

ALASKA LEGISLATURE SPECIAL COMMITTEE / SUBJECT FILES 8672
519 SCOM115: HOUSE/SEN. SP. COMM. SALE ROYALTY GAS 1977-78 519

1 been asked by a major pipeline and some liquids sellers.
2 to evaluate the industrial market for natural gas in the
3 future in order to help them make investment decisions,
4 in the case of one company in liquified natural gas and
5 goal gasefication and another company in import problems.

6 So we have gone around, I personally have inter-
7 viewed plant engineers, plant managers and energy buyers
8 of large and small companies to ask them what price will
9 they pay for natural gas. The price of natural gas
10 will be set by the next buyer who will buy from the
11 seller, the distribution company. If the seller, such
12 as Boston Gas, is really selling to homes, the person,
13 you and I, the home owner, will pay a higher price for
14 natural gas to be burned in our furnace, to cook with,
15 and heat hot water than will an industrial customer.
16 However, if the quantity of natural gas delivered by a
17 distributor is large enough so that he is delivering
18 gas to industrial consumers, the price that that person
19 can pay, that the distributor can pay, will be set by the
20 next industrial customer that he can sell gas to.

21 In our interviews with industrial consumers of
22 natural gas who were sometimes burning gas under their
23 boilers but more often using the gas in their processes --
24 by process use of gas I mean the melting of glass, the
25 keeping of glass warm as it moves into bottle making

1 machines or it moves from the annealing furnaces. The
2 use of gas in annealing furnaces and metal working,
3 the use of gas to heat metal for forging operations,
4 the use of gas to dry the paint on automobiles, these
5 are all processed high priority uses of gas.

6 In our review of the volumes of gas used in
7 various locations and in the prices that these industrial
8 consumers will pay for gas, we came to the very, very
9 clear conclusion that there is more than enough gas in
10 the United States, perhaps not well distributed, as
11 we've seen this winter -- but there is more than enough
12 gas in the United States to meet the needs of industrial
13 consumers who are willing to pay from forty to sixty
14 percent more per btu than they would have to pay for
15 number two oil.

16 Also it is very clear that natural gas is a very
17 easy fuel to handle, it's very clean burning fuel, it
18 has flame characteristics which are easier to control
19 in which one can use either fewer supervisory people or
20 less skilled supervisory people to control the process
21 such that industrial consumers will pay a premium for
22 natural gas, five or ten percent, maybe fifteen percent
23 in some cases, for process uses of natural gas.

24 We thus have concluded that, at least in the
25 northeast quadrant of the U.S., which I might point out is

1 relatively short at the moment, that in the long run
2 industrial consumers, many of whom have already converted
3 to dual fuel firing of many of their pieces of equipment,
4 will pay (to pick a number) ten percent more for natural
5 gas than they will pay for number two oil. Consequently,
6 when we, in our report, set prices that we believe under
7 free market, under net back calculations, will be received
8 by Alaska at the wellhead, what we asked is in 1980 and
9 1985 what will the price of number two oil be to the
10 industrial consumer.

11 We've estimated those prices essentially by taking
12 Arabian like oil, bringing it over to the United States
13 with a transportation charge, moving it either through
14 pipelines, or certainly through import terminals, moving
15 it to a refinery close to the consumer, putting refinery
16 margin on the number two oil and coming up with a price
17 per million btu of number two oil; adding ten percent,
18 and saying, "This is the competitive price for natural
19 gas at this industrial consumer," and then netting back,
20 subtracting the transportation costs to that industrial
21 consumer back to the Alaskan wellhead to come up with
22 some of our prices.

23 There have been witnesses before you who have
24 argued that such a calculation that I've just described
25 to you is inappropriate for determining the price of

1 natural gas, and they have argued that the so-called
2 market competition incremental value pricing that I have
3 just described to you doesn't apply because the Federal
4 Power Commission and the State regulatory commissions
5 allow new higher priced natural gas to be (so-called)
6 rolled in or cost averaged with the lower priced, lower
7 contractual, lower regulated price gas they receive such
8 that even if the price of Alaskan gas delivered to a
9 distribution company were to be higher than would be
10 competitive before sold separately, because the higher
11 price Alaskan gas (this is the theory) can be offset
12 by lower controlled price gas from other parts of the
13 Lower 48 States, that the distribution company could
14 pay more than competitive prices for Alaskan gas, and
15 still be able to sell its gas.

16 I understand the theory behind such an assertion,
17 and the theory is a sound theory. And to be sure, today,
18 in some fuels markets, propane specifically, where today
19 prices of propane are controlled for some companies far
20 below market values, those companies will go out and
21 buy high priced propane, foreign propane, mix it in
22 with their -- at least on their accounting bases, mix
23 it in with their cheap domestic propane and they will
24 be able to sell; they can pay a higher price for foreign
25 propane.

1 But these purchases are a purchase of a ship-
2 load, and they'll sell the high priced propane within
3 three months, purchase which may exist over a quarter,
4 the next calendar three months. The contract we're
5 talking about is a contract to purchasers of natural gas
6 which will begin close to 1985 and will run for twenty
7 years. So we really must look at the price of natural
8 gas between year 1985 and year 2005 in order to estimate
9 the applicability of so-called rolled in pricing to the
10 distributors to allow Alaska to receive a very high price,
11 a non-competitive, non-market based value price for its
12 gas.

13 You should be reminded that other sources of
14 natural gas, the distribution companies in the Lower 48,
15 are such projects as coal gasification, which is very
16 high priced. A number of transmission companies are now
17 importing liquefied natural gas. Some of the price
18 escalation clauses in those importation contracts for
19 liquefied natural gas, I believe, will generate some
20 fairly high prices for that liquefied natural gas. And
21 so on to rolled in pricing, the rolled in pricing of
22 Alaskan royalty gas will not be based solely upon Lower 48
23 conventional production of natural gas, but will be based
24 upon other alternate sources of natural gas.

25 I would submit that the rolled in pricing that

1 you are likely to receive will not be substantially higher
2 than a competitive net back price computed, as we have
3 done so in this report. Further, when I was assisting
4 in the negotiations of the pricing clauses a long-term
5 LNG import project, the clear position of at least the
6 customers was that they would not pay a higher price
7 for that LNG than would compete with two oil. They
8 were unwilling to take the risk that either (a) rolled
9 in pricing could not be applied to them or (b) that there
10 would be sufficient amount of cheap conventionally pro-
11 duced low price controlled, low contract price controlled
12 natural gas to offset higher than competitive price.

13 Thank you, I have finished. It turned out to
14 be a very long statement.

15 SENATOR RADER: Representative Gruening.

16 REP. GRUENING: I have one question I would like to get
17 answered. Is it your intention to start questioning
18 now or after lunch?

19 SENATOR RADER: It is ten after 12:00. I assume that the
20 committee would like to break for lunch and come back
21 at 1:30. That seems to be the consensus; we will recess
22 until 1:30.

23 (Whereupon the hearing recessed at 12:15 p.m.
24 and reconvened at 1:30 p.m.)

25 SENATOR RADER: The committee will come to order. I would

1 like to ask the page to be certain to advise any Legis-
2 lators that come in, they're welcome to seat themselves
3 up forward here for more convenient questioning of
4 witnesses and so forth -- and also to make certain that
5 we enforce the "no smoking" rule in the courtroom.

6 We will continue, unless there is some objection,
7 with the testimony of Dr. Carl Swanson. I believe we're
8 in a situation for questions. Senator Gruening, did you
9 wish to start off with that?

10 REP. GRUENING: I was waiting for the rest of the members
11 to get here.

12 SENATOR HUBER: In that case can we take a five-minute recess,
13 Mr. Chairman?

14 SENATOR RADER: I'm reluctant to do that because I'm afraid
15 we're going to run out of time today. I'm just reluctant
16 to do that, but I will wait so long as my Co-Chairman
17 thinks it necessary for additional members to show.

18 SENATOR HUBER: I know Senator Butrovich is on his way.

19 SENATOR RADER: There are several routine matters that we
20 can go through while we're waiting on other persons.
21 We're going to conclude today the joint hearings. There
22 will be additional testimony taken by the individual
23 committees at their discretion at a later time, but
24 the transcript of the record of these proceedings will
25 be concluded today.

1 I am going to ask the reporter -- she has already
2 been instructed to record some testimony out of order.
3 Whenever such a request is made, I want her to clear that
4 with Representative Gruening and myself. It's been
5 asked that the expert's testimony, Dr. Tussing, be
6 transcribed first and the other expert witnesses' testimony
7 hired by the committee be transcribed in order of their
8 presentation of testimony, then after that start at the
9 beginning of the proceedings and go through them as they
10 occur.

11 I'll want you to deliver -- the Department of
12 Natural Resources will not be able to give their wrap-up
13 testimony today, therefore, we will save the last exhibit
14 number for them. Their testimony will be submitted in
15 writing sometime next week. I will certify to it and
16 deliver it to the reporter, she will append it to the
17 original record and it will become a part of the official
18 transcript of these proceedings.

19 After the document has been printed, I will ask
20 the court reporter to certify one original copy for the
21 House and deliver it to Senator Gruening, one for the
22 Senate to be delivered to me, one for the Governor's
23 office, one for the Attorney General's office, one for
24 the Department of Natural Resources and one for each
25 of the purchasers, to be delivered to such other persons

1 as they may designate in writing in a communication to
2 my office. I will deliver them to them. Is there any
3 further suggestion as to how to handle the record?

4 REP. GRUENING: It might be good to put the applicable
5 statutes, the applicable statutes, someplace in the
6 supplements to refer to as you read the testimony, if
7 we could include it in the report. I have a stapled
8 copy here that would cover the statutes that deal with
9 the Royalty Board and surplus oil and gas.

10 SENATOR RADEF: Then we will leave open two exhibits, one
11 being the rebuttal and supplemental testimony of the
12 Department of Natural Resources, and the second will
13 be statutes, and I'll leave it up to Representative
14 Gruening and the staff to submit the statutes that you
15 want printed as an exhibit.

16 REP. GRUENING: I didn't realize you intended to include
17 further testimony as part of the joint hearings, in
18 which case maybe we ought to participate.

19 SENATOR RADER: Well, I think it's important that the
20 Department of Natural Resources respond to some of the
21 matters that have been raised and I was just going to
22 let them respond in writing as an exhibit. I don't know
23 what they're going to say.

24 REP. GRUENING: I see.

25 SENATOR RADER: Although we do intend to question them

1 personally, but our personal questioning of them
2 Monday morning would not be a part of these hearings.
3 But their written testimony, or their written response,
4 if they care to make any as a part of these hearings,
5 can merely be appended as an exhibit.

6 REP. GRUENING: We may show up Monday morning too.

7 SENATOR RADER: You're certainly welcome. We intend to go
8 on at 10:00 o'clock.

9 SENATOR HUBER: Mr. Chairman.

10 SENATOR RADER: Yes, Senator Huber.

11 SENATOR HUBER: I notice from the assignment of the exhibit
12 number 16 today, that that was the next number in line,
13 and I note that the J. McCutcheon written testimony which
14 I had requested be put in as an exhibit must not have
15 got in because number 16 was the next in line. Would
16 you please take care of that at this time, make sure
17 that it appears as an exhibit?

18 SENATOR RADER: I think yesterday that we established that
19 the secretary took the written statements of Mr. McCutcheon,
20 that he submitted them to her and that she had intended,
21 and does intend, to include his total statement as a part
22 of the transcript of the verbal testimony. Is that
23 not correct, Madam Reporter?

24 MRS. SANDERS: I believe that's correct.

25 SENATOR HUBER: We did deviate from it, Mr. Chairman, and

1 I wanted to make sure the written was in also.

2 SENATOR RADER: I just don't want you to type it twice. I
3 observed yesterday during the testimony of Mr. McCutcheon,
4 it was my observation that the reporter was not taking
5 notes and, therefore, I assumed she was relying upon
6 his statements and intended to include them in full as
7 a part of the oral testimony given. Is that correct?

