

ALASKA LEGISLATURE SPECIAL COMMITTEE / SUBJECT FILES 86/2

530 SCOMM16: JOINT SPEC. COMM. ROYALTY OIL & GAS 1977-78 53

1 merit or political horsepower nationally behind the
2 native claims. That were -- with the exception of the
3 second in which Senator Gravel, when he did come in in
4 1970, was an advocate of the native claims, our delegation
5 and our State administration dismissed the possibility
6 that this could hold up the pipeline and I was practically
7 stoned out of Anchorage in 1969 when I told the Chamber
8 of Commerce that there couldn't be an oil pipeline for
9 maybe seven years and going through the things that had
10 to be done. Well, this was against the unanimous
11 consensus of our administration and our delegation.

12 Come again to about 1972, when the question of
13 the destination of the oil and the West Coast supply/
14 demand balance, you had unanimous profession by the
15 industry, by the federal administration, by the State
16 administration and by our delegation that demand on the
17 West Coast would exceed production, combined California
18 and Alaska production, and that the question of exports
19 to Japan was not a real question because there would
20 never be a surplus of oil on the West Coast. And, again,
21 I think that I was probably alone in the State in
22 maintaining that this would be a problem.

23 Our delegation and most Alaska public officials
24 suffer a disease which is endemic to isolated colonial
25 areas and that is, that it is very easy to believe ones

1 own propaganda, to have wishful thinking. Now, I can't
2 believe that our delegation really believes that there is
3 a substantial chance that they could get a majority political
4 vote for the Trans-Alaska pipeline.

5 I do know that it would hurt them very badly
6 politically in Alaska to come in and do the same kind of
7 thing I do, that is, deliver the bad news. Again, I have
8 very little chance of replacing Senator Stevens or
9 Senator Gravel because I do tell the voters and the
10 politicians the bad news rather than the good news. And
11 so, I can't go into their heads and say why is it that
12 they give unanimous support. I just ask you, what would
13 be the political -- what are the political risks to them
14 of saying there is nothing you can do to advance the
15 Trans-Alaska pipeline, better forget it, buddy. You
16 know what would happen to them, regardless of whether that
17 is their best judgment. There is no political to them
18 at all in saying, "Go, man, go. Let's do everything we
19 can for El Paso." So, I don't know what -- you know, I
20 don't know what is in their heads but I don't think that
21 you can really weigh their statements as an accurate
22 objective judgment of what is going to happen in the
23 United States Congress.

24 SENATOR RADER: Any further questions?

25 REP. CHATTERTON: Yes.

1 SENATOR RADER: Mr. Chatterton?

2 REP. CHATTERTON: Thank you, Mr. Chairman. Dr. Tussing, I
3 am told that there was a recent poll conducted by the
4 Rowan group of public opinion and the findings of that
5 indicated in the order of eighty to eighty five percent
6 of the citizens of Alaska favored an all-Alaska gas
7 line. Are you suggesting in the comments you just made
8 that we who represent those people should subvert their
9 opinions?

10 DR. TUSSING: Not at all. I'm saying that you -- you as
11 members of the Legislature have to make this judgment
12 for yourself on the basis of the way you judge public
13 opinion, and the way you judge what's right and wrong.
14 That is not for me to say. I said I will not recommend
15 the vote one way or another on this.

16 SENATOR RADER: Representative Gruening?

17 REP. GRUENING: Well, this may be a clarification of
18 Representative Chatterton's question, but, is public
19 opinion subverted whether we reject or approve these
20 contracts? As I understand it, the question before us
21 is approving these contracts and not necessarily the
22 support or non-support of the El Paso line. In your
23 testimony the two are not necessarily, in terms of actual
24 effect, are not synonymous.

25 DR. TUSSING: Is that a question?

1 REP. GRUENING: Yes.

2 DR. TUSSING: I don't -- I agree with you that the -- that it
3 is possible to be in favor of the Trans-Alaska pipeline
4 and to be against this contract, or say to conclude that
5 this contract doesn't affect the outcome.

6 SENATOR RADER: Representative Miles was seeking the floor.

7 REP. MILES: Dr. Tussing, you indicated that there was no
8 support for the El Paso project in its market area, I
9 believe. Am I correct there?

10 DR. TUSSING: No. I said there is no substantial support in
11 California. I was talking of California's principal
12 market area.

13 REP. MILES: Just California only?

14 DR. TUSSING: Yes.

15 REP. MILES: I see. Well, this is a major market area, I
16 understand.

17 DR. TUSSING: Yes, California is El Paso's biggest market
18 area.

19 REP. MILES: Why -- getting off of politics and onto economics
20 for awhile, why would El Paso spend so much money in
21 developing a project if there is no support there? Am
22 I missing something? I obviously am.

23 DR. TUSSING: Well, again you are asking me to speculate
24 about peoples motives and I can just try to put myself
25 in their place. El Paso, in the first place, wants to

1 assure its customers that it is doing everything it can
2 to obtain gas and a major campaign to build a pipeline
3 system -- a transportation system from Alaska into their
4 market area is such a gesture and it may earn them some
5 Brownie points even if they -- you know, even if they
6 aren't successful. That is one consideration. Now,
7 El Paso is also getting very heavily involved in LNG
8 technology all over the world and wants opportunities
9 to develop and expand this technology.

10 Now, whether or not how great a probability of
11 success they have, or they believe they have, I don't
12 know. I think it's probably a good gamble for El Paso
13 to stay in the race in the expect. -- on the possibility
14 that Canadians might not come through. That then El Paso
15 is posed with an alternative system.

16 I would not say surely that the El Paso system
17 will be approved even if the Canadians can't get their
18 act together or if they turn down Arctic and Alcan, but
19 at least El Paso is certainly number one -- number one
20 in the line with this and they would -- if they success-
21 fully complete it -- financed it and completed it and
22 operated it, they would add more cash flow to the
23 corporate treasury.

24 Now, why do they want the gas? Why do they want
25 the royalty gas, because they are in the gas business.

1 They want gas to flow through their system. They would
2 want the gas to flow through their system regardless of
3 what system were chosen. I'm sure that once -- that if
4 a system other than El Paso was approved, El Paso will
5 be back here at the state trying to buy the royalty gas
6 and will be back trying to buy gas from the producers.

7 I don't think there is any mystery of what their
8 general motivation to the enterprise is and for risking
9 money for the enterprise. It is a perfectly legitimate
10 kind of corporate venture.

11 SENATOR RADER: Representative Swanson and then Senator Huber

12 REP. SWANSON: Yes, I just -- I'll turn the clock back just a
13 couple of minutes and something has disturbed me through
14 all of these hearings, that we are here talking about a
15 gas contract and using data that is two years old. Now
16 I'm one of the people who endorsed a all-Alaska route two --
17 going on three years ago and we are still using that
18 support in the propaganda used today. We have not
19 passed a resolution since we came to this Legislature
20 endorsing --

21 SENATOR RADER: Representative, do you have a question of
22 the witness?

23 REP. SWANSON: Yes. Well, I kind of resented what was said
24 here awhile ago and I feel a little bit like that I have
25 the right at this table or any other table to state

1 that I don't think that the --

2 SENATOR RADER: If you feel you have been attacked, you
3 have a right of personal privilege but the purpose of
4 this hearing is to make answer -- ask questions of these
5 witnesses now.

