, irrespective of the price indicated under Section 6.2 (price fixed at the highest price permitted by the Federal Power Commission to any working interest seller from the Exhibit A reservoirs); irrespective of the price indicated under Section 6.3 (in the event of deregulation at the time of first deliveries, the price is fixed at the level of the highest price being paid by any interstate gas purchaser for gas produced from the Exhibit A leases); irrespective of the price indicated under Section 6.4 (in the event of the cessation of federal regulation after such has once commenced, the price is to be fixed by redetermination and/or arbitration); and irrespective of the price which would result from redetermination in accordance with Section 6.5

The limitation holds as a ceiling on the State's sale price "so long as such rates (buyer's jurisdictional resale rates) are subject to regulation by the Federal Power Commission"

It is inescapable that the buyers under these contracts will become transporters of natural gas in interstate commerce, and that they are purchasing gas for resale in interstate commerce. The rates at which the buyers sell for resale will be within the jurisdiction of the Federal Power Commission under the Natural Gas Act, and I know of no foreseeable set of circumstances that would produce legislation, or a Commission decision, changing this result.

Section 6.1 may not be unduly burdensome if legislation is passed which denies the Federal Power Commission the power to refuse recovery of purchased gas costs in an interstate transporter's jurisdictional resale rates, for then it could be argued that the buyers under this contract must necessarily be "permitted to retain" in their jurisdictional resale rates the amounts paid to the State and, therefore, the ceiling limitation in the Section 6.1 proviso would not interfere with operation of the other pricing alternates in the contracts. Such legislative language was employed in the bill which passed the United States

19.6

Senate in October 1975, S. 2310, and the same type of language now finds expression in the most recent deregulation legislation offered in the current Congress by Senators Pearson and Bentsen, S. 256.

I do not think the language of the contracts to be altogether clear, however, that Section 6.1 becomes inoperative in the event of Congressional deregulation. If it is the intent of the contracting parties that "flow through" language in a deregulation bill would effectively eliminate the Section 6.1 proviso, then I would suggest that an appropriate letter be obtained and made a part of the contracts before they become effective.

2. Even if Section 6.1 is clarified as suggested, you must understand that Section 6.1 will still subject the State's royalty sales to FPC rate regulation, and such will continue unless and until the Congress enacts appropriate deregulation legislation.

While the State has uniformly and steadfastly maintained that its sales of royalty gas are not subject to direct regulation by the Federal Power Commission because the State is not a person within the meaning of the Natural Gas Act (and I agree with this position), the State does by these contracts consent to indirect rate regulation by the Commission by conceding that the State's sale price is limited to that amount which the Commission will permit the buyers to retain in their jurisdictional rates.

3. At this time, the State cannot determine its sale price, or anticipated revenues at time of first delivery. Section 6.2 does not yield a present price, for there are no FPC-set rates for Alaska gas at this time. Neither Section 6.3 nor 6.4 yields a present price, for their conditions precedent (deregulation) have not occurred. I am at a loss, therefore, to advise the Committee on the sale price which will be applicable at the time of first delivery. If the status quo prevails through the time for first delivery, I assume -- although the contract is silent on the point -- that the buyers and the State would agree to an interim price which would be paid to the State, subject to refund.

4. You should note that the pricing mechanism agreed to in Article VI results, in every reasonably probable circumstance, in the State's sale price being determined by parties other than the State. If federal regulation continues, or if deregulation legislation is not appropriately drafted, the FPC sets the rate for the State. If deregulation occurs, before or after first delivery, the sales price negotiated by private firms making comparable sales will determine the State's sales price.

19.7

5. I cannot guess what rate the FPC will set for private sales of natural gas from Prudhoe Bay, but the prospects for a relatively low rate -- because the gas is associated and many costs can be allocated to oil, and because the size of this discovery and these reserves may operate to distort initial well-head rates downward -- are not to be ignored. It will, in my judgment, be easier for the FPC to find reasons why a private seller's rate should be low than it would be for the Commission to deny to the State public funds for public needs. Thus, the contract tying arrangement to private firms' prices -- not yet negotiated -- may deprive the State of a strong argument for adequate prices: namely, that State revenues will be public monies devoted to public needs and public uses, and that, therefore, the State's sales rate should not be judged by traditional FPC concerns of windfall profits to private firms.

6. In Article VI, redetermination rights under Section 6.5 are not clearly granted if deregulation occurs prior to first deliveries. Such rights should exist to protect the State adequately over the twenty-year term of these agreements, and should be provided in Section 6.3, or through re-wording of Section 6.5. Incidentally, re-determination downward at the buyer's request, as permitted in Section 6.5, is not frequently seen. If Section 6.5 is modified, revision to eliminate the possibility of price reductions in the future should be explored.

7. Under the pricing scheme in the contracts, the probable mechanism for Federal Power Commission review of the State's royalty sales rate will be either (a) in the various pipeline rate cases where the cost of purchasing gas from the State is submitted to the Commission as a recoverable item by the pipeline in its resale rate structure; or (b) in a producer sales proceeding where one of the Prudhoe Bay working interest owners requests FPC sales authority; or (c) a rule-making procedure to determine as Alaska ceiling rate for producer sales. The State will be forced to seek intervention, and participate forcefully if allowed to intervene, in one or more of these proceedings in order to have an opportunity of making a direct presentation to the FPC on the appropriate rate level for sales by the State.

Are these problems sufficient to condemn the contracts as improvident? To some -- those whose sale concern is specificity of price and certainty of revenue -- the answer will be "Yes". But that answer may apply too narrow a standard if -- as may well be true -- there are no reasonable pricing alternatives available to the State.

If all prospective pipeline buyers, present and future, would insist on a pricing structure similar to the one in these contracts, then the alternative to rejection of these contracts

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is the alternative of having no contract for the sale of the State's royalty gas. Viewed in this light, the pricing structure before you may be unpalatable, but it may be necessary. If you say "no" to this pricing structure, you may really be saying that the State should not contract at all; that the State should play a less affirmative role in the routing decision; and that the State can strike a better bargain for its gas after the Federal decisional process has run its course.

This choice is yours to make. It requires a broader understanding of the State's goals and needs than I possess, and accordingly, I would be foolish to attempt to recommend a course of action to you. The best I can do is make you aware of the problems, so that your decision will be an informed one.

I would add two footnotes. If these contracts are approved, appropriate deregulation legislation by the Congress becomes terribly important to you. If Alaska gas is deregulated, most of your pricing problems disappear. On the other hand, if deregulation does not occur, the FPC becomes terribly important to you. That agency's pricing regulations will directly impact on your revenues. In the absence of deregulation, the State will be required to become an active, and effective, advocate at the FPC.

* * * * *

As a final area of general discussion, I would like to call the Committee's attention to several of the provisions in the contract which I think are significant. I do not classify these provisions as being either "good" or "bad" since, in most instances, one's perception of the provisions will depend upon considerations other than legal analysis.

In Article XI, Section 11.4, it is provided that the Governor of Alaska may give notice to the buyers of his decision to support a project other than the trans-Alaska pipeline, and if the Governor does so, with appropriate notice to the buyers, then the newly selected project will be considered the "pipeline" for the purposes of the contract. The buyers need not concur in this change in the State's official position, and if they do not agree, then they are given the right to terminate the contracts.

Second, the selection by the State of Tenneco and Southern as buyers of a portion of the State's royalty gas brings a promise of support by those two organizations of the trans-Alaska gas pipeline system. The involvement, and support, of these two concerns adds a new element to decisional process in Washington with respect to the selection of the routing of a North Slope gas transmission system.

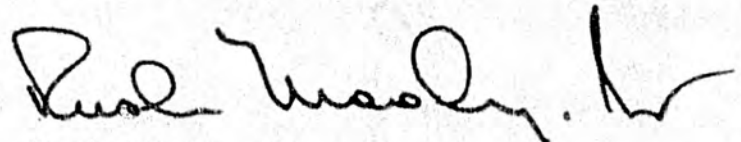
Third, it should be noted that the contracts grant certain options on State royalty gas which are triggered if the State effects a withdrawal of all or any portion of the gas committed under these contracts in order to satisfy in-State needs. The options are not exercisable unless the gas covered thereby is surplus to the needs of the State, and unless the surplus gas is to be transported to market through the trans-Alaska pipeline system. I do not find the option provisions objectionable, but I felt that they were significant enough to require separate mention.

Finally, the contract does not speak to one element of revenue loss that the State will probably sustain by reason of an in-kind taking. The severance tax payable on the State's royalty gas if the State did not take in kind will probably be lost if the State does take in kind. No treatment of this problem appears in the contract.

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I will stand ready to respond to such questions as the Committee might have during its hearing on February 2, 1977, and if there are any matters contained in this letter or in its attachment which are not clear, I trust that I will have an opportunity to speak to any such problem at that time.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Rush Moody, Jr.", with a stylized flourish at the end.

Rush Moody, Jr.

RM:bw
Attch.

19.11

ATTACHMENT "A"

SUMMARY OF MAJOR CONTRACTUAL PROVISIONS

A. "General Terms and Conditions"

Section 1 defines the terms essential to an understanding of the contract. The definitions are standard, and require no comment except to note the definition of the term "domestic and industrial needs of the State of Alaska" as set forth in Section 1.11. This term is defined to mean "those present and projected residential, commercial and industrial uses for gas within Alaska as determined by the Alaska Royalty Oil & Gas Development Advisory Board in accordance with AS 38.05-.183(d)."

This definition is critical to the structure of the royalty gas sale inasmuch as it forms the basis for the State's rights of withdrawal of royalty gas from the contract as set forth in Article III of the various royalty gas sales agreements.

Section 2 delineates the respective responsibilities of buyer and seller for damage or injury occurring in connection with the movement of royalty gas. The State is responsible prior to delivery to the buyers, and the buyers are responsible after receipt of the gas, except that while the gas is being processed by or on behalf of the State, the buyers are not responsible.

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The contract does not fix responsibility, as between buyer and seller, for the processing stage.

Section 3 governs metering of gas sold under the contract; the provisions which essentially require the buyers to install necessary meters to measure accurately the gas purchased under the agreement, but which permit the State to install check meters and otherwise periodically review the accuracy of the purchaser's metering activities, are standard and reasonable. In one respect these provisions are more favorable to the State than might be expected; the contract calls for correction of inaccuracies, when they occur, for a period extending back one-half of the time elapsed since the date of last calibration of the metering equipment. Frequently, gas sales contracts limit the period of time of recalculation, with it being fairly standard that such period is limited to a correction period of two weeks, or at most one month.

Section 4 contains standard provisions relating to the definition of the unit of volume sold.

Section 5 sets forth technical standards for gas measurement, and is standard in the industry.

Section 6, dealing with billing and payment, provides for the rendition of monthly statements, by the 15th day of each

month, setting forth the amount of gas delivered by the State and purchased by the buyers during the preceding calendar month, and for payment to be made by the 25th day of the calendar month in which the run statement is rendered. These provisions are standard.

Section 7, entitled "Receipt of Available Gas," imposes upon the buyer the obligation to proceed diligently to seek such authorization as required to receive gas then available for delivery by the State. As will be discussed later, the intent of Section 7 with respect to Tenneco Alaskan, Inc. and Southern Natural Gas Company is not altogether clear since neither of these buyers appears to be so situated that an authorization "to receive gas" would be required. Neither of these two buyers is in the present posture of seeking certificates permitting the transportation of royalty gas, or permitting construction of facilities to transport gas in interstate commerce and, accordingly, Section 7 is probably inappropriate in their contracts.

Section 8 contains a standard warranty of title by the State.

Section 9, force majeure, permits either party to the contract to suspend its performance if reasons force majeure supervene. The force majeure provisions are standard, but it is

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interesting to note that, in a case such as this where the State is a contracting party, the State can effectively relieve itself of any obligations under the contract by the imposition of "future rules, regulations, orders, laws or proclamations." The State can thus create a force majeure situation through its own action, and if the effect of force majeure is to require suspension of the State's performance under the contract, the State incurs no liability by reason of nonperformance to the buyers. Conversely, if the State, by future rule, regulation, order, law or proclamation makes it impossible for the buyers to perform, the buyers have no liability for nonperformance to the State.

Section 10 makes the contract subject to all present and future valid laws and valid regulations of the United States, the State of Alaska or any duly constituted agency thereof. This is a standard provision.

Section 11 permits assignment of rights under the contract; it is expressly provided that either buyer or seller may assign its rights under the agreement to a security holder without such security holder incurring personal obligation under the contract, and without such security holder being required to qualify to do business in the State of Alaska.

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Section 12 is not a standard contractual provision normally encountered in gas contracts. Section 12 provides, in essence, that if a producer of gas, of which the State's in-kind royalty gas is a part, enters into a contract of sale which contains provisions more favorable to the seller than the terms and conditions set forth in Sections 3, 5 and 6 of the "General Terms and Conditions," then the State has the option to include such more favorable terms and conditions within this contract "within 90 days after approval by the Federal Power Commission of said working interest owner's contract for the sale of its gas." The limitation of the State's right to move to more favorable terms is, as noted, limited to changes in the sections of the State's contract dealing with metering, measurement, and billing, and since these provisions are fairly well standard, it is doubtful that Section 12 will be of consequence. It should also be noted that if deregulation of new gas occurs, and if Prudhoe Bay gas is included within the definition of new gas so that the producer sales of that gas never become subject to FPC review, then Section 12 becomes meaningless inasmuch as the State would never have a matured right to demand favorable changes in Sections 3, 5 and 6.

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Section 13 contains miscellaneous provisions to aid in the interpretation and application of the contract. The provisions of Section 13 are not remarkable.

B. "Royalty Gas Sales Agreement"

Three separate "Royalty Gas Sales Agreements" have been negotiated, but all are identical in terms, with the exception that Tenneco Alaskan, Inc. is the buyer of 50 percent of the State's royalty gas covered by the total sales transaction, Southern Natural Gas Company is the buyer of 25 percent, and El Paso Natural Gas Company is the buyer of 25 percent. Since all contracts are identical, the following summary of the provisions of the El Paso contract will apply to the others also.

Article I sets forth the mutual promises of buyer and seller each to support actively and seek before appropriate authorities the ultimate selection and implementation of a trans-Alaska gas pipeline system. For purposes of this article, "pipeline" means a large diameter gas pipeline commencing at Prudhoe Bay, crossing Alaska in approximately the same route as the present trans-Alaska pipeline system oil pipeline, and terminating in the Prince William Sound area.

Article II, denominated "seller's royalty gas," covers several matters: Section 2.1 sets forth the State's warranty of

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its right to take royalty gas in kind, and its royalty share as being 12-1/2 percent. The leases identified in Exhibit A to the agreement set forth the specific acreage and royalty shares covered by the contract. If the State is prevented by federal action from taking its gas in kind, the gas sales agreement shall be void. [It should be here noted that Exhibit A was not furnished to me for review; I have assumed it to be no more than a listing and description of those State leases from which royalty gas will be sold under this contract.]

Section 2.2 provides that in addition to the sales price provided for elsewhere in the contract, the State will be reimbursed for the State's pro rata share of costs attributable to "the preparation and transportation of gas to be delivered hereunder." These costs are identified as being those costs which the State may incur as a result of its election to take its gas in kind, and which costs would not have been incurred if the State had not elected to take the royalty gas in kind.

Section 2.3 provides, however, that if the buyer is not able to include within its jurisdictional cost of service as determined by the Federal Power Commission, the cost reimbursement provided for in Section 2.2, then the buyer may terminate the gas sales agreement six months after giving notice of termination. If the

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right of termination is exercised, the buyer must nonetheless reimburse the State for those costs identified in Section 2.2 which become due and payable by the State prior to termination.

Article III governs the quantity of gas to be sold under the sales agreement. The structure of this article is as follows:

Section 3.1 establishes the State's agreement to sell 25 percent of seller's royalty gas available at the prescribed delivery points. (The Southern contract also calls for 25 percent of seller's royalty gas, while the Tenneco contract calls for 50 percent of the State's royalty gas.)

Section 3.2 establishes the base volume of gas to be sold by the State and purchased by the buyers during the term of the gas sales agreement. For El Paso, the base volume may be less than, but under no condition shall it be in excess of, 650 Bcf. The same base volume applies in the Southern contract, while the Tenneco contract specifies a maximum base volume of 1,300 Bcf.

Sections 3.3 and 3.4 relate to the right of the State to withdraw from the contract certain volumes to meet the present and future needs of the State. The schedule of reductions is as follows:

From date of first delivery through the fifth anniversary thereof, the State has the right to reduce the

quantity of royalty gas otherwise available for sale under Section 3.1 by up to and including 25 percent.

Commencing on the fifth anniversary date of first delivery and continuing through the tenth anniversary date thereof, the State has the right to reduce the quantity of royalty gas available for sale under Section 3.1 by up to and including 50 percent.

Commencing on the tenth anniversary date of first delivery and continuing through the 15th anniversary date thereof, the State has the right to reduce the quantity of royalty gas available for sale under Section 3.1 by up to and including 75 percent.

Commencing on the 15th anniversary date of first delivery and continuing until termination of the agreement, the seller has the right to reduce the quantity of royalty gas available for sale under Section 3.1 by up to and including 100 percent.

Reductions by the State of the quantity of royalty gas available for sale and delivery shall not become effective until after 12 months have elapsed from the date that the State gives written notice to the buyers of its desire to reduce deliveries.

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It is further provided that the State may change the percentages set forth above at any time during the term of the gas sales agreement, but such changes cannot become effective prior to the expiration of 24 months following the State's written notice to the buyer of its modification of the percentages.

Section 3.5 limits the State's rights of withdrawal of royalty gas volumes by stating that the rights of the State "shall be for the sole purpose of the State meeting the intra-state domestic and industrial needs of the State of Alaska" It will be recalled that the phrase "domestic and industrial needs of the State of Alaska" is specifically defined in the "General Terms and Conditions." The right of the State to withdraw gas from the contract for certain uses is further explained by the following provision in Section 3.5:

"This provision shall not limit the right to export from the State any products manufactured from said gas."

Section 3.6 requires the State to reduce, pro rata, deliveries to all three purchasing companies in the event that a State decision to withdraw gas from any of the contracts is made.

Section 3.7 has the effect of granting to the buyers an option on State royalty gas other than that produced under the leases identified on Exhibit A to the gas sales agreement. Under

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the provisions of 3.7, if the State in fact withdraws royalty gas to meet State needs and if, during the term of this agreement and five years thereafter, the State has additional royalty gas which is surplus to State needs, and which will be transported by a trans-Alaska pipeline, then the State agrees to offer to sell to the buyers under the provisions of this agreement (except as to price and term) such additional and excess royalty gas. The option is granted to the three purchasers ratably. As to such "option gas," the price to be paid is the highest price available to the State for such gas from any other interstate bona fide purchaser; if there are no other such purchasers, the price for such "option gas" will be the price then being paid under the instant gas sales agreement.

Under Section 3.7(b), an additional right of first refusal is granted to the buyers. If royalty gas becomes available to the state which, in the State's sole discretion, is determined to be surplus to the intrastate domestic and industrial needs of the State of Alaska, the buyers under the instant agreement are given a right of first refusal to purchase additional royalty gas from the State to the extent of one-half times the volume that the State's exercise of its rights of withdrawal under Sections 3.3

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and 3.4 in fact diminishes the amount of gas the buyer would otherwise have purchased and received under the instant agreement.

Section 3.8 permits the State to take and dispose of its royalty gas produced under the leases identified in Exhibit A at any time after the effective date of the instant agreement and prior to the time of first deliveries hereunder; the State may utilize, market or otherwise dispose of its royalty gas in any manner it chooses, at its own expense, so long as such taking or disposition does not prevent the State from making available for sale to the buyers on the date of first deliveries the quantity of gas committed under the contract.

Section 3.9 commits the State to the burden of advising the buyer at the beginning of each calendar year its best estimate of volumes which will be available under the agreement during each calendar year of the next succeeding five calendar years.

Section 3.10 expresses the agreement of buyer and seller to cooperate in minimizing "any charges levied on gas liquefied and transported from Alaska to the contiguous 48 states."

Section 3.11 provides that if the State exercises its rights of withdrawal of gas from the agreement, then the State will reimburse the buyer for a percentage of any then undepreciated investment made by the buyer in any facilities upstream of the

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pipeline. The percentage of reimbursement is the percentage that the State's reserved gas is of the total gas which otherwise would have been sold to the buyer under the agreement.

Article IV of the royalty gas sales agreement deals with delivery points and delivery pressures. Section 4.1 provides that the State's royalty gas shall be delivered at the point where the working interest owners of the leases make delivery of gas to their purchaser, or at any other point mutually agreed upon by the buyer and seller under this agreement.

Section 4.2 provides that if the State is required to take delivery of its royalty gas at a point upstream from the delivery point determined under Section 4.1, then the buyer under this agreement is required to accept delivery at the point where the State receives its royalty gas.

In Section 4.3, it is provided that gas sold and delivered by the State under this agreement shall be received by the buyers at the same pressure as the pressure the working interest owners deliver their gas to their purchasers, or at the pressure the State receives its gas from the working interest owners if delivery is made upstream of the specified delivery point.

Section 4.4 reserves to the State the right to receive all liquids removed from the gas prior to its delivery to the

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pipeline, whether the liquids are removed before or after delivery of the gas to buyer.

Article V of the royalty gas sales agreement specifies that the gas delivered by the State shall conform to the quality specifications applicable to the gas sold by the working interest owners at the same delivery point.

Article VI of the royalty gas sales agreement is concerned with price. Three alternate methods of determining the sales price are set forth in Sections 6.2, 6.3 and 6.4. Price redetermination rights are set forth in Section 6.5. Irrespective of which section governs the manner of establishing price, the sales price is subject to two important limitations:

Section 6.6 requires that the sales price reflect 1,000 Btu's per cubic foot, and if the heating value of the gas actually delivered is either greater than or less than 1,000 Btu's per cubic foot, then the price will be adjusted upward or downward.

Secondly, and more importantly, Section 6.1 sets forth an absolute upper limit on the price paid to the State. It is there provided that the price paid the State shall never be higher than the price which the buyer is permitted to retain in its jurisdictional

resale rates "so long as such rates are subject to regulation by the Federal Power Commission"

The four alternative methods of pricing are as follows:

Section 6.2 provides that if at the time of first delivery of gas, the price of gas purchased under the contract is subject to FPC regulation because of the Commission's authority to regulate resale rates, then the initial price to be paid shall be the highest rate allowed by the Commission to be paid by any interstate gas purchaser to any working interest owner in the leases identified in Exhibit A under contracts where at least 50 Bcf of gas are sold. Thereafter, the price to be paid would change in accordance with the applicable and governing portions of the rules and regulations of the Federal Power Commission. In the event any producer sells gas from the leases identified in Exhibit A at a price higher than the generally applicable FPC ceiling rates, through utilization of FPC special pricing procedures, then the State sales price would escalate to that higher price. In no instance will the State receive less than the price paid producers for their gas from the same reservoir for same or similar sales in interstate commerce.

Section 6.3 provides that if at the time of first deliveries of gas under the agreement the price of gas sold from the leases

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identified in Exhibit A is not regulated by the FPC, then the initial price for gas delivered under the agreement shall be the highest price being paid by any interstate gas purchaser for gas under contracts of at least 50 Bcf and produced from the leases identified in Exhibit A.

Section 6.4 deals with the eventuality of deregulation at the federal level; if the FPC ceases to exercise jurisdiction over interstate sales for resale after having once commenced jurisdiction, and if deregulation is in such form that it prevents the FPC from excluding the price the buyer pays under this agreement from its cost of service, then the State may elect, by the giving of written notice, to call for redetermination of the sales price as permitted in Section 6.5.

Section 6.5 sets forth redetermination rights of both buyer and seller. Each party has the option to cause the price being paid for gas sold under the agreement to be redetermined every 12 months, such redetermination to be effective on the anniversary of such redetermination. If either party requests redetermination, the parties shall attempt to agree on a new price, and in doing so shall observe the following: The redetermined price shall be the higher of (1) the highest price being paid for gas sold in interstate commerce from Prudhoe Bay of Alaska under a

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contract selling at least 50 Bcf of gas executed in the previous 12 months, or (2) the highest price being paid under a renegotiation or redetermination clause of any contract for gas sold in interstate commerce from the North Slope covering the sale of at least 50 Bcf of gas. If there are no comparable contracts executed in this one year period, or no contracts under which the price has been renegotiated or redetermined, then the parties are to attempt to agree to a new price, but failing this, the matter will be submitted to arbitration as provided in Article VII of the royalty gas sales agreement. In no event shall the redetermined price be less than the price being paid to the State immediately preceding the initial redetermination.

Article VII of the royalty gas sales agreement covers arbitration procedures. Any dispute arising under the agreement can be settled by arbitration if either party requests arbitration. Normal arbitration procedures are set forth, whereby each party names one arbitrator and the two so named select a third. The action of a majority of the board of arbitrators and their decision on matters submitted to them for adjudication shall be final and binding on the parties.

Article VIII of the agreement specifies that the agreement shall become effective upon execution and approval, and shall

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continue for twenty years from the date of first deliveries or until the base volumes of gas set forth in Section 3.2 have been delivered, whichever is earlier. Earlier termination can occur if, for any reason, a decline in production is sustained to the extent that further production of gas would no longer be profitable for the State, or further operation of the transportation facilities would no longer be profitable to the buyer.

Article IX reserves certain rights to the State. The State retains the right to process the gas or have the gas processed before and/or after delivery to buyer for the recovery of liquefiable hydrocarbons other than methane; the State agrees that such processing shall not reduce the heating content of the residue gas below 1,000 Btu's per cubic foot, and the State agrees to reimburse the buyer for all transportation charges, liquefaction charges and regasification charges attributable to volumes removed by processing, including fuel and shrinkage.

Article X of the royalty gas sales agreement specifies the form of notices to be used in those instances where formal notification is required by the agreement.

Article XI specifies certain "conditions precedent." First, the buyer has no obligation to perform any of its undertakings in the agreement, other than its agreement to support the government's

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selection of a trans-Alaska pipeline, unless and until all necessary government approvals for building, construction and operation of the pipeline are granted. The only exception here is that any costs incurred by the State by reason of the State's election to take its royalty in kind shall be reimbursed by the buyer as provided in Section 2.2.

Second, if all necessary regulatory approvals have not been issued and accepted by December 31, 1978, either party to the agreement may thereafter terminate the agreement by giving 10 days written notice.