8 MRS. SANDERS: Yes.

9 SENATOR RADER: Mr. McCutcheon, does that satisfy you?

10 MR. MCCUTCHEON: It wasn't my request.

11 SENATOR RADER: Senator Huber, does that satisfy you?

12 SENATOR HUBER: Yes.

13 SENATOR RADER: Then we will keep the exhibits numbered as
14 we presently have it, with the Economic Analysis, the
15 Jensen Report, as Exhibit No. 16, and Mr. McCutcheon's
16 testimony will be, as I say, reproduced verbatim as a
17 part of the verbatim transcript.

18 Should we proceed at this time? Any questions
19 of Dr. Swanson? Representative Gruening.

20 REP. GRUENING: Dr. Swanson, the last couple days you've
21 heard some concern expressed by the various members and
22 Legislators as to the reason why the producers have not
23 already entered into contracts, and various explanations
24 have been given.

25 Judge Litt, in a report to the Commission in

1 April of 1976 attributed, at least to the producers,
2 one of their reasons that they expressed to him for not
3 entering into contracts, and I'm going to introduce this
4 as an exhibit. It says, "They, the producers, expressed
5 distress that the Commission has not yet embarked on a
6 proceeding to establish a price for the gas and feared
7 that an early sales contract would lock them into an
8 adverse cutoff date under possible vintage pricing by
9 the Commission, or the possibility of a deregulation
10 statute being enacted by Congress." Now, would those
11 concerns that the producers expressed to Judge Litt
12 also apply to our entering into a contract at this time?

13 DR. SWANSON: The deregulation bills that have been introduced
14 into the Congress normally deregulate new gas, and there's
15 a definition for new gas. One of the definitions which
16 has -- the definition that has existed in the Pearson-
17 Benson Bill in the Senate and the Krueger Bill in the
18 House, which were the deregulation bills which proceeded
19 furthest in the past session, said new gas would be,
20 among other things, gas which was dedicated to interstate
21 commerce after some date.

22 Now, Mr. Moody is someone whom you should address
23 the same question to, and I would defer to his knowledge
24 and judgment. He is much more aware of the implications
25 of the definitions of energy than I am. The impression

1 that I have left, that taken away from reading some of
2 the bills, is that Alaskan gas which did not commence
3 flowing in interstate commerce until sometime in '85
4 would be classified as new gas. But it's entirely
5 possible that a bill could be introduced which has a
6 different definition of vintaging. For example, the
7 currently applicable opinion which sets the national
8 rate, 77-A, defines new gas as gas flowing from wells
9 which were spudded after January 1, I believe it's 1976,
10 or '75.

11 Some of the wells which will be producing gas
12 in Prudhoe Bay were spudded before that and would not
13 qualify as new gas under a spud date definition of new
14 gas. Under regulation, or under a deregulation bill
15 everyone runs the risk that part or all of gas will not
16 qualify as new gas.

17 Probably of greatest concern to this committee
18 would be a definition of new gas which says new gas
19 would be gas which flows into interstate commerce from
20 contracts which are dated after some date which would
21 be after the date of these contracts. Now, there is
22 some precedent for contract dating, I believe. The
23 applicable definition of new or old gas are set in
24 vintaging.

25 REP. GRUENING: This may be what the producers then are

1 concerned about in their concern not to enter into
2 contracts as of now.

3 DR. SWANSON: I would assume there are a number of questions
4 that the producers had in their mind. There may well
5 have been some questions about rolled in pricing versus
6 non rolled in pricing. Certainly there were questions
7 about vintaging, maybe some questions about deregulation.
8 They were prepared, when they felt it to be in their
9 economical advantage, to accept advance payments and to
10 commit gas as they have in the past. Even though all
11 of the same issues existed then, as they do now, they
12 didn't. But those contracts, I do believe, did not set
13 prices for the gas which will flow, even though they
14 committed gas in their advance payments.

15 REP. GRUENING: Well, is it fair to assume that they're
16 probably concerned about how the regulatory and legis-
17 lative enactments affect pricing arrangements under the
18 contract?

19 DR. SWANSON: I assume they are, and they may feel that they
20 can exact a higher price if they wait, although I'm not
21 sure that's the case. I think we should point out that
22 the working interest owners have seven-eighths of the
23 gas and the royalty interest is one-eighth of the gas.
24 One of your concerns may be, if you commit now you will
25 influence the price on the seven-eighths. I find that

1 dubious.

2 REP. GRUENING: That isn't -- really, my question goes to,
3 should we not have the same concerns in terms of dealing
4 with trying to write a contract which sets price terms
5 now as opposed to waiting, as the producers seem to be
6 waiting, until a time in the immediate future when
7 pricing arrangements under the FPC and, perhaps, Congress
8 will be more clear?

9 DR. SWANSON: I think the risks you run, the principal risk
10 you run is if a deregulation bill or a definition of new
11 gas or step price vintaging of gas were to use contract
12 date as the applicable vintage date or new gas date.
13 I am less qualified than Mr. Moody to describe issues
14 of vintaging and the probability that contract date
15 may become the applicable date of vintaging.

16 Another question that I think you raised was,
17 does this contract fail to protect the interests of
18 Alaska if the royalty gas committed under the contract
19 is treated in the same vintage as working interest owners'
20 gas. My reading of the provisions of the contract state
21 both under regulation and under deregulation that the price
22 of the royalty gas will be the highest price paid.

23 REP. GRUENING: Do you read that as meaning that vintaging,
24 if I understand that term correctly, is not important for
25 us to concern ourselves with? In other words, that concern

1 that I think the producers are expressing as to being
2 thrown into a special category because they enter into
3 a contract now doesn't apply to us, as a royalty owner.

4 DR. SWANSON: I think there is a concern. The degree to
5 which it is a realistic concern or merely one of those
6 very remote possibilities, I'm not able to judge except
7 by citing some history. The real concern that you should
8 have is the probability that vintaging will depend upon
9 not the date of initial deliveries of gas into interstate
10 commerce, but the date of the contract or the point the
11 contract comes in force.

12 There is, in fact, in our report on page 29 a
13 table listing ways in which gas can be defined, either
14 vintaged or different ways in which gas is put into
15 different price categories. In that table, and you may
16 wish to ask some of the other witnesses about this table
17 and its accuracy -- in this table a Permean base in
18 Opinion 468 of August 1965 did use contract date as a
19 method of vintaging gas.

20 In none of the recent national rate opinions
21 nor the Krueger nor the Pearson, and this is the Pearson-
22 Homes Bill, has contract date been, if I understand this
23 correctly, an applicable vintage definition.

24 So we must go back fairly far in order to find
25 contract date as applicable.

1 REP. GRUENING: I take it that it is possible there might
2 be some disadvantage then if contract date became important
3 as fixing a vintage on this gas?

4 DR. SWANSON: There is the possibility, yes.

5 REP. GRUENING: And what we're trying to establish here is
6 just what we're losing by entering the contract, and
7 the question I think that has been stated again and again
8 is, aside from what we're trying to accomplish outside
9 the pricing arrangements what could we be losing by
10 entering a contract now as opposed to later since we're
11 not actually at this time trying to get money for State
12 revenue, we're trying to protect ourselves from any
13 disadvantage by entering into this contract at this time.
14 I think you said timing and price were very important.

15 DR. SWANSON: Yes. In my opening remarks, I felt that the
16 State was well protected in this contract in the use
17 of liquids, in the ability to reserve gas for in-state
18 use, and I felt that the pricing provisions in the
19 contract protected the interests of the State. I think
20 you certainly have correctly identified a possible cost
21 of the contract; that is, if vintaging in future FPC
22 decisions or in possible deregulation bills or other bills
23 in Congress use contract date as the applicable vintaging
24 criteria, and contract date of this contract, and the
25 date of break point in vintaging were to be between the

1 contract date of these royalty gas contracts and the
2 working interest owners' contracts, that's a risk.
3 REP. GRUENING: The problem being an older vintage gets a
4 lower price?
5 DR. SWANSON: This has been historically true, yes.
6 REP. GRUENING: There are some other points the producers
7 make in here. I'd like to introduce this as an exhibit.
8 It's a report to the Commission by Judge Litt.
9 SENATOR RADER: All right. That will be Exhibit 17.
10 REP. GRUENING: This is my only copy of it.
11 SENATOR RADER: Report to the Commission by Judge Litt.
12 And the date of it?
13 REP. GRUENING: April 27, 1976.
14 SENATOR RADER: April 27, 1976, and you will deliver a copy
15 of that to the reporter, will you, Representative?
16 REP. GRUENING: Maybe she can make a copy for me.
17 SENATOR RADER: If you deliver the original to her she can
18 give you a copy back.
19 (Whereupon Exhibit 17 was duly marked.)
20 SENATOR RADER: Representative Parr.
21 REP. PARR: Mr. Swanson, we have heard testimony that, as
22 you know, the royalty gas price is tied to the price
23 the producers get.
24 DR. SWANSON: Yes.
25 REP. PARR: We have heard testimony that it may well be that

1 the dollar price, let's say, shown on the producers' con-
2 tracts may not be all they're really getting because
3 they have tie-ins with some of the people to whom they
4 will be selling and there may be, for example, a swap of
5 some oil or gas, and other kinds of things that will not
6 be directly a part of that contract and will not show
7 a dollar value, but which obviously will have value to
8 the producers. If that's true, do the contracts that
9 we presently have, these contracts before us, protect
10 our interests?

11 DR. SWANSON: I remember the testimony, I've forgotten who
12 testified, as you just described. The concern you have,
13 I believe, is under deregulation where there is somewhat
14 market pricing that might apply. The reason I say that
15 is, if regulation occurs probably the price will be held
16 below market price, the price for Alaskan gas will be
17 held below market price, and there would be no incentive
18 for a producer on the North Slope to keep their prices
19 below the regulated price, the allowable ceiling. So I
20 think you're talking about a case which might exist under
21 deregulation.

22 Now, on the North Slope or in the Prudhoe Bay
23 area there are at least three major working interest
24 owners, BP-SOHIO, Atlantic Richfield, and Exxon, plus
25 some of the working interest owners are consortiums of

1 Amarata, Hess, and five, or six or seven different oil
2 companies. Now, the contracts, under deregulation, in
3 Section 6.3 and 6.4 clearly state that the redetermination
4 shall be the highest price paid any working interest
5 owner on the North Slope. It may well be, though I think
6 the possibility remote, but it may well be that one
7 working interest holder may have a somewhat lower price,
8 stated price, in the contract under deregulation than
9 would be justified by an arm's length not around the back
10 deal.

11 However, in order that the highest price all be
12 held down below market justified pricing would require
13 at least six or seven oil companies to conspire to hold
14 that price down. There are people who argue that the
15 oil companies conspire frequently. It is my opinion that
16 they compete vigorously. I doubt very much -- I think
17 it highly improbable that six or seven oil companies
18 of quite different size, who operate in very different
19 areas of the world and very different areas of the United
20 States, with very different crude balances and very
21 different supplies of natural gas would find such a
22 commonality of interest that they could even structure
23 such a deal.

24 REP. PARR: I take it then, Dr. Swanson, that your answer
25 to my question is, yes, the contracts do protect us.

1 DR. SWANSON: Yes, they do.

2 REP. PARR: Thank you.

3 SENATOR RADER: Any further questions? Senator Huber?

4 SENATOR HUBER: Thank you, Mr. Chairman. Mr. Swanson, are
5 there any other reasons which you might be able to think
6 of that the producers appear to have for not committing
7 their gas at this time that might be worth the State's
8 consideration before we commit ourselves, other than you
9 have discussed already?

10 DR. SWANSON: I can't think of any at the moment. If I do
11 think of one while I'm on the stand, would it be
12 appropriate for me to so indicate and explain it to you?

13 SENATOR HUBER: Yes, I would appreciate that if you would.

14 SENATOR RADER: I had a couple questions, Doctor. You've
15 attended the hearings since they commenced last Monday
16 at 2:00 o'clock, is that not correct?