6 REP. SWANSON: All right.

7 SENATOR RADER: If you wish to why proceed.

8 REP. SWANSON: I feel like you do, John. I would like to
9 ask you, in your remarks concerning the support of the
10 El Paso route, do you take of what has happened today
11 or two years ago?

12 DR. TUSSING: I'm not sure what you are referring to.

13 REP. SWANSON: Well, in your -- in your statements of the
14 Legislature totally supporting the El Paso route.

15 DR. TUSSING: Oh, the last session of the Legislature
16 adopted a resolution urging the administration to make
17 a gas sale to El Paso and to other supporters in the
18 Trans-Alaska route.

19 As far as I know, you are perfectly correct,
20 this Legislature has not adopted any resolution to that
21 effect.

22 REP. SWANSON: Thank you. Thank you, Mr. Chairman.

23 SENATOR RADER: Senator Huber?

24 SENATOR HUBER: Thank you, Mr. Chairman. Mr. Tussing, the
25 Four Dollar price that you mentioned on gas, is it correct

1 to assume that was an mcf and that it would compare to
2 Twenty Four Dollar a barrel oil price or Sixty-five to
3 Seventy-five Dollar a ton coal price with eight or nine
4 thousand BTU's assumed?

5 DR. TUSSING: Well, those -- those are the equivalent prices.
6 I don't want to be pressed to give a specific price
7 because one of my points is that nobody knows what the
8 price is going to be. It is very likely to be much
9 higher than the sponsors of any of these projects are
10 telling us, but whether the overruns are going to be
11 five percent or five hundred percent, we can only
12 speculate and so --

13 SENATOR HUBER: Would you care to expound on the saleability
14 of Four Dollar gas compared to Twenty-four Dollar oil,
15 at this time?

16 DR. TUSSING: That's -- it's a complicated question. The
17 value -- as I said before, the value of gas to the
18 average homeowner or commercial user is roughly the
19 value of fuel oil plus the -- say, some amortization
20 of his cost of conversion if he has to convert from oil
21 to gas, and so, so at the burner tip, gas is on the
22 average worth maybe Two Dollars and Twenty-five, Two
23 Dollars and Fifty Cents a million BTU today.

24 Now, if we expect the OPEC oil price to go
25 up roughly with inflation, maybe six percent a year.

1 and so on. We can expect that average value of gas to
2 go up. Now, the gas distributors gather together gas from
3 various sources at various prices and they sell it at an
4 average price. The gas distributors and the pipelines
5 are also required by their franchises or by their licenses
6 to provide this service -- to provide gas to all comers
7 at a cost of service price. And so, if they have a
8 shortage, if their demand is greater than their supply,
9 they're often -- they will be willing to pay more than
10 the gas is actually worth at the burner tip to acquire
11 it and put it in their system.

12 Otherwise, they have consumers in which they have
13 legal -- to whom they have a legal obligation to serve,
14 who go short. So that for small amounts of gas, at the
15 seasonal peak, or when there is some sort of emergency,
16 the gas distributors may be willing to pay Ten Dollars,
17 may be willing to pay the equivalent of One Hundred
18 Dollar a barrel oil to avoid turning off the valve to
19 their consumers. So -- but you can't take Ten Dollars
20 a thousand cubic feet as the value because you have got
21 to look at the whole cycle. Now, if the gas coming out
22 of the pipeline costs the distributors Six Dollars a
23 million cubic feet and he has got to -- or a thousand
24 cubic feet and he has got to sell it at an average price
25 of say Two Fifty, that means he has got to get a hell of

1 a lot for it in the peak season. He may have to get Ten
2 Dollars for it at the peak season and then he has got
3 surplus gas, he's paying for the gas that comes through
4 that pipeline in midsummer even though his regular
5 residential customers don't need it. And, in that case,
6 he has got to sell it in competition with coal for a
7 dollar or residual fuel oil for Two Dollars.

8 So, it's not -- there is no single market value
9 price and to know how much, say six hundred fifty bcf of
10 gas or say one hundred million cubic feet of gas per day
11 is worth to a gas distributor in Chicago or Los Angeles
12 depends upon how short they are, how much they have already
13 cut off their low priority customers, what their other
14 alternative gas supplies are. Do they have a lot of
15 flowing -- of gas flowing under old regulated contracts
16 where they are paying Thirty Cents or Fifty Cents and to
17 be used to subsidize the purchase of expensive gas. You
18 have to look at all of these things and then each
19 distributor figures out what the gas is worth to it and
20 what the cheapest alternative is. If it goes to -- say
21 it goes to Four or Five Dollars, they will look at making
22 synthetic methane from oil which is very expensive for
23 base load supply. It is more than the average consumer
24 will pay but if they are trying to -- if they are just
25 trying to fill a gap, it is a lot less risky to build a

1 propane air plant or a plant to make methane out of
2 naphtha for Four Dollars an mcf than it is to commit
3 yourself to twenty years of take or pay year in and year
4 out Four Dollar gas from Alaska. So, Four Dollars is
5 cheaper from an SNG -- from an oil SNG plant than it is
6 from a gas pipeline and I just can't give you the answer
7 and say at what point, at what price Alaska gas prices
8 itself out of the market.

9 The Interior Department's -- the FEA study that
10 says Two Forty -- Two Forty, that's too low in view of
11 their opportunity to roll it in. The El Paso's assertion
12 that the distributors will accept the price no matter how
13 much it costs is pure crazy. There is just no substance
14 for that, there is a limit and I can't tell you --
15 probably Dr. Swanson's firm has done work in this as to
16 what the long term limit to the city gate price is, but I
17 can't tell you. It is somewhere between Two Forty and
18 infinity. And I don't think its -- I really don't think
19 it's much more than Four or Five Dollars.

20 DR. SCOTT: Somewhat short. This way from infinity.

21 SENATOR RADER: Senator Huber?

22 SENATOR HUBER: Mr. Chairman, the other question I have, I
23 have trouble in phrasing it and I have noticed that you
24 have returned to being a bit on the tough side and I don't
25 think you will give me the latitude that you gave Senator

1 Colletta, so I'll let it go.

2 SENATOR RADER: Well, now that we have established that I'm
3 an unfair chairman, are there anymore questions? Mr.
4 Carpenter.

5 REP. CARPENTER: I'm going to make an extension of Senator
6 Colletta's question. Dr. Tussing, you said that you
7 angered the Chambers of Commerce by saying there was going
8 to be a hiatus in construction of a Trans-Alaska oil pipe-
9 line due to land claims and so forth?

10 DR. TUSSING: Yes.

11 REP. CARPENTER: Well, refreshing your memory a little bit,
12 you actually angered them because you said there was no
13 political chance of a Trans-Alaska oil pipeline, there
14 was going to be a Trans-Canadian oil pipeline and that is
15 what got everybody on you.

16 DR. TUSSING: I never said that. Never, never, ever.

17 REP. CARPENTER: Our memories differ.

18 SENATOR RADER: Are there any other -- I'd like to ask every-
19 body to keep themselves on the subject of inquiry here.
20 There is opportunity -- there will be opportunity for each
21 of us to express ourselves at a later time as to whether
22 Dr. Tussing's remark characterized a hypothetical or a
23 real governor or legislature or a congressman. We needn't
24 confront him with that today. Our purpose here today is
25 to take his testimony on the subject before us and I

1 would like to limit the questions to that if we might.
2 Senator Croft?