Third, after approval of the agreement by concurrent resolution of a majority of each house of the Alaska State Legislature, the buyer is to proceed with diligence in the filing and prosecution of such pleadings and applications with the FPC as may be required to obtain all necessary rate, tariff and certificate authorizations related to the buyers' obligations under the agreement.

Fourth, it is provided in Section 11.4 that prior to the time that a Federal Power Commission order granting a certificate of public convenience and necessity to the pipeline becomes final and nonappealable, the Governor of the State may give written notice to the buyer of his decision to support a project other than the trans-Alaska pipeline as defined and identified in the

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agreement. Such notice is not a default by the State under the agreement, but if the buyer decides not to concur in the Governor's change of position, then the buyer may terminate the agreement in its entirety. If the buyer agrees to support the project designated in the Governor's notice, the new project shall be considered the "pipeline," and the agreement remains in force.

Fifth, the royalty gas sales agreement may be terminated by directive of the Governor and service of notice on the buyer if the Federal Power Commission denies the El Paso-Alaska application in Docket No. CP75-96, or if the Commission grants a certificate of public convenience and necessity to a project or system other than the "pipeline" as defined in the agreement.

Finally, it is stipulated that the agreement shall not take effect until approved by concurrent resolution of a majority of each House of the Alaskan Legislature.

Article XII incorporates the general terms and conditions and Exhibit A into the agreement and makes them a part of the agreement for all purposes.



21-a

STATE OF ALABAMA

JERE BEASLEY
LIEUTENANT GOVERNOR
MONTGOMERY
36130

January 14, 1977

TELEPHONE
AREA CODE 205
632-3492
632-3493

Honorable Lowell Thomas, Jr.
Lieutenant Governor
State of Alaska
Pouch "AA" State Capitol Building
Juneau, Alaska 99811

Dear Lowell:

Since the recent announcement by the State of Alaska to sell its surplus royalty natural gas for distribution to the lower 48 states, I have met with officials of Southern Natural Gas Company to discuss this matter. I was pleased to learn of this large new supply source of natural gas that will be available for delivery within the next several years to our part of the nation. This additional gas will be most important to our residential, commercial, and industrial sectors.

As we now find ourselves in the midst of an ominous and deepening natural gas shortage in the lower 48, I am firmly convinced that we must recognize the seriousness of its impact upon the nation's economy as well as to the health and comfort of millions of our citizens. It is incumbent upon all of us in government that we recognize this and act affirmatively to insure that our consumers will have the reassurance of adequate natural gas supplies.

Our nation should not have to depend on imported oil. It stands to reason that the greater the proportion of our total energy supply that domestic natural gas makes up, the lesser the proportion imported oil will make and, therefore, the lesser OPEC leverage on our foreign policy.

21-a.1

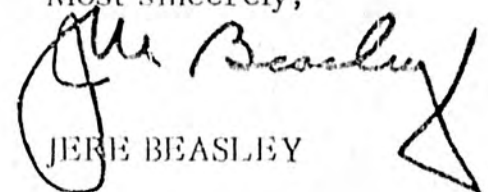
Honorable Lowell Thomas, Jr.
January 14, 1977
Page 2

Expeditious development of the domestic natural gas reserves of Alaska for transportation to the lower 48 states appears to be our best hope if we are to attain a timely degree of self-sufficiency in our energy needs. Accordingly, I endorse your state's proposal to sell a portion of Alaska's surplus royalty natural gas to Southern Natural Gas Company, the major supplier of natural gas to Alabama.

Our state will support efforts to obtain these new gas supplies for our area of the nation. If we in Alabama can be of assistance as this matter receives further consideration, please let me know.

With best personal regards, I am

Most sincerely,



JERE BEASLEY

JB:cw

TELEGRAM

RCA ALASKA COMMUNICATIONS, INC.
PHONE: 583-6440
JUNEAU, ALASKA 99801

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PMS SENATOR JOHN RADER CHAIRMAN ROYALTY GAS CONTRACTS

REVIEW COMMITTEE **1139** POUCH V

JUN 99811

JANUARY 27, 1977

BASED UPON PREVIOUS ALASKA LEGISLATIVE HEARINGS HELD LAST YEAR,
AND CONSIDERABLE ADDITIONAL INFORMATION ACCUMULATED SINCE THEN,
THE ALASKA CHAPTER AGC OF AMERICA, INC. HAS CONTINUALLY
SPONSORED AN ALL-ALASKA GAS PIPELINE ROUTE, AND SPECIFICALLY
THAT PROPOSAL PRESENTLY CONSIDERED BY EL PASO. IN LIGHT OF
THIS, WE BELIEVE THE HEARINGS WHICH ARE TAKING PLACE JANUARY
31 THROUGH FEBRUARY 2 NEXT WEEK WILL CONFIRM OUR ACTIONS
WE DO, HOWEVER, URGE THAT YOU ATTEND THESE HEARINGS AND
WE INTEND TO HAVE A REPRESENTATIVE DO LIKEWISE IN ORDER THAT
WE MAY ALL BE FINALLY ASSURED THAT THE ABOVE DECISIONS WERE
SOUND. IN ANY EVENT, WE ALSO URGE YOUR PROMPT DECISION ON
THE GOVERNORS ROYALTY GAS ALLOCATION CONTRACT.

GEORGE E. SMITH, MANAGER

ALASKA CHAPTER

ASSOCIATED GENERAL CONTRACTORS

AGO 800718

TELEGRAM

RCA ALASKA COMMUNICATIONS, INC.

PHONE: 586-6440

JUNEAU, ALASKA 99801

#

21.6.1

02003 ANCHORAGE AK 151 02-37 943A AST

1977 FEB 7 PM 1

PMS SENATOR JOHN RADER CHAIRMAN ROYALTY GAS CONTRACTS REVIEW
COMMITTEE ³³⁴ POUCH V
JUNEAU AK 99811

FEBRUARY 7, 1977

AT THE OUTSET OF YOUR HEARINGS WITH RESPECT TO THE ROYALTY
GAS CONTRACTS NEGOTIATED BY THE ADMINISTRATION, WE COMMUNICATED
OUR PREVIOUS ACTIONS AND ASKED THAT YOU CAREFULLY OBSERVE AND
ANALYZE THE TESTIMONY CONSIDERED, AS WOULD OUR ORGANIZATION.
AFTER MUCH TECHNICAL TESTIMONY, WHICH WAS OFTEN CONTRADICTORY,
WE WOULD STILL URGE YOU TO SUPPORT AND APPROVE THE GOVERNORS
ACTIONS. WE PREDICATE THIS ON THAT TESTIMONY WHICH SEEMED TO
BE IN PREFONDERANCE, AS WELL AS PERSONAL ASSURANCES FROM THE
ADMINISTRATION OF ITS INTENTIONS. THIS, COUPLED WITH ALASKAS
CONGRESSIONAL DELEGATIONS ADVICE, INDICATED IT IS WISE TO
SUPPORT SUCH ACTION. WE THEREFORE URGE THAT YOU DO SO
AND THEREBY INDICATE TO THE LOWER 48 AND ALL ITS CONGRESSIONAL
DELEGATES OUR ALASKAN SOLIDARITY, AS WELL AS OUR INTENTIONS TO
FIGHT TO THE LAST-DITCH EFFORTS TO EFFECT AN ALASKAN GAS LINE
ROUTE, BEST EPITOMIZED AT THIS TIME IN THE EL PASO PROPOSAL.

GEORGE E. SMITH, MANAGER
ALASKA CHAPTER
ASSOCIATED GENERAL CONTRACTORS

AGO 800719

TELEGRAM

ALASKA ALASKA COMMUNICATIONS, INC.

PHONE: 584-6440
JUNEAU ALASKA 99901

21-C

1977 JAN 27 PM 9 50

02123 NL ANCHORAGE ALASKA 168 01-27 500P AST

PMS HON JOHN RADER SENATE PRESIDENT

JUN

1222

THE ANCHORAGE CHAMBER OF COMMERCE BOARD OF DIRECTORS WOULD
RESPECTFULLY REQUEST THE FOLLOWING RESOLUTION TO BE READ
IN OFFICIAL SESSION OF THIS STATE LEGISLATIVE BODY.

" WHEREAS AN ALL ALASKAN GAS PIPELINE WOULD BE IN THE
BEST ECONOMIC INTEREST OF THE STATE OF ALASKA
AND ITS CITIZENS, WHEREAS THE ANCHORAGE CHAMBER OF COMMERCE
IS ON RECORD IN SUPPORT OF AN ALL ALASKAN GAS PIPELINE,
WHEREAS, THE ALASKA STATE LEGISLATURE IS PRESENTLY CONSIDERING
THE MERITS OF A ROYALTY GAS CONTRACT APPROVED BY THE STATE
OIL AND GAS ADVISORY BOARD. WHEREAS, THE EXISTENCE OF A
ROYALTY GAS CONTRACT SUPPORTED BY THE PEOPLE OF ALASKA
WOULD BE AN AID TOWARDS THE ULTIMATE APPROVAL OF AN ALL
ALASKAN GAS PIPELINE NOW
THEREFORE, BE IT RESOLVED THE ANCHORAGE CHAMBER OF COMMERCE
WISHES TO GO ON RECORD IN SUPPORT OF A ROYALTY GAS CONTRACT
AND RESPECTFULLY URGES THE LEGISLATURE OF THE STATE OF
ALASKA TO EXPEDITIOUSLY APPROVE SUCH A CONTRACT BASED ON
TERMS WHICH PROVIDE THE GREATEST ADVANTAGES TO THE CITIZENS
OF ALASKA.

ROBERT L HARDICK PRESIDENT THE ANCHORAGE CHAMBER OF COMMERCE

AGO 800720

TELEGRAM

21-d

HCA ALASKA COMMUNICATIONS, INC.
PHONE: 586-6440
JUNEAU, ALASKA 99901

#

02093 NL ANCHORAGE ALASKA 01-27 600P AST

PMS SEN JOHN RADER DEL

JUN 1214

REF HEARINGS ON SALE OF ROYALTY GAS PERIOD
BENEFITS TO OUR STATE AND ITS CITIZENS INHERENT IN
THE TRANS-ALASKA ROUTE FOR NATURAL GAS
WANTS YOUR SUPPORTS OF THE SALES CONTRACT FOR
ROYALTY GAS NOT NEEDED IN ALASKA AND WHICH
CONTRACTS ARE NOW UNDER CONSIDERATION PERIOD EARLY
LEGISLATIVE APPROVAL WILL DEMONSTRATE SOLID SUPPORT
OF ALASKANS FOR TRANS-ALASKA GAS PROJECT PERIOD IT WILL
ALSO INSURE THAT TENNECO AND SOUTHERN NATURAL
WILL JOIN EL PASO IN THE ALL OUT NATIONAL
CAMPAIGN TO OBTAIN CERTIFICATE TO AUTHORIZE
THE ALL AMERICAN GAS TRANSPORT SYSTEM PERIOD
AL SWALLING POUCH 7012 ANCHORAGE ALASKA 99512

377 JAN 27 PM 9 10

21-e

04106 SANFRANCISCO CA 115 01-27 345P PST
PMS THE HONORABLE JOHN RADER
SENATE PRESIDENT 1145
ALASKAN STATE LEGISLATURE
POUCH V
JUNEAU AK 99811

DEAR SENATOR RADER :

THANK YOU FOR INVITING MY COMMENTS
REGARDING PRUDHOE BAY ROYALTY SALES AGREEMENTS.
AS IT IS NOT POSSIBLE FOR ME TO ATTEND THE
HEARINGS BEGINNING JANUARY 31, I WOULD APPRECIATE
YOUR CONSIDERATION OF THIS SHORT WRITTEN COMMENT:
PACIFIC GAS AND ELECTRIC COMPANY URGES THE SPECIAL
SENATE COMMITTEE TO CONSIDER PROVIDING THAT, IF
THE FPC, THE PRESIDENT AND CONGRESS SHOULD SELECT
A PROJECT OTHER THAN THE EL PASO TRANSALASKA PROJECT
TO MOVE PRUDHOE BAY GAS TO THE LOWER 48 STATES, THE
PRESENTLY PROPOSED GAS SALES AGREEMENTS WOULD
TERMINATE AND THE STATE WOULD THEN BE FREE TO
NEGOTIATE ALSO WITH COMPANIES WHO ARE CURRENTLY SUPPORTING
ONE OF THE OTHER PROJECTS.

THANK YOU FOR YOUR KIND INVITATION.

BEST REGARDS,

JOHN A SPROUL

SENIOR VICE PRESIDENT

AGO 800722

2-022216E030 01/30/77 ICS IPMRNCZ CSP AHGB
9163223690 MGM TDRN SACRAMENTO CA 542 01-30 0740P EST

EXHIBIT # 21-f

HONORABLE JOHN RADER
SENATE PRESIDENT
ALASKA STATE STATE LEGISLATURE
POUCH V
JUNEAU AK 99811

YOUR LETTER TO TONY KLINE, THE GOVERNOR'S LEGAL SECRETARY, HAS BEEN FORWARDED TO ME FOR COMMENT. I URGE THE ALASKAN STATE LEGISLATURE NOT TO APPROVE THE GAS ROYALTY SALES AGREEMENTS BETWEEN THE STATE OF ALASKA AND THREE FIRMS. CALIFORNIA CAN NOT AFFORD TO RELY ON LIQUEFIED NATURAL GAS (LMG AND EL PASO PROJECT FOR OVER NINETY PERCENT OF THE STATE'S GAS SUPPLY LMG DELIVERY TECHNOLOGY IS PROVEN FOR SMALE SCALE DELIVERIES BUT NOT FOR THE LARGE SCALE (GREATER THAN 3.2 BCF/DAY) DELIVERIES PROPOSED FOR CALIFORNIA.

IF THE ONE LMG TERMINAL CALIFORNIA IS LIKELY TO PROVE OR TO BE TEMPORARILY CLOSED DOWN DUE TO AN EQUIPMENT MALFUNCTION, TRESSLE DAMAGE OR EARTHQUAKE, THE STATE OF CALIFORNIA COULD FACE MAJOR DISRUPTIONS IN ITS GAS SUPPLY DELIVERY SYSTEM. THE POTENTIAL DISRUPTIONS ARE DISCRIBED IN THE RESOURCE PLANNING ASSOCIATES STUDY BEING SENT UNDER SEPARATE COVER.

FOR THIS AND OTHER REASONS CALIFORNIA SUPPORTS AN OVERLAND PIPELINE DELIVERY SYSTEM FOR NORTH SLOPE NATURAL GAS WITH A DIRECT DELIVERY SYSTEM TO THE WEST COAST. A COPY OF THE ENERGY COMMISSION POLICY RESOLUTION AND PUC BRIEF WILL ALSO BE SENT UNDER SEPARATE COVER.

THERE IS ALSO STRONG EVIDENCE TO SUGGEST THAT OVERLAND PIPELINE SYSTEM WOULD YIELD MUCH LOWER TRANSPORTATION COSTS TO THE CUSTOMERS AND HENCE MUCH HIGHER NATURAL GAS ROYALTIES FOR THE STATE OF ALASKA AND HIGHER WELLHEAD VALUES FOR NORTH SLOPE PRODUCERS.

WE THEREFORE URGE YOU TO CONSIDER THE VALUE OF THE HIGHER WELLHEAD PRICE TO THE STATE AGAINST THE VALUE OF A LIQUEFACTION TERMINAL.

CALIFORNIA OFFICIALS ARE SENSITIVE TO ALASKA'S WISH TO PROVIDE ITS CITIZENS WITH JOBS AND ECONOMIC DEVELOPMENT OPPORTUNITIES. ARRANGEMENTS OF THE OVERLAND PIPELINE PROPOSALS TO BE ESTABLISHED THAT WOULD NOT DEPRIVE SOUTHERN ALASKA FROM SUPPLIES OF NATURAL GAS. THE ALCAN HIGHWAY PROPOSAL WILL DELIVER GAS TO SOUTHERN PARTS OF ALASKA AND COULD PROVIDE THE SAME VOLUME OF GAS AND DEVELOPMENT OPPORTUNITIES AS EL PASO'S PROPOSAL. ARCTIC GASES PROPOSAL COULD ALSO BE PERMITTED IN A MANNER TO ENSURE DELIVERIES OF GAS TO SOUTH ALASKA IN QUANTITIES SUFFICIENT FOR ECONOMIC DEVELOPMENT. THIS COULD BE ACCOMPLISHED BY REQUIRING THAT NORTH SLOPE GAS PRODUCERS PURCHASE OR EXCHANGE SOUTH ALASKAN NATURAL

AGO 800723

PAGE 2

REA Mailgram®



21.f.1

GAS WHICH WOULD REMAIN IN SOUTH ALASKA IN EXCHANGE FOR NORTH SLOPE ROYALTY GAS. THE RESULTANT TRANSPORTATION COST SAVINGS WOULD BENEFIT ALL PARTIES.

THERE IS ONE OTHER IMPORTANT FACTOR THE ALASKAN LEGISLATURE SHOULD CONSIDER BEFORE APPROVING THE PROPOSED ROYALTY SALES AGREEMENTS. THE CALIFORNIA LEGISLATURE MAY CONSIDER THE ESTABLISHMENT OF A CALIFORNIA STATE GAS PURCHASING AUTHORITY WHICH WOULD ENABLE CALIFORNIA TO PURCHASE ALASKA'S ROYALTY GAS DIRECTLY WITHOUT FEDERAL POWER COMMISSION APPROVAL OR PRICE REGULATION. THE POSSIBILITIES AS ALASKA BENEFITING FROM THIS ARRANGEMENT (THROUGH HIGHER ROYALTIES) AND OF CALIFORNIA ESTABLISHING SUCH AN AUTHORITY SIGNIFICANTLY DIMINISH AS THE STATE OF ALASKA AND OTHER NORTH SLOPE PRODUCERS SIGN THESE "OPEN ENDED/UNKNOWN PRICE" CONTRACTS.

THE ENERGY FUTURES OF THE STATE OF CALIFORNIA AND ALASKA ARE INTIMATELY TIED TO ONE ANOTHER WITH REGARD TO OIL AS WELL AS GAS. WE ARE GRATEFUL FOR THE OPPORTUNITY TO RESPOND TO YOUR INQUIRY AND LOOK FORWARD TO SPIRIT OF CONTINUING COOPERATION.

PLEASE ENTER THIS MAILGRAM AND MATERIALS BEING SEND UNDER SEPARATE COVER INTO THE OFFICIAL RECORDS OF YOUR PROCEEDINGS.

RICHARD L MAULLIN CHAIRMAN
CALIFORNIA STATE ENERGY COMMISSION
1111 HOWE AVE
SACRAMENTO CA 95825

1947 EST

MGMCOMP MGM

AGO 800724



Greater Fairbanks

CHAMBER OF COMMERCE

Member

550 First Avenue

U. S. Chamber of Commerce
Alaska State Chamber of Commerce
Pacific Northwest Trade Ass'n.
National Better Business Bureau

EXHIBIT 21-9

January 24, 1977

Dear

At the regular scheduled meeting of January 24, the Board of Directors of the Greater Fairbanks Chamber of Commerce unanimously supported the Governor's proposal for the sale of the state's royalty gas.

We urge you to support the Governor's proposal as written and ratify it as soon as possible as to avoid delay in the pipeline route decision.

In the future we hope that you would consider a gas separation plant in the Fairbanks area.

Sincerely,

Mrs. Jeanne Wilson
President

JW/sh



Exhibit 21-h



GEORGE W. EASLEY COMPANY

1577 C STREET • SUITE 105 • ANCHORAGE, ALASKA 99501 • DIAL 907/276-7915

January 31, 1977

Honorable John Rader
President of the Senate
Alaska State Legislature
Pouch V
Juneau, AK 99811

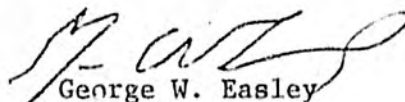
Dear Senator Rader:

Thank you for your kind invitation to participate in the hearings before the Special Senate Royalty Gas Review Committee.

I have had the opportunity to review the proposed contracts and I had looked forward to offering testimony relating to them. Unfortunately, the press of business necessitates that I remain in Anchorage at the time hearings will be held in Juneau.

It would be appreciated, however, if you would record my recommendation for swift approval of the proposed contracts.

Very truly yours,


George W. Easley
President

GWE:vmd

21-i

TELEGRAM

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BCA ALASKA COMMUNICATIONS, INC.

PHONE: 536-6440

JUNEAU, ALASKA 99901 1977 FEB 2 AM 10 32

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2-022343E033 02/02/77

ICS IPMBNGZ CSP

3135352099 TDBN DETROIT MI 23 02-02 1243P EST

PMS SENATOR JOHN L RADER ALASKAN STATE LEGISLATURE, DLR

050
JUNO AK 99311

THIS IS FROM JAMES T JEFFERSON ENTERPRISES INCORPORATED 14864

MMENDOTA DETROIT MICHIGAN 48233 3135352099 YES I ADVOCATE THE SALE
OF GAS AND OIL MY COMPANY WANTS A PORTION

JAMES T JEFFERSON

1244 EST

IPMAFUA AHG

OFFICE OF THE GOVERNOR

Exhibit 22

Honorable Jay S. Hammond
Governor
State of Alaska
Pouch A
Juneau, Alaska 99811

Frances A. Ulmer
Legislative Assistant
Office of the Governor
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Honorable Mike Gravel
United States Senate
3317 Dirksen Senate Office Bldg.
Washington, D.C. 30510

Honorable Donald E. Young
House of Representatives
1210 Longworth House Office Building
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AGO 800739

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Anchorage, Alaska 99510

22.13

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P.O. Box 1267
Fairbanks, Alaska 99707

Honorable Donald E. Gilman
Mayor - Kenai Peninsula Borough
P.O. Box 850
Soldotna, Alaska 99669

Honorable Ronald L. Larson
Mayor - Matanuska-Susitna Borough
Box B
Palmer, Alaska 99645

Honorable Eben Hopson, Sr.
Mayor - North Slope Borough
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Barrow, Alaska 99723

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Mayor - City of Cordova
PO Box 1210
Cordova, Alaska 99574

Honorable Bob Cramer
Mayor - City of Delta Junction
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Delta Junction, Alaska 99737

Honorable Freeman A. Roberts
Mayor - City of Dillingham
Box 19
Dillingham, Alaska 99576

Honorable Harold Gillam
Mayor - City of Fairbanks
410 Cushman Street
Fairbanks, Alaska 99701

Honorable Nancy James
Mayor - City of Fort Yukon
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THE SALE OF
ROYALTY GAS

(907) 465-3873

POUCH V
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MEMBERS

REP. CLARK GRUENING, CHMN.
 REP. C. V. CHATTERTON
 REP. JOE L. HAYES
 REP. JOSEPH H. MCKINNON
 REP. CHARLES H. PARR

House of Representatives

Joint Hearings with the Senate Committee to Consider
 the Sale of Royalty Gas January 31, 1977 - February 7, 1977

Invitations to testify:

I. Newspaper Advertisements (copy attached)

Anchorage Daily News	1/28/77 - 1/29/77
Anchorage Times	1/28/77 - 1/29/77
Fairbanks Daily News-Miner	1/27/77 - 1/28/77

II. Invitations by mail or telephone:

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 President and Chief Executive Officer
 Alaska International Industries
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 Fairbanks, Alaska 99701

Fairbanks Environmental Center
 1895 Pioneer Way
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Arlon Tussing
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Joint Hearings of the
House Special Committee on the Sale of Royalty Gas
Senate Special Committee to Consider the Sale of Royalty Gas

January 31, 1977 - February 7, 1977

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Vice Chairman
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Exhibit 24

ROYALTY GAS SALE HEARINGS

Joint legislative hearings to consider the sale of Alaska Royalty Gas will be held in Juneau, Jan. 31st and Feb. 1st and 2nd. Copies of the proposed Royalty Gas Sales Agreements with Penneco - Alaska, Southern Natural Gas and El Paso Natural Gas are available at the legislative information office 6th and K street. Persons wishing to testify should call 465-3873 to schedule testimony, written testimony may be sent to:

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REP. CLARK GRUENING
Pouch V. Juneau, Ak. 99811

SENATE GAS SALE COMMITTEE
SEN. JOHN RADER
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Anchorage Daily News 1/29/77

Exhibit 25

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ANALYSIS OF PRUDHOE BAY
ROYALTY NATURAL GAS DEMAND
and
THE PROPOSED PRUDHOE BAY
ROYALTY NATURAL GAS SALE

BY

Kristina M. O'Connor
and
Patrick L. Dobey

January 1977

A Study for the Alaska Royalty Oil
and Gas Development Advisory Board

Chairman
Guy Martin, Commissioner
Department of Natural Resources

Executive Director
Donald Wold

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Introduction and Summary

It is probable that Prudhoe Bay's vast natural gas supplies will begin to flow southward in 1982. Alaskans believe that an all-Alaskan gas pipeline is the only satisfactory transportation method for this gas with the availability of the gas for in-state use being a major consideration. A sale of Royalty gas has been proposed that offers the opportunity to use Prudhoe Royalty gas in the state. This analysis considers the implications of that sale. Previous state-wide natural gas demand studies have shown that the Cook Inlet area can be satisfied by existing commitments and other energy supplies. There is a good probability commercial, residential and light industrial use of the royalty gas along the Alaskan natural gas corridor will occur. We have compared this corridor use against the gas take-back provisions of the proposed gas sales contract. Results indicate that the proposed contract will satisfy potential in-state gas volumes required, and that sufficient flexibility is allowed to provide natural gas supplies when needed.

Previous reports by the Department of Natural Resources have been used as the basis for this study. A reference list is included on the last page of this report, and it is suggested that detailed questions on natural gas demand be answered by consulting these previous studies, especially the report entitled "Projected Alaskan Royalty Gas Production and its Relationship to Projected Natural Gas Demand" by P.L. Dobey, et al.

ANALYSIS AND RESULTS

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The three key factors in this analysis are the amount of royalty Natural Gas available through the pipeline, the estimated demand for Royalty Gas in Alaska and the contractual procedures for recalling the Royalty natural gas needed for in state use. A discussion of these factors follows.

Royalty Gas Supply

Neither the preliminary nor final rates of gas production from Prudhoe Bay have been set by the State. The figures included in these contracts do not offset the setting of those rates, but are based for the purposes of the sales, on reasonable expectations of what those rates might be. The initial rates will be set by State law prior to gas production, and readjusted as necessary based on production history. Buyers under these contracts will simply have to accept whatever rates are set, but for purposes of putting a ceiling on the commitment, some assumptions were agreed upon.

