

ALASKA LEGISLATURE SPECIAL COMMITTEE / SUBJECT FILES 86/2

521 SCOMM15: HOUSE/SEN. SP. COMM. SALE ROYALTY GAS 1977-78 521

REQUIREMENT FOR IN-STATE PROCESSING

1. "Article 4.3 does not actually require ALPETCO to produce energy fuel for in-state use."

(Memo from Randy Berry, Revisor of Statutes, Legislative Affairs Agency to Bill Miles, March 20, 1978.)

2. "No, there is no requirement that we process a certain amount of barrels, there is no requirement that we continue the operation, but, if we follow the criteria of 10.2, and meet those criteria, - those are the benchmarks - if we meet the general requirement which is described in Article 4 - the two of those together should satisfy..."

(From transcript of Eddie Rogers, Chief Contract Negotiator for ALPETCO, March 1978.)

3. "This language, which we finally concluded was as far as we can go, really did not commit them, I mean, if they want to build in the capacity and let it sit idle, or build in the capacity, manufacture the products and export them all to California, they would not be in breach of contract for doing so."

(From Fred Boness, Deputy Commissioner of Natural Resources.)

4. "There is no obligation in the contract to run 150,000 barrels through that facility."

(From Fred Boness, Deputy Commissioner of Natural Resources.)

REVENUES TO STATE

1. "If the State were to sign contracts for the sale of royalty oil to an in-state refiner, the total revenue loss over time, bearing in mind some sales would be made in-state would be:

Low = 936 million barrels x 70% x \$2.08 = \$1,363 million

High = 936 million barrels x 70% x \$3.12 = \$2,628 million

Quite clearly, insistence on the establishment of a world-scale refinery in Alaska would cost this State between 1 1/2 and 2 1/2 billion dollars in lost revenue over the life of the refinery."

(From Economic Feasibility of Royalty Oil Refining, Niall Trimble, Principle Economist, Department of Community and Regional Affairs, State of Alaska, December 8, 1977.)

2. "Revenue from sales of royalty oil will be greater via the in-value option and the in-kind option independent of the premium. No evidence indicates the premium will be obtainable. The difference in revenue could be as great as \$117,000 per day assuming the Sohio line exists or \$245,000 per day without the line." (From the North Slope Royalty Oil Market, Pricing and Revenue Analysis, Battelle Pacific Northwest Laboratories, March 1978.)

IN-KIND VERSUS IN-VALUE

1. "Transportation cost figures were available from Chevron which show the cost of transferring products from the San Francisco Bay area to Anchorage to be around \$1.23 per barrel. In contrast, they estimated crude shipment costs at around 55 - 80¢ a barrel using a mid point of 67 and 1/2 cents per barrel. For the latter cost, this would give a cost penalty for an Alaskan refinery, using Prudhoe crude and selling on the West Coast, of 55 and 1/2 cents, compared to a similar facility on the West Coast itself."

(From Economic Feasibility of Royalty Oil Refining, Niall Trimble, Principle Economist, Department of Community and Regional Affairs, State of Alaska, December 8, 1977.)

2. "Much of the North Slope crude is moving to market through trades/exchanges involving other domestic or foreign oil. The exchanges frequently result in a savings in transportation costs. These complex arrangements are possible because the larger North Slope producers have domestic and international refining, transportation, marketing networks."

(From the report on North Slope Royalty Oil Market, Pricing and Revenue Analysis, Battelle, Pacific Northwest Laboratories, March, 1978.)

3. "The in-value taking option appears to be the State's most practical, long-term economic method for receiving its royalty payment for oil marketed in the contiguous states. This option will provide the State with the most revenue and the least involvement and responsibility for marketing. With the in-value option, the producing companies will transport and market the royalty oil with their oil. This will allow the State to benefit from exchange programs among the oil companies. In addition, a proportionate share of the State's royalty oil will be marketed on the West Coast and less will be moved inland."

(From North Slope Royalty Oil Market, Pricing and Revenue Analysis, Battelle, Pacific Northwest Laboratories, March 1978.)

In-Kind Versus In-Value Cont.
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4. In-value versus in-kind. "Texas, Oklahoma, Wyoming, Colorado, New Mexico, Louisiana and California are all oil producing states with royalty provisions. All these states currently take their oil royalty in-value.

(From the North Slope Royalty Oil Market, Pricing and Revenue Analysis, Battelle Pacific Northwest Laboratories, March 1978.)