3 SENATOR CROFT: Could I interrupt your remarks and ask a
4 question? I am curious what you think the prospects are
5 that any pipeline, Arctic, El Paso, Alcan, or another
6 one if it is proposed, will actually begin construction
7 sometime in 1978. Judge Litt talks about a dollar well-
8 head value being about the upper limit and all of the
9 projections are that these -- each of these projects will
10 have a higher amount than that. You have talked about
11 all events tariffs and types of public financing that
12 haven't even been considered yet. What do you think the
13 prospects are? You have indicated Arctic is likely to be
14 approved, do you think that means that they can actually
15 begin the construction on the time schedule they are
16 talking about?

17 DR. TUSSING: I don't -- I'm very skeptical as to whether
18 Arctic can be built. I think it can be approved, that's
19 the -- I think it can be approved in the United States
20 and all other things being equal, it will be approved in
21 the United States. It will get the endorsement of the
22 FPC. But, shortly after the FPC decision we'll get the
23 Berger decision, the National Energy Board in Canada will
24 be second phase hearings next month. The NEB -- I don't
25 know what the NEB will do, it will probably hand the hot

1 potato to the cabinet -- to the Canadian cabinet. But,
2 once the FPC makes its decision and once Berger in effect
3 makes a contradictory decision, what is on the agenda is for
4 negotiations between the United States and Canada as to
5 what can be worked out. And the final decision depends
6 first on those negotiations and second on resolving a lot
7 of questions that involve both government and industry
8 that really haven't been confronted yet. One is the
9 financing question and in what manner shall the respective
10 governments provide the guarantees against the risks in
11 this system and practically any proposal is going to be
12 extremely controversial. Loan guarantees come -- again,
13 raise the question that your socializing the private risk
14 and letting the private owners have the profit, and there
15 is going to be a lot of antagonism in both countries.

16 You may recall that the Diefenbaker government
17 fell as a result of things resulting from the loan
18 guarantees to the Trans-Canada pipeline. The -- so that
19 -- it's a sensitive issue in Canada.

20 Another issue that hasn't yet become -- begun to
21 be confronted which is relevant to this royalty gas sale,
22 is how the gas is going to be allocated. If the -- if
23 there is still wellhead price control by the FPC, every
24 gas company in the United States is going to want some
25 of that gas and no company can offer the producers or

1 the State of Alaska more favorable economic terms than
2 any other company. So, there is going to be a lot more --
3 there is going to be a lot more demand for that gas than
4 there is supply, assuming that some sort of viable pipe-
5 line system is hooked up.

6 The FPC is going to have to decide whose contracts
7 are going to be approved. And even though there is no --
8 there is no current legal authority for the FPC to
9 allocate gas and -- at least in non-emergency times
10 among pipelines the way it can allocate today and say --
11 say to Columbia, "you know, Tenneco needs the gas more
12 than you do, so we will turn down the Columbia contract
13 in the -- the proposed contract with Columbia in the
14 public interest because this other system is cut -- it's
15 jeopardizing its number one and number two priority
16 customers while you're still serving threes and fours."
17 So, the FPC is going to decide who gets the gas. That is
18 one of the reasons the producers aren't going out of their
19 way to sign contracts, because -- you know, why should
20 they choose one over another? They are not going to get
21 any price advantage and the contracts -- a lot of them
22 will probably be turned down anyway because the FPC wants
23 somebody else to have the gas. Well, that hasn't yet been
24 dealt with and if gas contracts are going to be used to
25 finance the pipeline, then these have to be executed

1 before a final financial plan goes together. So, in
2 summary, I don't see much chance for construction in --
3 beginning in '78 unless the U.S. and Canadian governments
4 bite the bullet and say, "we will provide the interim
5 financing and we'll guarantee the thing until you put
6 the final -- until all the final arrangements are made."
7 And I really don't see -- I don't see that. Maybe next
8 winter, if the questions before Congress and the Parliament,
9 and we have got another cold spell like this years, they'll
10 be willing to do it. They may send the Corps of Engineers
11 out to build the thing for all I know but -- but, I don't
12 see it starting in '78.

13 SENATOR RADER: Senator Croft, were you through?

14 SENATOR CROFT: No, I have another question. To what extent
15 do you feel that the assumption of the amount of gas that
16 is available on the reserves in the Arctic, Prudhoe Bay,
17 as well as the Mackenzie is an unrealistically high
18 assumption? Both El Paso and Arctic are big volume lines.
19 To what extent do you think their estimates of their
20 potential build up of throughput are realistic or un-
21 realistic?

22 DR. TUSSING: Well, if by the time -- by the time the system
23 is completed, I think there is a good chance that there
24 will be a lot more gas than we know about now. That isn't
25 enough to get -- to get the kind of debt financing I'm

1 talking to. A good chance isn't enough. A good chance
2 is enough to make a risk venture, but if you are risking
3 your own money and you say "I think there is going to be
4 plenty of gas there that we'll be -- that by the time the
5 thing goes on stream we would be able to produce four and
6 one-half bcf from those two areas and that's -- that's
7 the way to average expectation and I'm willing to gamble
8 my money on that." That's fine, but the bond -- the bond-
9 holders want a ninety-nine percent assurance.

10 I think that there is merit to the notion that
11 society, that is, that the U.S. and Canadian governments
12 should take the risk and build a pipeline that is cheap
13 to expand. Now, if the governments are not going to do
14 it then the -- then the rationale -- the strategy of Alcan
15 is the only one that makes sense. You put in absolutely
16 minimum capital investment necessary to start that gas
17 and that cash flowing. I think that they have -- that the
18 Alcan people haven't scaled down their system as far as
19 they could. That, for example, they could drop Northern
20 Border out of the system and say, "we're going to -- we
21 expect the NEB to authorize or compel Trans-Canada to move
22 this east and then we'll take it through a Great Lakes
23 pipeline and we'll increase the power or whatever is
24 necessary there."

25 I think -- now, Judge Litt wants a western leg on

1 the Arctic pipeline and all the Western States want it
2 because they don't believe that they will get the gas
3 under reasonable prices by displacement. Well, the
4 western leg is physically superfluous, at least up to,
5 say one and one-half bcf going to -- going to western
6 systems. Well, so -- so, as part of the political
7 compromise you put the western leg into the system but
8 you don't build it until after the gas starts flowing and
9 the production builds up.

10 So, but if -- but if Canada and the United States
11 are willing to bite the bullet and say, "our best
12 geological assessment is that there is sixty or one hundred
13 tcf up there which can be discovered within the next ten
14 years, then let's go haul the hog, let's put in a high
15 capacity pipeline. Let's put a MacKenzie link, whether
16 it is on the Dempster Highway or the foothills or whatever,
17 as part of the phase two and build the thing so it is
18 compatible with the Mackenzie link and so on."

19 SENATOR CROFT: What you are saying is that a sale of the gas
20 will not have any effect on the route decision. What I
21 was really getting at to get you to comment on, do you
22 feel a -- (a) a refusal to sell any gas or (b) a refusal
23 to allow production of gas might influence a route decision?