The agreed assumptions include an initial rate of 2.0 B.C.F./day increasing over a period of time to 3.2 B.C.F./day. Commitment of a maximum total of 2.6 trillion cubic feet for these contracts equals an average gross sales rate of 2.85 billion cubic feet per day over 20 years. It also represents the maximum royalty gas available from 20.8 trillion cubic feet of the total reserve. The State estimates the total reserve slightly higher than industry. Its figure for the

25.4

Prudhoe Oil Pool reserve in the sale area is 31.2 trillion cubic feet with a royalty reserve in the sale area of approximately 3.9 trillion cubic feet. Thus although 100% of our royalty production is committed for 20 years, it represents only about 66 percent of the State's total royalty gas reserve. If the penalty section in the contract ever becomes operative, the penalty gas would come from this reserve or from other gas on the North Slope not yet in production and not directly committed to this contract.

The estimates on reservoir performance are based on no production history. The degree of accuracy under these conditions is low and provision must be made for actual production data which might require changes in rates for optimum recoveries. The 2.85 B.C.F. average is thought to be a reasonable maximum based on what is known now and one which will permit some flexibility in case of error. It was arrived at by assuming a maximum rate of 2 B.C.F. for a period of five years and a rate of 3.2 B.C.F./day for the remaining 15 years of the contract. This would assume that five years of sales would be necessary to reasonably establish the best way to operate the reservoir ultimately and that these data indicate a higher rate can be justified by performance data. For the purpose of this analysis we have chosen 2.0 B.C.F. per day as a likely and conservative actual pipeline thruput.

Demand for Natural Gas

Demand is defined in the report as that amount of natural gas necessary

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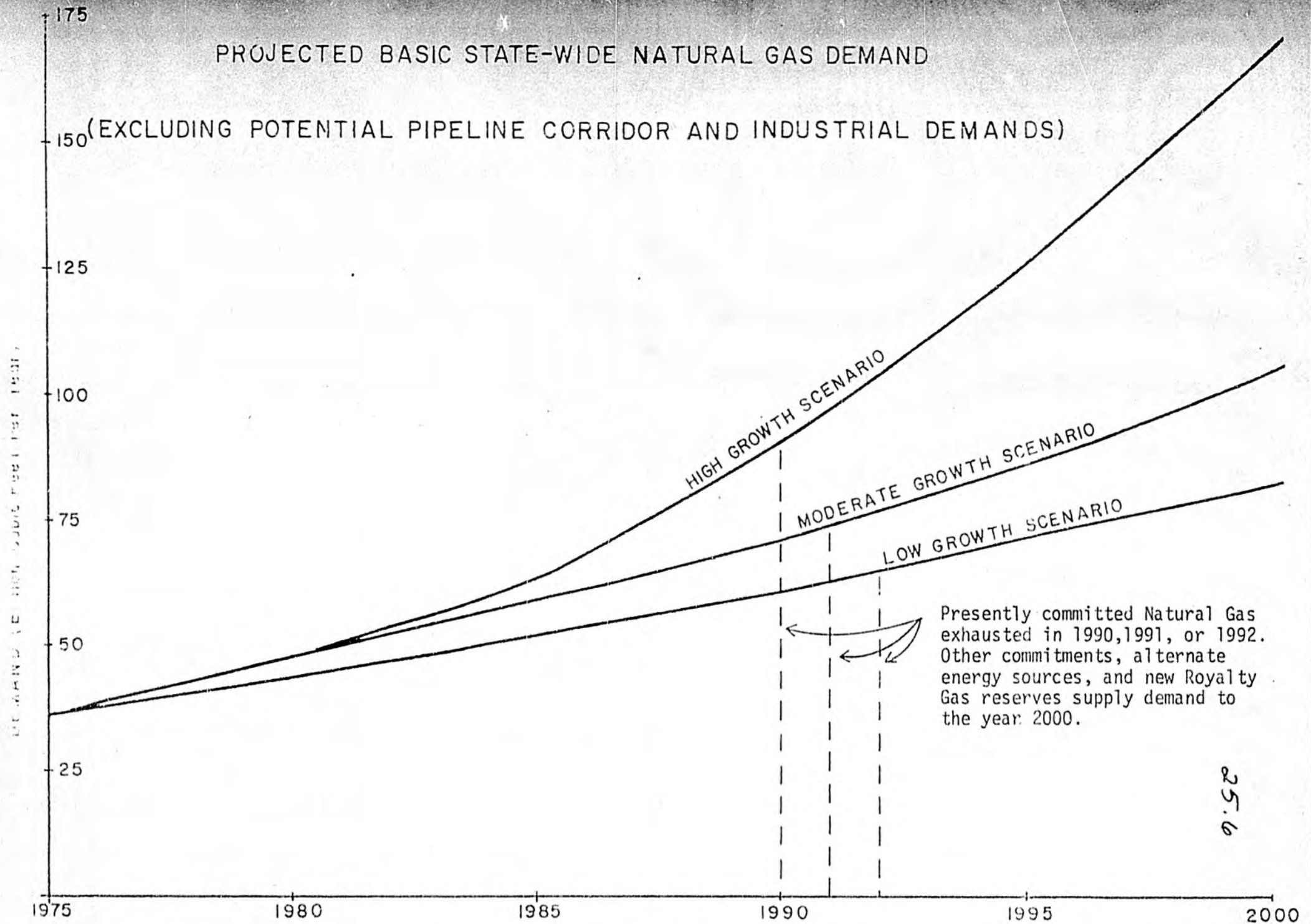
to provide the residential-commercial needs of the State. Basic demand relies only upon population growth and does not include potential demand resulting from the Alaskan gas pipeline corridor or industrial uses. Current natural gas consumption, upon which the basic demand is projected, occurs almost exclusively in the Upper Cook Inlet area and is supplied by the Upper Cook Inlet gas fields.

Low, moderate, and high growth scenarios were used to predict future basic demand. The most likely state-wide demand curve from each scenario is shown on Figure 1. Presently committed non-royalty natural gas assures a plentiful energy supply until the year 1992, 1991, and 1990 using the low, moderate and high growth scenarios, respectively. Alternative energy sources, such as coal and hydroelectric power, can supply up to about 70% of that demand, and other commitments and new royalty gas reserves can supply the remaining 30%. This is illustrated on Figure 2, which shows the effects of alternative energy sources and potential industrial consumption upon the most likely moderate growth scenario.

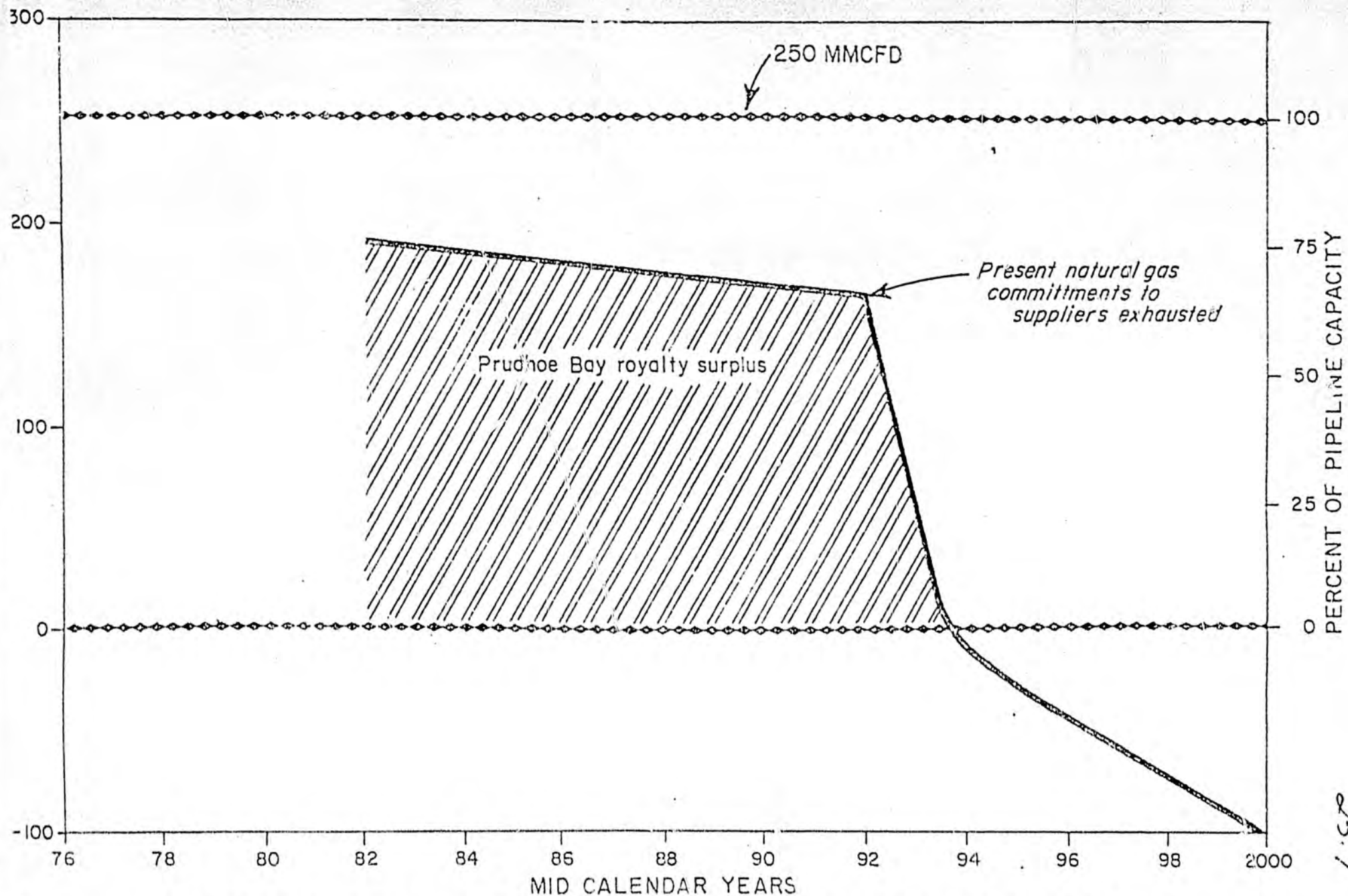
It has also been assumed in this report that the corridor demand will be met from Prudhoe Bay Pipeline Royalty gas, a very conservative assumption, since other supplies of gas may be available. We selected 1982 as a probable time for the beginning of Prudhoe Bay Natural gas production.

PROJECTED BASIC STATE-WIDE NATURAL GAS DEMAND

(EXCLUDING POTENTIAL PIPELINE CORRIDOR AND INDUSTRIAL DEMANDS)



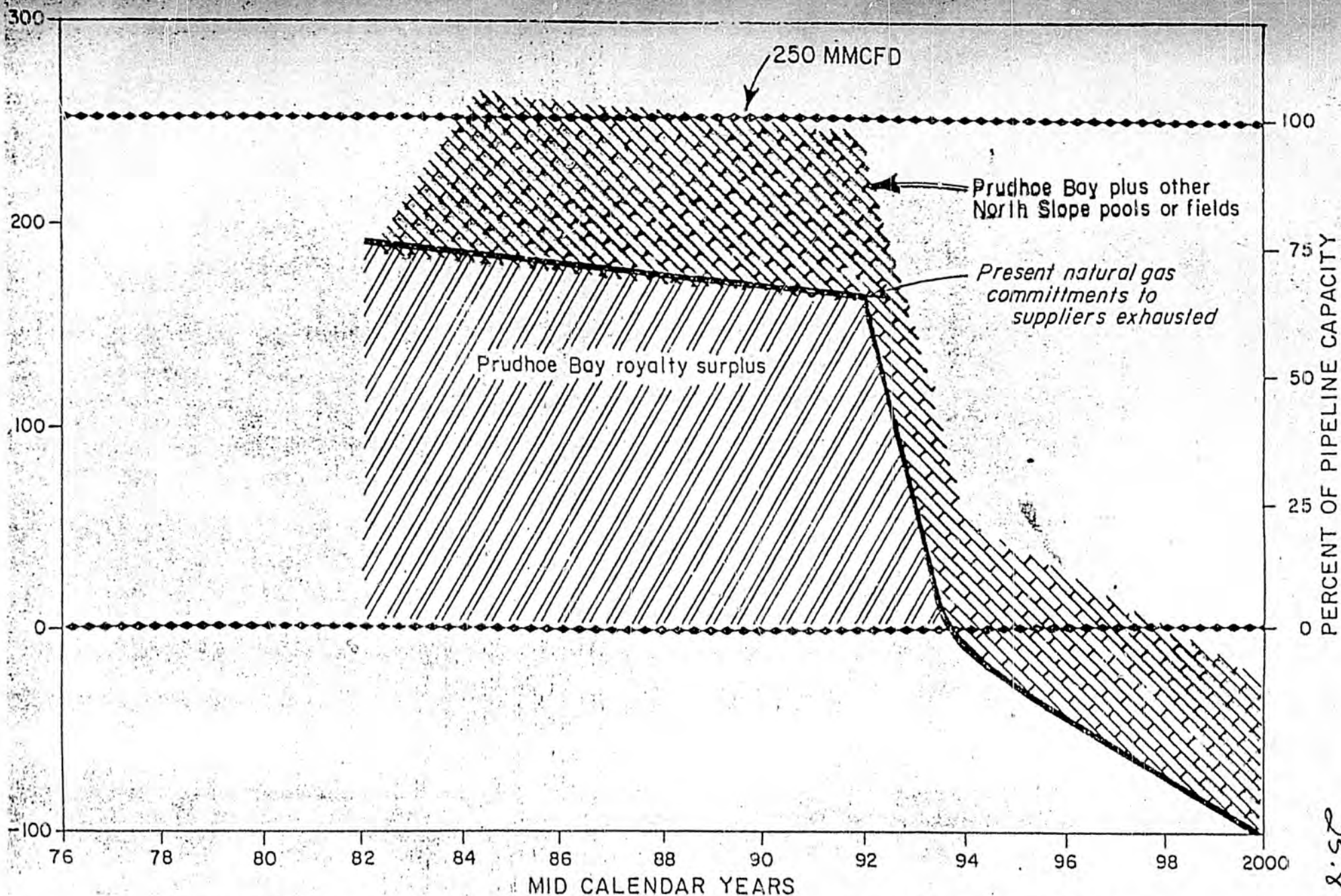
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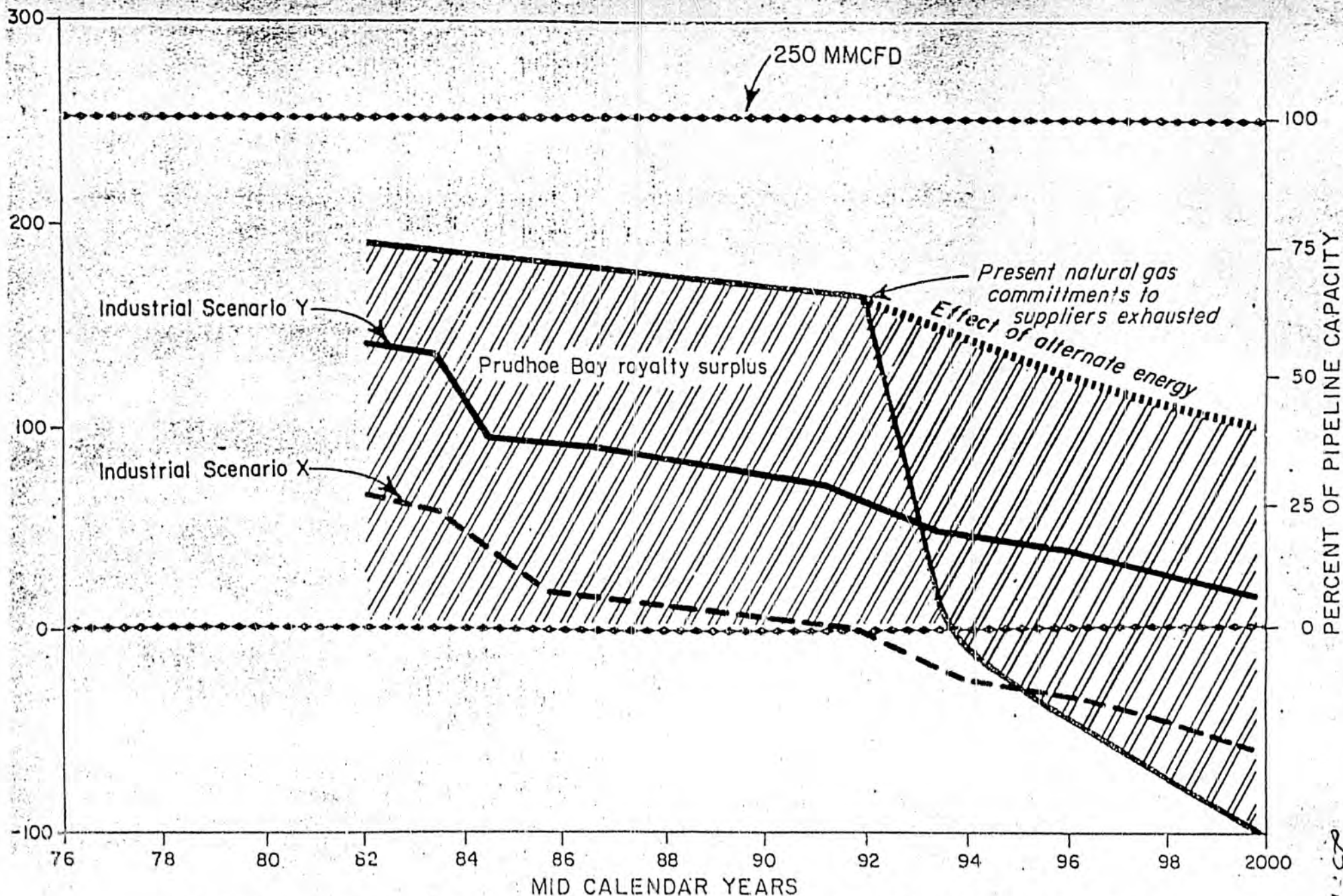
PRUDHOE BAY ROYALTY GAS AVERAGE DAILY SURPLUS
MOST LIKELY CASE AT 2.0 BCF/DAY PIPELINE THRUPUT

FIGURE 2



PRUDHOE BAY ROYALTY GAS AVERAGE DAILY SURPLUS
MOST LIKELY CASE AT 2.0 BCF/DAY PIPELINE THRUPUT

FIGURE 2



PRUDHOE BAY ROYALTY GAS AVERAGE DAILY SURPLUS
MOST LIKELY CASE AT 2.0 BCF/DAY PIPELINE THRUPUT

FIGURE 2

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Royalty Gas Sales Agreement

To protect the State's interest and provide the flexibility which may be needed to adjust the amount of gas surplus to State needs to meet changing conditions, there is a provision in the gas sales agreement for the State to recall a specified amount of its gas on the date of initial delivery and percentage increases at five year intervals. These percentages may be changed upon 24 months prior written notice. During each 5 year period the amount of gas recalled can be changed up to the total percentage allowed for that period upon 12 months prior written notice. The State will make the judgement of the amount of gas to be recalled based upon the in-state uses which develop and an on-going analysis of future requirements. We have assumed only residential, commercial and light industrial requirements, but using moderate projections, there should be surplus capacity for heavy industrial uses, also.

It is our belief that this provision affords ample protection to possible future gas users in the State. For example, assume that someone wants to build an Ammonia-Urea Plant requiring 60 million cubic feet of gas per day. Design, permits and construction of such a plant will require 3 to 4 years before gas delivery to the plant. This time lag gives ample time for the State's recall provision to be put into effect. Similarly, the decision to install a gas-fired turbine generator in a town along the pipeline, will require 18 months to 30 months from date of order to date of startup. The volume of gas (about 10 MMCFD)

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necessary to operate this generator would be accommodated by the 12 months notice period of the recall provision. An on-going demand analysis will insure that timely and appropriate take-back notice is given and that proper amounts of natural gas are available. The Division of Minerals and Energy Management will carry this responsibility.

Figure 3 illustrates the low, moderate and high growth residential-commercial corridor demands with the maximum take-back steps described in the Sales Agreement. The hatched area represents the gas which can be taken back under the terms of the contract and which is in excess of projected demand. All of the hatched area above the low scenario curve is the surplus obtained by recalling the maximum percentages, 25%, 50%, 75% and 100%, in each progressive five-year increment. Note that the high growth scenario still falls within the take-back surplus area, and the margin of "safety" appears to increase with time.

Table 1, "Pipeline Corridor Demand and possible take-back steps," summarizes the results of this analysis. Assuming a thruput of two billion cubic feet of natural gas per day, the 25%, 50%, 75% and 100% take-back steps are shown with the corresponding quantities of Royalty gas taken back for in-state use. The low, medium, and high natural gas demand scenarios are shown in billions of cubic feet of gas needed per year. This projected gas demand is then listed as a percent of the total royalty production and as a percent of the maximum allowable take-back during a five year period. In all cases at least 6% of the total royalty gas production may be required by the pipeline corridor

PROJECTED ALASKAN PIPELINE CORRIDOR DEMAND
FOR PRUDHOE BAY NATURAL GAS AND MAXIMUM TAKE-BACK STEPS

 SURPLUS

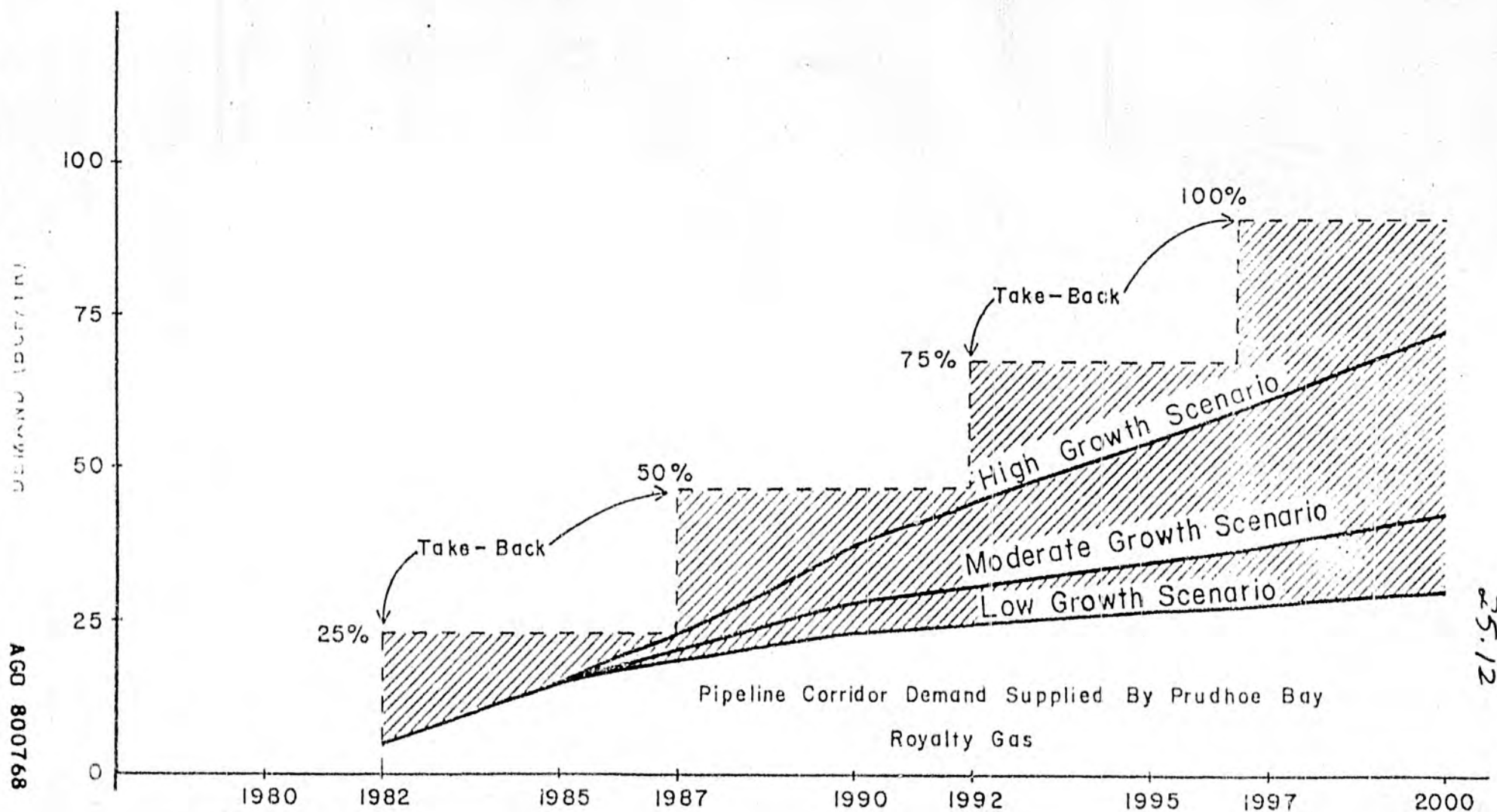


FIGURE 3

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consumers in the first year of the contract. This is about 22% of the allowed amount which is 25% of royalty production. The maximum amount of take-back required occurs in the year 2000 of the high growth scenario. At this time about 80% of the royalty production may be necessary to meet corridor demand. The greatest percent of take-back (about 91%) may occur in the year 1996 of the high scenario.

Total pipeline corridor demand for Royalty gas may range from zero to 740.2 billion cubic feet compared with take-back privileges which could total over one trillion cubic feet under the terms of the contract.

The important result of this analysis is that the flexibility built into the proposed gas contract should be adequate to handle our anticipated future needs. Actual natural gas use will vary considerably with time and circumstances, but a reasonable monitoring program can assure the availability of supplies at the appropriate time.

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PUBLIC LANDS

§ 38.05.183

(s) *Short title.* This section may be cited as the Geothermal Resources Act.

(am §§ 40, 41 ch 127 SLA 1974)

Effect of amendment.

The 1974 amendment substituted "AS 41.08.020" for "AS 41.07.020" near the middle of subsection (b) (1) and "AS 41.08.040" for "AS 41.07.040" at the end of subsection (b) (2) and deleted "of 1971" from the end of subsection (s).

As the rest of the section was not affected by the amendment, it is not set out.

Legislative committee report.

For report on ch. 127, SLA 1974 (SCSHB 817 am S), see 1974 House Journal, p. 657.