17 DR. SWANSON: Yes, I have been here all the time.

18 SENATOR RADER: You've been in constant attendance at all
19 times?

20 DR. SWANSON: Yes, I have.

21 SENATOR RADER: Doctor, considering all of the testimony
22 which you have heard and considering the difference between
23 possibilities and probabilities, how would you characterize
24 this contract as to whether or not it protects the State
25 in an overall manner or does not the possibilities of it --

1 not as against the probabilities of it not -- in other
2 words, I would like to have you use your expertise to
3 help us weigh the value of very conflicting testimony
4 and the statement of possibilities as against probabilities.

5 DR. SWANSON: In my opening remarks I attempted to deal with
6 some of the issues that were raised in the testimony which
7 precedes mine when I talked about the issue of, can a higher
8 price be obtained than would be obtained under these
9 contracts in the issue of pricing, royalty pricing.

10 It's my judgment that these are good contracts.
11 I think that they protect the interests of the State in
12 the use of liquids, in its ability to reserve gas and
13 obtaining a favorable price. Very well, given the
14 set of probable circumstances which may emerge in the
15 future, and there is a great deal of uncertainty about
16 the price of natural gas, to be sure, there is -- I think
17 Representative Gruening has identified one possible
18 event, that is the setting of vintage dates on contract
19 date, which hasn't happened recently, which is a risk.

20 SENATOR RADER: Would you weigh that risk for us as possible,
21 probable, improbable, or whatever terms you might choose
22 to use? Again, it's very difficult for me to know
23 whether that risk is something that is of such a nature
24 that we should reject the contracts or how to weight it.
25 In other words, place a value on this, recognizing again

1 that's really what you're hired for, is for your value
2 judgment on matters in which we are not experts, on which
3 there are conflicting possibilities and probabilities.

4 DR. SWANSON: I recognize that, and I think that's a valid
5 question. You're asking me to evaluate probability of
6 any legislative or regulatory event. Now, that is the
7 using of contract date as the appropriate time for
8 vintaging. If we look to recent history being in the
9 last ten years, contract date was not used in such a
10 way that the value of this contract to the State --
11 this contract compared to that with the State -- to be
12 sure, the course of regulation and legislation is
13 something which can be, particularly in the area of
14 natural gas, can be highly unpredictable, as it has
15 proven to be in the past two or three years. I would
16 say that the chances that contract date will be used
17 as a vintage date to the detriment of the State, if
18 this contract were to be approved now, is probably less
19 than fifty percent, and it may be quite a bit less than
20 that. I'm not sure I've answered your question.

21 SENATOR RADER: Well, does it approach fifty percent?

22 In other words, we signed this contract, we have a
23 fifty/fifty chance of having signed a disadvantageous
24 pricing contract because of vintaging.

25 DR. SWANSON: If I may just try to think through to myself

1 what the advantages to advocates of various positions
2 and the position of the Congress might be of a contract
3 date vintaging. Let me just pause a minute and think
4 about it, and I will respond.

5 Senator Rader, I frankly don't understand the
6 history or regulation well enough to know why a contract
7 date was used in the Permean base in case, rate case for
8 vintaging.

9 SENATOR RADER: Let me ask you this: I don't want to ask you
10 to go on record here on something on which you are not
11 prepared.

12 DR. SWANSON: I would like to continue, if I may, sir.

13 SENATOR RADER: All right.

14 DR. SWANSON: The reason for using vintages and defining
15 something called new gas is to raise the price of gas
16 to producers so that they are encouraged and have the
17 financial resources to explore and develop natural gas.

18 The reason there is vintaging is to keep the
19 price of flowing gas down, the theory being that one
20 does not increase the incentive to a producer to find
21 new gas by raising the price of old gas. That strikes
22 one as a reasonable theory.

23 Both Mr. Moody and Mr. Byrd have done a good
24 deal of natural gas contracting, but my understanding
25 of natural gas contracts (you might want to pose this

1 same question to them) -- my understanding of natural
2 gas contracts is that under contracts a whole reservoir,
3 where all the natural gas under a lease will be dedicated
4 to the sale, to the contract, often underneath the land
5 area there will be more than one reservoir of natural
6 gas, or often the reservoir may be sufficiently intimated
7 that after a while it makes sense to drill some additional
8 wells, or it may be that in a natural gas lease, a
9 natural gas reservoir, that after a while the well will
10 sand up, the casing will collapse, or the well will be
11 damaged, and thus a new well will have to be drilled; or
12 if there is a deeper reservoir a well will have to be
13 drilled or an old well re-entered in order to find the
14 gas in a deeper reservoir.

15 If the vintaging date were the date of the contract --
16 remember that the whole, all of the gas underneath the
17 lease, perhaps defined by depths, were to be dedicated
18 to the contract, then there would be no incentive for
19 the producer to repair the wells or to redrill the wells
20 or to search deeper for new reservoirs. Thus, it strikes
21 me -- the point I have is, and I guess you should ask
22 other witnesses, is that given some of the conventions
23 of natural gas contracting, that vintaging new gas by
24 date of contract may impair the discovery of additional
25 supplies of natural gas, which would be contrary to what

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1 I understand to be the purpose of deregulation or the
2 purpose of allowing a higher price for new gas, and
3 thus self-defeating. If the theory I have just expounded
4 is true, then I think that a vintaging gas generally
5 within the United States by contract date would be
6 unlikely.

7 SENATOR RADER: Any further questions? Senator Sumner.

8 SENATOR SUMNER: Mr. Chairman. Have you evaluated contracts
9 between states and oil companies in the past?

10 DR. SWANSON: No, sir, I have not.

11 SENATOR SUMNER: Do you have any basis to compare or to answer
12 a question of how does this contract for the sale of the
13 royalty gas compare with the sale of royalty gas between
14 other states and oil companies?

15 DR. SWANSON: I happen to have in my possession a very bad
16 photographic copy of a sale of royalty gas from New
17 Mexico to El Paso.

18 SENATOR SUMNER: How does this sale contract here compare
19 in favor of the State?

20 DR. SWANSON: I read that contract last night, the one between the
21 Royalty Board of New Mexico and El Paso, and I think
22 that the sale of Alaskan royalty gas compares well.
23 The other contract also was a soundly conceived contract,
24 and it did not have the reservations clause that Alaska
25 has.

1 SENATOR SUMNER: When you say compares well, is this contract
2 better than, in your view?

3 DR. SWANSON: The contract you have negotiated is a better
4 contract.

5 SENATOR SUMNER: There's some confusion in my mind. If the
6 contract says that Alaska is going to get paid as high
7 as any of the producers that are selling to the oil
8 companies for the seven-eighths supply, would the vintaging
9 determine the sale price that Alaska receives, or would
10 the contract dates on their contract with the users or
11 buyers determine the sale price that Alaska gets?

12 DR. SWANSON: I think you have posed a question which would
13 require legal interpretation and, frankly, I had not
14 thought of it, in response to the earlier questions of
15 Senator Rader and Representative Gruening, because what
16 you're arguing is that through the terms of this contract
17 the vintaging date applicable to this contract alone may
18 not apply. That's a very important question and I would
19 only like to say that I'm not a lawyer, I do not have
20 extensive Power Commission experience, and you have a
21 witness who does. I just am not qualified to answer
22 the question. I do understand the issue, and it's a good
23 point.

24 SENATOR RADER: Let me go back just a moment then to the
25 question I asked you. Does that change your answer to my

1 question as to whether or not it is likely in the future,
2 in view of the past policies, that contract date will be
3 the determining factor in vintaging? As I understood
4 your testimony, you said you thought it would be highly
5 unlikely the contract date would be the determining
6 factor in vintaging.

7 DR. SWANSON: Unlikely, yes.

8 SENATOR RADER: Now, the question raised by Mr. Sumner does
9 not affect your testimony in that regard, does it?

10 DR. SWANSON: No, it does not. In fact, if anything, it
11 suggests that at least within the terms of the contract
12 one does not know how those terms will be interpreted
13 in accordance with the Federal Power Commission, at
14 least within the terms of the contract, that there is
15 even less likelihood that contract date vintaging would
16 apply to the price.

17 SENATOR SUMNER: Mr. Chairman, in response to you, that's
18 the view that I thought.

19 SENATOR RADER: Senator Colletta, do you have a question?

20 SENATOR COLLETTA: I believe Senator Huber did.

21 SENATOR RADER: Oh, Senator Huber.

22 SENATOR HUBER: I had on your subject in response to Senator
23 Rader I want to get back in. Now there's a second one
24 since you came in. Senator Rader and I apparently didn't
25 hear exactly the same way. I thought I heard you say

1 that the chance that vintaging would be disadvantageous
2 or that it would happen to the State was on the order
3 of fifty percent, not very unlikely. So which way is it?
4 DR. SWANSON: Senator Huber, what I attempted to do was, when
5 I said that the probability that vintaging would be based
6 upon contract date, I said I thought the probability was
7 less than fifty percent. I chose a number where I felt
8 extraordinarily confident, and Senator Rader felt that,
9 in his judgment, he needed a finer definition, a more
10 precise statement of probabilities, and he pressed me
11 on the point, and upon thinking about the point, in
12 thinking about the use of contract date for setting
13 vintaging dates for pricing, given the traditions of
14 contracting in natural gas, did not strike me as too
15 sensible, given the purposes of national policy in the
16 use of vintaging. So I think that the probability
17 that contract date will be the applicable vintage
18 definition that dominates price under this contract is
19 quite a bit less, it is unlikely.

20 SENATOR HUBER: Would you like to give a percentage of
21 less than? You gave less than fifty before. Would you
22 like to give us less than something now?

23 DR. SWANSON: Less than fifteen, less than ten percent.

24 SENATOR HUBER: Less than ten percent. All right, that
25 goes on ---

1 DR. SWANSON: Now, the difficulty of a number -- excuse me,
2 Senator, I'm sorry.
3 SENATOR HUBER: Go ahead.
4 DR. SWANSON: The difficulty of a number given, such as that,
5 is that it's a number which can assume greater importance,
6 or it's an easy number to grab ahold of. You asked me
7 the question straight, and I answered it as straight as
8 I could. Maybe it's fifteen percent, maybe it's five
9 percent, maybe it's ten percent, maybe it's two percent;
10 I don't know, but I think when I state ten percent (maybe
11 it's less) I think that's a fair characterization of
12 unlikely. But remember that that ten percent would be
13 further reduced by the point that Senator Sumner has brought
14 up, which is that there are contract terms in the contract
15 you are examining now which might make the vintaging
16 which would allow working interest holders a higher
17 price than applicable, but that's something presumably
18 which will be worked out in the courts, and also it's
19 something that requires legal judgment, which I would
20 suggest you ask of Mr. Moody.
21 SENATOR HUBER: Mr. Chairman, that brings me to the second
22 half of my question. Mr. Swanson, your definition that
23 vintaging, I believe, was quite narrow here. In regard
24 to that, have you taken into consideration the precedent
25 that was set by the Federal Government action in disallowing

1 North Slope oil new status? Do you think that they might
2 use vintaging or some other mechanism there to do the
3 same thing with the gas that they have done with the
4 oil that might affect the status of these contracts?

5 DR. SWANSON: There are two questions, I think, which we
6 must address, and one question is, will these contracts
7 approved now put the State in a worse position than if
8 they were not approved, which is a very appropriate
9 question, to be sure. My judgment is that these contracts
10 are very good contracts and they do protect interests
11 of the State, and that if they are approved now the
12 chances that the State will suffer value are not great.

13 The second question arises, and I think it
14 comes out of your point about the Federal Government,
15 and that is, what are the risks to the State of Alaska
16 of receiving very favorable value for its royalty gas
17 and oil. Those risks are great, and I think they are
18 legislative and regulatory risks, but by and large they lie
19 outside of the contract.

20 SENATOR HUBER: Could I just draw you out a little more?

21 You said there wasn't disadvantages to the contract.
22 Could you conversely say , is there definitely advantages
23 to the contract?

24 DR. SWANSON: The theory of examining the contract at this
25 time, and many witnesses have testified to this, that by

1 approving these contracts at this time the likelihood
2 of the El Paso project being approved will be enhanced.
3 That's the theory. I, frankly, am not competent to judge.