24 DR. TUSSING: No. There is no credibility to such a threat
25 by Alaska because once the decision is made, the State's

1 got no -- the State's got no alternatives and all you do
2 by not allowing the gas to be produced -- you may cause
3 problems for oil production which causes the State a lot
4 of problems and you forego the revenue. And, I just can't
5 believe the State is stupid and spiteful enough to refuse
6 to produce the gas just because the rest of the country
7 didn't do -- didn't build the route the State wanted.
8 It just doesn't make sense. And so that threat has
9 absolutely no credibility. In the calculation of rates of
10 return or costs assuming only seven-eighths of the
11 production are just meaningless, you are just not going
12 to do that and nobody will believe that you'll do that.

13 SENATOR CROFT: What about the holding down the rate of
14 production?

15 DR. TUSSING: Well, there are some difficult -- there are some
16 difficult problems. Suppose your reservior engineering
17 studies show that the optimum rate of production is 1.6
18 bcf below -- is below the economic threshold of any pipe-
19 line system but that you -- but you do run into trouble
20 by keeping injecting that gas and you're not going to
21 flare it. You have some tough -- you have got some tough
22 problems and I don't have an answer to that and let's hope
23 we don't have to face that one. But, it is entirely
24 plausible that you may have the level of production large
25 enough to give you problems as to what to do with the gas,

1 but not large enough to make any transportation system
2 viable. And, of course in the past what was done in that
3 sort of situation is what is being done is Saudi Arabia
4 and Venezuela and the other big isolated fields in the
5 world, they just burn the stuff.

6 SENATOR CROFT: Mr. Chairman. If a one in ten chance which you
7 referred to earlier is sufficient to keep investors from
8 backing any gas line, isn't the uncertainty about levels
9 of production such that it might -- that itself might
10 cause a delay in the pipeline?

11 DR. TUSSING: Yes, I think so. The --

12 SENATOR CROFT: Particularly when it is coupled with the
13 possible decision by the U.S. Government on deregulation
14 which may make Alaska gas -- not only might they face
15 a lower volume of Alaska gas but a less valuable Alaska
16 gas, if you couple the two together.

17 DR. TUSSING: Yes, all of these are just parts of a big
18 package of uncertainties that are going to cause difficulties
19 for any of these proposals.

20 SENATOR CROFT: Thank you.

21 SENATOR RADER: Representative Gruening?

22 REP. GRUENING: Dr. Tussing, as I understand what you said
23 earlier was that the Canadian government was going to
24 make the choice as to whether it was for either Alcan or
25 Arctic. How is the President going to feel comfortable

1 with making a decision, certifying a route without that
2 stage in the negotiations being very certain? Are they
3 going to amend the Alaska Natural Gas Transportation Act
4 so he has more time? In other words, he has until July --
5 or September first and then ninety days if he wants to
6 extend it. Is he going to feel comfortable with making
7 that kind of decision without those things resolved?

8 DR. TUSSING: I think what he is going to do is as soon as
9 the FPC decision comes down, and it may be happening right
10 now, he is going to start talking with responsible
11 Canadian authorities about -- oh, to what -- what kind
12 of compatible decision we can come out with. And, I
13 don't think that the Canadian authorities know what their
14 political constraints are yet, until Berger has actually
15 published his findings and there has been the -- a chance
16 for a discussion of it and for the bureaucracy -- for
17 them to read the FPC decision in the United States.

18 But, if the President makes the decision, say at
19 the end of '77, you can count on its reflecting his
20 discussions with the Canadians and he is not going to
21 make a decision which is totally incompatible with what
22 he thinks the Canadians are going to do. And both
23 countries are going to bend over backwards not to appear
24 to be forcing the hand of the other and to be blackmailing
25 the other that there -- or leapfrogging or something like

1 that. They're going to try to make it -- they're going
2 to try to come out with compatible decisions, whatever
3 the --

4 REP. GRUENING: You seem to raise the same arguments that the
5 El Paso people raise in terms of the unsolvable Canadian
6 questions and I think, you know, the same statements
7 seem to be made in terms of the problems. Now, are those
8 problems going to be resolved to the extent that the
9 President can make a decision certifying say a Canadian
10 route and not -- coming back at a later time and say,
11 "I'm sorry, we can't -- the Canadians just decided that
12 they can't go either route, we're going to have to go to
13 an El Paso --"

14 DR. TUSSING: Well, the law says that he has to make the
15 decision whether or not Canada has -- he has to make a
16 decision on its merits whether or not Canada has made a
17 decision. And, irrespective of what the process in
18 Canada is, in reality it's going to be a joint decision
19 once the -- once the thing has gone through the regulatory
20 and hearing phases of it and I don't know the exact
21 mechanism by which the United States and Canada will
22 consult on this. I'm sure no mechanism has been set up.
23 But, it's not an insoluble problem, it's a problem whose
24 answer -- whose outcome is impossible to predict with
25 competence now. I don't think anybody can come out with

1 a solid prediction of what will happen in Canada, much
2 less -- I'm as willing to do it as any Canadian. There
3 is no authoritative -- there is nobody who has the
4 authoritative position in Canada to say what Canada's
5 position is on this. But, Canada will have a position
6 of some sort and it will influence the President's decision.

7 I think that the -- that there is a good chance
8 that the compromise between the FPC's decision in favor
9 of Arctic and Justice Berger's decision against Arctic
10 will be some kind of expanded Alcan system. That is my
11 guess, but I wouldn't give it more than a fifty percent
12 probability. One substantial possibility is that Canada
13 will not authorize any pipeline or will postpone it till
14 after the elections and the President may decide that we
15 have to go ahead with our own system because of our
16 internal needs, even though it's not -- even though it is
17 the second best. So, my ability to forecast or prophecise
18 is strictly limited on that.

19 SENATOR RADER: Representative Meekins?

20 REP. MEEKINS: Thank you, Mr. Chairman. Dr. Tussing, you
21 stated in your comments that this contract, in your view,
22 was not essential, that we weren't -- essentially that you
23 weren't getting very much in the contract but looking at
24 it from the other perspective, what are we losing, if
25 anything? Are we losing anything by approving it?

1 DR. TUSSING: Well, it is -- it is conceivable that the Trans-
2 Alaska route, or for that matter an Alcan route, after the
3 State shifts to it, if it does, will be approved and that
4 these contracts will be the basis of contracts under
5 which gas actually flows.

6 I'm rather doubtful, even in this situation,
7 whether the FPC will approve just these contracts for a
8 number of reasons. But -- but it's possible you may be
9 stuck with these terms and they are probably not -- not
10 the best terms you could get in a bidding situation after
11 the -- after the pipeline is -- route is clear. Certainly
12 there may be opportunities in a deregulated situation to
13 get a more favorable situation. I don't want -- I don't
14 want to speculate too far on that, but your other
15 consultants who have examined the contracts in detail
16 point out ways in which the State has given up options. So --
17 So, in case they go into effect you have given it up. I
18 do have one specific criticism of the contracts even
19 starting -- even from the presumption -- the premises
20 from which the administration is starting, that is, that
21 you are going to buy some political support.

22 And, I don't know why you had to commit one hundred
23 percent of the gas and I think there is some -- there are
24 a couple reasons why you probably shouldn't commit one
25 hundred percent of the gas. Firstly, you have this most

1 favored nation clause, that is, that the price is the
2 highest price paid by any interstate purchaser. Now,
3 it may well be possible for the State, if it kept some --
4 held some gas back to find a purchaser who would pay a
5 higher price than any of the others and jack up the fate.
6 If it kept some -- twenty-five percent out and waited
7 until -- waited until the bidding process at the time
8 of the completion of the pipeline, you might be able to
9 get a higher price than any of the sales from the -- by the
10 operators because the State might be in a position to
11 sell to a nonjurisdictional purchaser, or to one that
12 has a special tax advantage, like a state entity.