Sec. 38.05.182. Royalty on natural resources. Any royalty provided for in §§ 135 — 181 of this chapter may be taken in kind rather than in money if the commissioner, with the consent of the Alaska Royalty Oil and Gas Development Advisory Board, determines that the taking in kind would be in the best interest of the state. The consent of the board is required only with respect to oil and gas royalty-in-kind under § 183 of this chapter. (§ 1 ch 56 SLA 1970; am § 7 ch 71 SLA 1971; am § 1 ch 9 SSSLA 1974; am § 5 ch 218 SLA 1976)

Effect of amendments. — The 1974 amendment substituted "if the commissioner, with the consent of the board, determines" for "at the discretion of the commissioner if he determines" near the middle of the first sentence and added the second sentence.

The 1976 amendment substituted "Alaska Royalty Oil and Gas Development Advisory Board" for "board" in the first sentence.

Sec. 38.05.183. Sale of royalty. (a) The sale, exchange or other disposal of a mineral obtained by the state as a royalty under § 182 of this chapter, or the sale, exchange or other disposal in whole or in part of a right to receive future mineral production under a state lease under this chapter, shall be by competitive bid and the sale, exchange or other disposal made to the highest responsible bidder, except that competitive bidding is not required when the commissioner, with the prior written approval of the Alaska Royalty Oil and Gas Development Advisory Board where applicable, determines that the best interest of the state does not require it or that no competition exists.

(b) When competitive bids are required, the commissioner, with the prior written approval of the Alaska Royalty Oil and Gas Development Advisory Board, may reject all bids if he determines that because of the amount of the bids, the lack of responsibility on the part of the bidders, or for reasons consistent with the criteria set out in AS 38.06.070, the acceptance of the bids would not be in the best interest of the state.

(c) If the commissioner determines that a sale, exchange or other disposal of a mineral obtained by the state as a royalty under § 182 of this chapter or of a right to receive future mineral production under a state lease under this chapter shall be made otherwise than by

competitive bid, and the Alaska Royalty Oil and Gas Development Advisory Board where applicable has approved that determination, the commissioner shall make public in writing the specific findings and conclusions upon which that determination is based.

(d) Oil or gas taken in kind by the state as its royalty share may not be sold or otherwise disposed of for export from the state until the commissioner with the approval of the Alaska Royalty Oil and Gas Development Advisory Board determines that the royalty-in-kind oil or gas is surplus to the present and projected intrastate domestic and industrial needs. The commissioner shall make public, in writing, the specific findings and reasons on which his determination is based and shall, within 10 days of the convening of a regular session of the legislature, submit a report showing the immediate and long-range domestic and industrial needs of the state for oil and gas and an analysis of how these needs are to be met. (§ 1 ch 56 SLA 1970; am § 3 ch 9 SSSLA 1974)

Effect of amendment. — The 1974 amendment rewrote this section.

~~Sec. 38.05.184. Limitation on oil and gas leases in certain areas, and reacquisition of leases. (a) The legislature finds that Kachemak Bay is an area of extraordinary abundance and diversity of marine life that has provided, and will continue to provide in the future, a basis for one of the state's most important commercial fisheries; that recent information discloses that even minute quantities of oil released into the marine environment may be harmful to the larval forms of crabs and other marine life and that the existence of gyral currents within the bay may increase the likelihood of oil coming into contact with these valuable commercial fish and shellfish species; and that therefore oil and gas development in the bay, at this time, presents an undue hazard to this valuable state renewable resource.~~

~~(b) No additional oil or gas leases may be issued by the Department of Natural Resources or any other state agency for the exploration for or the development or production of oil and gas on state-owned land and waters seaward of the mean higher high water line, beginning at Anchor Point; then around the perimeter of Kachemak Bay, to Point Pogibshi; then west to the three mile limit of state land and waters; then north to a point three miles west of Anchor Point; then east to the mean higher high water line of Anchor Point, the point of beginning.~~

~~(c) The commissioner of natural resources may enter into negotiations to reacquire by purchase in the name of the state, title to or accountable interests in oil or gas leases within the boundaries described in (b) of this section which were issued before June 4, 1976.~~

~~(d) In lieu of cash payment for a negotiated purchase of a leasehold interest, the commissioner may authorize a credit of the purchase price plus interest at the rate prescribed by AS 09.30.070 to be granted the~~

public interest, or migration and spawning of fish in which there is a public interest.

(am § 4 ch 117 SLA 1976)

Effect of amendment. — The 1976 amendment added paragraphs (22) and (23).

As the rest of the section was not affected by the amendment, it is not set out.

Editor's note. — Section 1, ch. 117, SLA 1976, provides: "It is the intent of this Act to implement the provisions of art. VIII,

sec. 14, Alaska State Constitution, relating to access to the navigable or public waters of the state."

Applied in *Moore v. State*, Sup. Ct. Op. No. 1284 (File Nos. 2551, 2587), 553 P.2d 8 (1976).

Chapter 06. Alaska Royalty Oil and Gas Development Advisory Board.

Section

10. Purpose

20. Establishment

25. Membership

30. Compensation; per diem, travel expenses

35. Meetings, rules, quorum, votes required; conflict of interest

Section

40. Powers

50. Board approval required

55. Action by legislature

60. Confidentiality

70. Criteria

80. Definitions

Sec. 38.06.010. Purpose. It is the purpose of this chapter to facilitate the wise development of Alaska's oil and gas royalty interests by providing means and procedures for sales, exchanges or other disposition of those interests in ways calculated to promote private economic growth consistent with applicable environmental standards and public fiscal stability, and in accordance with AS 38.05.183. (§ 2 ch 9 SSSLA 1974)

Sec. 38.06.020. Establishment. There is established in the Department of Natural Resources the Alaska Royalty Oil and Gas Development Advisory Board. (§ 2 ch 9 SSSLA 1974)

Sec. 38.06.025. Membership. The board consists of the commissioner of natural resources, who is chairman, the commissioner of revenue, and three public members. Each of the public members shall possess experience in petroleum-related fields in such areas as exploration, development, production and economics, and shall be appointed by the governor to serve at his pleasure for three-year staggered terms and confirmed by a vote of a majority of the members of the legislature in joint session. The public members may not be state officers or employees. A public member, upon the expiration of his term, shall continue to hold office until his successor is appointed and qualifies. Vacancies in public membership shall be filled in the same manner as original appointment. An appointee to fill a vacancy shall hold office for the balance of the term for which his predecessor on the board was appointed. A vacancy in board membership does not impair the authority of a quorum of the board members to exercise all the powers and duties of the board. (§ 2 ch 9 SSSLA 1974; am § 8 ch 207 SLA 1975)

Effect of amendment. — The 1975 "commissioner of economic development" amendment, effective July 1, 1975, in the first sentence, substituted "commissioner of revenue" for

Sec. 38.06.030. Compensation; per diem, travel expenses. Members of the board are in the exempt service under AS 39.25.110 and shall receive per diem and travel allowances as provided by law for other boards and commissions. (§ 2 ch 9 SSSLA 1974)

Sec. 38.06.035. Meetings, rules, quorum, votes required; conflict of interest. (a) The board shall prescribe its own rules of procedure. It shall meet at a time and place determined by the chairman, and at other times and places as the chairman, or a majority of the board members, considers necessary. A quorum is a majority of the members of the board. The votes of the board members shall be recorded. Effective action to carry out the powers granted under this chapter requires the affirmative vote of a majority of the board members. No board member may, with respect to a matter before the board, vote for or on behalf of another member of the board.

(b) No member of the board may act upon a matter in which his relationship with any person creates a conflict of interest. No board member may have an official connection with or hold stock or securities in, or have a pecuniary interest in, a corporation, company or association engaged in the production or transportation of oil or gas. (§ 2 ch 9 SSSLA 1974)

Sec. 38.06.040. Powers. The board has the power to

(1) direct the commissioner of natural resources to solicit inquiries, development plans or bids from persons for the sale, exchange or other disposal of oil or gas or both obtained by the state as a royalty under AS 38.05.182, or for the sale, exchange or other disposal in whole or part of rights to receive future oil or gas production or both under a state lease, subject to terms and conditions established by the board;

(2) examine proposed sales, exchanges or other disposals of oil or gas or both obtained by the state as a royalty under AS 38.05.182, or of rights to receive future oil or gas production or both under a state lease, for the purpose of approving or disapproving the proposed sale, exchange or other disposal;

(3) hire an executive director, consultants expert in technical, economic or other relevant professions and other persons as necessary to assist the board in the exercise of its powers;

(4) promulgate regulations under the Administrative Procedure Act (AS 44.62) that are necessary or appropriate in the exercise of its powers; and

(5) take whatever other actions are reasonably necessary in the furtherance of the purposes of this chapter. (§ 2 ch 9 SSSLA 1974)

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§ 38.06.050

PUBLIC LANDS

§ 38.06.070

Sec. 38.06.050. Board approval required. (a) No sale, exchange, encumbrance, or other disposition of oil or gas or of the rights or waiver of the rights to receive future production of royalty oil or gas may be made by the commissioner of natural resources under AS 38.05.183 without the prior written approval of the board.

(b) Bids or applications for the purchase of royalty oil or gas may not be rejected by the commissioner of natural resources without the prior written approval of the board.

(c) Competitive bidding in a sale, exchange or other disposition described in (a) of this section may not be waived by the commissioner of natural resources under AS 38.05.183 without the prior written approval of the board.

(d) The board may require conditions relating to the sale, delivery, transportation, or refining or processing within the state to be included by the commissioner of natural resources in the offer of and sale by competitive bidding of oil or gas obtained by the state as royalty under AS 38.05.182. (§ 2 ch 9 SSSLA 1974)

Sec. 38.06.055. Action by legislature. (a) In addition to the approval by the board required under § 50 of this chapter, no sale, exchange or other disposition of oil or gas or of the rights or waiver of the rights to receive future production of royalty oil or gas may be made by the commissioner of natural resources under AS 38.05.183 without the prior approval of the legislature by a concurrent resolution concurred in by a majority of the members of each house.

(b) Until July 1, 1975, contracts for the sale of state-owned royalty gas or oil that specify the sale and delivery of not more than 400 barrels of crude oil per day or not more than 460 barrels of natural gas liquids per day or not more than 2,400 Mcf of natural gas per day may be executed without ratification by the legislature. (§ 2 ch 9 SSSLA 1974)

Sec. 38.06.060. Confidentiality. Notwithstanding AS 09.25.110 — 09.25.120, the board may provide by regulation for the confidentiality of those documents and records in its possession or control which contain confidential business or marketing information the protection of which is essential to the person who has submitted them to the board or in the judgment of the board is essential to the best interest of the state. Such confidentiality, however, shall not preclude the proper review by the legislature. (§ 2 ch 9 SSSLA 1974)

Sec. 38.06.070. Criteria. (a) In the exercise of its powers under § 40(1) — (2) and § 50 of this chapter the board shall consider

- (1) the revenue needs and projected fiscal condition of the state;
- (2) the existence and extent of present and projected local and regional needs for oil and gas products and by-products, the effect of state or federal commodity allocation requirements which might be applicable to those products and by-products, and the priorities among competing needs;

(3) the desirability of localized capital investment, increased payroll, secondary development and other possible effects of the sale, exchange or other disposition of oil and gas or both;

(4) the projected social impacts of the transaction;

(5) the projected additional costs and responsibilities which could be imposed upon the state and affected political subdivisions by development related to the transaction;

(6) the existence of specific local or regional labor or consumption markets or both which should be met by the transaction;

(7) the projected positive and negative environmental effects related to the transaction; and

(8) the projected effects of the proposed transaction upon existing private commercial enterprise and patterns of investments.

(b) When it is economically feasible, the board may require, as a condition of the sale of oil or gas obtained by the state as royalty, that the oil or gas be refined or processed in the state and may, when it is feasible and in the best interests of the state to do so, provide for processing or refining of the oil or gas under a contract entered into by competitive bidding before the sale of the oil or gas. (§ 2 ch 9 SSSLA 1974)

Sec. 38.06.080. Definitions. In this chapter

(1) "board" means the Alaska Royalty Oil and Gas Development Advisory Board; and

(2) "state lease" means an oil and gas lease on state land. (§ 2 ch 9 SSSLA 1974)

Chapter 35. Right-of-Way Leasing Act.

Section	Section
10. Legislative declaration of policy	140. Payment of rental and costs
20. Grant of right-of-way lease	150 — 160. [Repealed]
30. Abandonment, reduction or impairment of service of pipeline	170. Forfeiture of lease
40. Temporary or emergency service or temporary abandonment, reduction or impairment of service by lessee	180. Suits to enjoin or recover damages for defaults
50. Applications for right-of-way leases	190. Application of the Administrative Procedure Act
60. [Repealed]	200. Judicial review of decisions of commissioner on application *
70. Notice of application	205. Lease savings clause
80. Analysis and public hearing	210. Delegation of commissioner's authority
100. Decision on application	220. Continued operation of certain carriers
110. Term of lease	225. Binding effect of covenants
120. Covenants required to be included in lease	230. Definitions
130. Right-of-way easements or leases acquired from others	

24 JAN 77 2:59

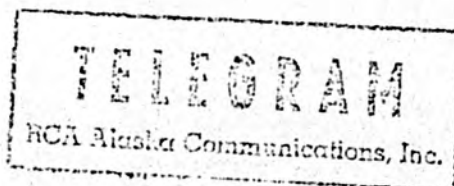


exhibit 2

27-a

#

02048 TDA VALDEZ ALASKA 20 01-24 150P AST

PMS OMAR 278-9615

BOX 516

ANCH 995-001

(THE CITY OF VALDEZ) URGES PROMPT APPROVAL OF THE ROYALTY
GAS CONTRACT TO ASSURE SUCCESS OF THE TRANSALASKA GAS
PIPELINE.

LYNN CHRYSTAL MAYOR OF VALDEZ

AGO 800778

27 JAN 77 3:03



27-6

#

02066 TDA VALDEZ ALASKA 21 01-27 147P AST

PMS O M A R

2501

630 WEST 4TH SUITE 200

ANCH 99501

URGE PTOMPT APPROVAL OF ROYALTY GAS CONTRACTS TO ASSURE

SUCCESS OF TRANS ALASKA PIPELINE

(BARNEY NEYRING) PO BOX 850 VALDEZ AK 99686

28

AGO 800779

27 JAN 77 3:04

TELEGRAM
RCA Alaska Communications, Inc.

27-C

#

02068 TDA VALDEZ ALASKA 13 01-27 230P AST

PMS O M-A R

2504

630 WEST 4 AVE RM 200

ANCH

URGE PROMPT APPROVAL OF ROYALTY GAS CONTRACT

TO ASSURE SUCCESS OF TRANSALASKA PIPELINE

(C W ELLIS) VALDEZ AIRPORT TERMINAL VALDEZ AK

#

NG

AGD 800780

27-d

0JV

02063 NL TDA HOMER ALASKA 50 01-24 250P AST
PMS REP LEO RHODE

JUN

URGE PROMPT APPROVAL OF ROYALTY GAS CONTRACTS TO
ASSURE SUCCESS OF TRANS ALASKA GAS PIPELINE
JAMES C MANLEY

#CJV

02064 NL TDA HOMER ALASKA 50 01-24 250P AST
PMS SENATOR CLEM TILLION

JUN

URGE PROMPT APPROVAL OF ROYALTY GAS CONTRACTS TO
ASSURE SUCCESS OF TRANS ALASKA GAS PIPELINE
(JAMES C MANLEY)

#

AGD 800781

TELEGRAM

RCA Alaska Communications, Inc.

27-e

23 JAN 77 8:26

02014 TDA VALDEZ AK 30 01-28 801A AST

PMS OMAR - 2546

630 WEST 4 ST SUITE 200

ANCHORAGE AK 99501

THE FOLLOWING TELEGRAM WAS SENT TO SENATOR JALMAR KERTTULA
AND REPRESENTATIVE KEITH SPECKING

QUOTE URGENT URGE PROMPT APPROVAL OF ROYALTY GAS CONTRACT
TO INSURE SUCCESS OF TRANSALASKA PIPELINE UNQUOTE

(MR AND MRS ERVIN MICHAEL)

27-f

**Greater Anchorage
CHAMBER of COMMERCE**



January 26, 1977

Crossroads of the Air World

Be it Resolved by The Anchorage Chamber of Commerce:

Whereas, an all Alaskan gas pipeline would be in best economic interests of the State of Alaska and its citizens, and;

Whereas, The Anchorage Chamber of Commerce is on record in support of an all Alaska gas pipeline, and;

Whereas, the Alaska State Legislature is presently considering the merits of a royalty gas contract approved by the State Oil and Gas Advisory Board and,

Whereas, the existence of a Royalty Gas contract supported by the people of Alaska would be an aid toward the ultimate approval of an all Alaskan gas pipeline;

Now, therefore, Be it Resolved.

The Anchorage Chamber of Commerce wishes to go on record in support of a Royalty gas contract and respectfully urges the Legislature of the State of Alaska to expeditiously approve such a contract, based on terms which provide the greatest advantages to the citizens of Alaska.

Copies of this resolution shall be forwarded to: The Honorable John Ederick, President of the Senate; The Honorable Hugh Malone, Speaker of the House, and to all Senators and Representatives of the Legislature.

AGO 800783

27 JAN 77 5:49

TELEGRAM

RCA Alaska Communications, Inc.

27-9

#

02085 NL TDA VALDEZ ALASKA 50 01-27 412P AST

PMS OMAR

2515
630 WEST FOURTH SUITE 200

ANCH

URGE PROMPT APPROVAL OF ROYALTY GAS CONTRACTS TO ASSURE

SUCCESS OF TRANS ALASKA PIPELINE

(PAUL AND ELLEN FOSTER) 835-2296 VALDEZ ALASKA

Mj



Greater Fairbanks

CHAMBER OF COMMERCE

550 First Avenue

FAIRBANKS

ALASKA 99701

Member:

U. S. Chamber of Commerce
Alaska State Chamber of Commerce
Pacific Northwest Trade Ass'n.
National Better Business Bureau

January 24, 1977

27-h

Dear

At the regular scheduled meeting of January 24, the Board of Directors of the Greater Fairbanks Chamber of Commerce unanimously supported the Governor's proposal for the sale of the state's royalty gas.

We urge you to support the Governor's proposal as written and ratify it as soon as possible as to avoid delay in the pipeline route decision.

In the future we hope that you would consider a gas separation plant in the Fairbanks area.

Sincerely,

Mrs. Jeanne Wilson
President

JW/sh



Gateway to the Arctic

AGO 800785

FEDERAL POWER COMMISSION

28

NEWS RELEASE

WASHINGTON, D.C. 20426

Exhibit 28



IMMEDIATE RELEASE

FEBRUARY 1, 1977

No. 22868

Docket Nos. CP75-96, et al.

Alaskan Arctic Pipeline Company, et al.

FPC JUDGE RECOMMENDS APPROVAL OF ARCTIC GAS'

\$8.5 BILLION ALASKAN GAS PROJECT

Federal Power Commission Administrative Law Judge Nahum Litt today recommended approval of an \$8.5 billion trans-Canada pipeline system proposed by an Arctic Gas Study Group to bring large volumes of Alaskan natural gas to lower 48 U.S. markets.

Judge Litt in his 430-page decision found the proposal superior in almost every respect to two competing applications, by El Paso Alaska Company and Alcan Pipeline Company (see fact sheet, FPC release No. 22869, for details of all three proposals).

Arctic's project, the largest private undertaking in the country's history, will make more gas available sooner, result in less impact on the environment, at less cost to the consumer than either of the competing proposals, Judge Litt concluded. It would be built during the winter seasons, employing 2,400 at its peak, and initially carrying from 2 to 2.5 billion cubic feet of gas daily beginning in 1982 or 1983.

This initial decision is the first step in FPC consideration of the matter. The full Commission will now review the action of the Administrative Law Judge under the special procedures established under the Alaska Natural Gas Transportation Act of 1976. An FPC recommendation regarding the transportation system will be submitted to the President by May 1, 1977.

(over)

In a separate order issued concurrently with Judge Litt's decision, the Commission noticed suspension of the Natural Gas Act proceedings, established further procedures for Commission review and responded to earlier procedural petitions by Arctic Gas and El Paso. The Commission said that the procedures adopted will give parties adequate opportunity to rebut factual matters while enabling it to discharge expeditiously its duties under that Act.

Hearings on the proposals began May 5, 1975, and continued almost uninterrupted until November 1976. An official inspection was made in August 1976 of the sites of the proposed major facilities and pipeline routes of all three applicants. The record consists of 253 volumes of transcripts and about 1,000 exhibits. The second-stage proceeding is not likely to begin before early 1978, and construction would not begin before late 1978 or '79. The second-stage proceeding would address producer sales contracts and again review rates, marketability, financeability and other matters.

The transportation cost per million btu's for the Alaskan Arctic gas in the fifth year of operation, based upon unescalated 1975 data, will be about \$1.60, compared to \$2.15 for El Paso's proposal and \$1.91 for Alcan.

Judge Litt recommended rolled-in pricing, where all the pipelines' customers help pay for the project gas, but cited one witness' conclusion that gas marketed through the Alaskan Arctic project will be competitive whether priced incrementally or rolled in.

Making a number of assumptions, the average rolled-in price at the city gate would be \$1.50 per thousand cubic feet, based on a field price of \$1 per thousand cubic feet. On an incremental basis, meaning only those consumers who actually receive the gas pay for it, the average price will be \$2.41. These prices are substantially lower than the price of fuel oil and electricity for all metropolitan areas except California and New York, where there is parity with fuel oil, Judge Litt said.

(over)

Even with a 20 percent construction cost overrun, which is not improbable, Judge Litt said, the Arctic Gas deliveries are still economically competitive, while the El Paso project gas would be only marginally so.

Alaska's North Slope encompasses an 80,000-square-mile area extending about 600 miles from the Canadian border up to the Arctic Ocean. Exploration there has only begun, but Judge Litt said all parties agree that proved saleable reserves are around 22 trillion cubic feet.

Most of the proved reserves on the North Slope are in the Prudhoe Bay field, discovered in 1968. Those reserves are the largest yet discovered on the North American continent, representing about 10 percent of proven 1975 U.S. natural gas reserves and more than a year's supply for all U.S. consumers.

The applications were filed prematurely from any rational regulatory point of view, Judge Litt said, and the Commission's determination to try the cases without an essential ingredient represents a regulatory boldness normally not seen. The important missing ingredient was sales contracts by any of the 13 producers who hold interest in Prudhoe Bay reserves. Their failure to sign sales contracts was a chief impediment throughout the hearings, Judge Litt said, since many things depend on the amount of gas available, such as the size of the pipeline, financing, and marketability.

The Commission, with some misgivings, set the applications for hearing without the sales agreements because the national interest demanded expedited consideration, Judge Litt said. The only conclusion possible, he stated, is that for the producers the national interest "lies somewhere below their own economic interest. The producers, like G.B. Shaw's dinner-time companion, have a price at which they would sell their 'service,' and all their protestations to the contrary cannot hide that they are mainly dickering over price," Judge Litt said.

However, he continued, the lack of sales contracts was not fatal to the case since there is little dispute over the
(over)

recoverable reserves at Prudhoe Bay. There is no such agreement on the size of the Mackenzie Delta reserves though, which are critical since the Arctic Gas proposal is directly dependent on delivery of at least 1 billion cubic feet a day the first year of operation. The Mackenzie Delta, located in Canada's Northwest Territories, is 15,000 square miles in size. There are benefits of building one project to transport both Canadian and U.S. gas rather than two separate transportation systems, he said, not the least of which is fewer environmental effects.

Judge Litt rejected Alaska's claim that the FPC does not have jurisdiction over the Alaska gas because the State is performing those activities within the state which Congress wanted regulated. The Commission clearly has full jurisdiction over producer wellhead sales in interstate commerce, transport of the gas within Alaska, and transport and sale within the lower 48 states, Judge Litt said.

The Arctic Gas proposal calls for over 4,000 miles of pipeline extending from Prudhoe Bay through Alaska and Canada to termination points in the lower 48. The 48-inch line to be built between Prudhoe Bay and Caroline Junction in Alberta will be the largest ever used to transport gas, and the operating pressure used to force the gas through the pipeline will exceed the thrust of any line now in existence in North America. The projects would all be built using known technology, with adaptation or "scale-up" as necessary to improve that which is known, such as construction of chilled gas pipelines in permafrost (ground that is frozen year-round), or fabricating a ditching or snow-making machine larger than any built before.

Arctic Gas' heavy reliance on winter construction, it was argued, subjects it to billion-dollar risks if construction is delayed. Arctic has made clear its willingness to incur additional costs to avoid delay, Judge Litt pointed out, but maintains it will not be necessary. All in all, he continued, there is little reason to believe Arctic Gas will not be able to meet its logistic build-up schedule prefatory to each winter construction season. It plans to barge most of its equipment and supplies to stockpile sites before the construction begins, with air support as needed. Although Arctic contemplates six years between certification and

(continued)

28.7

commencement of flow, actual construction would not begin until the winter of the fourth year.

Judge Litt said that, as to the environmental effect of the proposed projects, seldom has a decision-making body been favored with so substantial a body of salient information on which to draw in reaching a decision. The staffs of the FPC and the Department of Interior each wrote detailed environmental impact statements assessing the "worst case" risks of all three proposals and numerous alternatives. In addition, reports were filed by the parties and voluminous evidence submitted by numerous expert witnesses.

The most significant environmental concern as expressed through testimony was Arctic's crossing of the 14,000-square-mile Alaskan Wildlife Range. The line would cross the entire Range in an east-west direction, with about 2,650 acres permanently dedicated to it. Most of that acreage is right-of-way, however, which would be revegetated.

The Range is part of a large ecosystem, Judge Litt said some of which has not been substantially despoiled by man. Its protection from significant degradation is therefore important and has been so considered by all parties, he said. He accepted, however, Arctic's belief that the impact will be small, of limited duration and not disruptive of even a small area. Judge Litt pointed out that the Range, while remote, is not unimpacted by man, who will continue to use the area regardless of whether a pipeline is approved or not. In addition, he noted, the Range is not legally designated as a "wilderness area" and there is therefore no legal impediment to authorizing a pipeline across it.

It is clearly in the public interest to exploit hydrocarbon reserves in the Range, Judge Litt said, and unless prohibited by Congress, incursion into the Range for this purpose must be considered a virtual certainty. The Arctic Gas project then becomes a benefit because it lessens the environmental cost of attaching the reserves, he said.

A primary environmental concern of the cross-Mackenzie Delta route in Canada was effect on migratory snow geese. Mitigative construction measures can greatly reduce the impact, Judge Litt said. Aircraft overflights, the most
(continued)

28.5

serious hazard, will be kept well below the least acceptable rate of one every two hours. Judge Litt said, however, that while the FPC can consider the impacts of the pipeline on the MacKenzie Delta, two Canadian tribunals must also rule on the issue, with ultimate authority to deny, license or condition as they see fit.