4 SENATOR HUBER: And you don't want to make a judgment of
5 how much enhance them being chosen over Arctic?

6 DR. SWANSON: No, sir, I'm not competent, and if I were to
7 make a judgment I would be doing you a disservice.

8 SENATORY HUBER: Thank you, Mr. Swanson.

9 SENATOR RADER: Representative Gruening had a follow-up question.

10 REP. GRUENING: Are there any advantages to the State in
11 terms of pricing in these contracts? Let's say if we
12 do sell the gas at a later point under these contracts,
13 have we gained anything in terms of pricing, setting
14 aside the question of political gain that the contract
15 is based on?

16 DR. SWANSON: It's very hard to be actually sure about what
17 the course of events will be in the future. The contracts
18 do state -- let me step back a second. The question is
19 an important question and I must answer it.

20 Royalty gas comprises one-eighth of the gas in
21 the Prudhoe Bay field. The contracts are very clear, that
22 both under regulation and under deregulation that the
23 price received by the State will be the highest price.
24 The contracts are unambiguous. I do not believe that
25 one-eighth interest is sufficiently large to swing the

1 value of the gas such that the prices received by the
2 working interest owners will be less than if you waited.

3 For example, and let me expand on the point
4 because I'm not sure I'm being very clear. If the amount
5 of gas which you are selling now were enormous, more than
6 enough to satisfy the demands in the Lower 48 States.
7 then possibly by delaying, by not committing gas now
8 and by having these highest prices for other people to
9 obtain, you could depress future prices. But that's
10 not the situation to be faced. The royalty gas interest
11 is only one-eighth, and all of Prudhoe Bay gas, while
12 very large, is not sufficient to solve the lack of
13 natural gas supply in the Lower 48 States; so that your
14 committee now does not so change the balance of supply
15 and demand that future prices will be reduced by
16 your commitment now. Have I answered your question?

17 SEN. GRUENING: If I interpret it correctly, you were saying
18 that the contract protects us in most regards in your
19 view, but in terms of advantages outside the political
20 aspect of it, you don't see any -- it may be a good
21 contract but you don't see any advantages to entering
22 into a contract now as opposed to, say, trying to acquire
23 these same terms at a future date, and that may be
24 dependent upon whether, in your expert opinion, we could
25 get these terms at a future date.

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1 DR. SWANSON: You would require me to read the minds of the
2 purchasing companies to determine if you could get the
3 same terms that you have in these contracts at a future
4 date. I have difficulty doing that. I would like to
5 point to one section of the contract where you do have
6 some very favorable terms, I think, and that is the
7 purchasing companies have committed to pay the royalty
8 share expenses upstream of the delivery point whether
9 or not they are able to put those expenses into their
10 costs of service. That's a good term, I think. Whether
11 they'll agree to the same term in the future, I really
12 don't know.

13 SENATOR RADER: Representative Chatterton.

14 REP. CHATTERTON: Thank you, Mr. Chairman. Dr. Swanson, I
15 don't expect I'm going to ingratiate myself with you with
16 this line of questions, but nothing personal is intended.

17 DR. SWANSON: You have an obligation, sir, a very important
18 one.

19 REP. CHATTERTON: To bring everything into perspective, I have
20 before me and have not a little slower than hastily read
21 a November 30, 1976, letter addressed to Ms. Elke Kallab
22 and signed by you, regarding a proposal to make an
23 economic study of the gas sales contracts. That was
24 dated November 30, 1976. And I also have before me
25 a letter, or a document accepting your proposal that was

1 dated December 27, I believe, 1976, and unless you're
2 like some people who may think that they're willing to
3 commit course money to build a pipeline before you have
4 a contract, I doubt if you started to do much work on
5 this problem prior to the first of the year. I'm not
6 questioning you as to the fact that in context of what
7 you were asked for and what you have presented is, you've
8 fulfilled the obligation completely, and I do concur
9 with you, with slight exceptions of your findings, that
10 this contract permits Alaska to recall and use the gas.
11 It does have that, it does provide the LPG protection,
12 but you did state here that in your proposal you would
13 not involve an analysis of the sale of natural gas
14 liquids, in your economic analysis, does provide for a
15 favorable price. Now, I think it's equally important
16 to this committee to know things that you did not find
17 in arriving at this conclusion, and obviously within
18 the framework of thirty days there's a bunch of things
19 you did not find out.

20 DR. SWANSON: There's a very large number of things of concern
21 to this committee that we did not state, that's correct.

22 REP. CHATTERTON: And possibly even the economic considerations,
23 if you had studied these things, if we had paid you more
24 money and you had had more time, it's possible -- it
25 is possible, if you had studied possibly a trade in kind

1 of gas at Prudhoe Bay with like owned State gas some-
2 place else, or State owned crude with like State owned
3 crude someplace else, or looked to see if in any way
4 this would be jeopardizing the ultimate recovery of
5 hydrocarbons from the Arctic Slope, aiding and abetting
6 the jeopardy thereof, is it possible you could have
7 come up with a slightly different conclusion?

8 DR. SWANSON: Let me list for you a number of the things
9 which perhaps are of concern which we did not study.
10 I'm not a qualified reservoir engineer. Our firm are
11 not qualified reservoir engineers. We did not study the
12 question of the level of production of natural gas
13 from Prudhoe Bay from the sedilologic sands which are
14 appropriate. On the other hand, I would assume that, given
15 the terms of the contract, that the State is well pro-
16 tected, if it were determined that to maximize the
17 recovery of oil, gas production would need to be cut
18 back, because this contract does not specify any minimum
19 quantity of natural gas which must be delivered to the
20 purchasers.

21 This contract does specify very clearly that the
22 purchasers must pay for, whether or not they can pass on
23 in their cost of service, the royalty share of facilities
24 required prior to delivery. So I'm not really sure that
25 our lack of knowledge of the specific reservoir characteristics

1 apply too much to our analysis of this contract.

2 We did not study, and I have no judgment of the
3 relative merits of the three proposed gas lines, for
4 example. A good deal of testimony has been presented
5 here, and much more before the Federal Power Commission,
6 on that issue, and perhaps you may, as individuals, in
7 your judgment, in your decisions about this contract,
8 weigh the relative merits of the three gas proposals.
9 We have not examined them, and I have no opinion, no
10 professional opinion on it.

11 We did not attempt to uncover for the State of
12 Alaska other alternate buyers of royalty gas and attempt
13 to understand from them the terms that they might be
14 prepared to offer to you for the purchase of that royalty
15 gas. I presume that in a sense the Administration, under
16 Commissioner Martin, did explore with a variety of
17 purchasers the royalty gas and possible alternate terms;
18 we did not.

19 So the question you raised, Representative
20 Chatterton, was, is it conceivable, is it remotely
21 possible that our analysis would be altered had we
22 spent more time and more effort in examining these con-
23 tracts and the alternatives which are applicable to you.
24 And when I was studying physics I read in a book that
25 it's entirely possible, it is remotely possible that

1 all of the molecules of air in this room will suddenly
2 rush over into that corner and we will all explode; I
3 think that's remote.

4 In a contract such as this, one can over-study
5 it. One should study to a point where one thinks one has
6 a grasp and can offer sound judgment to a client. If
7 we were to study, and study and study we would charge
8 for that, and perhaps not give value for money received.
9 I'm confident that our analysis is sound, our conclusions
10 are sound; I can no more say that there is no possibility
11 whatsoever of something possibly changing than I can
12 that apples will fall up instead of down. Do I answer
13 your question, sir?

14 REP. CHATTERTON: Yes, thank you very much.

15 SENATOR RADER: Senator Colletta.

16 SENATOR COLLETTA: Dr. Swanson, we have had a lot of talk
17 about the possibility and probability of what could
18 happen, and just taking the one aspect, the contract
19 provisions (period), since you deal in that area what is,
20 not the possibility but the probability of duplicating
21 a contract verbatim to what is before us now if, in fact,
22 we wait and see who builds what and when? I make
23 specific reference to one section on the total take-back
24 that we're allowed.

25 DR. SWANSON: The provisions for reserving natural gas in this

1 contract are favorable to the State. The reason that
2 the purchasers signed this contract is, as I believe
3 Mr. Tomas of Tenneco stated very clearly, that they
4 frankly don't think that either (a) you're going to take
5 back that much or (b) if you do take back that much
6 they have a good deal of confidence that Alaska will
7 experience a number of additional discoveries of gas
8 and under the terms of this contract they can buy that
9 gas.

10 Now, if you waited so long that it became more
11 probable that Alaska would take back the gas or that
12 additional discoveries would not be found and other
13 discoveries were to be committed, then perhaps you
14 couldn't get exactly the same terms with the reservation
15 clause as in this contract. I think I'm grasping at
16 something that is relatively small, and I think you may
17 well be able to get reservation clauses in the future.
18 As good as these? I don't really know.

19 The pricing provisions? I think in the future --
20 if you were to wait I think you probably will have
21 pricing provisions which are as favorable as these.
22 Whether the purchasers would pay for, at their own risk,
23 the royalty share of the costs of gathering or whatever,
24 I just simply do not know. I think likely they might;
25 I don't know.

1 SENATOR RADER: Any further questions? Any questions on
2 this side? We'll go a second round here. Senator Huber.

3 SENATOR HUBER: Thank you, Mr. Chairman. I'm sure that
4 this question was asked of other people but it was not
5 asked of Dr. Swanson, and I would like to know his answer.

6 I refer generally to the provisions in the contracts
7 that head end money, premium money, whatever you want to
8 call it, will not be allowed or will not be paid to the
9 State, but that the highest unit field prices, in the
10 language that we're both familiar with is there to state
11 that, is used. Assume now that deregulation occurs,
12 which apparently some form of deregulation is going to
13 occur, and the working interests should negotiate large
14 lump sum or front end payments with smaller amounts per
15 mcf, wouldn't our contracts then have a good chance of
16 denying the State the same opportunity for these much
17 higher prices that might be paid, or likely would be
18 paid, would be unlikely to be paid?

19 DR. SWANSON: Senator Huber, with your indulgence may I
20 characterize what I think is concerning you and then see
21 if I have characterized it correctly and then proceed
22 from there?

23 SENATOR HUBER: Please do that.

24 DR. SWANSON: Would that be an appropriate way to proceed?
25 I believe what you're suggesting is that the provisions

1 of this contract clearly state it shall be the highest
2 price specified in some other contract, and that price
3 will be in so many cents per mcf to the working interest
4 owner. You were concerned, I believe, that potentially
5 the value given in a contract or an interest owner may
6 exceed the price stated in the contract, value being
7 given to the working interest owner by an advance payment
8 on an interest free loan.

9 SENATOR HUBER: Even if it's a separate document for advance
10 payment.

11 DR. SWANSON: Or whatever, yes. I believe that is your
12 concern.

13 SENATOR HUBER: That is my concern.

14 DR. SWANSON: We have the same concern in our analysis of
15 this contract. Specifically we were aware of advance
16 payments having been made for working interest holders
17 of Alaskan gas. We then reviewed, as best we could, the
18 outstanding advance payments, the ones that had not been
19 terminated, advance payment premiums, so we uncovered,
20 particularly the Columbia Gas advance payment agreement
21 with, I guess it's BP and SOHIO. I'm not sure. And we
22 asked exactly that question in our analysis. We addressed
23 exactly that question in our analysis, would the price
24 as quoted in the contract be lower because of a previous
25 advance payment to a producer and, thus, not give full

1 value to the State.

2 Our research, looking at the contracts between
3 SOHIO and Columbia led us to believe that the advance
4 payments given to the producers would not reduce the
5 price as quoted in the contract. That was the conclusion
6 of our research.

7 Let me continue. One question that can be raised
8 is, will advance payments be allowed in the future.
9 I think the Federal Power Commission has suggested that
10 they won't be. A pipeline will give an advance payment --
11 well, the Federal Power Commission says they're not
12 doing it now -- a pipeline will give an advance payment
13 only if it can somehow recover the cost of using that
14 money or that money in its rate base. If they can't put
15 it in their rate base or they can't somehow recover it
16 from their consumers, they're unlikely to make advance
17 payment, because they can recover an allowable price.