13 And, I would like to see you have the opportunity
14 to use that twenty-five percent to jack up the price on
15 the remaining seventy-five. Then the other is -- in the
16 administration's presentation and within the whole rationale
17 for the thing, there seems to be a high probability of
18 a shift in route -- of a shift to Alcan, for example.
19 And, if that is serious, if that is not just window
20 dressing, then it would seem to me you would want to keep
21 twenty-five percent out to -- and to offer it to Northwest
22 at that time that the State moves to the Northwest position.
23 Otherwise, the option of shifting doesn't seem terribly
24 great. So, even if I were -- even if I accepted all the
25 other premises, I don't see the reason for selling more

1 than three-quarters of the gas at this time.

2 SENATOR RADER: Representative Meekins?

3 REP. MEEKINS: Do you happen to know if that -- if the most
4 favored nation provision, as you call it, in there would
5 apply to sales to users? I'm not sure it would.

6 DR. TUSSING: I don't have it in front of me but if I recall
7 the language, it's in any interstate sale. It doesn't --
8 or any interstate purchase and so it doesn't characterize
9 the purchaser. It would seem to me it would -- frankly,
10 I don't see why in a deregulated situation it should be
11 limited to interstate sales since -- since, if the gas
12 is worth Two Dollars in-state, to an in-state purchaser,
13 you shouldn't sell it for One Dollar to an out-of-state
14 purchaser.

15 But, as Mr. Moody says in his prepared statement,
16 it may not be that you can get any contract which includes
17 a -- you know, includes that -- all these provisions.
18 That's a matter of judgment that is up to the negotiator,
19 he really has --

20 REP. MEEKINS: Well, I'm trying to find out if there is any-
21 thing we are really losing, in your view, in approving
22 this contract. You know, we've heard that that -- that
23 problem that you point out that we may be losing a higher
24 price by not having reserved the twenty-five percent so
25 we can jack up the most favored nation provision in there.

1 That might not be a realistic concern because the FPC
2 wouldn't approve of such a contract anyway in their
3 regulation of the transportation of such gas.

4 DR. TUSSING: Well, no. That's a -- that's one that depends
5 on the -- it's conditional on deregulation. So, it wouldn't
6 require an FPC approval. The FPC will continue to regulate
7 the transportation and the transportation costs but if
8 that's a feature of the wellhead price, conceivably the
9 FPC could reject the whole contract on the grounds the
10 pricing provisions are not in the public interest but I
11 don't see that as a problem. I just -- let's say what
12 you are giving up are the shortcomings identified by Mr.
13 Swanson and Mr. Moody, as far as I can tell. That is,
14 that there -- that you are giving up options or some
15 possible options for getting a higher price by leaving
16 the gas off the market until you see -- until all the
17 circumstances are sorted out. You know -- for example,
18 the amount the gas is worth to a particular gas distributor
19 does depend on the transportation system. Now, the hi-
20 erarchy -- the ranking and the order of preference of
21 the different potential customers would change. For an
22 Alcan system probably -- probably Northwest would be
23 your preferred customer in a deregulated situation be-
24 cause the value of gas in its market is essentially the
25 same as it is anywhere else in the country but it is

1 closer, so you have the lowest transportation costs.
2 And, under the LNG system you would probably -- conceivably
3 El Paso would be willing to bid the highest for two
4 reasons. First, because it would be the point of off
5 loading and be closest, and second, because they are
6 quality problems. California probably has the highest
7 premium but as you know, of course PG & E, which is one
8 of El Paso's customers, is part of the Arctic group and
9 would like to bring the stuff overland to California.
10 Now I don't know how much PG & E would give.

11 REP. MEEKINS: Thank you.

12 SENATOR RADER: Mr. Chatterton?

13 REP. CHATTERTON: Mr. Chairman, Dr. Tussing, this is in effect
14 the same question as Mr. Meekins -- Representative Meekins
15 asked and I am going to ask it so I think that we can not
16 be confused by rhetoric about pipeline routes and stay
17 with just one subject, the contract, and I think you can
18 answer it with a "yes" or "no". My question, do you
19 believe that this legislature in approving these three
20 gas sales contracts would be doing the people of Alaska a
21 disservice?

22 DR. TUSSING: I can't answer that. That's a political question
23 that really goes beyond my competence.

24 SENATOR RADER: Any further questions? We'll adjourn and
25 subject to an adjournment by the House and Senate

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tomorrow morning we will reconvene at 11:00 a.m.

We'll start with the Alcan people and go from Alcan to Arctic Gas and then probably through our consultants and then into the general public testimony.

We stand adjourned.

(Whereupon the hearing was adjourned at 5:15 p.m.)

1 review and a rebuttal by our Department of Administration,
2 Attorney General's office, and whatever, concerning
3 misstatements that may have been made or positions that
4 are unclear, and also submit themselves to questions
5 by the committee members and, of course, other Senators
6 on any questions of which we have reason to question
7 their earlier statements or need clarification.

8 Representative Gruening, did you have any further
9 announcements as to your committee?

10 REP. GRUENING: I guess not.

11 SENATOR RADER: We'll first take up Dr. Carl Swanson. Doctor,
12 would you please identify yourself, give us a resume of
13 your background, your position, and I would suggest that
14 you go through your report and outline to us those portions
15 of your report which you think are most important to us,
16 and then open it up for questions. Would that be
17 appropriate with you?

18 DR. SWANSON: That would be very appropriate. I have some
19 remarks that I've outlined here which I'd like to give
20 to summarize the report, as well as a few remarks on issues
21 that have been raised during these hearings upon which
22 I'd like to comment. Would that be appropriate for me
23 to do?

24 SENATOR RADER: That would be appropriate. I'd like to have
25 your background read into the record first.

1 DR. CARL SWANSON: My name is Carl Swanson, I am Executive
2 Vice President of Jensen Associates, Inc., which is an
3 economic consulting firm with offices in Boston, Washington
4 and Geneva, Switzerland. The company specializes in
5 economic analyses, forecasting, pricing, analysis of
6 investments, advice on contracts, occasionally testimony
7 before various Congressional regulatory bodies, or
8 Legislative bodies, in matters of world oil, natural
9 gas, natural gas liquids, and occasionally some work on
10 electricity prices.

11 My educational background is at Massachusetts
12 Institute of Technology where I received a Bachelors Degree
13 in Economics and Engineering, and a PhD in Management.
14 I taught for five years at the Sloan School of Management,
15 at M.I.T. as an Assistant Professor. More recently I
16 have been a consultant, since that time.

17 In my consulting, relevant to the issues that you
18 face, I have assisted in the staff work, backing up,
19 price negotiations on long-term LNG projects, I have
20 performed analyses for computer simulation models of the
21 logistics of moving LNG from the liquefaction line across
22 the Atlantic Ocean to receiving terminals, into distribution
23 systems, and to the burner tip. I have assisted industrial
24 buyers under Order 533, analyzed supplies of natural gas
25 and contracts that are offered to them. We have assisted

1 producers in analyzing their contracts, producers in
2 analyzing their gas contracts, in order to see if they're
3 well protected. I have looked at supply and demand of
4 natural gas in the United States and impact upon curtail-
5 ments. I have forecast the world-wide supply and demand
6 to 1985 of propane and butane, that is liquefied petroleum
7 gases, and lastly, relevant to your concerns my firm and I
8 have analyzed the gaseous fuel markets in the states in
9 the northeast quadrant of the United States in order to see
10 the impact of price upon the demand for natural gas and
11 for propane by industrial consumers.