Judge Litt rejected the argument that Arctic's knowledge of the environmental effects along its proposed route is woefully deficient. The research effort Arctic has made is impressive, he said, and its specific knowledge of the fauna and flora exceeds that held by its competitors.

Another key environmental criticism of Arctic's proposal is its alleged inability to build snow roads when needed in an environmentally acceptable manner or to build a pipeline from them in winter conditions of extreme cold and long periods of darkness. Judge Litt found that the snow road plan is both feasible and effective and can be accomplished with a minimum of environmental harm.

The 915 miles of snow road and work pad will be built in sensitive permafrost using snow collected by snow fencing, harvesting from frozen lakes, or manufactured snow using standard ski-slope technology. Timing is the critical element, he noted. Snow fences would be erected in October, and construction would begin in late October or early November as soon as five to ten miles of snow road is completed.

The State of Alaska's position on environmental matters clearly has been influenced by economic considerations, Judge Litt stated. The simple fact is, he continued, that the State wants to encourage industrial development in central Alaska and supported the El Paso proposal on economic grounds, bargaining with pipeline purchasers of its royalty gas to release portions of that interstate supply for future intrastate industrial use.

The State embarked early on upon a course designed to maximize the economic benefits it would derive, Judge Litt stated. "This laudable goal for Alaskans, unfortunately, is not always consistent with the public interest of all the people of the U.S.," he said. Besides the fact that the state's

(over)

use of Alaskan gas is speculative at best, Judge Litt stated, there is also a serious question of whether industrial gas use would be compatible with federal natural gas end use policy or environmental sensitivities.

Judge Litt acknowledged that Alaska's views are entitled to substantial weight even where the evidentiary showing may be ambiguous. However, he said, the great bulk, if not all, the Prudhoe Bay gas will be marketed in the contiguous U.S., and those consumers will be paying the costs. The economic ills of a particular state are not a valid consideration in determining pipeline rates or route selection, he said, and this policy has been upheld by the Commission and the courts.

Arctic Gas' pipeline, because it is large-diameter and uses extra-high compression, will use less fuel than the other two proposals --6.87 percent for Arctic gas compared to 11.96 for El Paso. Since gas consumers must pay for the gas consumed as fuel, their unit costs will be lower, Judge Litt said. The annual fuel saving by using the Arctic system exceeds residential consumption in each of a large number of states, he noted.

The Arctic Gas system also has more flexibility and expansibility should volumes exceed those expected. It can handle up to 4.5 billion cubic feet daily with additional compression, and if even more capacity is necessary, looping (new lines paralleling existing ones), would "be a work of joy," Judge Litt said.

The FPC staff contended the west leg of the Arctic Gas system is not the most economic way of moving the gas to those market areas. That leg, as proposed by Arctic Gas, would deliver 659 million cubic feet daily, or roughly 30 percent of total initial flow, to a point on the Idaho-British Columbia border, for delivery to west coast markets. The FPC staff proposed that delivery could be accomplished by using idle western pipeline capacity it expected to result from future declining Canadian gas imports, or by displacement of gas westward using existing pipeline systems.

(continued)

Judge Litt said the staff's alternative must be rejected because he does not believe its pessimistic outlook for Canadian gas imports will be fulfilled. Without this occurring, he said, there would be no true saving to consumers. Recent reports issued by the Canadian government contain a considerably more favorable appraisal of its ability to continue exports at present levels. Any curtailments which might occur in the late 1970's or early 1980's should prove temporary, he said, in light of frontier gas which may become available then.

The existence of a nationwide gas shortage is uncontested, Judge Litt said, with the nine interstate pipelines comprising the Arctic Gas group projecting their total supplies will fall short of requirements by 26 percent in 1985. These companies, which marketed about a third of total gas production in the lower 48 in 1975, sell in a substantial majority of the lower 48 states but principally California, Ohio, Michigan, Illinois, Minnesota, New York and Pennsylvania. Without both Alaskan gas and other gas supplies, their 1985 requirements in priorities 1 and 2 cannot be met, Judge Litt said.

While Canada's National Energy Board is considering the proposals, Judge Litt said there is much dispute on political issues such as whether the NEB will act impartially in a timely fashion for U.S interests, and whether it will allow U.S. and Canadian Mackenzie Delta gas to be transported through the same system.

These political considerations are principally the prerogative of the President, Judge Litt emphasized; the FPC does not make foreign policy for the U.S. However, he said he must assume that the decision to be made by the Canadian government will be made by rational men viewing the pros and cons of the proposals on a wide range of criteria, just as it is assumed rational men here will make the decision.

Given the present state of world energy resources, he stated, it can be assumed that more rapid development of known and substantial resources is as important to Canada

(over)

as to the U.S., and that a time frame for delivering known supplies late into the 1980's is not likely to be a winning position.

Judge Litt agreed with Arctic Gas' contention that a joint project through Canada is not dependent on a U.S. - Canadian treaty. The normal and long-standing relationship of almost 200 years between the two countries is more than a sufficient basis for assuming stability and rational treatment of a mutually beneficial business enterprise. "Even if it is assumed that a Canadian government would come to power predisposed to act unreasonably, such imprudence could be countered with equally unsavory activities on the part of the U.S.," Judge Litt said.

The overwhelming benefit to Alaska will be royalty gas payments and severance taxes. Any of the proposals would net the state a minimum \$135.5 million a year, totalling several billion dollars over the next several decades. The bottom line for the state's development is how it spends those billions, Judge Litt said. Those policies will determine the ultimate socio-economic effect of the project.

There was consensus by the Commission staff, the most populous consuming states which took an active interest, and an array of pipelines and distributors serving huge sections of the country that Arctic Gas' proposal would serve their best interests. However, El Paso's proposal is viable and, if Arctic Gas is unable to accept a certificate, El Paso's proposal, with modifications, would also meet the public convenience and necessity, Judge Litt said. The chief problem with the El Paso project is its lack of flexibility and credibility as presented, he continued. It would need at least 9 cryogenic ships, rather than 8, to provide reliable transportation; five rather than four liquefied natural gas storage tanks, and seven, not six, liquefaction trains at Gravina Point in Alaska. While El Paso proposed locating its California terminal at Point Conception, Judge Litt said all the evidence points to Oxnard as the preferred location.

El Paso, primarily through its lawyers, "has made a silk purse out of a sow's ear," Judge Litt said. It has done
(continued)

No. 22868

little intermediate design work and its design, while impressive on paper, has no particular backup by core samples or even general site-specific work anywhere along its actual route.

As to Alcan, Judge Litt said the record does not support even the possibility that a certificate could be granted it. Its design is clearly neither efficient nor economic since the pipeline is undersized. Its 3-year phased-in construction schedule is not credible, he said, and judging from the FPC staff's evaluation, the proposed summer construction cannot be accomplished without unacceptable environmental impact, primarily degradation of ice-rich permafrost.

All the major participants in this mammoth undertaking, "in the vernacular, 'have their hand out,'" Judge Litt said. They all want top dollar, creating serious questions of marketability and in turn, financeability. Alaska may again seek to increase its severance tax on hydrocarbons from 4 to 10 percent; the pipelines want consumer guarantees to repay their equity investment but still seek a rate of return of from 15 to 17 percent; the producers' failure to sign sales contracts indicates where their concern lies.

Only a limitation on the field price of the gas to reflect its intrinsic market value and a reduction on investment returns to reflect limitations on risk can bring these projects "in from the cold," Judge Litt concluded. A field price of \$1.00 per thousand cubic feet is about the upper limit, he said; a field price established by contract or otherwise at a level much higher will sink the project, because the delivered cost of the gas would be so high the high-priority consumers which constitute the market would turn to other energy supplies.

The financial plan prepared by Arctic Gas does not outstrip the capacity of any of these markets and is generally feasible, Judge Litt found. He concluded, however, that the magnitude of the capital investment is such that the gas transmission company sponsors cannot provide the institutional lenders with the security necessary to warrant financing. There must be reliance upon both the consumer and the taxpayer to guarantee that the project will be

(over)

No. 22868

completed and that debt service will be secure during any sustained outages.

Legislation to perfect tracking of rates to the consumer level and to approve U.S. Treasury participation is necessary if the project is to be built, Judge Litt concluded. He made the following recommendations: consumer participation in guarantees on capital costs, but only for the debt service; the equity holder should accept the usual risk of equity investment; and the federal government should entertain an insurance or completion guarantee arrangement to facilitate raising project debt capital at a more reasonable cost.

-FPC-

For further information
call 275-4006 (Area Code 202)

DC-E

FEDERAL POWER COMMISSION

NEWS RELEASE

WASHINGTON, D.C. 20426



Exhibit 29

IMMEDIATE RELEASE

February 1, 1977

El Paso Alaska Company, et al.

Docket No. CP75-96, et al.

No. 22869

(accompanies FPC

Release No. 22868)

ALASKAN NATURAL GAS FACT SHEET

This Federal Power Commission proceeding involves three competing projects proposing significantly different approaches to delivering natural gas from the Prudhoe Bay Area of Alaska's North Slope to markets in the lower 48 states. The 200-square mile Prudhoe Bay Field is estimated to contain 22.5 trillion cubic feet in proven reserves of natural gas.

The FPC is to make a recommendation to the President on the selection of a transportation route for the gas by May 1, 1977, under the Alaska Natural Gas Transportation Act of 1976 (Public Law No. 94-586), passed by Congress October 1, 1976, and signed into law by the President October 22.

The three projects pending before the Commission are:

① Alaskan Arctic Gas Pipeline Company (CP74-239, et al.) -- This project involves the construction of about 3,300 miles of new pipeline and 875 miles of looped (connected and parallel to existing lines) pipeline. The pipeline, ranging in diameter from 30 to 48 inches, would pick up United States reserves in Prudhoe Bay, Alaska, and Canadian reserves in the Mackenzie Delta, Northwest Territories, and proceed to Caroline Junction, Alberta, where the system would divide, with one leg extending into the Pacific Northwest down to California, and the other crossing the U.S. border into Montana and southeast into Illinois. Gas would move to eastern markets by displacement. This project includes transmission facilities proposed by several other Canadian and American companies -- Canadian Arctic Gas Pipeline Limited, Alberta Natural Gas Company Limited, Pacific Gas Transmission Company, Pacific Gas and Electric Company, and Northern Border Pipeline Company.

(over)

The project facilities are designed to initially transport 2.25 billion cubic feet of gas daily to U. S. markets and will cost an estimated \$5.9 billion (based on filed July 1975 estimates of gas allocated to U.S. markets).

③ El Paso Alaska Company (CP75-96) -- This company would build an 809-mile 42-inch pipeline from Prudhoe Bay along the Alyeska oil pipeline corridor to a liquefaction facility at Point Gravina on the south coast of Alaska. The liquefied natural gas would be transported across water by a fleet of 11 cryogenic tankers 1,900 nautical miles to Point Conception, California, where it would be regasified. Gas would flow to midwest and east markets by displacement. The project is estimated to cost \$6.54 billion (based on July 1975 estimates) and would be capable of delivering an estimated 2.4 billion cubic feet of gas per day.

③ Alcan Pipeline Company (CP76-433) and Northwest Pipeline Corporation, along with several Canadian companies (Foothills Pipe Lines Ltd., Westcoast Transmission Company Limited, Alberta Gas Trunk Line Limited), propose construction of about 3,000 miles of new pipeline and 1,600 miles of looped pipeline (paralleling the other line). The pipeline, ranging in diameter from 30 to 48 inches, would pick up Prudhoe Bay reserves and follow the Alyeska oil pipeline route as far as Delta Junction, Alaska, and from there would parallel the Alcan Highway to a connection with Canadian pipelines in British Columbia and Alberta, where the system would split the gas between western U.S. and midwest U.S. shippers. Gas would also flow to the east by displacement. This system would have a capacity of approximately 2.4 billion cubic feet per day and would deliver gas both into the Pacific Northwest and across a route similar to the Arctic Gas project extending from northeastern Montana into Illinois. The proposed project will cost an estimated \$6.28 billion (as filed).

An associated, although independent project, Maple Leaf, will be built to deliver Canadian reserves from the Mackenzie Delta to Southern Canadian markets.

(continued)

Chronology

- March 21, 1974 - Alaskan Arctic Gas Pipeline Company application filed.
- September 24, 1974 - El Paso Alaska Company application filed.
- January 23, 1975 - FPC order consolidating both applications (in Docket No. CP75-96, et al.).
- April 7, 1975 - Hearings began before FPC Administrative Law Judge Nahum Litt.
- November 21, 1975 - FPC staff Draft Environmental Impact Statement issued.
- April 7, 1976 - Final Environmental Impact Statement issued.
- July 9, 1976 - Alcan Pipeline Company and Northwest Pipeline Corporation application filed.
- September 1976 - Supplemental Final Environmental Impact Statement issued.
- November 12, 1976 - Hearings concluded. (There were a total of 253 days of hearings resulting in 44,458 pages of transcript together with numerous exhibits.)
- December 7, 1976 - Final Position Brief of the Commission Staff issued.
- December 14, 1976 - FPC issued Order No. 558 prescribing procedures pursuant to the Alaska Natural Gas Transportation Act of 1976.
- February 1, 1977 - Initial decision issued by Judge Litt.
- March 1, 1977 - Briefs on exceptions to the Judge's decision to be filed by FPC staff and all parties in the proceeding. (Replies to the exceptions will not be permitted.)
(over)

May 1, 1977 - The Federal Power Commission to make its recommendation to the President.

September 1, 1977 - The President to make his recommendation to Congress. He may postpone his decision until up to December 1, at his discretion.

Sixty days after the President's recommendation, Congress may enact a joint resolution. The Alaskan Natural Gas Transportation Act of 1976 (in section 8) provides dates for further executive and legislative review, if necessary.

Maps of the three proposed Alaskan natural gas transportation systems accompany this fact sheet.

- FPC -

For further information
call 275-4006 (Area Code 202)

DC-E

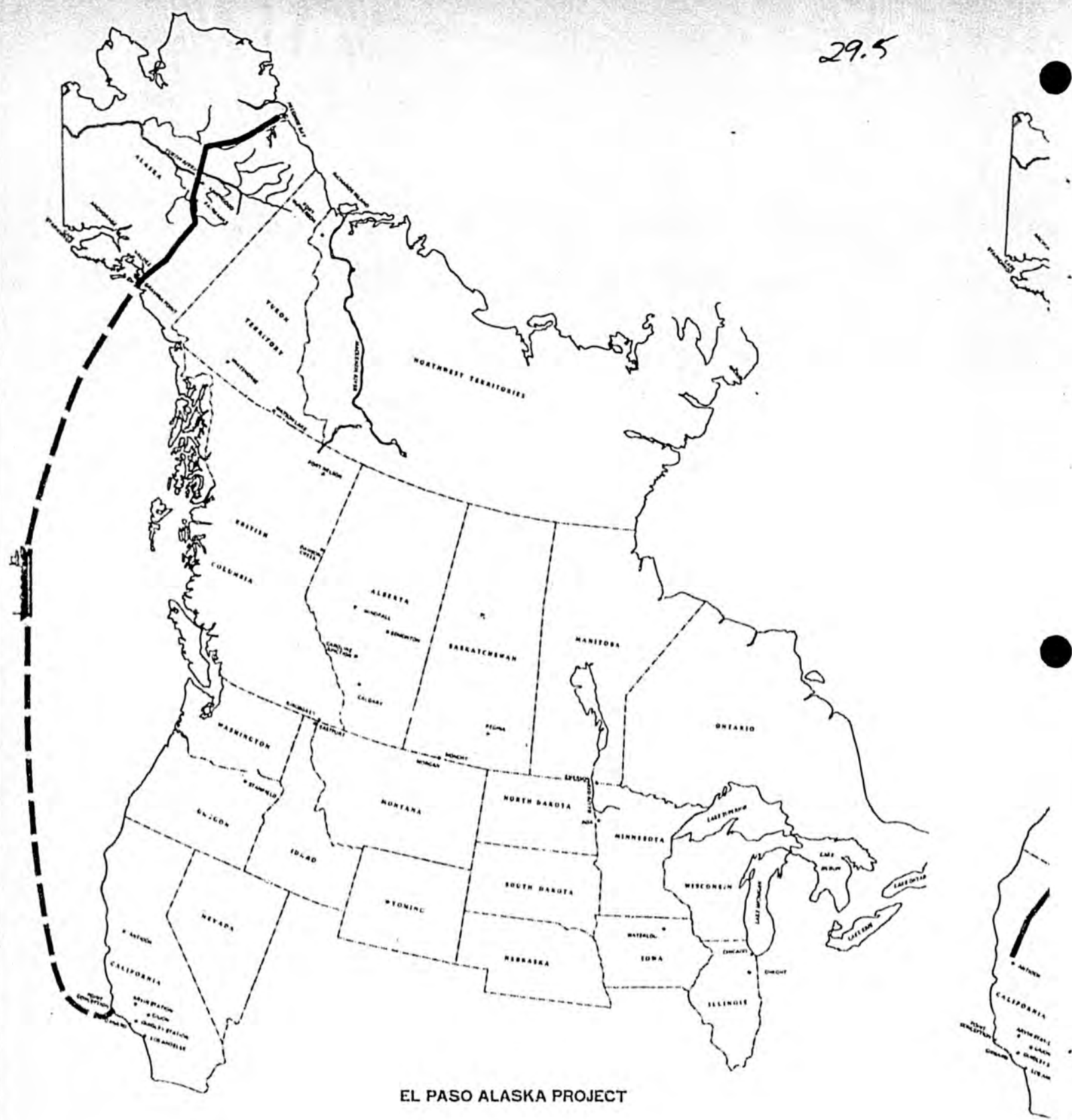
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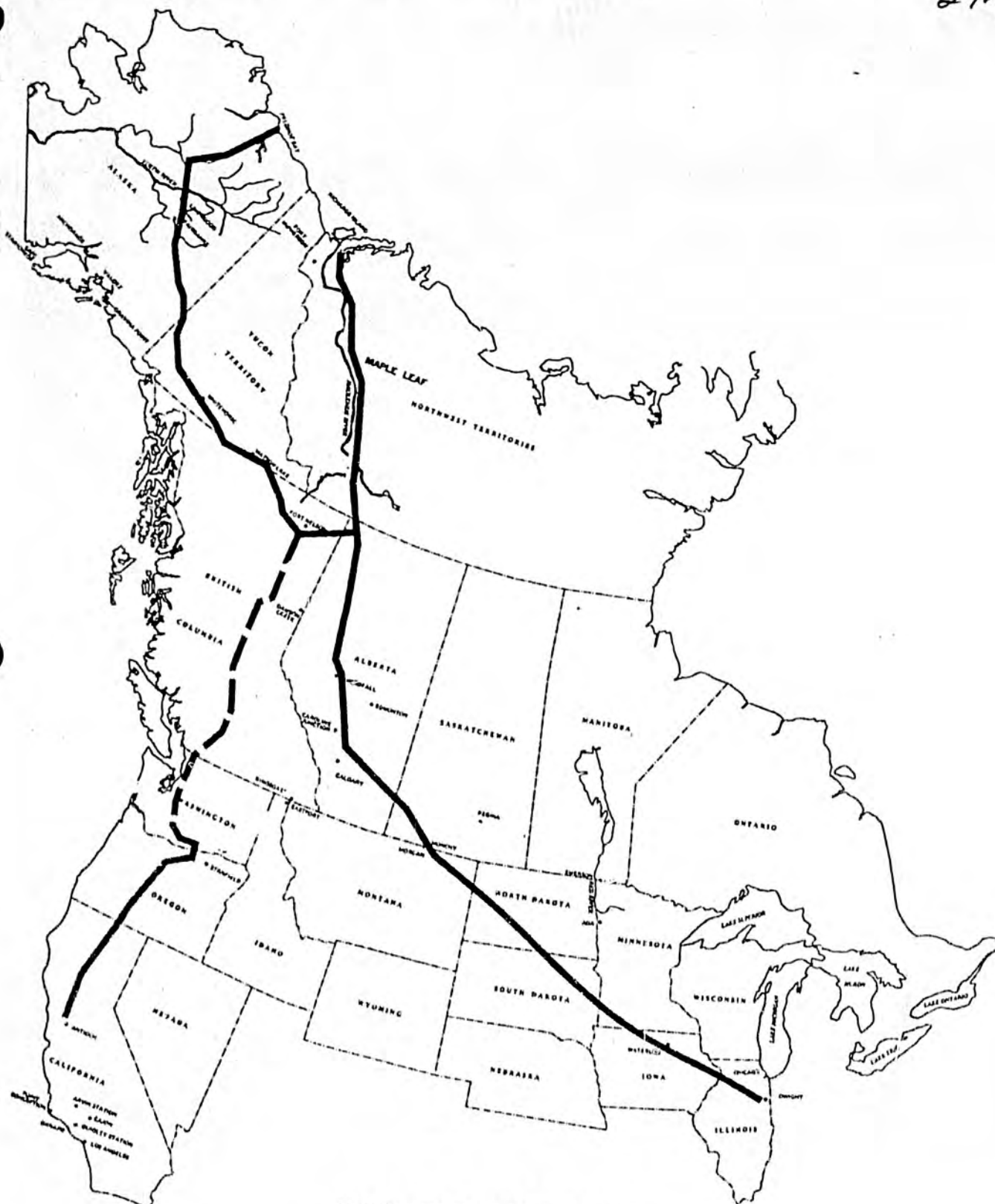


ARCTIC GAS PROJECT

29.5



EL PASO ALASKA PROJECT



ALCAN - MAPLE LEAF PROJECTS

30

RUTH A. M. SCHMIDT, PH. D.

GEOLOGIST

1040 C STREET

ANCHORAGE, ALASKA 99501

Exhibit 30

30 January 1977

House Special Committee on Royalty Gas Sale
ATT: Representative Clark Gruening
Pouch V, Juneau Alaska 99810

Dear Representative Gruening:

I have been asked to express my thoughts on the proposed El Paso natural gas pipeline route vs. the proposed Alcan route.

I am most disturbed by the State's position of giving premature support to the El Paso-LNG tanker route for Alaskan gas. The additional not-too-subtle royalty gas sale plug for that route should make the legislators give pause and further consideration before approval, if any.

Several points should be most carefully examined, in light of the extensive lobbying effort of the industry that stands to profit greatly by this. The route El Paso proposes involves additional intrusion upon wilderness areas, in the extension from Brown Creek to tidewater at Point Gravina. And Point Gravina additionally is in a highly active seismic zone. I need not remind many of you that this area was suddenly elevated about four feet during the 1964 earthquake, nor of the dangers of seismic sea waves in Prince William Sound to onshore facilities. Think of the additional safeguards that must be built into any sensitive structure to conform to seismic building codes.

The further expenditure of energy and time to convert the natural gas to LNG, plus the energy and time in reconvertng back to natural gas, at a still unnamed port, MUST be considered. It has been reported that as much as 6.85% will be lost in liquifaction and ocean transportation.

Think as well of the materiel necessary to construct not one, but two terminals, which will cause further delay in marketing the gas. Materiel such as steel that already is in short supply. Will it require more steel for terminals and tankers than for a pipeline?

To keep my discussion to land usage for a bit, the Alcan route does not require any significant alignment and cutting through the wilderness. It utilizes areas already 'developed', not only in Alaska, but also in Canada. It would not require any conversion and reconversion of natural gas to LNG and back again. It would utilize pipelines, many of which in Canada and the conterminous United States are already in place. And, it avoids the high seismic zones.

If this route were in existence now, think of how the suffering East and Midwestern States could avail themselves of needed supply. But if they had to rely on conversion to LNG, transport by tanker, and reconversion to natural gas, ALL BEFORE the gas could AGAIN enter a pipeline to be

transported to the East --- well, how would you regard your fellow citizens of another state who made you -- what was that bumper sticker- "... freeze in the dark" ..?

I do not have at hand the figures for conversion, but it does cost more. More money, more time, more energy ---at a time when the nation MUST be practising energy conservation.

So far my thrust has been to the land. Can we consider the sea? Presently the media is covering the great tanker debate, and is finally reporting many of the tanker accidents, spilling oil: fuel oil, crude oil, heating oil, into the sea. It is not my intention to remind you of the devastation of oil spills upon marine life and renewable food sources, though I would like to point out the difference in amount of oil lost by a pipeline leak, even a 48" pipeline, to that lost in any of the recent tanker accidents. The large 48" TAPS line has check valves which would limit a spill at most to less than 300,000 gallons. (Alyeska's reported figure 5000 bbls., or 210,000 gals.) Compare this to recent media reported losses at sea, and in harbors.

It is my intention to call your attention to the present controversy about the oil tanker traffic. Consider the additional navigational hazards posed by adding more large vessels to the sea routes south and west from Alaska. Vessels that require great distances to stop. To turn around, to maneuver. Vessels that will require additional highly trained crews. All this to be added to the oil tanker fleet, freight traffic of barges, hydro-trains, the ferries, cruise ships. Nor should we forget the fishing industry of Prince William Sound and the Alexander Archipelago, an industry that historically has provided large portions of Alaska's jobs and income.

Have you ever seen the ARCTIC TOKYO or its sister ship slow down in Kachemak Bay before a pilot can board it to take it to Nikiski? Watch it some time, before you think it can be easily maneuvered. Now have it try to avoid another ship. What about accidents? Consider again, the great loss of a non-replaceable, non-renewable source of energy from a tanker, super or smaller, LNG or oil, vs. a pipeline leak.

I am not going to bring up other harmful environmental effects, such as thermal pollution.

But I do wish to express my strong support for carefully considering a route that has minimum environmental impact, that requires less energy in its facets to construct, and STILL is providing most advantages of an All-Alaska route.

Respectfully,

Ruth A. M. Schmidt

Ruth A. M. Schmidt, AIFG 352



Exhibit 31

STATE OF ALABAMA
HOUSE OF REPRESENTATIVES

JOHN W. PEMBERTON
CLERK

MONTGOMERY
36104

February 1, 1977

Honorable Lieutenant Governor
Honorable Speaker of the House
The Legislature of the State of Alaska
Juneau, Alaska 99801

Gentlemen:

✓ On February 1, 1977, H. J. R. 5, which was introduced in the House of Representatives by the Speaker Pro Tem, the Honorable Bobby Tom Crowe, was passed without any controversy. The resolution was passed by the Senate with no descension and subsequently signed by the Governor of the State of Alabama. When the Governor signed the resolution, the office of the Secretary of State had closed for the day and as a result there was no act number given to the H. J. R. The office of the Secretary of State will be open at 8:00 a.m. on Wednesday, February 2, 1977 at which time H. J. R. 5 will be given an act of number 1 of the 1977 legislature.