18 Secondly, in the repayment -- I would like to say
19 something and I think I'm going beyond my current research
20 and competence and I'm not sure whether I should say it,
21 subject to verification of Mr. Moody or simply not say it.
22 I'll proceed by your judgment.

23 SENATOR HUBER: If it's part of my question I wish that you
24 would.

25 DR. SWANSON: I'll do that, but I do want to warn the two

1 committees that my recollection of the regulation of the
2 law is shaky. My recollection is that the amount of gas
3 that must be delivered for the repayment of an advance
4 payment will depend upon the subsequently negotiated
5 price for the gas. Thus, it is in the interest of the
6 working interest owner to negotiate the highest possible
7 price he can get in order to repay the advance payment
8 as soon as he can.

9 If that theory or recollection were true, and you
10 can check this with Mr. Moody, then the granting of an
11 advance payment probably would not reduce the stated
12 price in the gas sales contract and, thus, would not
13 provide full value under the most favored nations clauses
14 or the clause of deregulation in them, and in the highest
15 price clauses under this contract.

16 SENATOR HUBER: Thank you, Mr. Chairman. I feel it is a
17 little better given, the answer, from our experts rather
18 than the oil company in this case on that one. I lay
19 that one to rest as far as I'm concerned.

20 SENATOR RADER: Any further questions of Mr. Swanson?

21 Mr. Swanson, I think you were trying to catch an airplane,
22 were you, this afternoon?

23 DR. SWANSON: No, sir, I'm going to catch the 8:30 plane
24 out tonight, so I'm at your service.

25 SENATOR RADER: Would you stay for the remainder of the

1 proceedings in case questions do come up later?

2 DR. SWANSON: Yes, sir.

3 SENATOR RADER: Thank you very much. I have no particular
4 preference of order myself. Mr. Moody, Dr. Kilgore, do
5 you gentlemen have any idea as to a preference of
6 testimony, your order?

7 MR. MOODY: Whatever the will of the committee, Mr. Chairman.

8 SENATOR RADER: Why don't we take a ten-minute break and
9 let me discuss with both of you the nature of your
10 testimony and make a decision?

11 (Whereupon the hearing recessed at 2:40 p.m.
12 and reconvened at 2:50 p.m.)

13 SENATOR RADER: The committee will come to order. During recess
14 I discussed with Mr. Moody and the Doctor the order
15 of testimony, and it was the feeling that the Doctor's
16 testimony would be more in line and more relevant to
17 that which has gone immediately preceding and, therefore,
18 it would be logically easier for him to testify at this
19 time along the same lines as indicated previously by
20 Dr. Swanson.

21 Doctor, of course, you're an old hand here.
22 We all know that you're with the Levy Lipton Associates,
23 but for the record, for those who do not know you, and
24 who may come across this record, would you give us a
25 full statement of your firm and yourself, and then proceed

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with the statement, which I presume then we would open
to questions.

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1 MR. KILGORE: All right, thank you, Senator. My name is
2 Richard Kilgore. I'm Director of Research for W. J.
3 Levy Consultants Corporation. Our firm has been economic
4 advisor on matters of oil and gas to the Legislature since
5 I believe, 1969. We are also consultants to a number of
6 oil companies, domestic and foreign, small and large.
7 We also are consultants to a number of chemical companies
8 on feed stock procurement and feed stock availability
9 and so on. We're also consultants to a number of major
10 oil users such as electric utilities, mining companies
11 and the like. In addition to the State of Alaska, we
12 are consultants to a number of other governments, at the
13 present time the Province of Alberta, for example, and
14 Pertamina, the state oil company of Indonesia, among
15 others.

16 As for myself, I'm an economist by training, a
17 Bachelors Degree in Economics from Rutgers University,
18 and a Masters Degree from Carnegie Mellon University.
19 Senator, you've been calling me Doctor; that is incorrect.
20 I'm one of those who passed Ph.D. exams and never wrote
21 a thesis, so I would like to correct that.

22 I've been with W. J. Levy since 1963, just about
23 fourteen years now. Prior to that I spent two years with
24 the National Bureau of Economic Research, which is a major
25 non-profit research organization. I was also with the

1 Econometric Institute for a short while, and also did
2 some work for the Committee for Economic Development.

3 I would like to make what I hope are relatively
4 brief opening remarks, and they really have to do with
5 how we, as your economic advisors, view what you're trying
6 to achieve through these contracts. At least my opening
7 remarks today are addressed primarily to the underlying
8 reasons for sale of Prudhoe Bay royalty gas.

9 I'm going to cover such things as what are the
10 interests of the State of Alaska, what issues can Alaska
11 properly decide for itself; set against these, what
12 are the broader national interests; and how do Alaska's
13 interests fit into the national decision making process
14 on this gas pipeline. And we'll try to put these in
15 the context of the contracts before you.

16 As I said, my initial remarks will have relatively
17 little to say about the contracts themselves. As an
18 opening statement, our view can be characterized this
19 way: if Alaska decides that sale of royalty gas is
20 essential to support of an all Alaska pipeline route,
21 we feel that the contracts, in general, are carefully
22 conceived to protect the State's interests.

23 The primary objective in entering into agreements
24 for sale of Prudhoe Bay royalty gas at this time is to
25 provide support for an all Alaska route. We would like

1 to review briefly the reasons for Alaska's interest in
2 that route and the importance of these reasons. As we
3 see it, there are basically two types of benefits to the
4 State in an all Alaska route. First, there appear to be
5 certain fairly clear-cut economic benefits, although
6 probably offset to some extent by some social costs.

7 And second, there is the question of the potential
8 availability of gas for State use with the El Paso route.

9 We would like to provide some perspectives on
10 both of these potential advantages. Among the pipeline
11 alternatives there are certain economic advantages to
12 the State that can be reasonably established. These
13 were reviewed by the Governor's Task Force, and then the
14 report, Comparative Evaluation of Prudhoe Bay Natural
15 Gas Pipeline Systems.

16 An all Alaska route, together with its liquefac-
17 tion facility, does appear to provide the greatest economic
18 advantages in certain key areas. Employment is an
19 obvious one; resulting income flows to Alaska's labor
20 force, although all these will obviously not be State
21 residents, there will be migrants too. Employment and
22 income should be higher, both in the construction and
23 operating phases of the El Paso facility, as against
24 others. The greater length of the line, and the LNG
25 facility virtually insure this will be the case.

1 Tax revenues to the State treasury should also be
2 higher, largely through the operation of your property
3 tax. Again, it's the greater length of the line and
4 the LNG facility that make this possible for you.

5 Now, another major source of State revenue from
6 Prudhoe Bay natural gas will be royalties and severance
7 tax, both of which are based on wellhead values, as you
8 know. The Governor's Task Force concluded that these
9 revenues would not be affected by alternative routings;
10 that is, that higher or lower transport costs to markets
11 would not bear on wellhead values.

12 Now, we agree that as long as sales of Alaskan
13 gas in interstate markets continue to be regulated by
14 the Federal Power Commission, this is likely to be the
15 case; that is, that wellhead values will probably be
16 established on a basis other than a net-back from markets,
17 that transportation would probably be added on to a
18 regulated wellhead price, and the final price would be
19 rolled into the final cost of gas to distribution
20 companies and to ultimate consumers.

21 The FPC staff, I believe, has recommended the
22 rolling in of high-cost gas supplies such as foreign
23 LNG and Alaskan Arctic gas, and I understand that Judge
24 Litt has also recommended this approach for high cost
25 sources.

1 Under deregulation this is not necessarily the
2 case, that the costs of transportation would not bear
3 on prices. Transport costs, in that case, would have
4 an ultimate bearing probably on the value of Prudhoe
5 Bay resources. But we basically feel that deregulation
6 is not a too likely event for some years to come.

7 We would caution, however, that Alaska cannot
8 always assume that the value of its resources will be
9 unaffected by the routing of its exports. In the long-run
10 this may be the case. I think Prudhoe Bay provides a
11 current example of some of the problems of transportation
12 costs on wellhead value. As you know, there is a problem
13 of potential crude surpluses on the West Coast, the major
14 market to which Prudhoe Bay crude will move. And there
15 is a possibility that some volumes of Alaskan crude may
16 have to move to quite distant markets, that is, beyond
17 the West Coast, around to the Gulf and East Coast of the
18 United States, and this would be at very high tanker
19 transportation costs since the oil must move in U.S. flag
20 vessels and the distances are very substantial.

21 And if this is the case, if Alaskan crude does
22 move in this direction in any kind of substantial volumes,
23 there will inevitably be a question of the value of Alaskan
24 crude in Alaska; that is, what market is its value
25 established in. We feel that over the long-run it is not

1 in the national interest, and probably not in Alaska's
2 interests either if its wellhead values are affected,
3 to funnel ever larger and larger volumes of Alaskan
4 energy supplies through California; that is, larger and
5 larger volumes beyond Alyeska crude and beyond the El Paso
6 route, if that is chosen.

7 If major oil reserves are found in Petroleum
8 Reserve No. 4 on the North Slope, for example, a strong
9 case will be made for a pipeline to move that oil through
10 Canada I think, despite the fact that you have a
11 pipeline corridor southward. Incidentally, if the gas
12 Arctic pipeline is not built and an oil line moves in
13 that direction, it would then be pioneering a corridor
14 rather than following a corridor which might be established
15 had the gas Arctic pipeline been constructed.

16 But this is somewhat aside. We believe it is
17 reasonable to assume that the value of Prudhoe Bay gas
18 will most likely be unaffected by the cost of alternative
19 pipeline routes, at least for many years ahead. And
20 let me also say that we've looked at the various studies
21 that have been made on the costs of transportation,
22 what the FPC has done, what other people have done, and
23 we are not entirely certain in our own minds which system
24 would, in fact, have the highest cost of transportation.
25 It looks like a very uncertain thing to us. A lot of the

1 cost estimates are based on probabilities of delays,
2 cost over-runs and so forth, that are very, very difficult
3 to assess, in our view.

4 Against positive advantages in terms of employ-
5 ment, income and tax revenues, there are other factors
6 to be considered as well by the State; and, as the
7 Governor's Task Force concluded, some of these may be
8 negative to the State in an all Alaska routing if one
9 looks at such things as social impacts, the effect on
10 the cost of living, prices in Alaska, and so on, and
11 also looking at environmental factors which are, obviously,
12 very difficult to assess. The all Alaska route also
13 involves an LNG facility, movement of LNG tankers out of
14 Alaska, and these pose new environmental concerns, and
15 ones we feel are very, very difficult to assess.

16 However, these are all factors that the State and
17 its citizens must evaluate and weigh with the more clear-
18 cut economic advantages from taxes, employment and so
19 on. Your own Task Force concluded that the positive
20 advantages outweighed the negatives, as you know.

21 The second reason for supporting an all Alaska
22 route is the potential availability of natural gas for
23 in-state use, and it is very clear -- I've been through
24 all the -- I've sat also through all the hearings -- it
25 is very clear from your questions that many of you

1 consider that aspect very vital.

2 It is obvious that the potential availability of
3 gas is quite different among the three pipeline alterna-
4 tives. El Paso moves to tidewater, and this could be
5 very important for uses of gas in industries which involve
6 export of their products to Lower 48 markets, obviously;
7 being on the water, near water transportation, is
8 important.

9 Alcan, of course, moves gas to Fairbanks and
10 then moves off in a southeasterly direction, and in
11 directions which run through areas that are, obviously,
12 not very populated.

13 Gas Arctic route, of course, provides gas
14 essentially just on the North Slope.

15 It is difficult, however, to assess how much value
16 to be placed on this greater potential availability of
17 gas for in-state use. We should point out first that
18 there may well be other gas available in the State over
19 the years ahead. Exploration is beginning now in other
20 areas, the Gulf of Alaska, Lower Cook Inlet, Bristol
21 Bay and so on. Gas may be discovered in one or more
22 of those areas, and it is possible also that gas may
23 be available for in-state uses from these areas at
24 lower costs, lower transport costs and the like.