12 That's my background, and I think what I'd like
13 to do is briefly summarize the report which has been,
14 I believe, distributed to the committee and is available
15 to anyone else. Should I identify this report, Mr. Chairman?

16 SENATOR RADER: I would like to have the report made an exhibit
17 in our proceedings. Would the reporter inform us as to
18 the exhibit number.

19 MS. SANDERS: 16.

20 SENATOR RADER: Exhibit No. "16" will be the "Economic Analysis
21 of Alaskan Royalty Gas Contracts" to the State of Alaska
22 by Jensen Associates, Inc., consisting of some forty-four
23 pages, dated January 1977. Therefore, any matter which
24 the Doctor omits in his testimony will be available in
25 the supplement, or in the exhibit. Would you proceed,

1 Doctor?

2 (Whereupon Exhibit "16" was duly marked.)

3 DR. SWANSON: First let me summarize the report. There is a
4 summary of the report on the first four or five pages,
5 which you may already have read, and I will essentially
6 go through that summary.

7 Let me first, before I continue, identify who
8 I'm representing. We were hired, Jensen Associates, Inc.,
9 were hired by the Legislative Affairs Agency on behalf
10 of you ladies and gentlemen, the Legislature, to assist
11 you in analyzing the contracts that you are now considering.
12 Our mandate was to see if the contracts protect the
13 interests of Alaska. We did not address ourselves to the
14 legal issues; we confined ourselves to economic issues
15 as appropriate to business ---

16 SENATOR RADER: Excuse me, Doctor, let me interrupt you.

17 I do see some members of the Legislature, and I want to
18 invite you to seat yourselves at the front tables here,
19 if you would care to. It will be easier to participate
20 in the questioning and also address the witness.

21 I'd ask, do we have a page. We're supposed to
22 have a page here. When we get one I was going to ask
23 the page to invite other legislators who may come in
24 at a later time to come forward.

25 Proceed, Doctor, I'm sorry for the interruption.

1 DR. SWANSON: Thank you. We looked at this contract from two
2 points of view, or we asked two questions. One question
3 we asked was, if the El Paso project is not approved
4 has the State preserved itself the right to protect its
5 royalty gas and interest through provisions which allow
6 it to terminate the contract. The answer to that question
7 is yes.

8 The second question we asked is, if the El Paso
9 project or any pipeline project which the Governor would
10 like to support is approved, does this contract protect
11 the economic interests of Alaska; that is, if this contract
12 is in force is Alaska protected. We examined three dif-
13 ferent respects in which Alaska might be protected, and
14 one of them is, can Alaska use the gas within its own
15 state. Secondly we asked, are its interests in the natural
16 gas liquids protected. Thirdly we asked, will Alaska,
17 under the terms of this contract, receive a favorable
18 price.

19 Let me take those questions in order. First, I
20 think this contract has extremely well designed provisions
21 to allow Alaska to reserve natural gas from Prudhoe Bay
22 for its own use. The terms on reservations are unambiguous,
23 and Alaska with what I consider to be short notice, two
24 years, can take back to itself one hundred percent of the
25 royalty gas.

1 Secondly, there is a provision in the contract
2 which allows Alaska to exchange royalty gas for gas which
3 may be more proximate to its markets and use the royalty
4 gas, taking back the royalty gas in paper at least, in
5 order to trade for gas which may be more available to it.
6 This exchange provision provides a great deal of flexibility
7 to the State of Alaska.

8 Thirdly, the provisions of the contract do not
9 set any limit to when in the future the State could
10 determine it will need the royalty gas which is in
11 Prudhoe Bay. I interpret this to mean that the State
12 could decide today or sometime when this contract is in
13 force five years downstream gas which is currently being
14 delivered, or part of the gas which is currently being
15 delivered, would be needed in the future and thus Alaska,
16 as I interpret this contract (and you probably should ask
17 others about this) could at any time reduce deliveries
18 to the purchasers. Now, since the Prudhoe Bay field has
19 a gas cap, it would appear to me -- I am not a reservoir
20 engineer and your reservoir engineers could comment on
21 the reality of what I'm about to describe -- but it seems
22 to me that Alaska could work out a deal with the producers
23 to reduce slightly the production of gas from the gas cap
24 and, in effect, store Alaska royalty gas for future years.

25 The second question we've addressed is, are the

1 rights of Alaska to the natural gas liquids well protected
2 and the answer is, I think very well protected. Alaska
3 has the right to extract ethane and heavier components
4 at any time before or after delivery to the purchasers.
5 I would interpret this to mean that if a gas processing
6 plant were to be built in Canada or the United States and the
7 liquids extracted there, that the rights of Alaska to
8 the liquids would still be retained. I would suggest
9 you ask Mr. Moody the same question.

10 Furthermore, within the contract, statements on
11 quality of the gas of the contract, I saw no limitations
12 to the btu content of the gas delivered to the consumers.
13 To be sure, there is a price adjustment clause built in
14 the contract for the btu content of the gas, but I believe
15 there is no quality limitation to the delivery of methane
16 or the natural gas which would restrict removal of liquids.

17 Third, I think the more important question and
18 lengthier analysis in our report, is what price will
19 Alaska receive for its royalty natural gas under the terms
20 of this contract. I think in order to understand the
21 terms of this contract as written I need to review for
22 you very, very briefly what I believe to be the course
23 of energy prices over the terms of this contract.

24 This contract has a term of twenty years,
25 beginning upon initial deliveries of natural gas, which

1 will occur sometime close to 1985 very likely, meaning
2 this contract will exist from sometime around 1985 to about
3 2005. As we look downstream at the price of energy in
4 the world, I think most energy consultants agree that
5 the Organization of Petroleum Exporting Countries is not
6 likely to lose control of world oil pricing between now
7 and 1985 certainly. I think most agree that the price
8 of oil will continue to increase in world markets. I
9 think the price of energy within the United States is
10 going to rise more rapidly than the price of world oil,
11 largely because at the current time the price of energy
12 in the U.S. is controlled below world levels. As these
13 controls are relaxed, particularly as more and more new
14 oil, as it's defined in the regulations, is produced,
15 and as more imported oil is brought into the United States,
16 the oil prices should increase in the United States more
17 rapidly than world oil prices.

18 Secondly, I think that it's very clear that there's
19 a consensus developing in the United States that the con-
20 servation of energy is a very, very important national
21 objective. There is yet no means that have proven to
22 be effective by which this conservation is to occur.

23 Europe and Japan have imported oil in great
24 quantities for many years, and they have very actively
25 for many years used taxes to increase the price of energy

1 to their consumers in order to force conservation and this
2 conservation, through the use of the price mechanism,
3 has proved to be effective. I would expect the U.S.
4 would begin to follow such policies of using prices to
5 bring about conservation.