The legislature is very much concerned about the events occurring in the State of Alabama and are very hopeful that the resolution passed by them will be of some assistance whereby the Legislature of the great State of Alaska will help us in the problem that confronts us with regards to a shortage of natural gas.

RECEIVED

FEB 01

Lieutenant Gov.

JWP/csf

RECEIVED

FEB 01

FEB

Lieutenant Governor

Very truly yours,

John W. Pemberton
John W. Pemberton

RECEIVED

FEB 01 1977

Lieutenant Governor

AGO 800806

State of Alabama

31.1

House of Representatives



MONTGOMERY, ALABAMA

Resolution

H. J. R. 5

By Mr. Crowe

WHEREAS, the lower 48 United States are experiencing a dire need for natural gas, the impact of which is causing serious economic and citizen hardships; and

WHEREAS, the vast discovery of natural gas in the Prudhoe Bay Field on the North Slope of Alaska will offer a new supply source that could improve the requirements of our residential, commercial and industrial sectors; and

WHEREAS, Southern Natural Gas Company, the major supplier of natural gas to the State of Alabama, has negotiated a contract with the State of Alaska for the purchase of a significant quantity of the royalty natural gas from Alaska; and

WHEREAS, under the terms of the contract between Southern Natural Gas Company and the State of Alaska, approximately 650 billion cubic feet of natural gas would be delivered to our area of the country over a period of twenty years; and

✓ WHEREAS, this contract must be approved by the Legislature of the State of Alaska; now therefore

✓ BE IT RESOLVED BY THE LEGISLATURE OF ALABAMA, BOTH HOUSES THEREOF CONCURRING, That the State of Alabama urges the Legislature of our sister state, the State of Alaska, to lend its approval to this contract and to take the necessary steps to the end that the contract will be ratified and the natural gas can be expeditiously transported for use by our citizens and industries.

BE IT FURTHER RESOLVED, That copies of this resolution be forwarded by the Clerk of the House to the Governor and Lieutenant Governor of the State of Alaska, to the Congressional Delegation from the State of Alaska and to the Congressional Delegation from the State of Alabama.

State of Mississippi



Evelyn Candy
Lieutenant Governor

Jackson

February 3, 1977

The Honorable Lowell Thomas, Jr.
Lieutenant Governor
State of Alaska
Pouch "AA"
Juneau, Alaska 99811

Dear Governor Thomas:

Our growing concern about the severe shortage of natural gas has been greatly increased as a result of the unprecedented cold weather we have experienced this winter. We believe that positive action must be taken if this situation is to be improved and serious consideration must be given to ways by which adequate gas supplies will be available to our people.

The above situation brings to our attention the proposal by your State to sell a portion of its royalty natural gas to Southern Natural Gas Company which delivers a substantial amount of natural gas for use by the consumers in Mississippi. This additional supply for use in our area would mean much in helping Mississippi avoid a more serious and acute shortage of natural gas in future years.

The accelerated development and transportation of the natural gas from the Prudhoe Bay Field of Alaska to the lower forty-eight states appears to be absolutely necessary, and I hope Alaska's proposal to sell a portion of its royalty natural gas to Southern Natural Gas Company will be given serious and favorable consideration.

With kindest regards and best wishes, I am

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Evelyn Candy".

Evelyn Candy
Lieutenant Governor

EG/nl



STATE CHAMBER of COMMERCE

~~505 National Bank of Alaska Building~~ 310 Second St.

Juneau, Alaska 99801

Phone 586-2323

File

February 7, 1977

TO: Senator John L. Radar, Chairman
Representative Clark Gruening, Chairman
All Committee Members of the Joint Committee
of Alaska Royalty Gas

FROM: Don Dickey

Because joint hearings on the State's Royalty Gas contracts have stretched out considerably longer than anticipated, I did not request to testify but have chosen to submit our position on this important matter in writing.

The Alaska State Chamber of Commerce supports the Royalty Gas contracts arranged by the Administration with the three companies who have agreed to distribute Alaska's gas: El Paso Gas Co., Southern Gas Co., and Tenneco.

I would remind the Committee that these contracts are the result of strong statewide pressure from the public and requests by the last legislature for the Administration to act and find a market for the State's 1/8th Royalty Gas. It appears to us that these contracts will, as Commissioner of Natural Resources, Guy Martin, pointed out accomplish at least three things:

1. Alaska gets a good price for the gas.
2. We get interstate protection of our gas with the unique "Take Back" provision if needed.
3. Alaska gains needed outside support by developing a team of promoters for an All-Alaska Line.

Now, some witnesses claim we could have gotten a higher price for our gas if we would have put it up to competitive bid, or as some suggest, wait for the hope that the Federal government will deregulate gas.

We recognize there is a climate in Washington that makes it appear possible that deregulation may soon occur. However, I would remind you that in spite of frequent major attempts in the past, the price freeze on gas has stood since the F.P.C. put it in effect well over 22 years ago, in 1954. So waiting is merely a delay technique and gains nothing since the contract specifically protects the State regardless of whether gas is regulated or unregulated.

Some claim Alaska could have obtained a higher price by open bidding which is possible, but is it probable. Testifying before your Committee last Friday, Dr. Carl Swanson, Executive Vice President of Jensen and Associates, Inc. of Boston, commented: "I believe the prospects of obtaining a higher price are highly unlikely. Even if the El Paso route isn't approved, the State is protected." Where were all these interested companies when the Gas Royalty Board was meeting and openly discussing prospects to contract for its gas?

Also, what price tag can we realistically place on the contract provision that insures the three companies will conduct an outside lobbying effort in support of an All-Alaska Line? While the success of their effort can not be guaranteed, the fact is they don't obtain our gas if the decision is for another line. The three companies share a common goal with Alaska.

This week we heard Federal Law Judge Nathun Litt rule in favor of the Arctic Gas project. Next month the Federal Power Commission is to render its route choice recommendation to the President. Now is the time for Alaska to act to get a strong outside lobbying effort in support of an All-Alaska Gas Line - with the needed jobs, economic contribution, and added taxes it will bring Alaska and her people. To delay is to turn our back on the facts and deny any favorable consideration of the All-Alaska Line. We think the effort must be made.

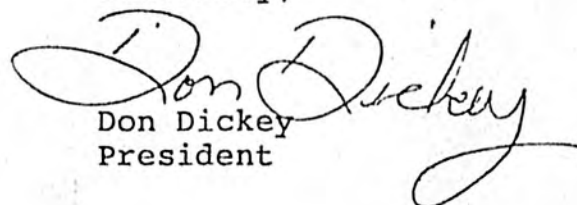
It has been suggested that an overland route is superior to liquifying the gas and shipping it to the West Coast in tankers because of the uncertainty of moving LNG. Alaska has the greatest amount of experience in shipping LNG of any state in the nation. Just this week, Rear Admiral Hayes of the 17th Coast Guard District, publicly commented: "Over the last six years our nation has experienced the transfer of 252 LNG tankers in U.S. waters, and of these, 210 occurred in Alaska."

Let me point out that this record was accomplished without any major accidents and gives us a wealth of experience in this method of transportation that will prove useable for the future.

After listening to a week of expert testimony, as your Committee members have, it appears that with a majority of Alaskans favoring an All-Alaska Line then we must unite as one voice in support of the commitment and launch a national lobbying effort to seek its final approval now.

I hope this letter will be made part of the record of the hearings and appreciate this opportunity to present our views.

Sincerely,


Don Dickey
President

DD:rh

STATE OF CALIFORNIA
State Energy Resources
Conservation and Development Commission

Exhibit 34

RESOLUTION

WHEREAS the California Public Utilities Commission has been directed by recent state legislation (SB 2008) to "represent the united interests" of (state agencies) in federal regulatory energy proceedings and to consult with state agencies, specifically the ERCDC (Section 5401 of the Public Utilities Code); and

WHEREAS the ERCDC staff has prepared or in preparation comprehensive reports designed to identify emerging trends related to energy supply, demand, and conservation and public health and safety factors pursuant to Section 25309 (the Warren-Alquist Act) "to provide the basis for state policy and actions in relation thereto"; and

WHEREAS ERCDC staff has acquired and analyzed information in order to ascertain future energy problems and uncertainties including:

- (a) The production of Alaskan North Slope oil and its projected use in the State;
- (b) Impacts of petroleum price increases and projected conservation measures on the demand for energy and indirect effects on the need for offshore oil development and Alaskan oil delivery into the State;
- (c) Potential shipments of Alaskan oil through the State;
- (d) The impact on the State of national energy policies.
including Project Independence and its successors;
- (e) Implications of natural gas decision making for California
in accordance with Section 25005.5 of the Public Resources Code (SB 1479); and

WHEREAS the CPUC, in consultation with the Governor's Office of Planning and Research and ERCDC staff, has established procedures for consultation with other state agencies in federal energy proceedings; and

WHEREAS the CPUC will file a final brief in the El Paso Alaska case by November 30, 1976, which will set forth a statement of policy, based upon the record before the FPC, of other state agencies (CPUC telegram, October 28, 1976);

THEREFORE BE IT RESOLVED that the General Counsel's Office, in coordination with the Executive Director and Commission staff, shall recommend to the Commission appropriate responses to CPUC's request for assistance and to have evidence, expert witness(es), and statements of policy prepared when appropriate for the following federal regulatory energy proceedings (described in depth in attachments) pursuant to the ERCDC's consultation responsibilities according to the provisions of SB 2008:

1. El Paso Alaska Company, FPC Docket No. CP75-96, et al.;
2. Pacific Indonesia LNG Company, FPC Docket No. CP75-160, et al.;
3. El Paso Natural Gas Company, FPC Docket No. CP75-362;
4. Proposed Rulemaking for Approved States' Coastal Zone Management Program, FPC Docket No. RM76-38;
5. Request for Rulemaking on LNG Site Selection Criteria, FPC Docket No. RM76-13;
6. Pacific Alaska LNG Company, FPC Docket No. CP75-140;

34.2

BE IT FURTHER RESOLVED that all statements of policy representing the position of the Energy Resources Conservation and Development Commission in any of the above federal energy regulatory proceedings be submitted on the Energy Commission's consent calendar and approved before they shall be officially represented as a Commission position;

BE IT FURTHER RESOLVED that the Energy Commission makes the following Alaskan North Slope natural gas policy findings, and respectfully requests the California Public Utilities Commission to include these findings and the attached policy statement in its final brief in the El Paso/Alaska case and consider them in the development and approval of CPUC's own final arguments:

- 1) That California will require at least one liquefied natural gas (LNG) regasification marine terminal in the early 1980;s;
- 2) "Until the risks inherent in liquefied natural gas terminal operations can be sufficiently identified and overcome and such terminals are found to be consistent with the health and safety of nearby human populations, terminals shall be built only at sites remote from human population concentrations. Other unrelated development in the vicinity of a liquefied natural gas terminal site which is remote from human population concentrations shall be prohibited. At such time as liquefied natural gas marine terminal operations are found consistent with public safety, terminal ties only in developed or industrialized port areas may be approved." (California Public Resources Code, Section 30261(b).)

- 3) That given the current state of knowledge concerning LNG safety, the proposed Oxnard and Los Angeles LNG terminal sites should not, at the present time, be considered "remote from human populations concentrations";
- 4) That the State of California has a law and a process (the California Coastal Act, SB 1277) for resolving LNG-related land use, environmental, and safety questions and for issuing coastal permits for LNG terminals;
- 5) That it would be inappropriate for California to advocate a specific remote site (on or offshore) until such time as the state has completed its environmental impact, supply contingency, and seismic and LNG safety studies;
- 6) That certification of an overland natural gas pipeline system is in California's and the national interest, in part because diversification of supply sources minimizes risks and enhances the reliability of energy delivery systems; and
- 7) That, however, if the Federal Power Commission should approve the El Paso Alaska proposal and must, therefore, select one of the three proposed California sites in the El Paso/Alaska proceeding, it should tentatively approve a site subject to:
 - a. Permit approval by the State Coastal Commission and review by the State Seismic Safety Commission;

34.4

- b. Strict permit conditions which prohibit unrelated secondary (or induced) industrial and residential development adjacent to the site or within a "fire hazard" radius of the site; and
- c. Completion and evaluation, including public hearings of the expanded alternate site analysis for the Point Conception EIR.

THEREFORE BE IT RESOLVED that the Energy Resources Conservation and Development Commission finds that an overland pipeline delivery system for natural gas from Alaska's North Slope including a western leg for direct delivery to California should be selected by the Federal Power Commission which most closely incorporates the following characteristics:

- 1) Earliest possible completion date;
- 2) Lowest cost of service;
- 3) Least environmental impact particularly including impact on sensitive wildlife areas;
- 4) Provides access to the largest deliverable natural gas supplies;
- 5) Relies on proven pipeline construction techniques;
- 6) Maximizes the use of existing rights-of-way;
- 7) Provides an acceptable financing plan requiring the least possible governmental subsidies;
- 8) Provides the most direct delivery system for California;
- 9) Enjoys the committed support of both the United States and Canadian governments;
- 10) Provides the greatest incentives for maintaining continued access to Canadian gas already contracted with California consumers.

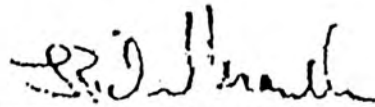
34.6

WHEREAS the final decision on the choice of systems for delivering Alaskan North Slope (and Canadian) natural gas to the lower 48 states will be made by the President with Congressional concurrence in the second half of 1977;

BE IT RESOLVED that the SERCDC directs the staff to prepare issue papers in support of hearings to be held by the CERCDC during the 1st quarter of calendar year 1977. The purpose of the hearings shall be to enable the Commission to take a definitive position in favor of one or the other of the overland gas transportation routes for North Slope gas and to communicate such findings to the President and the Congress.

Dated: November 17, 1976

STATE ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION



Richard L. Maullin
Chairman

ENERGY COMMISSION POLICY STATEMENT
EL PASO/ALASKA CASE:

The Energy Commission contends that the CPUC acted prematurely in choosing Oxnard as the preferable site for the El Paso/Alaska project for the following reasons:

1. The public safety factor regarding the proposed facilities at Point Conception, Oxnard and Los Angeles Harbor is still undetermined. The risk assessment studies prepared by Science Applications, Inc. (SAI) for all three facilities and submitted for the record by Western Terminal as Exhibits WL-51, WL-52, and WL-53 were based on preliminary data and anticipated design (Tr. 25178). The SAI studies were published in December 1975, and do not fully reflect certain critical engineering details and design progress. For example, seismic analysis for the Oxnard marine facility was completed in July 1976, and the related gimbal joint study was completed in September 1976.
2. Disagreement exists between the FPC staff and SAI regarding the behavior of LNG vapor clouds and other key risk determinants, such as marine vessel traffic. Attention is directed to a letter from the FPC staff to Western Terminal, dated October 26, 1976, in Western LNG Terminal Company, Docket No. CP75-83-2, requesting additional information as to 21 technical points relating to the SAI risk assessment studies and models and assumptions upon which those studies were based. The information requested in this letter indicates that several important areas relating to public safety remain unanswered.
3. Witnesses for Western Terminal stated that they were convinced "internally" that the proposed facilities "presented no undue hazard to the public" and that SAI's risk assessment studies were performed primarily for "defense in permit proceedings", and for the purpose of "convincing the public" (Tr. 24959). Witnesses for SAI stated that no changes in design or operations were suggested because "the risks were extremely low and therefore there was no reason to suggest any changes in the design". Western Terminal did not produce "internal" studies or documents which led them to the conviction that the facilities were acceptably safe, prior to completion of the SAI risk assessment studies. Therefore, the SAI work must be treated as an advocacy document until such time as technical review by qualified, independent peers has established its scientific validity. This review process has only just begun. SAI's conclusions and methods have not been shown to enjoy general acceptance in the scientific community, and they have not been accepted or relied upon by any identifiable authority other than Western Terminal.

34.8

4. Contingency planning appears woefully inadequate to assure public safety in the event of a major safety incident, however unlikely.
5. Pre-permitting safety review must be regarded as preliminary and inconclusive. For example, the review conducted for the FPC by the National Bureau of Standards was only a preliminary step; many critical issues were not and could not be addressed because of the preliminary status of engineering work. Other problem areas were identified but, based on information and belief, responses were left open-ended. It has not been adequately established that safety monitoring in the post-permitting phase, from final design through construction and operation, will be adequately provided for. The recently enacted California Coastal Act (California Public Resources Code, Section 30000, et seq.) will require positive findings that any LNG facility proposed for siting in a populated area is consistent with public safety. The California Coastal Commission intends to exercise this responsibility.
6. Additional studies are being conducted within California, regarding all three of the proposed sites for LNG regasification facilities. A preference for any site would be premature, until these studies are completed. For example, the City of Oxnard recently issued a Draft Environmental Impact Report (EIR) regarding Western Terminal's proposed facility at Oxnard. The first public hearing regarding the Draft EIR was held on November 4, 1976. A Final EIR for the project is required by the California Environmental Quality Act (California Public Resources Code, Section 21000, et seq.) prior to the issuance of any local or state permits. Also, from a public policy point of view, completion of the State EIR process appears indispensable to a decision as to the acceptability of Oxnard as a site for a LNG regasification facility.

At this point, it should be noted that in preparing its Draft EIR, the City of Oxnard had an independent safety study performed. It refused to rely on the SAI risk assessment study to establish the safety of the proposed facility at Oxnard. Based on information and belief, a Final EIR for the Oxnard facility will be certified in March or April, 1977. The Final EIR for the Oxnard facilities will be submitted to the FPC as soon as it has been certified.

The preparation of an EIR for the proposed Point Conception site has recently begun. The reason for the delay has been Western Terminal's failure to file the necessary applications with the County of Santa Barbara until just recently. As stated above, with respect to the Oxnard EIR, completion of the State EIR process is indispensable to a decision regarding the acceptability of Point Conception as a site for a LNG regasification facility.

By Order dated May 19, 1976, the Federal Power Commission denied petitions by the CPUC and the County of Santa Barbara for local hearings regarding the proposed LNG facilities at Los Angeles Harbor, Oxnard and Point Conception. At the same time, it has granted requests for local hearings at other sites in the lower 48 states, e.g., Everett, Massachusetts. After the Commission has denied the requests of state and local agencies for local hearings in California, it would be premature for California to endorse any site until the various State EIR processes have been completed. After the Oxnard and Point Conception EIRs have been subject to local public hearings and local exposure, there will be a better indication as to which site, if any is more acceptable for a LNG facility. Also, until the Oxnard and Point Conception EIRs have had such local exposure, it seems premature to argue, as the CPUC did, that the possibility of injunctive action is more likely at Point Conception than at the other for proposed locations.

The issue of seismic safety is presently under detailed technical review by the California Seismic Safety Commission (Seismic Safety Commission). The Seismic Safety Commission expects to issue an official report regarding each of three proposed sites by the end of 1976.1/ Design data presented to this Commission in the El Paso/Alaska, Pacific Indonesia and Pacific Alaska proceedings has been preliminary in many respects. For example, important studies relating to the design of the trestle at Oxnard were only completed in September 1976. These studies have not been submitted for the record in either the El Paso/Alaska or Pacific Indonesia proceedings. Until the Seismic Safety Commission has completed its study as to the proposed sites at Point Conception, Oxnard and Los Angeles Harbor, judgment as to the seismic issues should be reserved.

The Energy Commission is preparing a study relating to the issues of reliability of the proposed LNG regasification facilities. The study will be completed by the end of 1976 and will be available for presentation in the Pacific Indonesia and/or Pacific Alaska proceedings.

1/ It should also be noted that the U.S. Navy, acting through its Naval Facilities Engineering Command, has actively participated in technical discussions relating to seismic issues with respect to both the Los Angeles Harbor and Oxnard sites. Based on information and belief, the Navy has intervened in the Pacific Indonesia and Pacific Alaska proceedings because of the proximity of major naval facilities to both Oxnard and Los Angeles Harbor. In its recent comments on the Draft EIS for the Pacific Alaska project, the Navy agreed with the Commission Staff's conclusion that "the LNG terminal facilities should not be constructed at the proposed Los Angeles site in view of the seismic problem, the shipping congestion in Los Angeles Harbor and the resulting threat to a highly populated area."

34.16

7. The California Coastal Act includes a strong presumption in favor of remote siting, with the burden of proof on the applicant to establish safety. The above-described EIRs for Oxnard and Point Conception will be a vital element of state decision-making for all state permitting agencies, particularly the Coastal Commission and State Lands Commission, with respect to both safety and environmental issues. Since the County of Santa Barbara has not adopted the Commission staff's Final EIS in the El Paso/Alaska proceeding, it would be inappropriate to base a site preference on the Commission staff's environmental analysis which downgrades Point Conception.

Based on the foregoing, the Energy Commission submits that if this Commission (Federal Power Commission) recommends approval of the El Paso/Alaska project, it should approve siting of the El Paso/Alaska project at a remote site consistent with the California Coastal Act and the California Environmental Quality Act. The proposed sites at Los Angeles Harbor and Oxnard are not remote. Point Conception or some other remote site, on or offshore, should be approved by the FPC subject to the condition that a permit be obtained from the California Coastal Commission. The Federal Power Commission should take cognizance of the California Resources Agency's concerns on the environmental issues at each of the proposed sites.

If the El Paso/Alaska project is not certificated, the Energy Commission would recommend siting a facility at Point Conception or some other remote location (either onshore or offshore) for both the Pacific Alaska and Pacific Indonesia projects, until the unanswered safety questions are resolved by the appropriate California agency. These recommendations are without prejudice to the possible siting of a facility at Oxnard, depending on the development of the record on the Pacific Indonesia proceeding.



SOHIO PIPE LINE COMPANY

Exhibit 35

BP BUILDING, 3111 "C" STREET
ANCHORAGE, ALASKA

TELEPHONE: (907) 274-2955

GOVERNMENT AND PUBLIC AFFAIRS DEPARTMENT

MAIL: P.O. BOX 4-2329
ANCHORAGE, ALASKA 99509

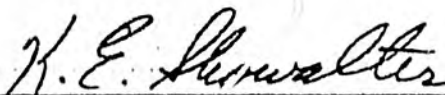
February 3, 1977

Honorable John L. Rader
ALASKA STATE SENATE
Pouch V
State Capitol Building
Juneau, Alaska 99811

The agreement between SOHIO and Columbia Gas covering our
Purdhoe Bay gas reserves was discussed at the Joint Committee
hearings on February 1, 1977. It became apparent to me that
there were several misunderstandings regarding our agreement
and to clear up those misunderstandings we are enclosing a
copy of our Mr. Spahr's letter to you dated March 10, 1976.
This letter gives a good summary of the transaction and the
reasons for making such an agreement in 1971.

We are anxious for the Legislature to have a correct under-
standing of this transaction and would be willing to appear
before an appropriate committee to expand on the enclosed
letter if you deem it desirable.

I plan to return to Juneau on Wednesday, February 9.


K. E. Showalter

KES:ft

Enclosure

cc: R. M. Donaldson



THE STANDARD OIL COMPANY

35.1
MIDLAND BUILDING, CLEVELAND, OHIO, 44115

March 10, 1976

CHARLES E. SPAHR
CHAIRMAN

The Honorable John L. Rader, Chairman
Gas Pipeline Impact Committee
Alaska State Capital
State Capitol Building
Pouch V
Juneau, Alaska 99801

Dear Senator Rader:

I know that you are working hard for a gas pipeline that would be built from Prudhoe Bay south through Alaska, possibly along much of the right-of-way for the Trans Alaska Pipeline now under construction. I also understand your hope that Sohio could be able to support such a gas pipeline by committing its Prudhoe Bay gas to the proposed pipeline.

On February 19th in our response to questions you had asked on behalf of the Gas Pipeline Impact Committee we indicated that Sohio had entered into a Preliminary Gas Agreement with Columbia Gas dated August 3, 1971 covering our Alaskan gas. This agreement is still in effect and I expect that it will remain in effect. It gives Columbia Gas control of the ultimate disposition of the gas, subject to appropriate federal and state regulations and subject to Sohio and Columbia Gas reaching a final agreement on the price of the gas.

Our agreement with Columbia Gas is probably not fully understood by many in Alaska and elsewhere, and in fact, is a little bit complicated. It did serve as an important part of the early financing of the development of Sohio Prudhoe leases. I think your committee might find it useful to have a summary of what our agreement with Columbia Gas is all about and that's the purpose of this letter.

The Preliminary Gas Agreement covers all of Sohio's Alaskan gas except that which may be used for field purposes. The State of Alaska's royalty gas from our leases will be included unless the State elects to take its royalty in kind. In addition gas attributable to BP's net profits royalty interest in our leases will be included unless BP elects to take its royalty in kind. The agreement further provides that either Sohio or Columbia Gas may cause the other to enter into negotiations looking toward the signing of a regular gas purchase and sales contract of the type appended to the Preliminary Agreement as an exhibit. A regular agreement has not been signed nor have the negotiations started because there are

AGO 800824

The Honorable John L. Rader, Chairman
Gas Pipeline Impact Committee
March 10, 1976
Page 2

35.2

still too many unknowns at this time with respect to the gas. These include how much gas Sohio will have available for sale, the rate the gas will be produced and when the production will start.

In order to get this right to negotiate for our gas, Columbia Gas was willing to pay us an advance of \$175 million as long as we used the money to develop our Prudhoe Bay leases. Sohio received the money in 1971, 1974, and 1975 and has used it for this purpose. Columbia Gas needed some assurance of getting its money back within a reasonable number of years. Since the timing of gas production was so uncertain, Sohio agreed it would repay the \$175 million advance in Prudhoe Bay oil after the field started producing. This advance and the repayment were provided for in a document called an Agreement for Sale and Purchase of Crude Oil. In effect, Columbia has bought \$175 million worth of oil for future delivery and paid for it in advance. When Columbia sells the oil it gets from us and receives an amount equal to the advance plus interest, the oil agreement will be at an end. Columbia has appointed Sohio as its agent to sell this oil on its behalf. In summary, Columbia Gas has loaned Sohio \$175 million to get the right to negotiate for the purchase of Sohio's Prudhoe Bay gas.

Both the Preliminary Gas Agreement and the Agreement for Sale and Purchase of Crude Oil are lengthy documents but if you want copies, I will be glad to send them to you.