25 As an aside, I think we should also mention

1 something that we have before, that to the extent that
2 the State of Alaska feels that in-state use of gas is
3 very important to it or may be important to it in the
4 future, they might consider in their leasing policy,
5 perhaps changing leases so that what they have available
6 to them, to the State, is not simply a royalty which
7 can be taken either in value in kind. Perhaps the State
8 should consider some sorts of options in leases which
9 provides the State's future ability to buy back gas if
10 the State feels that's necessary. This is not what is
11 under your consideration now, but I think I should say
12 again one should consider this if use of gas, you feel,
13 is important in your State.

14 In any event, all may not be lost in terms of
15 future availability of gas if the Gas Arctic route is
16 chosen. As for now, however, it is Prudhoe Bay gas
17 that is becoming available, and other potential supplies
18 are obviously very speculative. And El Paso clearly
19 has the potential to make more gas available to more
20 locations in the State of Alaska. But what then really
21 are the advantages in using gas within the State of
22 Alaska?

23 You have major oil resources in the state, as you
24 all know, and you're obviously not an energy short region.
25 I believe we've pointed this out before, but we would

1 like to again: there is likely to be an economic advantage
2 to using gas versus oil in an area such as Alaska, which
3 is a major exporter of energy and also an exporter which
4 is remote from its major markets. The reasons for this
5 is that the economics of transportation clearly favor
6 movement of oil over gas.

7 Gas transport costs per btu are roughly three to
8 four times that for oil when the gas is moving overland
9 by pipeline. Gas transport costs are roughly ten to
10 fifteen times higher when the gas is transported over
11 water as against transportation of crude oil over water.
12 Thus gas, which carries very high transport costs,
13 tends to have a lower value in an area such as Alaska,
14 an exporting area such as Alaska; and oil, a higher value.

15 In general then, the economics tend to favor
16 use of gas in Alaska and export of oil. To put it another
17 way, gas is a better btu bargain locally, oil a better
18 product to sell nationally. But we want to caution you
19 and point out that gas transportation within Alaska is
20 also, obviously, expensive if distances are very great
21 over which gas must move; it's possible that the general
22 economic advantage of using gas internally could be
23 wiped out. But in general, the distances that you're
24 likely to move gas to markets are likely to be compara-
25 tively short, at least as compared with the distances

1 you would be moving it to export markets in the Lower 48.
2 Thus, in general, we would expect that gas will be a
3 relatively attractive fuel for use in the State, as
4 against oil.

5 While there can be significant cost advantages
6 to using gas in Alaska, the potential volumes that might
7 actually be consumed, we believe, are very elusive.
8 We've looked at a number of studies that have been done
9 projecting these volumes, and we think it is by no
10 means certain that the volumes would be very large,
11 especially any time in the near future.

12 It is even difficult to estimate what future
13 residential, commercial and conventional industrial
14 fuel uses might be in Alaska. Realistically, as I said,
15 we believe that the volumes are not likely to be very,
16 very large. We would note that in the Anchorage area
17 where gas has been available for many years, as you know,
18 and which is the area's most populous region, Alaskan
19 consumers are now consuming something like two hundred
20 million cubic feet a day of natural gas. Your royalty
21 share of Prudhoe Bay gas might be on the order of three
22 hundred million cubic feet a day, or about fifty percent
23 more than is currently being consumed in Anchorage,
24 where it has been available for many years, and where
25 a large part of your population lives.

1 Now, new industries are possible. Copper, iron
2 ore, nickel were pointed out by the Governor's Task
3 Force, but they also were very candid in admitting
4 that, and I quote, "At the present time there have been
5 no large-scale, serious and detailed proposals by the
6 private sector to utilize Prudhoe Bay gas for in-state
7 use."

8 Non-conventional uses of gas, and we've heard
9 some testimony about these, such things as using gas
10 as a feed stock for petrochemicals or for methanol are
11 even more uncertain, we believe. If these do materialize
12 it seems likely that it would be many years down the road.
13 While the resources are available in Alaska for these
14 types of operations, the economics of scale and of
15 transport of products to other areas tend not to favor
16 Alaska and tend to work against the economics of
17 these industries in Alaska. We don't mean to say
18 nothing of this sort will ever come about, but what we
19 are saying is that one has to look very carefully at
20 the economics of these things, and it is uncertain,
21 quite uncertain as to what volumes would be used in
22 the foreseeable future for these unconventional uses.

23 So, as we see it, the State's interest in an
24 all Alaska route depends on, first, reasonably clear-cut
25 net economic and social benefits; second, the potential

1 availability of gas for in-state use which, in principle,
2 could provide economic advantages as against other fuels,
3 notably oil. But the volumes that might be used, and
4 their importance, is very difficult to judge and
5 uncertain.

6 But it is up to the State and its people to
7 decide how important these factors are to their interests,
8 and how vigorously, and by what means it wishes to
9 pursue these interests. We do not, however, feel that
10 the State of Alaska can really be the judge of what
11 pipeline route is in the best overall national interests.
12 There are a great many factors that bear on this beyond
13 the interests of the State. Alaskans should be aware
14 that other routes than an all Alaska route might have
15 greater overall advantages to the Nation.

16 On the other hand, if Alaska feels strongly
17 about what it sees are important advantages to the
18 State in the all Alaska route, what is important is
19 that these interests are considered and weighed in the
20 national decision making process that is now taking
21 place as to the routing of the pipeline.

22 We were struck, in reading the FPC staff report,
23 which strongly recommended the Gas Arctic route, that the
24 interests of Alaska and potential benefits to the State
25 were apparently not really considered at all. Judge Litt,

1 in his decision, and I haven't read it all, I haven't
2 read it in its entirety, acknowledges that -- and again
3 I quote, "Alaska's views are entitled to substantial
4 weight." However, I suspect that he is not as convinced
5 of the validity of Alaska's arguments and gives them
6 less weight than most Alaskans might wish.

7 If Alaska feels strongly about what it believes
8 are the interests of the State in an all Alaska gas
9 pipeline, it will want to work to insure that its views
10 get a very careful hearing in the nation's decision-
11 making process. The sale of Alaska's state royalty gas
12 is one way of attempting to do this. If this approach
13 is chosen, we believe that the contracts before you are,
14 in general, as I said before, carefully conceived and
15 effective in protecting the State's interests.

16 We are not legal advisors to the State, I want
17 to caution, and we have no legal expertise, and there
18 are others here who do. But I would like to make the
19 following general comments on the contracts.

20 Some questions have been raised about the pricing
21 provisions, and you will obviously have to consider
22 these very carefully. You obviously are by the nature
23 of your questions. In the end, it seems to me, you will
24 have to assess the likelihood of these contingencies that
25 are spoken about; that is, the likelihood that the State

1 might be able to get a higher price if it didn't sign
2 this contract. Various alternatives have been thrown
3 out. Some of them seem to involve sales of emergency
4 gas to industrial users, questions of whether the State
5 would be caught on a vintaging problem if it signed
6 the contract now, and get a lower price, and so on.
7 From your questions it's obvious also that you are taking
8 the approach that we would recommend, trying to assess
9 what the possibilities of these things happening are.
10 I'm sure you're going to ask me more questions on this.

11 In general, I've looked at these possibilities;
12 I think they're relatively unlikely. And second, if you
13 conclude that these things are possible, that is that it's
14 possible that the State might get a lower price by
15 entering this contract, and even if you assume that that
16 possibility is very small, you might want to consider
17 how could one protect oneself against this possibility.
18 You'll have to ask yourself, could you write contract
19 terms or modify this contract in a way which would pro-
20 tect you from these eventualities. Well, I don't know
21 whether I have the answer to this, but I suspect it's
22 probably doubtful that you could. I think there are
23 probably other witnesses who may be able to give you a
24 better answer to that.

25 Now, as to the other provisions, the recall

1 provisions seem to us to be very strong. It is difficult
2 for us to see how they really could be improved upon
3 very significantly.

4 We are also pleased with the State's ability
5 to get access to liquids under the contract. We have
6 always felt that liquids could be very important to the
7 State, if not as a petrochemical, or a feed stock, or
8 for methanol, or something rather exotic, we think that
9 they could be especially of value as a fuel to local
10 residents, especially to businesses and residents in
11 remote areas. So that we feel that liquids, in the end,
12 could perhaps be of even more benefit to the State for
13 in-state use than gas itself. It's a possibility, and
14 we're very pleased with the provisions of the contract
15 in that respect.

16 In sum, the Legislature will have to consider
17 carefully what its interests are and how to pursue those
18 interests. In the end, only you can decide whether the
19 contracts before you are an effective mechanism for
20 achieving your objectives. Thank you.

21 SENATOR RADER: Thank you, Mr. Kilgore. Any questions?

22 Mr. Gruening.

23 REP. GRUENING: Mr. Kilgore, when you mentioned studies that
24 you looked at for in-state use of royalty gas, which
25 studies were they?

1 MR. KILGORE: Well, there was one prepared by your Division
2 of Natural Resources.

3 REP. GRUENING: Could you identify it specifically?

4 MR. KILGORE: I think I have it with me. "Analysis of
5 Prudhoe Bay Royalty Natural Gas Demand & The Proposed
6 Prudhoe Bay Royalty Natural Gas Sale" dated January 1977.
7 It's a study done by the State of Alaska, Department of
8 Natural Resources, Division of Minerals and Energy
9 Management.

10 Now, I don't want my remarks to be construed
11 to mean I quarrel with this study. It's very difficult,
12 all I'm saying -- estimating future requirements is an
13 extremely difficult and uncertain thing, and this may be
14 as good a job as can be done, but the results are still
15 highly uncertain.

16 REP. GRUENING: Did you do an analysis of what projected
17 uses might be?

18 MR. KILGORE: No, we have not.

19 REP. GRUENING: In that regard, the testimony yesterday
20 from Mr. Thomas Stahr was that the Anchorage utility
21 saw that in 1985 their needs in Cook Inlet would be
22 exhausted. In your readings or studies have you
23 established that to be true?

24 MR. KILGORE: No, I really don't know whether that is true.
25 I do not know how much gas is committed to that pipeline.

1 REP. GRUENING: But the major part of that would be that
2 two hundred million cubic feet per day that you referred
3 to that's used there?
4 MR. KILGORE: Yes, a significant part of that does go for
5 generating electricity in the Anchorage area.
6 REP. GRUENING: And the total royalty share at peak capacity
7 is about two hundred-fifty to three hundred million
8 cubic feet per day?
9 MR. KILGORE: I said very roughly three hundred million cubic
10 feet a day. That's an eighth of 2.4 million cubic feet
11 a day, a very rough number.
12 REP. GRUENING: Did you run across a date at which at least
13 the present known reserves at Cook Inlet are exhausted?
14 MR. KILGORE: No, I haven't. The gas reserves data are
15 available. The American Gas Association has estimates
16 of reserves in the area.
17 REP. GRUENING: Do you recall whether that study of January
18 '77 covers that point?
19 MR. KILGORE: No, I don't recall. As I recall, it was
20 basically an analysis of potential gas demands along the
21 route of the pipeline.
22 REP. GRUENING: But it didn't take in total the gas demand
23 in the State?
24 MR. KILGORE: I believe not.
25 REP. GRUENING: Are you familiar with the provision that

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1 allows the companies that are purchasing to take one and
2 a half times new reserves that are discovered to replace
3 gas that we call back?

4 MR. KILGORE: Yes.

5 REP. GRUENING: Do you see any economic disadvantage to the
6 State in doing that? It was raised, I think by Mr.
7 Dallas, yesterday . He pointed out that, say, reserves
8 were found in Cook Inlet, new reserves or, say, Copper
9 River Basin, that we would be giving them lower priced
10 gas. In other words, because of the lower transportation
11 costs we would be giving them gas at a lower price than
12 we should.

13 MR. KILGORE: Well, frankly, I don't know the answer to that.
14 As I originally read the contract I thought it referred
15 to gas which traversed the whole length of the pipeline,
16 that this was gas they would have a call on. I was
17 thinking in terms of North Slope new discoveries or
18 more gas on the North Slope. I really don't know the
19 answer to that question.