6 In sum then, I think that to 1985 we should within
7 the U.S. and the world see increases in the price of energy.
8 After 1985 we believe, Jensen Associates, Inc. believes,
9 there is a very good likelihood, as long as industrialized
10 nations do not fall into worldwide depression, that the
11 production limits of the OPEC nations will
12 begin to be strained by the demand for oil in the indus-
13 trialized nations, and the chances after 1985 for very
14 sharply rising prices will exist. Between now and 1985
15 we would expect oil prices to essentially track inflation
16 in the industrialized nations.

17 This is the price scenario under which we need
18 to examine the price terms of this contract; that is,
19 prices rising gradually to 185 and with sharply rising
20 financial prices thereafter.

21 The question is, do the price terms of this
22 contract protect the interests of Alaska, its revenues
23 essentially, with sharply rising prices after 1985.
24 I think the people who framed the contract recognized
25 that there is a fair amount of uncertainty about energy

1 prices, which there are, and they designed the contract
2 to adapt to prices established outside the contract.
3 There is not a price, there is not a set price, a certain
4 number, in this contract for royalty gas. But prices
5 are established within the contract under two different
6 types of regulation that may occur in the future. One of
7 them is deregulation.

8 If the price of natural gas at the wellhead is
9 completely deregulated the terms of this contract, in my
10 opinion, protect the interests of Alaska well. There is
11 an annual redetermination clause which has been clarified
12 by the purchasers as applying to both Section 6.3 and
13 6.4 within this contract, which will allow the contract
14 to try prices on the North Slope of Alaska.

15 Now, the North Slope of Alaska is expected to
16 be producing oil and gas in many other locations in the
17 future. The terms of the deregulation clause in the
18 contract allow the price to attract the highest price
19 paid on the North Slope. One would expect that there
20 will be continuing discoveries on the North Slope, and
21 under deregulation continuing new fairly well market
22 base pricing of natural gas which will be tracked by
23 this contract.

24 Under deregulation this contract protects the
25 revenues and the prices Alaska will receive for its

1 royalty gas in interstate commerce very well.

2 The second scenario one can view with a future
3 is continued regulation of wellhead prices by the Federal
4 Power Commission and possibly by Congress. The shape
5 of that regulation is, hard for -- it's certainly hard
6 for me to discern as regulation has changed from time to
7 time with some fairly sharp shifts. Mr. Moody can explain
8 that to you better than I can. We attempted to indicate
9 it in our report.

10 But the contract does state clearly that Alaska
11 will accept the regulated ceiling prices for the natural
12 gas which the regulatory agency will set. It also says
13 that the price that Alaska will receive for the gas will
14 never exceed that price which the purchasers can include
15 in their cost of service to their customer. This is the
16 clause which protected purchasers. I would assume that
17 the contract could not have been written without that
18 clause in it. It essentially says that, given the very
19 large volumes of gas which we're discussing in these
20 contracts, that the purchasers will not have their share-
21 holders pay part of the price of the gas if the regulatory
22 agencies do not allow the full price of Alaskan royalty
23 gas to pass to the consumers. I think it is probably
24 likely that the purchasers would not have signed the
25 contract without such protection for their shareholders

1 and their bankers.

2 Now, Alaska under regulation, you and anyone
3 else who attempts to understand what the regulated price
4 for gas will be from Alaska, will be faced with some
5 difficulty, and that is because the recent national rate
6 decisions from the Federal Power Commission have clearly
7 excluded Alaska from the national rate, both in the appli-
8 cation of a national rate and secondly, in the calculation
9 of the proper national rate for new natural gas. Thus,
10 it's not clear, the precedent is not clear the calculation
11 of the procedures which will be applied under regulation
12 if regulation persists to this North Slope royalty gas.

13 In our report we've attempted to show that there
14 is a great deal of uncertainty, very significant uncer-
15 tainty about what this price might be. In 1980 if the
16 current pricing mechanism or the vintaging of 77-A, using
17 the vintaging of 77, and I'm sorry if I'm using some terms
18 with which you may not be familiar, the price which might
19 apply to new natural gas, a Dollar Fifty-Six a million
20 btu's. But Alaska has characteristics which are very
21 different from the characteristics of the Lower 48 States
22 in its gas production, and that is in the calculation of
23 the national rate the calculation is based upon the costs
24 of finding and developing non-associated gas. The reason
25 for this is the Federal Power Commission has had a very

1 great difficulty in pricing associated natural gas because
2 it had difficulty in allocating costs of drilling, explora-
3 tion and development between oil and gas.

4 Thus, the Federal Power Commission, and there's
5 an expert to my left and to your right who can describe it
6 more fully than I the reasons behind it; the Federal
7 Power Commission recently has said that the national
8 rates for non-associated gas, and it simply said that
9 the prices for associated gas will be equal to that
10 calculated for non-associated gas.

11 Non-associated gas comprises perhaps seventy per-
12 cent of the Lower 48 gas supply. Such is not true of
13 Alaska. The Prudhoe Bay field is the largest field in
14 North America and it has the predominance of the reserves
15 of Alaska, and it's an associated gas field. If the
16 Federal Power Commission were to apply cost based pricing
17 to Alaska, particularly to the Prudhoe Bay field, you
18 would have to face the issue of how to allocate the costs
19 of drilling, development and exploration between the
20 gas and the oil. The fact about the Prudhoe Bay field
21 which is very delightful for Alaska in its sales of
22 oil is that it is the largest field in the world. From
23 the point of view of selling gas, if a rate were to be
24 applied to Alaska, the fact that it's the largest field
25 in the world may not give you the highest price because

1 the costs of finding and developing the gas per thousand
2 cubic feet are relatively low.

3 We've calculated, using some very rough estimates,
4 and ignoring the costs of water flood that may be attributed
5 to the taking back of natural gas and the costs of
6 extraction of carbon dioxide, that the Alaska rate might
7 be somewhere between Twenty and Forty-Five Cents per
8 million btu.

9 The question remains, however, does this contract
10 protect your interests in your royalty gas, and I think
11 that we can safely say this contract is not going to
12 influence too greatly, with one exception (I'll talk
13 about that in a second) the regulated price of natural
14 gas. This contract can only adapt to prices set by the
15 Federal Power Commission or other regulatory bodies.

16 Under regulation, the contract clearly states
17 it will accept the regulated price (a), and (b) it says
18 that it can receive a price no less than the price received
19 by any working interest owner. Both clauses, I think,
20 protect your interests reasonably well.

21 However, there is one concern we had, which we
22 described in the report, which is that most royalty interest
23 owners, and certainly working interest owners, are
24 usually private investors. The State of Alaska is a body
25 different from the private investor. It has social

1 responsibilities to its citizens.

2 One question that has been raised is, could Alaska
3 under regulation claim, because of its unique responsi-
4 bilities as a state, get a higher price for its royalty gas
5 than the price given to the working interest owners.
6 If such were true, this contract does not distinguish
7 Alaska from the working interest owners, it clearly
8 states it will accept that price which will be received
9 by the working interest owners. I think you need to
10 assess, and I would like to help you assess, the probability
11 that Alaska might receive a higher price for royalty
12 gas under regulation than working interest owners.