Further background on these agreements might also be helpful. Our agreement with Columbia Gas was the first to be entered into with respect to Prudhoe Bay gas and many have asked us why we did this as early as 1971. I think the step we took was a good one, particularly in view of the financing problems we had at the time. When Sohio acquired its oil and gas interests in Alaska from BP in 1970, it recognized that the development costs of the field and the cost of building an oil pipeline across the State of Alaska, together with tankers to move the oil to the lower 48 states, would be a monumental physical and financial task. This was particularly true because Sohio was, and is, relatively small when compared to the size of this development. Consequently, as soon as the BP transaction had been agreed upon, we undertook to study every possible source of funds that was available to Sohio for this development. In making these studies, we kept in mind our need to preserve as much of our normal borrowing power as we could for the tremendous capital requirements of the oil pipeline once that project commenced.

We knew Sohio now had large oil and gas reserves in Alaska and that such reserves would have a sizable loan value as a source of development money, if they were located in the lower 48 states near transportation facilities.

36.3

The Honorable John L. Rader, Chairman
Gas Pipeline Impact Committee
March 10, 1976
Page 3

We talked to banks about loans which would, in effect, be secured by a pledge of future production from these reserves. We met with no success. The oil pipeline project had been stopped by the courts, and the banks told us, in effect, that they would not loan money on a non-recourse basis against these reserves. The banks said that until the pipe started to go into the ground, non-recourse loans supported solely by these reserves would not be made. Additional credit would have to be pledged. They could not take the risk of loaning money solely against the reserves and then find that the pipeline would never be built. Unfortunately, all during this time inflation and environmental constraints were increasing the development costs by leaps and bounds.

Faced with this situation, Sohio conceived and entered into the agreements with Columbia Gas. In return for agreeing to negotiate with Columbia for our gas, we were able in effect to use part of Columbia's borrowing power to supplement our own. By getting the money from Columbia we were able to carry on a continuous drilling program at Prudhoe during years when some owners stopped drilling completely.

With this perspective and the fact that Columbia Gas will probably be the company determining and arranging for the transportation of this gas, I don't think Sohio should make any statements that could be interpreted as a commitment to any particular gas pipeline project. This would be contrary to the spirit of our agreements with Columbia Gas. This is also consistent with the Statement of Position we filed with the Federal Power Commission in April, 1975.

The State of Alaska and Sohio do have a mutual interest in seeing a pipeline to transport Prudhoe Bay gas. We hope that the current process involving all the interested parties and evaluating the alternative proposals will result in the selection of the project that is best for everyone. Your committee's proceedings will add to this record. Whether or not the matter is finally resolved in the Congress remains to be seen, but we all hope for an early determination.

One other matter ought to be mentioned here. Though I am not thoroughly familiar with the arrangements other companies have made with respect to their Prudhoe gas, I believe that some made agreements which provided for advances to be made by the gas companies with the provision that if such advances did not become part of the rate base of the gas company, the agreement would not be effective. Our agreement with Columbia Gas has no such provision.

Sincerely,



C. E. Spahr

February 7, 1977

Senator John Rader
Representative Clark Gruening
Joint Gas Pipeline Committee
State Capitol, Pouch V
Juneau, Alaska 99801

Gentlemen:

I think serious consideration should be given to a "fallback" position by the state prior to ratification of the state's royalty gas sale contracts. The contracts are well-bargained, and at one point last year, might have significantly furthered Alaska's chances for an all-Alaska line. That time has passed.

The only reason for the sale is political support. It is too late to mount any significant campaign to effect the eventual gas-line decision in my estimation. The train has already left the station.

After this winter, the gas-hungry Mid-West would never allow this major project to end up anywhere than their own backyards. No amount of convincing could prove that North Slope gas can be delivered to the Mid-West any more economically than a direct pipeline. El Paso can deliver gas to California competitively - but not the Mid-West.

So the options remaining are Gas Arctic or Northwest - barring a Canadian veto. I suggest attention be paid to: 1) trading Alaskan royalty gas for gas liquids; 2) passing legislation barring the gas liquids from leaving Alaska unprocessed; 3) attempting to gain industry support for either running a small diameter liquids line to Fairbanks, or processing the liquids on the North Slope.

Reasoning: 1) Gas could go to Mid-West where it is desperately needed, with Alaska's full support;

2) Alaska would profit from liquids: a) they could be most efficiently distributed to Alaska's sparse and scattered population as a heating/energy source; b) they are the building-block of several petrochemical applications that could support Alaska's industrial and employment needs.

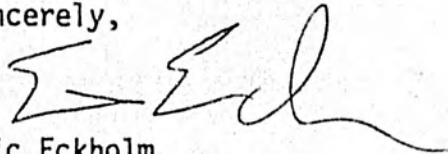
February 7, 1977
Page -2-

36.1

I think it is time to reassess the state's position to a more realistic one, and seek maximum benefit from that.

Thank you for hearing me.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Eckholm', with a stylized, flowing script.

Eric Eckholm
1028 East 11th Avenue
Anchorage, Alaska 99501

cc: Gregg Erickson
Guy Martin
Bob LeResche
John Greely

EE/kb

TELEGRAM

BOA ALASKA COMMUNICATIONS, INC

PHONE: 586-6440

JUNEAU, ALASKA 99801

#

02015 ANCHORAGE ALASKA 45 02-09 1107A AST

PMS SENATOR JOHN RADER

JUN 534

PLEASE MAKE THE FOLLOWING PART OF THE RECORD.

ANCHORAGE ASSEMBLY BY UNANIMOUS VOTE URGES FAVORABLE

CONSIDERATION OF HCR 11, 12, 13 (SCR 3, 4, 5)

APPROVING SALE OF ALASKA SURPLUS ROYALTY GAS TO TENECO

ALASKA, INC. SOUTHERN NATURAL GAS CO. AND EL PASO NATURAL
GAS CO.

DAVE ROSE CHAIRMAN

Anch.

Exhibit #37

1977 FEB 9 PM 1 53

TELEGRAM

ALASKA ALASKA COMMUNICATIONS, INC.
PHONE: 554-6440
JUNEAU, ALASKA 99801

#

19002 POM CORDOVA ALASKA 15 02-09 1100A AST

544
PMS SEN JOHN RADER CHAIRMAN SPECIAL SENATE GAS
CONTRACT REVIEW COMMITTEE

Exhibit #38

JUN

URGE PROMPT FAVORABLE COMMITTEE REPORTING OUT OF
ROYALTY GAS CONTRACTS TO SUPPORT TRANSALASKAN PIPELINE.

DOUG BECHTEL PRESIDENT CORDOVA CHAMBER OF COMMERCE

#

On L Supp

TELEGRAM

Exhibit #39

ALASKA ALASKA COMMUNICATIONS, INC.
PHONE: 586-6440
JUNEAU, ALASKA 99801

1977 FEB 7 PM 4 24

FM 0/088 JUNEAU ALASKA 34 02-07 400P PST

PMS JOHN RADER 355

POUCH V JUNEAU AK

PLEASE APPROVE CONTRACTS SO EL PASO CAN GET TO WORK
WITH THEIR NEW PARTNERS. WE FEEL STRONGLY THAT THIS IS
BEST FOR ALASKA

- RON MOORE
- LEVANCE FORSYTHE
- LES REYNOLDS
- RICHARD J SEARS
- JOHN BERGGREN
- TERI YOUNG

1977 FEB 10 PM 12 21

Exhibit #40

#

02 011 ANCHORAGE ALASKA 57 02-10 900A AST

FMS SENATOR JOHN RADER

JUN **664**

HOME BUILDERS OF ALASKA HAVE STRONGLY SUPPORTED THE
TRANS-ALASKA GAS PIPELINE PROJECT AND BELIEVE SALES OF
SURPLUS ROYALTY GAS WILL HELP ACHIEVE ITS ULTIMATE APPROVAL
AT NATIONAL LEVEL. LEGISLATIVE APPROVAL OF SALES CONTRACT
WILL ALSO HELP ALASKA KEEP CONTROL OF ITS ROYALTY GAS.
WE URGE APPROVAL, AT THE EARLIEST POSSIBLE TIME AND REQUEST
YOU VOTE AFFIRMATIVELY

F W CATALANO PRESIDENT HOME BUILDERS ASSOCIATION OF ALASKA

AGO 800832

Phone: (907) 424-3237
or 424-3238

CITY OF CORDOVA

Box 1210

CORDOVA, ALASKA 99574

"The Friendly City"

February 10, 1977

Reply to:

Senator John Rader
Pouch V
Juneau, Alaska

Dear Senator Rader:

With the F.P.C. deadline for its recommendation on the Gas Pipeline set for May 1977, it is important for Alaska to speak with a unified voice for an all-American route.

Your timely approval of the proposed gas royalty contracts, after due consideration, will enhance this effort by allying us with influential parties Outside.

We urge your approval.

Sincerely,

Axel Bud Janson
Axel (Bud) Janson
Vice-Mayor

R E S O L U T I O N

WHEREAS, a trans-Alaska gas pipeline would be in the best interest of the State of Alaska and its citizens; and,

WHEREAS, the Juneau Chamber of Commerce is on record in support of a trans-Alaska gas pipeline; and,

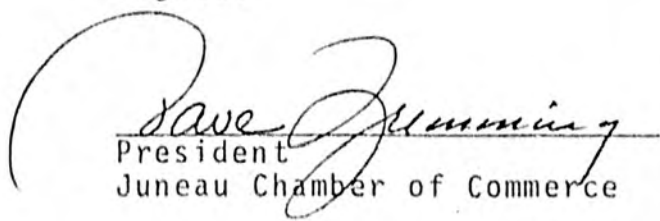
WHEREAS, the Alaska State Legislature is presently considering the merits of royalty gas contracts approved by the Royalty Oil and Gas Development Advisory Board; and,

WHEREAS, the existence of royalty gas contracts supported by the people would aid toward the ultimate approval of a trans-Alaska gas pipeline:

NOW, THEREFORE, BE IT RESOLVED, the Juneau Chamber of Commerce wishes to go on record in support of the royalty gas contracts and respectfully urges the Legislature of the State of Alaska to expeditiously approve such contracts.

Approved this 15th day of February, 1977.

Signed:


President
Juneau Chamber of Commerce

ATTEST:

Alida Boucher

1977 FEB 11 PM 4 30

TELEGRAM

ALASKA COMMUNICATIONS, INC
PHONE: 554-6440
JUNEAU, ALASKA 99801

CJ

12024 FAIRBANKS ALASKA 103 02-11 1130A AST

PMS JOHN RADER

JUN 833

IT IS CLEAR TO US THAT THE CONSENSUS OF THE TESTIMONY
BEFORE THE SPECIAL GAS CONTRACT REVIEW COMMITTEE THIS WEEK
IN JUNEAU, PROVED THAT THE ROYALTY GAS CONTRACT WILL
ADEQUATELY PROTECT ALASKAS INTERESTS AT THE SAME TIME
HAVING A SUBSTANCIAL INFLUENCE ON THE GAS PIPELINE ROUTING
DECISION WE THEREFORE URGE YOU TO GIVE THE ROYALTY
GAS CONTRACTS EARLY AND FAVORABLE CONSIDERATION

FAIRBANKS CLINIC

ABRAM H CANNON MD

GARY L WALKUP MD

GLEN W STRAATSMA MD

JAMES N BERTELSON MD

H JAMES JORDAN MD

JOSEPH M REBAR MD

ROBERT D HANEK MD

JOSEPH K JOHNSON MD

DONALD A DENNESON ADMINISTRATOR

El Paso ALASKA
COMPANY

Exhibit #44

POUCH 7009
ANCHORAGE, ALASKA 99513
PHONE: 907-279-6502

February 8, 1977

The Honorable John Rader
The Honorable Clark Gruening
Chairmen
Legislative Royalty Gas Contract
Review Committees
Pouch V
Juneau, Alaska 99811

Gentlemen,

During El Paso Alaska Company's presentation before your committees last week, we were asked to furnish several items of additional information subsequent to the close of the hearings. Such is the purpose of this letter.

Senator Huber requested information respecting the expected composition and LPG content of the gas stream, both before and after processing at Prudhoe Bay. This data is given in Attachment #1 hereto for both 2.0 bcf and 2.5 bcf daily delivery volumes into the proposed gas pipeline.

Senator Croft inquired as to the reasons for abandonment of the El Paso-Distrigas-NIGC LNG project. Attachment #2 is a brief description of that project, and includes an explanation of the various reasons for its present inactive status.

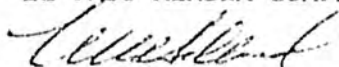
Senator Croft also asked whether El Paso had conducted its own analysis of the reserves and deliverability of the Prudhoe Bay reservoir. We have done so, and a copy of such analysis is appended as Attachment #3. This same document was submitted to the Federal Power Commission as part of El Paso's presentation at Docket No. CP75-96. The direct testimony of Mr. A. M. Derrick, sponsoring witness for the reservoir study, is also included.

I believe the information in the attachments will be fully responsive to the foregoing inquiries. However, if anything further is needed, please let me know.

Best regards.

Sincerely,

EL PASO ALASKA COMPANY



Michael C. Holland
Assistant to the Vice President

Enclosures

AGO 800836

PRUDHOE BAY NATURAL GAS
COMPOSITION AND LPG CONTENT

44.1

The attached table illustrates the composition and LPG (liquefied petroleum gas) content for Prudhoe Bay natural gas both before and after field processing on the North Slope, and for both 2.0 Bcfd (billions of cubic feet daily) and 2.5 Bcfd volumes of delivery into the gas pipeline. The "heavier" components of the processed gas stream, which could not be carried in the gas pipeline due to potential condensation problems, are shown as being transported by the oil pipeline.

The field gas composition information was provided by ARCO. The field processing facilities were designed to treat the gas for CO₂ removal, dehydrate the gas to maintain an acceptable gas hydrocarbon dewpoint (thus preventing liquid condensation in the gas line).

The gas pipeline is, in effect, loaded to capacity with LPG's in accordance with its design operating pressure and temperature. The need to "spill over" some of the heavier hydrocarbons into the oil line arises from the inability of the gas line to accept all of the available LPG's without condensation (and its attendant problems) occurring.

Table I (2.0 BCFD Case)

44.2

	a) Field Inlet		b) Pipeline Gas		c) NGL to Alyeska	
	Mole %	<u>LPG Content</u> BBL/day	Mole %	<u>LPG Content</u> BBL/day	Mole %	<u>LPG Content</u> BBL/day
N ₂	.65	-	.735	-	-	-
CO ₂	12.63	-	1.030	-	-	-
C ₁	73.64	-	86.081	-	-	-
C ₂	6.67	106,548	7.759	98,522	1.60	625
C ₃	3.51	57,604	3.976	51,983	4.04	1,619
iC ₄	.63	12,236	0.155	2,406	18.85	8,982
nC ₄	1.15	21,602	0.194	2,902	37.46	17,201
iC ₅	.33	7,142	0.025	437	11.65	6,211
nC ₅	.40	8,398	0.021	363	14.12	7,452
C ₆ ⁺	.39	9,003	0.006	128	12.28	8,253
Total	100.00	222,534	100.000	156,740	100.00	50,342

Table II (2.5 BCFD Case)

	a) Field Inlet		b) Pipeline Gas		c) NGL to Alyeska	
	Mole %	<u>LPG Content</u> BBL/day	Mole %	<u>LPG Content</u> BBL/day	Mole %	<u>LPG Content</u> BBL/day
N ₂	.65	-	.753	-	-	-
CO ₂	12.63	-	1.030	-	-	-
C ₁	73.64	-	86.081	-	-	-
C ₂	6.67	133,185	7.759	123,152	1.60	781
C ₃	3.51	72,005	3.976	64,979	4.04	2,024
iC ₄	.63	15,295	0.155	3,007	18.85	11,227
nC ₄	1.15	27,003	0.194	3,627	37.46	21,501
iC ₅	.33	8,927	0.025	546	11.65	7,764
nC ₅	.40	10,498	0.021	454	14.12	9,315
C ₆ ⁺	.39	11,254	0.006	160	12.28	10,316
Total	100.00	278,167	100.000	195,925	100.00	62,928

PARS (IRAN) LNG PROJECT

Since mid-1973, subsidiaries of the El Paso Company have negotiated with the National Iranian Gas Company (NIGC), an Iranian government-owned company, for a share of Iran's potentially large gas reserves in the Persian Gulf. These negotiations have been conducted in partnership with Distrigas, S.A., and Sopex Belge, S.A., both Belgian companies.

The original project concept was to produce natural gas in Iran, pipeline the gas through Iran and Turkey, and liquefy the gas at a port on the Mediterranean Coast for ocean transportation to Europe and the United States. As initial studies progressed, the participants developed another concept which would locate all land-based facilities in Iran and ship the LNG through the Suez Canal to the United States and Europe. Production from the LNG facilities, to be located near Mianlu on the Persian Gulf Coast, is to be shared equally by the United States and Europe. The studies have contemplated a project which would produce in Iran a total of 2.0 billion standard cubic feet per day of natural gas in the form of LNG for 25 years. NIGC has stated that this quantity could be increased to 3.0 billion standard cubic feet per day of LNG depending on the amount of reserves ultimately proven for the Pars structures.

Project Organization

In December, 1974, the participants agreed on several principles which would form the basis for initial evaluation of the project. This agreement set forth the ownership basis (50% NIGC, 25% Distrigas, 25% El Paso), the prices of alternative fuels in the marketplace against which Iranian LNG

44.4

must compete, and the basis for future engineering studies. The first feasibility studies conducted by Fluor Engineers and Constructors, Inc., were completed in mid-1976.

The Pars LNG Carrier Fleet

The LNG carrier fleet has been sized to deliver one billion standard cubic feet of natural gas per day in the form of LNG, to both Zeebrugge, Belgium, and to a terminal in the Chesapeake Bay area in the United States. The size of the LNG carriers was limited to the restrictions imposed by the dimensions of the Suez Canal. One-way shipping distances are approximately 8,300 nautical miles for the U.S. route and 6,200 nautical miles for the European route. Twenty-one 185,000 cubic meter ships comprise the integrated LNG carrier fleet required for the project.

Land-Based Facilities

Iranian Facilities

The source of natural gas for this project is located in the general Kangan area of southwestern Iran. The gas field under consideration for the project is the offshore Pars Structure gas field. Based on preliminary results from an exploration drilling program now in progress, reserves are presently estimated at 150 trillion cubic feet.

The production gas will be collected in an offshore gathering system including 32 gas wells, eight production platforms, and a submarine pipeline system to transport gas to shore. From shore, a 50-mile, 48-inch diameter pipeline will transport the gas to the liquefaction plant near Mianlu, Iran.

44.5

A gas treating plant is required to remove carbon dioxide, hydrogen sulfide and moisture from the gas before liquefaction. The natural gas liquefaction is carried out in six identical parallel liquefaction trains. The LNG plant facilities are entirely self-sufficient, including all utilities, office buildings, safety, maintenance, and laboratory needs.

U. S. Receiving and Vaporization Facilities

Receiving terminals and vaporization facilities will be required in the United States and Europe. El Paso is planning a terminal facility to be located on the U.S. East Coast to receive, store, and revaporize Iranian LNG.

Project Costs

Total capital investment for the Pars LNG Project is estimated to be approximately \$8.0 billion based on late-1975 costs. This estimate includes allowances for funds used during construction, return on equity during construction and owner's costs, but excludes receiving terminal costs.

Capital Cost Summary -- Billions of Dollars

Gas Production & Gas Gathering	\$1.1
Pipeline, LNG Plant & Terminal	2.6
Integrated LNG Carrier Fleet	<u>4.3</u>
TOTAL	<u>\$8.0</u>

Project Schedule

It is estimated that shipments from the Pars LNG Project will commence about five years after project certification by the FPC. The LNG plant will be completed and produce at full design rate six years after the project initiation date.

44.4

Future Project Development

The feasibility studies completed in 1976 indicate substantially higher costs for the Pars LNG Project over those contemplated at the time the project was conceived. On the other hand, the prices of alternative fuels in Europe and the United States have not increased correspondingly. Under these circumstances, the project does not appear to be economically feasible at the present time with the present structure. Numerous other alternatives are presently being explored with the expectation that the project will materialize at some future date.

Press reports indicate that the Iranian government is presently considering several major internal gas consumption programs including petrochemicals development and gas reinjection into crude oil fields with declining production. These alternative uses for natural gas, coupled with Iran's long shipping distance from LNG markets in the U.S., Europe, and Japan, will ultimately influence the timing and extent of Iran's commitments to export LNG.

Docket No. CP75—

44.7

EXHIBIT H

TOTAL GAS SUPPLY DATA

Application of
EL PASO ALASKA COMPANY

EL PASO ALASKA COMPANY

Total Gas Supply

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<u>Description</u>	<u>Tab Number</u>
Discussion of the North Slope Prudhoe Bay Field and Potential Alaska Petroleum Resources	
Statistical Data	1
Reservoir and Volumetric Data	1
Summary of In-Place Hydrocarbons and 25 Year Recovery	1
Forecast of Oil and Gas Production	1
Maps, Cross Sections, Geologic Section	2

EL PASO ALASKA COMPANY

Total Gas Supply

Discussion of the North Slope Prudhoe Bay Field
and Potential Alaska Petroleum Resources

The discovery of Prudhoe Bay Field has signaled the prospects for a new and sustained era of petroleum exploration and development in Alaska. As the giant of all American fields it has fulfilled the prophecy of vast petroleum resources in a land that encompasses an area larger than the combined areas of the four most prolific producing states in the lower 48 states.

North America's largest field, Prudhoe Bay, was discovered in 1968 above the Arctic Circle on Alaska's remote and barren North Slope. It lies approximately 200 miles east of Point Barrow and 640 miles north of Anchorage. This hydrocarbon giant, covering over 200 square miles, is estimated to contain, in-place, 13.4 trillion cubic feet of solution gas, 21.7 trillion cubic feet of associated gas and 19.4 billion barrels of oil and condensate as shown in Schedule No. 3. It has opened a vast new petroleum frontier for a nation with decreasing production and increasing requirements.

The primary reservoir in the Prudhoe Bay Field is the Sadlerochit Formation of Triassic Age. The Sadlerochit Reservoir is approximately 600 feet thick except in the east part where it thins to approximately 300 feet. Generally, the formation can lithologically be divided into three depositional zones; an upper zone of primarily fine to medium grained sandstone with occasional thin layers of shale, siltstone or conglomerate, a middle zone of primarily conglomerate and coarse grained sand with high concentrations of pyrite and siderite, and a lower sandstone zone that becomes increasingly silty and shaly toward its base.

Accumulation of oil and gas is controlled by a westward plunging faulted anticline truncated on the northeast flank. The limits of production are defined on the north by a major down to the north fault; on the west by an oil-water contact and probable faulting; on the south by an oil-water contact; and on the east by truncation. The gas-oil and oil-water contacts vary slightly across the field; however, they generally lie at approximately -8578 feet and -9008 feet, respectively. Minor vertical faults, with 50 feet to 200 feet of throw, occur within the field but are believed to be non-sealing. Due to complex structure and poorer reservoir quality on the west side, the field was divided into the main area and the west area. The main area comprises approximately 98 percent of the oil and gas reserves.

EL PASO ALASKA COMPANY

Total Gas Supply

Discussion of the North Slope Prudhoe Bay Field
and Potential Alaska Petroleum Resources
(Continued)

Reservoir and volumetric data, Schedule No. 2, for the Prudhoe Bay Field were obtained by analyzing and making comprehensive studies of all released data, published material and contact with industry sources. Production for the main area was scheduled utilizing a three-dimensional computer model and is shown in Schedule No. 4. The production forecast shows a relatively gradual build-up of gas production to approximately 4 billion cubic feet per day in the tenth year of operation after the start of oil production. This level of gas production is maintained for a period of 14 years with declining volumes thereafter. For the twenty-five year period shown, 29.2 trillion cubic feet of gas and 6.7 billion barrels of oil are estimated to be recovered.

The reservoir data and scheduled production contained in this application are for the Prudhoe Bay Sadlerochit Reservoir only. Hydrocarbon potential has been established in the shallower Kuparuk River and deeper Lisburne Formations; however, future development will be necessary to delineate the extent of these reservoirs and establish their producing capabilities.

Alaska has many thick sedimentary basins located throughout its boundaries. The Trans-Alaska Gas Project would bring into market's reach gas reserves expected to be associated with these highly potential sedimentary provinces. These huge and thick basinal areas are located in very favorable geologic settings and contain hundreds of thousands of cubic miles of stratigraphy representing Paleozoic to recent sediments. Surface studies and very limited drilling have found the presence of abundant organic material, surface hydrocarbon seeps, oil shales and subsurface shows. All the essentials necessary for petroliferous provinces are present except adequate drilling and testing. Indications are highly favorable that many of the potential sedimentary provinces will primarily develop as gas provinces.

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Docket No. CP75-____
Exhibit H
Schedule 1
Page 1 of 1

EL PASO ALASKA COMPANY

Total Gas Supply

Statistical Data
Prudhoe Bay (Sadlerochit) Field
North Slope, Alaska

<u>Line No.</u>	(a)	(b)
1	Reservoir	Sadlerochit
2	Type Gas	Dissolved and Associated
3	Reserve Estimation Method	Volumetric
4	Average Depth, Feet	8500
5	Date of Discovery	1968
6	Ultimate Wells	400
7	Wells at January 1, 1974	88

EL PASO ALASKA COMPANY

Total Gas Supply

Reservoir and Volumetric Data
Prudhoe Bay (Sadlerochit) Field

Line No.	(a)	Main Area		West Area	
		Oil Zone	Gas Zone	Oil Zone	Gas Zone
		(b)	(c)	(d)	(e)
RESERVOIR DATA					
1.	Average Porosity, Percent	21	23	17	20
2.	Interstitial Water Saturation, Percent	30	20	57	50
3.	Reservoir Temperature, °F.	200	192	200	199
4.	Initial Reservoir Pressure, psia	4,409	4,307	4,431	4,325
5.	Specific Gravity of Gas (Air = 1.0)		0.840		0.840
6.	Deviation Factor (Z) Initial Conditions		0.878		0.878
7.	Initial Solution GOR, Cubic Ft./Bbl.	720		650	
8.	Original Reservoir Volume Factor	1.40		1.38	
9.	Original Oil in Place, Bbls./Acre Foot	814.6		410.9	
10.	Original Gas in Place, Mcf/Acre Foot		2,128.8		1,149.5
11.	Original Condensate in Place, Bbls./MMcf		34.4		34.4
VOLUMETRIC DATA					
12.	Acres	116,810	59,260	16,060	4,140
13.	Acre Feet	22,334,300	10,161,300	1,302,500	108,800

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44.12

EL PASO ALASKA COMPANY

Total Gas Supply

Summary of In Place Oil, Condensate and
Gas and Recovery for 25 Year Period
Prudhoe Bay (Sadlerochit) Field

Line No.	(a)	Oil and Condensate Volumes in Billion Barrels					
		In Place			Recovery for 25 Year Period		
		Main Area	West Area	Total	Main Area	West Area	Total
		(b)	(c)	(d)	(e)	(f)	(g)
1.	Oil	18.2	0.5	18.7	6.6	0.1	6.7
2.	Condensate	0.7	Neg.	0.7	---	---	1/
3.	Total	18.9	0.5	19.4	6.6	0.1	6.7

Gas Volumes in Trillion Cubic Feet at 14.73 psia and 60° F.					
		In Place			Recovery for 25 Year Period
		Solution	Associated	Total	Total
4.	Main Area	13.1	21.6	34.7	29.1
5.	West Area	0.3	0.1	0.4	0.1
6.	Total	13.4	21.7	35.1	29.2

1/ Not Scheduled.