20 SENATOR RADER: Representative Parr.

21 REP. PARR: Mr. Kilgore, you mentioned a while ago that one
22 of the possibilities was gas from OCS, you mentioned the
23 Gulf of Alaska, etc.

24 MR. KILGORE: Yes.

25 REP. PARR: And that this might be cheaper than what we could

1 get from the North Slope actually. As you know, of
2 course, the Supreme Court has held that all belongs to
3 the Federal Government and we don't have a claim on it.
4 So I suppose we would have to buy it from the producers.
5 Even considering the fact that we would be buying it
6 rather than using our own royalty gas, do you think the
7 economics are still such that we would do better by
8 taking OCS gas, assuming it is produced in reasonable
9 quantities?

10 MR. KILGORE: I think the answer to that is very uncertain.
11 It's impossible to really know. One doesn't know the
12 pricing of this gas, one doesn't know the physical cir-
13 cumstances under which it would be produced, what sort
14 of costs would be involved in bringing it to shore and
15 so on. I think the answer is, one cannot really determine
16 in advance whether that gas would be cheaper. It could be.

17 REP. PARR: Is it also possible, Mr. Kilgore, that the Federal
18 Power Commission could decide where the OCS gas would go,
19 it might say it would all go to Pennsylvania rather than
20 staying in Alaska at all?

21 MR. KILGORE: Yes.

22 REP. PARR: Thank you, Mr. Kilgore.

23 MR. KIGORE: Certainly.

24 REP. PARR: Two different points. You said a while ago
25 it didn't seem really that there was too good a potential

1 at least at the present for use in the State of the gas.
2 At least it seemed to be highly doubtful as far as you
3 were concerned.
4 MR. KILGORE: What I said was, it's very uncertain, it's
5 elusive, and we suspect that the volumes would not be too
6 large.
7 REP. PARR: Does that mean what you're saying is that you
8 don't anticipate, at least in the foreseeable future,
9 a sufficient demand; is that what you're saying; or are
10 you simply saying you can't tell? I'm not sure.
11 MR. KILGORE: What we're saying, it's very difficult to tell.
12 If you want a judgment, I suspect it's lower volumes
13 rather than higher volumes.
14 REP. PARR: Has your company ever done any kind of a study
15 as to the lowest economic threshold at which petrochemical
16 plants and so forth will become feasible, of the kind
17 that might be built, let's say, in Alaska using the
18 royalty gas?
19 MR. KILGORE: No, we have not made formal studies of that.
20 We know some of the problems of the economics involved
21 and so forth, but we have not done a formal -- this is
22 from broad knowledge chemicals and so on. It is not from
23 a detailed study of the potentials for petrochemical
24 uses in Alaska.
25 REP. PARR: Could we assume that the use of natural gas in

1 other communities in Alaska would be roughly comparable
2 to that being used in Anchorage? I'm not talking absolute
3 terms, of course, but in, say, relationship to the
4 population? Fairbanks, for example, is roughly --
5 the Fairbanks immediate area is roughly one-third the
6 size of Anchorage. Now, do we anticipate that they
7 would use about one-third as much as Anchorage, or does
8 that vary quite a bit?

9 MR. KILGORE: I think, if one has to make a guess, you might
10 guess that it might be lower per capita. Don't forget,
11 Anchorage is a populated area, you have a density of
12 population, and this provides advantages, economics of
13 scale of putting in distribution systems and things of
14 this sort. If you were going to put gas into Fairbanks
15 there would be a very, very high expense of putting in
16 a distribution system. If you look at other more remote
17 areas, the economics of just getting it there and the
18 scale of population, or the users in those areas, is
19 quite small and tends to work against the advantage of
20 gas use.

21 REP. PARR: That was going to be my next question. You did
22 say, I believe, something about the possibility of using,
23 I believe, butane and propane, which are the liquids
24 from the natural gas, especially for remote areas.
25 One thing you really didn't touch on very much was the

1 liquids. You said you thought it was desirable to the
2 State to have them. Do you have any idea of the economic
3 feasibility of taking liquids out in the State, let's
4 say propane and butane, and shipping those to remote
5 areas of the State to use?

6 MR. KILGORE: Some liquids, obviously, have to come out,
7 I guess there's been testimony here. On the North Slope
8 there will be some taken out for pipeline reasons. The
9 answer is no, we have not done detailed studies on the
10 economics of the use of propane as a fuel in areas.
11 The statements I made really come from our broad judgment
12 and from our knowledge of the industry, not from detailed
13 studies.

14 REP. PARR: Thank you, sir.

15 SENATOR RADER: Representative Hayes.

16 REP. HAYES: Mr. Kilgore, yesterday Mr. Thompson of the
17 Alcan Pipeline testified that in his opinion one of the
18 advantages of the Alcan route over the El Paso route
19 was an approximately Eight Hundred Million Dollars of
20 additional revenue to the State. From your testimony
21 I conclude that you don't agree with this, and if my
22 conclusion is correct is that because you don't agree
23 with their projected construction costs or you don't
24 agree with his statement that if construction cost is
25 less it will result in a better price to wellhead?

1 MR. KILGORE: It's the latter. I don't quarrel with his
2 or anybody else's construction costs because I don't
3 have my own estimates. What I'm saying, we really don't
4 know what the circumstances of pricing of Prudhoe Bay
5 gas are going to be. If it's still regulated by the
6 Federal Power Commission we don't know quite how they're
7 going to regulate it. We don't know whether there will
8 be regulation and so on.

9 We think the most likely thing is that we will
10 have continued wellhead gas regulation by the Federal
11 Power Commission and that it will set prices independently
12 of what the transportation costs are. That's the most
13 likely thing to happen.

14 If you're looking down the road and we really
15 have deregulation, then the cost of transportation could
16 have an impact on the value of gas at Prudhoe Bay.

17 REP. HAYES: If I might continue on that, we have had
18 testimony here that we can expect deregulation of some
19 sort down the line. Would you agree with that?

20 MR. KILGORE: Well, if far down the line is a very long
21 period of time, yes, I think you can't rule it out.
22 We think it unlikely it would come anywhere in the near
23 term.

24 REP. HAYES: Anytime during the life of the contract?

25 MR. KILGORE: The life of the contract is?

1 REP. HAYES: Twenty years.
2 MR. KILGORE: Twenty years. Well, near the end of the contract
3 I suppose the probabilities get higher.
4 REP. HAYES: But in any event, in your opinion, you don't
5 anticipate any regulation that would be beneficial to
6 the wellhead price in the next ten years.
7 MR. KILGORE: I think that's most likely, there will not be.
8 SENATOR RADER: Senator Sumner.
9 SENATOR SUMNER: My concerns lie primarily in the area, say,
10 of economic development potential, whichever line is
11 chosen. Which line, in your view, would provide more
12 economic development opportunities for the State of
13 Alaska?
14 MR. KILGORE: Well, I think the all Alaska; I think that's
15 reasonably clear.
16 SENATOR SUMNER: Do you think that petrochemical manufacturing
17 is a potentially viable interest for our future?
18 MR. KILGORE: I think it may be. I don't know at the present.
19 I think it might be and I think obviously this is something
20 you want to look at. You will want to get people,
21 chemical companies who do this kind of thing to look
22 at it very, very carefully for you. I don't want to
23 imply, anything that I've said, that you shouldn't pursue
24 economic development.
25 SENATOR SUMNER: There seemed to be some doubt in your mind

1 as to whether it might not be feasible, and yet the
2 primary interest in using the Alcan line, or the all
3 Alaska line, would be for that primary benefit. Yet
4 you seem to have a fair amount of hesitancy as to
5 whether that's ---

6 MR. KILGORE: I think this is something that you're obviously
7 interested in. I guess, yes -- what I'm really saying
8 is I wouldn't overdo my expectations as to what you will
9 get because you have gas available.

10 SENATOR SUMNER: If we don't get the all Alaska line what
11 opportunity in the future do you see where there might
12 be a possibility of getting gas to tidewater or an Alaska
13 line bringing the gas down?

14 MR. KILGORE: Is your question where else one might get gas?

15 SENATOR SUMNER: What is the opportunity of getting gas to
16 tidewater in the future if we don't get the Alaska line
17 that's proposed?

18 MR. KILGORE: That depends on what the chances are of finding
19 gas in the area close to tidewater, and there are a number
20 of prospective areas where gas could be found. But
21 there isn't anyone, including myself, I'm not a geologist,
22 but one who really knows geology, who can tell you for sure
23 exactly what the probabilities are of finding gas in
24 these areas because there has been, as you know, virtually
25 no exploratory work in many of these areas. So you just

1 can't assess in advance how much you might get or what
2 the chances are.

3 SENATOR SUMNER: Are you aware of any interest at the moment
4 from different chemical companies that might have an
5 interest in Alaska in the petrochemical area?

6 MR. KILGORE: No specific knowledge. In the past -- as I
7 say, we have some chemical company clients -- we have
8 very broadly suggested they might want to look into this
9 possibility. But I don't know of any detailed proposals
10 of looks at the present time.

11 SENATOR SUMNER: And if I've drawn the right conclusions,
12 you're saying that the Arctic line provides virtually
13 no economic benefit or development benefit for the
14 State of Alaska except money; the all Alaska line provides
15 the most opportunity of the three lines; is that correct?

16 MR. KILGORE: In terms of economic advantage and potential
17 availability of gas.

18 SENATOR SUMNER: Thank you very much.

19 SENATOR RADER: Senator Butrovich.

20 SENATOR BUTROVICH: Mr. Kilgore, in your work for the State,
21 have you people projected changes in population down
22 the road?

23 MR. KILGORE: No, we have not, Senator. We have not been
24 asked to do that.

25 SENATOR BUTROVICH: Are you aware of what is happening in the

1 way of population in Alaska?

2 MR. KILGORE: I know that it's growing rapidly, yes.

3 SENATOR BUTROVICH: Can you see any difference in shipping
4 a product by water, say, from an Alaska port to the
5 South 48 than from Alaska to Japan or from South America
6 to the United States?

7 MR. KILGORE: Well, obviously the costs of transportation
8 depend upon the distances involved, but in the case of
9 Alaskan shipments to the Lower 48, they also involve
10 the use of U.S. flag vessels, which are considerably
11 higher on cost than foreign flag vessels. Shipments
12 from Alaska, for example, to Japan would not have to
13 move in U. S. Flag vessels.

14 SENATOR BUTROVICH: You are aware, however, I assume, or are
15 you aware that when the consumer in Alaska buys something
16 he is generally paying the freight up and the freight
17 back because of the fact that there is no back haul?

18 MR. KILGORE: Yes, sir.

19 SENATOR BUTROVICH: Wouldn't you consider the possibility
20 of a petrochemical industry in Alaska greatly reducing
21 that span of cost to the people living up here if,
22 indeed, there was a back haul?

23 MR. KILGORE: Yes. I think it's obviously something you have
24 to look at. It's an important objective for you to
25 pursue. You see a problem and you obviously should

1 pursue it. The problem may be that -- I said may be --
2 certain types of chemical processing, you're talking
3 about a plant on a very large scale, and a very small
4 part of the output of that plant may be consumed locally
5 in Alaska, which means that a very large part of the
6 output may have to go to other markets, and you have to
7 look very carefully at how competitive that big part
8 that goes elsewhere is with supplies from other sources.
9 I don't want to prejudge the answer.

10 SENATOR BUTROVICH: No, I'm sure you don't. It's awfully
11 hard for me to reconcile, in this day and age, why it
12 is not as practical to ship by water from Alaska as it
13 is to ship by water anywhere else. There's no such
14 thing anymore anywhere that I know of where such a thing
15 as cheap labor exists. That used to be a great argument,
16 but it certainly doesn't exist in the United States today.
17 I, for one, don't think that enough emphasis and enough
18 study has been developed on the petrochemical side of
19 this question.

20 MR. KILGORE: I would agree with that.

21 SENATOR RADER: Senator Huber.

22 SENATOR HUBER: Mr. Chairman, I do have a couple. Dick,
23 do you believe that the contracts that we have before
24 us are attractive enough to disregard the earlier
25 admonitions of Walter Levy and Milt Lipton to be very

1 cautious about committing our future oil and gas supplies
2 before delivery systems actually exist that are able
3 to transport them? We've heard that many times from
4 Milt and Walter, and can you expound on it?