13 Let's do it in the following way. If Alaska
14 were to state that it will ask for a price different
15 from the working interest owners, and if Alaska were to
16 ask for a higher price, I think the response could be
17 a varied response. One response might be, and I'm sure
18 there are some people who would make it within the courts
19 and certainly before the Federal Power Commission, is that
20 since Alaska has incurred no costs whatsoever in the
21 discovery and production of its natural gas that if it
22 wishes to separate itself from the working interest
23 owners, it should accept prices based upon its costs,
24 and its costs were zero. This would be unfavorable to
25 Alaska.

1 The other possibility is that Alaska would claim
2 it should receive a higher price for its gas because of
3 its unique responsibilities to the State, to its current
4 citizens and future generations. The likelihood of such
5 an argument being accepted is one which I have difficulty
6 judging. I think, however, that as we look at the decision
7 of Administrative Law Judge Litt, he did not appear to
8 have an attitude which would be favorable to giving the
9 State of Alaska higher prices for its royalty gas than
10 working interest owners were to receive under regulation.
11 You may wish to ask me some more questions about that
12 point later.

13 Let me go on. One of the concerns of the contract
14 that we had as we first read it was that since the State
15 of Alaska does not collect severance taxes from itself
16 that under regulation it might be possible for the pur-
17 chasers to pay a price higher to the working interest
18 owners, higher by the value of severance taxes, than the
19 State of Alaska. I think the testimony certainly before
20 these two committees by the purchasers was that right in
21 the contract they did not intend to not pay an amount
22 equal to severance taxes to the State of Alaska for
23 royalty gas. Your legal staffs may need to judge whether
24 or not you need to change your severance tax laws in order
25 to insure that under litigation and under regulation, if

1 regulation occurs, if in fact Alaska will be able to
2 accept a payment in lieu of certain taxes from the pur-
3 chasers under its current law.

4 At this point I think I have finished my summary
5 of the contract. The contract overall, I think, is a
6 very good contract. It does protect the interests of
7 Alaska. There has been one clause, which I've described
8 earlier, about Alaska separating itself from working
9 interest owners under regulation.

10 The thing, however, which is very clear in
11 examining this contract and your sale of natural gas
12 is that the provisions of this contract do not set a
13 price for natural gas. The price of natural gas is going
14 to be set by forces outside of this contract, perhaps
15 market prices. More important, they're going to be set
16 by regulation and legislation.

17 If Alaska wishes to return to itself favorable
18 revenues for its royalty gas it should, we think, focus
19 its attention more upon regulation and legislation than
20 upon the terms of this contract. The terms of this
21 contract will stand Alaska in good stead, but you need to
22 deal with regulation and legislation in order to increase
23 your revenues from the sale of royalty gas.

24 I would like to comment now on several issues,
25 three issues, that came up during the course of these

1 hearings if it's appropriate to do so at this time, or
2 would you like me to stop, Mr. Chairman, and entertain
3 questions about our review of the contract?

4 SENATOR RADER: Why don't you go ahead and answer those
5 questions that you think are pertinent and we will
6 question you later on it.

7 DR. SWANSON: Thank you, sir. Several of the witnesses,
8 including Natural Resources Commissioner Guy Martin,
9 stated that, and I believe I quote Commissioner Martin,
10 that very likely a higher price could have been attained
11 in this contract for the royalty natural gas. I thought
12 that was a very important statement that came out in his
13 testimony. A number of other witnesses made the same
14 statement.

15 I have asked myself can a higher price, in my
16 judgment, be obtained than under the terms of this contract,
17 and I must confess that I think it's highly unlikely. I
18 think the pricing terms of this contract have been very
19 well designed, again with that one proviso that I mentioned
20 earlier. Let me review with you why I came to that con-
21 clusion.

22 I think, first of all, we must understand that
23 royalty gas that Alaska has to sell now is 2.6 trillion
24 feet; it's a large package of gas. I think it is possible
25 in the future that Alaska could sell maybe a billion cubic

1 feet in a spot market for a higher price than you will
2 get under this contract. But a billion cubic feet is not
3 the same as 2.6 trillion cubic feet. It is possible,
4 for example, under certain shortage conditions to receive
5 a very high price, but not for the volumes of gas, I think,
6 that you have here.

7 It has been suggested by some other witnesses
8 that Alaska could have received a higher price for its
9 gas had it sold gas directly to gas distributors and then
10 had the gas transported by interstate pipelines, and
11 that gas distributors would be willing to pay a higher
12 price. I think Mr. Moody should discuss this with you
13 more than me, but it is my impression of the Natural
14 Gas Act that if a gas distributor in Boston or Chicago
15 who is not now subject to the jurisdiction of the Federal
16 Power Commission, if that person were to purchase gas
17 in Alaska, move that gas across state lines and resell
18 it in the Lower 48 states anywhere, that gas distributor
19 would be subject to the jurisdiction of the Federal
20 Power Administration. I think no gas distributor would
21 subject himself to such regulation and thus would not
22 purchase gas directly.

23 Secondly, it was stated that Alaska may be able
24 to receive a higher price for gas if they were to sell
25 it directly to an end user such as, I believe Pacific

1 Gas and Electric was mentioned, or large industrial
2 consumers of gas. Again, I think Mr. Moody can comment
3 on this with greater knowledge and with greater competence
4 than I. It's my impression, however, the Federal Power
5 Commission currently does not allow direct users of
6 natural gas to transport gas through interstate gas lines
7 for their own use except under Order Number 533. Order
8 Number 533 is a very highly restrictive order which sets
9 the term of any contract to two years and it says that
10 only industrial high priority direct end users of gas
11 may purchase the gas, and they may purchase the gas on
12 a monthly basis, or perhaps on a daily basis, only to
13 that extent of their high priority use is curtailed.
14 Thus, when a winter is very cold and many home owners
15 are burning a great deal of gas, such industrial purchasers
16 could buy a great deal of gas. In warm winters such as
17 we had in 1975 and '76, many industrial purchasers had
18 their full needs of high priority gas met and thus they
19 couldn't receive delivery of gas under direct purchase.

20 I don't think that any direct user of natural
21 gas will be willing to sign the term of this contract,
22 which says that they will take delivery as you receive
23 delivery from the working interest owners, depending upon
24 the gas production and upon the oil production, and pay
25 for it because the timing of their needs for gas under

1 Section 533 is probably quite different from the timing
2 of the delivery of gas from the working interest holders
3 to Alaska and thus to your purchasers.

4 Secondly, let me address one other possible
5 purchaser of your gas. It was suggested that an electric
6 power and generation utility might be willing to purchase
7 gas directly from you and burn it underneath its boilers.
8 I am very, very doubtful if the Federal Power Commission
9 would allow interstate transportation of gas to be burned,
10 purchased in such a way, under boilers.

11 In fact, in some of its opinions on the purchase
12 or the retention of gas by producers in the Gulf Coast
13 to be used in refineries, the Federal Power Commission has
14 very explicitly stated that gas may not be burned under
15 boilers; in fact, it went beyond that. But I think it's
16 unlikely that anyone who would burn gas under boilers
17 can buy substantial quantities from Alaska or anyone else
18 to be transported through interstate pipelines when high
19 priority users in parts of the pipeline system in units
20 are denied gas.

21 Let me go on to another issue. We have heard
22 from two or three witnesses descriptions about the setting
23 of price for natural gas under deregulation. The gist
24 of their testimony has been that it's very difficult to
25 set a price at the wellhead under deregulation. We have

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 coal gasification 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 RADER: 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 Amara:ta, 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

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 SENAGOR 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.

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