44.14

Docket No. CP75-

Exhibit H

Schedule 4

Page 1 of 1

EL PASO ALASKA COMPANYTotal Gas Supply

Forecast of Oil and Gas Production
 Prudhoe Bay (Sadlerochit) Field
 North Slope, Alaska

Volumes at 14.73 psia and 60° F.

Year (a)	Oil Production, MBbls/D			Wellhead Gas Production, MMcf/D			Gas Available to Pipeline, MMcf/D (h)
	Main Area (b)	West Area (c)	Total (d)	Main Area (e)	West Area (f)	Total (g)	
1	1,191	--	1,191	828	--	828	1/
2	1,190	--	1,190	800	--	800	1/
3	1,190	--	1,190	801	--	801	1/
4	1,501	--	1,501	2,061	--	2,061	1,649
5	1,499	--	1,499	2,195	--	2,195	1,756
6	1,497	--	1,497	2,497	--	2,497	1,998
7	1,490	--	1,490	3,187	--	3,187	2,550
8	1,377	15	1,392	3,805	10	3,815	3,052
9	1,214	15	1,229	3,821	10	3,831	3,065
10	1,021	15	1,036	4,091	10	4,101	3,281
11	829	15	844	3,977	11	3,988	3,190
12	677	15	692	4,026	11	4,037	3,250
13	567	15	582	4,084	11	4,095	3,276
14	478	15	493	3,912	11	3,923	3,158
15	409	15	424	3,980	12	3,992	3,194
16	342	15	357	3,974	12	3,986	3,189
17	274	15	289	3,987	12	3,999	3,199
18	232	15	247	4,020	13	4,033	3,226
19	204	15	219	3,971	13	3,984	3,187
20	185	15	200	3,999	14	4,013	3,210
21	166	15	181	3,962	14	3,976	3,181
22	163	15	178	3,927	15	3,942	3,154
23	149	14	163	4,029	15	4,044	3,235
24	117	12	129	3,294	19	3,313	2,650
25	89	11	100	2,606	20	2,626	2,101

Production for 25

Year Period:

Oil, Billion

Bbls. 6.6 0.1 6.7

Gas, Trillion

Cu. Ft. 29.9 0.1 30.0 25.3

1/ Gas injected.

AGO 000850

UNITED STATES OF AMERICA

44.15

Before the
FEDERAL POWER COMMISSION

El Paso Alaska Company, *et al.*)

Docket Nos. CP75-96, *et al.*
(Phase I)

Prepared Direct Testimony

of

A. M. Derrick

- 1 Q. Please state your name and business address.
- 2 A. A. M. Derrick, Post Office Box 1492, El Paso, Texas 79978.
- 3 Q. By whom are you employed and in what capacity?
- 4 A. I am employed by El Paso Natural Gas Company in the capacity of Vice
5 President.
- 6 Q. What is your educational background?
- 7 A. I have a Bachelor of Science degree in petroleum engineering from
8 the University of Texas and a Master of Science degree in petroleum
9 engineering from the University of Houston.
- 10 Q. Are you a member of any professional organizations?
- 11 A. Yes, I am a member of the Society of Petroleum Engineers of the
12 American Institute of Mining and Metallurgical Engineers, the Society
13 of Petroleum Evaluation Engineers, and the American Association of
14 Petroleum Geologists. I am a registered Professional Engineer in the
15 State of Texas.
- 16 Q. What was your professional experience prior to joining El Paso Natural?
- 17 A. After serving as an engineering officer in the United States Navy dur-
18 ing World War II, I joined Stanolind Oil and Gas Company, now Amoco
19 Production Company, in June, 1947. I first performed various field
20 and office duties in Stanolind's production department; later I was
21 assigned to reservoir engineering work. In the latter capacity, I
22 worked in Stanolind's field offices in Pampa and Wink, Texas, and in
23 its general office in Tulsa, Oklahoma. Shortly prior to leaving
24 Stanolind to join El Paso Natural, I was in charge of reservoir en-
25 gineering in Stanolind's West Texas district office in Midland.

1 Q. What has been the nature of your professional experience with El Paso
2 Natural?

3 A. I joined El Paso Natural in 1953 as a Senior Petroleum Engineer and
4 became Manager of the Company's Reservoir Engineering Department in
5 1960. I remained in that capacity until 1966, at which time I was
6 elected an Assistant Vice President. I was elected Vice President
7 in May, 1972.

8 Q. What is the nature of your present responsibilities?

9 A. I am responsible for and direct the activities of various departments
10 in the Company's gas supply and gas marketing functions.

11 Q. Mr. Derrick, will you briefly summarize each of the Company functions
12 that you are responsible for?

13 A. The gas supply function is administered through the activities of
14 the Gas Purchases Department, Reservoir Engineering Department and
15 Proration Department, each having the responsibilities to continually
16 study and evaluate the gas supplies available to El Paso Natural un-
17 der both gas purchase agreements and company-owned leaseholds. Such
18 responsibilities include the negotiation of gas purchase agreements,
19 administration of the state proration rules and regulations includ-
20 ing the day-to-day determinations of gas supply availability in
21 meeting the Company's daily operations gas delivery requirements
22 and the determination of future availability and uses.

23 The gas marketing function is administered through the Gas Marketing
24 and Customer Relations Department and the State Governmental Affairs
25 Department. The Gas Marketing Department's primary responsibility
26 is to continually monitor and evaluate El Paso Natural's system-wide
27 gas requirements of its customers. Such responsibility also includes
28 the day-to-day coordination with the operating divisions of the Com-
29 pany in rendering such services. These responsibilities further in-
30 clude the forecasting of future requirements of El Paso Natural's
31 customers which is used by all departments in the Company in pro-
32 jecting the future actions affecting their areas of responsibility.
33 Additionally, customer relations and state governmental affairs are
34 conducted as an integral part of the overall gas marketing function.

35 Q. Mr. Derrick, what is the purpose of your testimony in these proceed-
36 ings?

37 A. I am presenting testimony and exhibits respecting the projected
38 availability of gas from the Prudhoe Bay Field of Alaska. Gas to be
39 produced from that field is the gas proposed in these proceedings
40 to be transported by El Paso Alaska to markets in Alaska and to the
41 Lower 48 States. I am also presenting testimony and exhibits re-
42 specting the projected availability of gas, for the years 1982 through
43 1985, from the sources presently dedicated to El Paso Natural's

existing pipeline system. Such projections were utilized by Mr. A. H. Carameros in preparing the evidentiary showing that he will make in these proceedings respecting El Paso Natural's role in transporting the Alaskan gas in the Lower 48 States.

Q. What exhibits are you sponsoring?

A. I am sponsoring Exhibit EP- (AMD-1) and Exhibit EP- (AMD-2).

Q. Would you please describe Exhibit EP- (AMD-1)?

A. Exhibit EP- (AMD-1) is comprised of five schedules and maps and diagrams designated Figures 1 through 10 included under Tab 2 of Exhibit H to El Paso Alaska's original application at Docket No. CP75-96. Schedule 1 contains a general discussion of the North Slope Prudhoe Bay Field and Potential Alaska Petroleum Resources. Schedule 2 sets forth various Statistical Data for the Prudhoe Bay Field and Schedule 3 reflects Reservoir and Volumetric Data for the Prudhoe Bay Field. Schedule 4 contains a Summary of In-Place Hydrocarbons and 28-year Recovery from the Prudhoe Bay Field and Schedule 5 contains a Forecast of Oil and Gas Production. The information and data contained in the schedules form the basis for my proposed direct testimony as it relates to Alaskan reserves.

Q. Would you please describe Exhibit EP- (AMD-2)?

A. Exhibit EP- (AMD-2) consists of the three page schedule included under the tab designated "Supply Data" in Exhibit Z-3 to Volume I of El Paso Alaska's First Supplement to Docket No. CP75-96, filed March 3, 1975. The data reflected on such schedule, as I shall describe in my testimony, has been utilized in preparing the illustrative case studies respecting the transportation concept for the Lower 48 States.

Q. Mr. Derrick, would you please describe the Prudhoe Bay Field as presented in Exhibit EP- (AMD-1)?

A. The Prudhoe Bay Field, largest field on the North American continent, is located on Alaska's North Slope near the Beaufort Sea. Figure 1 of Exhibit EP- (AMD-1) is an index map of the State of Alaska depicting the location of Prudhoe Bay Field, prominent geographical features and the proposed Trans-Alaska gas pipeline route. As illustrated in red, the proposed gas line would run from the Beaufort sea coast south to a terminus north of the town of Cordova on Prince William Sound. The Prudhoe Bay Field lies, as shown in Figure 1 of Exhibit EP- (AMD-1), approximately 200 miles east of Point Barrow and approximately 640 miles north of the City of Anchorage, Alaska.

Q. When was the Prudhoe Bay Field discovered?

- 1 A. The field was discovered in 1968 when Atlantic Richfield drilled
2 and completed the No. 1 Prudhoe Bay State well. 44.18
- 3 Q. Mr. Derrick, please describe briefly the general geology of the
4 Prudhoe Bay Field.
- 5 A. The Prudhoe Bay Field is a westward plunging faulted anticline
6 truncated on the northeast flank. Minor inferred type faults with
7 approximately 50 to 200 feet of throw have been interpreted in the
8 field.
- 9 Q. What is the formation in the Prudhoe Bay Field that is reflected in
10 Exhibit EP- (AMD-1)?
- 11 A. The Prudhoe Bay Field data is limited to the sandstone unit of the
12 Ivishak Member of the Sadlerochit Formation. In my testimony and
13 exhibits it is referred to, for the sake of simplicity, as the
14 Sadlerochit Formation. Figure 6 of Exhibit EP- (AMD-1) is a
15 generalized stratigraphic column of Prudhoe Bay Field. The strati-
16 graphy represented is of a generalized nature and not definable at
17 any specific location. As noted, the scale on the right side of
18 Figure 6 represents average cumulative thickness and not drilled
19 depth. Hydrocarbon potential has been established for several other
20 formations; however, future exploration will be necessary to define
21 the areal extent and producing capabilities of these reservoirs.
- 22 Q. Mr. Derrick, will you briefly describe the lithology of the Sad-
23 lerochit Reservoir.
- 24 A. The Sadlerochit, varying in gross thickness from approximately 300
25 feet to 600 feet, lithologically consists of fine to coarse grained
26 sandstones, conglomerates, siltstones and occasional thin layers
27 of shale.
- 28 Q. In your evaluation of the Prudhoe Bay Field did you consider all wells
29 completed to date to be in one reservoir?
- 30 A. No. Due to the complexity of the structure and poorer reservoir
31 quality on the western end of the field, the reservoir was divided
32 into the large Main Area and the small West Area as shown in Figure
33 2 of Exhibit EP- (AMD-1). Separate reservoir data is given for
34 each area in Schedule 3 of Exhibit EP- (AMD-1). On Figure 2
35 the subsurface Sadlerochit Reservoir is projected on the surficial
36 map. Shown are the location of wells, the areas of computed reserve,
37 as defined by structure and stratigraphy, and the areal limits of
38 the Prudhoe Oil Pool as defined by the Alaska Oil and Gas Conserva-
39 tion Committee. The illustrative colors and symbols are explained
40 in the legend. That Committee's oil pool limits encompass a larger
41 area than El Paso Natural's computed reserve limit because the Com-
42 mittee includes the Shublik formation and Sag River sandstone within

- 1 its pool boundaries, whereas limits of computed reserves shown on
2 Figure 2 of Exhibit EP- (AMD-1) represent only the Sadlerochit
3 Formation.
- 4 Q. What is the basic fluid makeup of the Prudhoe Bay Field Reservoir?
- 5 A. The fluid columns in both the Main Area and West Area are the classi-
6 cal water aquifer overlain by trapped liquid hydrocarbons capped with
7 an associated gas column. The three generalized cross sections,
8 Figures 3, 4 and 5 of Exhibit EP- (AMD-1) represent pictorial
9 vertical views east-west, north-south and northwest-southeast across
10 the Prudhoe Bay-Sadlerochit Fields. Each figure has a cross section
11 index map for location purposes, a subsea vertical scale for depth
12 reference and a horizontal scale at the bottom. Graphically the
13 fluid zones are shown in different colors. Faults and fluid contacts
14 are appropriately labeled.
- 15 Q. What method was employed in estimating the reserves for the Prudhoe
16 Bay Field?
- 17 A. The volumetric method.
- 18 Q. Did you also employ the performance method?
- 19 A. No. Due to the absence of transportation facilities from the Prudhoe
20 Bay Field, no wells have been produced except for very minor produc-
21 tion utilized in field operations; therefore, a performance study was
22 precluded.
- 23 Q. Please describe how the areal limits of the Prudhoe Bay Field were
24 established.
- 25 A. A subsurface structural geologic map was interpreted on the top of
26 the Sadlerochit Formation utilizing tops correlated from available
27 well logs. The gas/oil contact, where present, was established in
28 each well by overlaying the Sonic or Formation Density Log with the
29 Sidewell Neutron Log. Where present, the oil/water contact was
30 established in each well from drill stem tests and/or Resistivity
31 Logs. Although the fluid contacts varied slightly across the field
32 the gas/oil contact was generally found at -8578' and the oil/water
33 at -9008'. These limiting features were depicted on the structure
34 map. A geologic study resulted in the interpreted minor faults and
35 the truncated zone to the northeast thus further delineating the
36 areal limits of the Sadlerochit Reservoir. The major seismic de-
37 lineated fault formed the northern boundary.
- 38 Q. Now, after establishing the areal extent of the field, how was the
39 net effective pay determined for the Sadlerochit Formation?
- 40 A. A comparison was made between available logs and limited core descrip-
41 tion in the well histories. The appropriate net effective gas pay
42 and net effective oil pay were determined from the Formation Density

44.20

Log for each well. It should be noted that a majority of the wells in the Prudhoe Bay Field were directionally drilled, therefore, in these wells measured pay thicknesses were adjusted to true vertical net pay thickness.

Q. Mr. Derrick, how were the net pays utilized?

A. The net pays were utilized to construct isopach maps of the net gas sand and the net oil sand within the reservoir limits established by the structure map. The isopach maps were then planimetered and the reservoir volumes, in acre feet, were calculated for the gas cap and the oil zone.

Q. Mr. Derrick, how were the porosities and water saturations determined?

A. The porosities for the gas cap and for the oil zone were determined from the Formation Density Log. The average weighted bulk density was calculated for the gas interval and oil interval in each well. Then utilizing Schlumberger's empirical chart, the respective porosities for each well were obtained. The gas and oil porosities shown represent weighted averages. The water saturations are estimated based on limited log analysis, the Iso-water saturation maps from the State of Alaska's In Place Volumetric Determination of Reservoir Fluids-Sadlerochit Formation-Prudhoe Bay Field Report of June 1974 and discussions with an operator.

Q. How were the applicable reservoir temperature and pressure calculated?

A. From data presented in the Prudhoe Bay Field Rules Hearing held February 9, 1971, before the Alaska Oil and Gas Conservation Committee, and contained in Order No. 98 and drill stem test information, the respective gradients were calculated for temperature and pressure.

Q. How were the initial gas/oil ratio and reservoir volume factor obtained?

A. Reservoir fluid analysis data were presented in the State of Alaska's Prudhoe Bay Field Rules Hearing, and reflected in Order No. 98. From these data, the gas/oil ratio and original reservoir volume factor for various depths were determined.

Q. Mr. Derrick, how were the specific gas gravity and deviation factor calculated?

A. The specific gas gravity and deviation factor were calculated utilizing data that were obtained from State of Alaska records, well histories and logs.

Q. From what source did you obtain the condensate-gas ratio?

- 1 A. The condensate-gas ratio was obtained from the State of Alaska's In
2 Place Volumetric Determination of Reservoir Fluids-Sadlerochit For-
3 mation-Prudhoe Bay Field report published in June, 1974.
- 4 Q. Please describe the methods and techniques used to prepare the pipe-
5 line gas supply availability forecast shown on Schedule 5 of Exhibit
6 EP- (AMD-1)?
- 7 A. The scheduling in the main area was performed using a three-dimen-
8 sional, three phase reservoir simulation model. The reservoir was
9 divided into one square mile blocks each having six 90' layers.
10 The productive capability of each block was estimated based on num-
11 ber of wells and thickness of net productive interval. Gas well
12 spacing was assumed to be 320 acres and ultimate oil well spacing
13 was 160 acres. Edge locations were developed as realistically as
14 possible with one, two, or three wells depending primarily on net
15 oil pay and proximity to the gas/oil or water/oil contacts. A layer
16 by layer, block by block fluid saturation, pressure, and productivity
17 was computed in order to maximize oil production and schedule gas
18 production consistent with the capacity of the facilities.
- 19 Q. How was the productivity of a particular block determined?
- 20 A. The net pay for each block was determined from an isopach map. It
21 was assumed that the middle of the oil column would be perforated
22 to determine the producing interval. The average productivity index
23 was determined and used with the number of wells assigned to a block
24 to calculate the total productivity.
- 25 Q. What variables were used to describe each block?
- 26 A. Each block was described with porosity, horizontal and vertical
27 permeability, water saturation and, of course, depth. Additionally,
28 gas/oil contacts and water/oil contacts, relative permeability data,
29 capillary pressure data and fluid property curves were basic to the
30 simulation.
- 31 Q. How did you handle the apparent change in oil properties with depth?
- 32 A. We used three separate tables of fluid properties to describe the
33 oil. The program then calculates by interpolation the PVT properties
34 throughout the reservoir.
- 35 Q. How were the porosities and permeabilities determined for the model?
- 36 A. The porosity was determined from iso-porosity maps for the oil zone
37 and for the gas cap. The average permeability for the gas cap and
38 oil zone was determined from records obtained from the Alaska Oil
39 and Gas Conservation Committee.
- 40 Q. How many oil wells are included in your simulation model?

1 A. We assumed that 397 oil wells would be drilled in 135 productive 44.22
2 blocks.

3 Q. At what rates did you schedule oil and gas production?

4 A. As shown on Schedule 5 of Exhibit EP- (AMD-1), oil production
5 was scheduled at approximately 1.2 million barrels of oil per day
6 in the first three years, increasing to 1.5 million barrels per day
7 the fourth year, and thereafter, for as long as the reservoir was
8 capable of producing at this rate. During the first three years
9 of oil production the gas production amounted to approximately 800
10 MMcf/d.

11 With respect to field gas production it was assumed that during the
12 fourth year 1566 MMcf/d would be produced. The production rate
13 would increase to approximately 4100 MMcf/d in the sixth year which,
14 after deducting for plant shrinkage, will utilize the full capacity
15 of the proposed Trans-Alaska Gas Project facilities.

16 Q. What disposition was made with the gas produced during the first
17 three years of oil production?

18 A. All of the residue gas resulting from the oil production during the
19 first three years was injected into the gas cap.

20 Q. In scheduling production from this field, was water produced, and if
21 so, what disposition was made with the produced water?

22 A. Initially, there was very little water production, however, over the
23 scheduled period water production increased. The produced water was
24 injected into the reservoir in down-dip wells.

25 Q. During the scheduling of production from this reservoir did you mon-
26 itor the expansion of the gas cap?

27 A. Yes, during the production period the saturations in the grid blocks
28 were monitored and indicated increasing gas saturation in the oil
29 blocks and expansion of the gas cap.

30 Q. What is shown in Figures 7, 8 and 9 of Exhibit EP- (AMD-1)?

31 A. Figures 7, 8 and 9 are related to oil and gas producing areas in the
32 State of Alaska. Figure 7, a map of the State of Alaska, shows the
33 location of the two presently producing areas--the Arctic North Slope
34 Area located in the northern part of Alaska and the Cook Inlet Basin
35 Area located in southern Alaska. Figure 8 and Figure 9 are expanded
36 scale maps of the Arctic North Slope area and Cook Inlet Basin, re-
37 spectively, that were outlined on Figure 7. Oil fields, in yellow,
38 and gas fields in red, as designated by the State of Alaska are
39 shown on Figures 8 and 9. Additionally, the North Slope Area, Fig-
40 ure 8, outlines the Naval Petroleum Reserve No. 4 and the Arctic
41 National Wildlife Reserve.

1 Q. Mr. Derrick, would you please explain Figure 10, the last figure in
2 Exhibit EP- (AMD-1)?

3 A. Figure 10 is a map of Alaska showing the provinces or basins desig-
4 nated by the State to have oil and gas potential but relatively un-
5 explored. The potential of each area is based on very limited
6 drilling, surface geology and/or geophysical data. Various graphic
7 patterns delineate each appropriately labeled potential Basin or
8 Province. Superimposed on Figure 10 is the proposed Trans-Alaska
9 Gas Pipeline route.

10 Q. Mr. Derrick, would you please summarize the results of your study of
11 the Prudhoe Bay Field?

12 A. The Prudhoe Bay Field, covering over 200 square miles, is estimated
13 to contain, in-place, 13.4 trillion cubic feet of solution gas, 21.7
14 trillion cubic feet of associated gas and 19.4 billion barrels of
15 oil and condensate as shown in Schedule 4. The production forecast
16 shows a build-up of the annual average day gas production to the
17 pipeline average day design capacity of 3.3 billion cubic feet per
18 day in the sixth year of operation after the start of oil production.
19 This level of gas production is maintained for a period of 16 years
20 with declining volumes thereafter. For the twenty-eight year period
21 shown, 30.4 trillion cubic feet of gas and 6.8 billion barrels of oil
22 are estimated to be recovered.

23 The tapping of the Prudhoe Bay Field has opened a vast new petroleum
24 frontier for the nation at a time when it is experiencing decreasing
25 production and increasing energy requirements.

26 Q. Mr. Derrick would you please explain Exhibit EP- (AMD-2)?

27 A. Exhibit EP- (AMD-2) is a forecast of gas supply available to
28 El Paso Natural from presently dedicated sources for the years 1982
29 through 1985. Such data is contained under the tab denominated
30 "Supply Data" in Exhibit Z-3 of Volume I of El Paso Alaska's First
31 Supplement to Docket No. CP75-96.

32 El Paso Natural derives its gas supply from three major gas producing
33 areas, the Anadarko Basin area of Texas and Oklahoma, the Permian
34 Basin area of west Texas and southeast New Mexico, which includes the
35 Delaware-Val Verde Basins, and the San Juan Basin area of northwest
36 New Mexico, Colorado, Arizona and Utah. This gas supply forecast is
37 based on gas reserves shown in El Paso Natural's 1973 Form 15 report
38 to the Federal Power Commission, updated to reflect new supply dedica-
39 tion through July of 1974. The volumes indicated represent the gross
40 annual average day and gross year end monthly average day volume of
41 gas estimated to be available from each source of supply for each of
42 the years 1982 through 1985. Such supply availabilities after ap-
43 propriate reductions for company gas use, shrinkage and losses, were
44 used in the preparation of the market data reflected in Exhibit
45 EP- (MKO'T-1) through EP- (MKO'T-7) and were used in the illus-
46 trative Case studies presented by Mr. A. H. Carameros in these proceed-
47 ings.

1 Q. Mr. Derrick, will you please explain the procedures which are used
2 to reduce the gross supply availability projections to obtain net
3 volumes of gas available for sale?

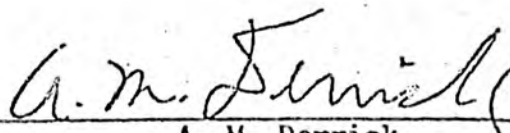
4 A. At my direction, and principally in coordination with the Gas Supply
5 and Marketing Departments, each individual source of supply is ad-
6 justed to exclude those volumes of gas used for field fuel, shrink-
7 age and losses, which are unavailable for sales, in order to arrive
8 at the total system supply available for mainline fuel use and for
9 sales. This adjusted supply is further reduced by the estimated
10 mainline fuel requirements determined by the Engineering Department.
11 As explained in detail by El Paso Alaska's witness, Mr. M. K. O'Toole,
12 the Gas Marketing Department allocates the remaining total volume
13 to determine the gas available for sale at each delivery point on
14 El Paso Natural's system. The allocated gas sales volumes by de-
15 livery point are then furnished to the Engineering Department for
16 use in their design studies. Such net sales volumes were used by
17 El Paso Alaska's witness, Mr. A. H. Carameros, in preparing the il-
18 lustrative design operation of El Paso Natural's pipeline system
19 when transporting certain volumes of Alaskan gas to other existing
20 pipelines located in the Anadarko Basin and Gulf Coast areas.

21 Q. Mr. Derrick, does this conclude your prepared direct testimony?

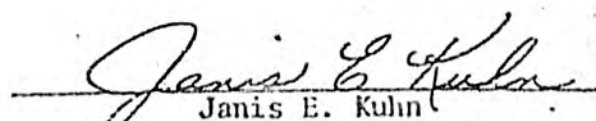
22 A. Yes.

STATE OF TEXAS)
)
COUNTY OF EL PASO)

A. M. DERRICK, being first duly sworn, on oath, says that he is the A. M. Derrick identified in the foregoing prepared direct testimony; that he caused to be prepared such testimony; that the answers appearing therein are true to the best of his knowledge and belief; and that if asked the questions appearing therein, his answers thereto would, under oath, be the same.


A. M. Derrick

SUBSCRIBED AND SWORN TO before me, the undersigned authority, on this 22nd day of March, 1975.


Janis E. Kuhn
Notary Public in and for
El Paso County, Texas
My Commission Expires June 1, 1975