5 MR. KILGORE: I think, as a general proposition, I would
6 probably agree with that, but what one has to do is --
7 here you have a new objective, something else which you
8 are trying to do with these contracts. You obviously
9 have a purpose for doing it; it's to help promote a
10 line which you seem to be quite interested in having,
11 and you just have to assess that against a more general
12 position that perhaps waiting is better. You really
13 have to assess the value of it.

14 SENATOR HUBER: Leading to my next question, Dick. Do you
15 believe the contracts will decide which route is chosen,
16 and would you please try to give us a percentage of
17 chance for El Paso against Artic Gas, for instance?

18 MR. KILGORE: Senator, I'm really not able to give you that
19 kind -- it obviously provides some positive support.
20 I really don't know what the odds of it are. I think
21 that's beyond the scope of my competence as an economic
22 advisor.

23 SENATOR HUBER: My last question fits in with it. Leaving
24 political considerations aside, if you remove the
25 political considerations from the contracts, do you believe

1 we could get more money if we held off selling our gas
2 until a transportation system is ready instead of
3 using it for political clout? If so, what magnitude
4 would you project?

5 MR. KILGORE: As I said before, we don't really know what
6 future pricing is going to be like. We don't know
7 whether it's going to be regulated pricing, or deregulation
8 and so on. So there is an uncertain future. It has been
9 suggested there is at least a possibility that the State
10 could get a higher price by not signing this contract
11 and waiting. But when I look at the circumstances under
12 which this possibility might happen, I think it's
13 unlikely.

14 SENATOR HUBER: You think it's not the most likely scenario?

15 MR. KILGORE: That's correct.

16 SENATOR HUBER: Thank you, Mr. Chairman.

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

18 It's about time for a break. I assume we're just about
19 through with this witness, but go ahead.

20 REP. CHATTERTON: There are three questions, and I don't
21 know how long he's going to take to answer them.

22 SENATOR RADER: Why don't you go ahead, let's try it.

23 REP. CHATTERTON: Sir, Mr. Kilgore, let's take an assumption
24 that here last week there was a natural gas transportation
25 system between Prudhoe Bay and the South 48 and, at least

1 we will take that premise right now. Now, apparently
2 a crisis occurred in the northeastern sector of the
3 United States that has led the President to take near
4 national emergency situations, at least for transporting
5 liquefied methane between American ports in foreign
6 bottoms and Heaven knows what all we are doing, quite
7 an upset. On the premise that that straw existed, do you
8 believe that the President might even have been able
9 to legally, and I'm sure he would have, demanded Alaska
10 gas from Prudhoe Bay even though it might have made the
11 people of Alaska suffer?

12 MR. KILGORE: Yes, I think it's a possibility. In an
13 emergency situation you can't rule out that if he doesn't
14 have the power now that the Congress will legislate
15 such powers.

16 REP. CHATTERTON: Without that straw he can't do much about
17 it, can he?

18 MR. KILGORE: No, there's no way he can move the gas to the
19 Lower 48.

20 REP. CHATTERTON: You indicated, when you were giving your
21 reasons for being hired by the Legislature here and so
22 forth and so on, that you did do consulting work for,
23 I think you said, transmission companies, other foreign
24 governments. I don't know whether I singled out of
25 context transmission companies, but would any time,

1 keeping in mind the powers of the Alaska Oil and Gas
2 Conservation Commission, would you recommend to a client
3 or do you think that a client, even if you recommended
4 that he proceed to look for financing, could possibly
5 get financing for a Six to Nine Billion Dollar pipeline
6 in view of the powers of the Alaska Oil and Gas Con-
7 servation Committee?

8 MR. KILGORE: What your're asking, are these powers likely
9 to be an important stumbling block to ---

10 REP. CHATTERTON: To the financing.

11 MR. KILGORE: To the financing? No. I think those powers,
12 in and of themselves, no.

13 REP. CHATTERTON: Even though they can turn the valve and
14 shut the gas off in two years?

15 MR. KILGORE: I think if the lenders were reasonably assured
16 from their own looks and so forth at the reserves and so
17 forth, and carefully considered what they felt were
18 reasonable flows of gas without loss of pressure and
19 so on, without loss of oil, I think they would go ahead,
20 yes.

21 REP. CHATTERTON: You, yourself, or your associates have
22 not so done, have you -- made that determination?

23 MR. KILGORE: No. We are purely economic consultants.

24 REP. CHATTERTON: One more question and I'll close. Do you
25 think, by any chance, that the transmission system between

1 Prudhoe Bay and the South 48 would be financed by public
2 money?
3 MR. KILGORE: Do I think is there a possibility that in the
4 end public money or some sorts of guarantees, or something?
5 REP. CHATTERTON: Yes.
6 MR. KILGORE: I think there is a possibility, yes.
7 REP. CHATTERTON: Thank you, sir. Thank you, Mr. Chairman.
8 SENATOR RADER: Representative Hayes.
9 REP. HAYES: Thank you, Senator Rader. I want to get back
10 on the question that I was asking you about, the timing
11 for deregulation. I didn't quite pose the question
12 correctly. I think you said that you didn't think there
13 would be deregulation in the next ten years, but within
14 somewhere between ten and twenty years from now. The
15 contract actually starts on the date of delivery, isn't
16 that correct?
17 MR. KILGORE: Yes.
18 REP. HAYES: So that during the first ten years of the
19 life of the contract we might expect deregulation, going
20 back to your previous answer?
21 MR. KILGORE: It's possible, yes.
22 REP. HAYES: Thank you.
23 SENATOR RADER: Any further questions?
24 SENATOR HUBER: I have a short one that comes from a question
25 Mr. Chatterton asked.

1 SENATOR RADER: Go ahead, sir.

2 SENATOR HUBER: I just wondered, Dick, I thought maybe you
3 might have some idea. Well, here's the question.
4 How much is the reasonable flow of gas without reducing
5 oil recovery? That's in answer to the way you used it
6 in answering Mr. Chatterton.

7 MR. KILGORE: Would you repeat that, Senator?

8 SENATOR HUBER: In your opinion, how much is the reasonable
9 flow of gas without reducing oil recovery in the content
10 that you used it in answering Mr. Chatterton's question?

11 MR. KILGORE: As I said, I'm not an engineer, I don't know
12 technically the answer to that. My answer to the question
13 was, if the lenders and other people in their own analysis
14 were assured of this fact that they probably would be
15 willing to go ahead. I have no opinion of my own as
16 to what the volumes would be.

17 SENATOR HUBER: I thought it indicated to me you had some
18 knowledge that we didn't have, from your work with
19 other companies.

20 MR. KILGORE: No, sir.

21 SENATOR RADER: I think you stated, Mr. Kilgore, when you
22 started, that you've been in attendance constantly
23 during the hearings which started Monday, and that the
24 value judgments you have given us today, you have taken
25 into consideration the testimony that you have heard

1 at these hearings thus far?

2 MR. KILGORE: Yes, Senator.

3 SENATOR RADER: Are there any other questions of Mr. Kilgore?

4 Mr. Kilgore, will you be available the rest of the
5 afternoon?

6 MR. KILGORE: Yes.

7 SENATOR RADER: We'd appreciate it very much if you could
8 keep yourself available for the committee if they have
9 any questions.

10 MR. KILGORE: I intend to. I'll be happy to do so.

11 SENATOR RADER: We'll take a break and then hear from Mr.
12 Rush Moody. Ten minutes.

13 (Whereupon the hearing recessed at 3:45 p.m.
14 and reconvened at 4:00 p.m.)

15 SENATOR RADER: The committee will come back to order. Mr.
16 Jerry McCutcheon has handed me a two-page document dated
17 April 4, which he has asked to be inserted into the
18 record as an extension of his remarks as Exhibit 18
19 instead of requiring him to verbally testify. Unless
20 there is objection, we will have those remarks placed
21 in the record as Exhibit 18.

22 REP. CHATTERTON: Objection. Would you change the date to
23 February 4, please, from April 4?

24 SENATOR RADER: I'm sorry, did I say April 4? It's February 4.
25 (Whereupon Exhibit 18 was duly marked.)

1 Our next witness -- before he starts to give us his
2 own statement of qualifications, I just thought I might
3 direct the attention of the people present, as well
4 as for the record, that the February 7, 1977 Newsweek
5 entitled "The Gas Crisis" in the National Affairs
6 section, Mr. Rush Moody, a former Federal Power Commis-
7 sioner, is extensively quoted. So I want you to know
8 that Mr. Rush Moody has a national audience for sure
9 and perhaps a national constituency. I don't know about
10 that.

11 MR. MOODY: If nominated, I will not run.

12 SENATOR RADER: But, at any rate, I want to say one thing
13 about the Alaska Legislature; we go first-class when
14 we hire consultants. That's February 7, 1977 on page
15 twenty.

16 Mr. Moody, would you please -- as many of you
17 know, Mr. Moody was first retained by the State of Alaska
18 last year by the Joint House-Senate Gas Impact Pipeline
19 Committee, which was a statutory committee chaired by
20 myself and Representative Gruening as Co-Chairman.
21 Mr. Moody gave that committee extensive testimony last
22 year on some of the same matters that we're considering
23 now. The committee went out of existence as of January 1
24 of this year, the statutory committee. As I say, he
25 was retained by that committee, as was Mr. Swanson,

1 from funds appropriated to that committee, with the
2 thought that some committee of this Legislature would
3 need his advice and his counsel in this matter.

4 So, Mr. Moody, with that, would you please
5 read into the record first, sir, your background quali-
6 fications, and then I assume you will make a statement
7 and open yourself for questions.
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1 MR. MOODY: Thank you, Mr. Chairman, to both Chairmen, and
2 to the Members of the Committee, I wish to express my
3 appreciation for the opportunity of being here. I have
4 been most impressed over the course of the past five
5 days with the attention and the concern which each of
6 you expressed. I wish that the Congress of the United
7 States would take as seriously some of the problems they
8 have as you obviously take seriously this problem before
9 you.

10 I am a lawyer by trade. I attended the University
11 of Texas, with a Bachelor of Business Administration,
12 University of Texas Law School, licensed to practice
13 in the State of Texas in '56, in private practice from
14 1956 until 1971. I was appointed to the Federal Power
15 Commission as a Democratic member by a Republican President.
16 I served on the Federal Power Commission from 1971 until
17 March 15, 1975. I was Vice-Chairman of the Commission
18 for two of those years.

19 I resigned from the Commission in March of 1975
20 because of my belief that the structure of Federal
21 regulation was injuring the consuming public of the
22 United States and that very serious regulatory reform
23 was necessary if the country wasn't going to get in a
24 lot worse shape than it was already in.

25 Following my resignation I represented the

1 Governor of the State of Texas in Washington, as his
2 special counsel on energy affairs. In January of 1976
3 I became a managing partner of the Washington office of
4 the law firm of Vinson and Elkins. The firm, of which I
5 am a member, has offices in Houston, Washington, Fort
6 Worth and London.

7 I hesitate to claim to be an expert in any
8 area, but I am more than fifty miles from home and I
9 do have a briefcase, so I guess I qualify.

10 Mr. Chairman, I would start out, I suppose, by
11 saying that I attempted to prepare for the committees
12 a summary of the contracts together with some analyses,
13 or attempted analyses, of what I perceive to be the major
14 strengths and major weaknesses.

15 SENATOR RADER: Let me interrupt you, Mr. Moody, so we be
16 sure we don't miss that. Make certain that the remarks,
17 your analyses and your covering letter of January 28 is
18 entered in full as an exhibit to the hearings, and that
19 would be Exhibit 19; is that not correct, Reporter?

20 MRS. SANDERS: Yes.

21 SENATOR RADER: Be assured that your full remarks are in
22 the supplement.

23 (Whereupon Exhibit 19 was duly marked.)

24 MR. MOODY: Thank you, Mr. Chairman. I realized after I
25 got here and after I listened to the course of the