NEED FOR OVER-ALL DECISION

1. "Others have addressed the feasibility of producing petrochemicals in Alaska from royalty gas. Their conclusions are relevant to the royalty oil issue in that, generally speaking, Prudhoe Bay gas liquids would be a lower cost feedstock and would be heavy Prudhoe Bay crude oil. If processing from royalty gas is uneconomical, processing from royalty oil is even less attractive a proposition."

(From Report to the Alaska Royalty Oil and Gas Development Board, David Reaume, Principle Economist, Division of Economic Enterprise, State of Alaska, December 14, 1977.)

2. "The cost and benefits of proposed sale of royalty oil to the Alaska Petrochemical Company (ALPETCO) cannot be determined independently of other major decisions involving Alaskan oil and gas reserves. The number of factors suggest that a petrochemical complex using crude oil as a feedstock would be non-competitive with a similar facility processing North Slope natural gas liquids. A favorable decision on the ALPETCO contract, moreover, would limit the options available for in-state use of the State's royalty gas and gas liquids."

(From the Statement of Matthew Berman, Phd. in Economics, Yale University, to the Joint Royalty Oil and Gas Committee, March 16, 1978.)

3. "The true value of the ALPETCO project is heavily dependent on the natural gas decision. Conversely the options available for North Slope gas may be severely limited by approval of the ALPETCO proposal."

(From Statement by Matthew Berman, Phd. in Economics, Yale University, to the Joint Royalty Oil and Gas Committee, March 16, 1978.)

4. "If the State were to award a royalty oil contract to a group proposing to build a fuels refinery, then royalty gas could be considered independently. If the State were to award a royalty oil contract to a group proposing to build a petrochemical refinery, it should be understood that NGL availability at the right place would likely require that the oil

project be abandoned or converted to the use of NGL, if that option were within the power of the State to grant."

(Royalty Gas Study, Bonner and Moore. page 7-4)

5. "It is imperative for the welfare of the citizens of this State that the legislature take time to resolve its three major oil and gas disposal questions with a common plan. The hurried piecemeal approach at an unwise method for deciding the fate of the State's precious non-renewable resources."

(From Statement by Matthew Berman, Phd. in Economics from Yale University to the Joint Royalty Oil and Gas Committee, March 16, 1978.)

WEST COAST MARKETS

1. On the West Coast sales. "Pemex has unveiled a \$15.5 billion capital investment budget for 1977 through 1982. Mexico's refinery capacity is scheduled to grow by 735,000 barrels per day by 1982, approximately one half of which is probably targeted for export."

(From the International Petroleum Encyclopedia, page 134, 1977.)

2. "Reference to the statistics published by the Oil and Gas Journal show that in 1976, oil refining capacity in California grew from 1,993,503 to 2,414,585 barrels per day, an increase of 421,000 barrels, or 21.1 percent. It is against these refinery extensions that an Alaskan plant will have to compete and clearly it is against them that its cost should be measured."

(From Economic Feasibility of Royalty Oil Refining, Niall Trimble, Principle Economist, Department of Community and Regional Affairs, State of Alaska, December 8, 1977.)

3. "The West Coast oil supply/demand outlook for the future period indicates a significant crude surplus each year. The surplus could be as great at 725,000 barrels per day. The surplus appears likely to persist well after 1985."

(From the North Slope Royalty Oil Market, Pricing and Revenue Analysis, Battelle Pacific Northwest Laboratories, March 1978.)

4. "Mexico's refining capacity is scheduled to grow by 735,000 barrels per day by 1982, approximately one half of which is probably target for export."

(From The International Petroleum Directory, 1977.)

5. "Given the immense U. S. refinery capacity on the Gulf Coast and projected shortage of refined products on the West Coast, it's possible that much of Mexico's new capacity is aimed at the Southern California market."

(From The International Petroleum Directory, 1977.)

6. "...the importance of the Mexican refinery expansion is this. Normally a firm will not purchase or produce Alaskan products at a price (FOB California) that is above the competitive price, if they can simply purchase Mexican or Gulf Coast products. The notion of an assured supply of products is one possible exception. However, there are limits to the amount of premium a rational firm will pay for an assured supply."

(From the Report to the Alaska Royalty Oil and Gas Development Advisory Board, David Reaume, Principle Economist, Division of Economic Enterprise, State of Alaska, December 14, 1977.)

7. "...Mexico will be investing 15 billion dollars in its petroleum and petrochemical operations over the next six years, target for Mexican as well as export markets. It has been announced that the refining capacity will increase from 850,000 barrels per day to 1.7 million barrels per day in 1982, a boost of 93 percent. Mexico's plans for petrochemical development are no less ambitious--self sufficiency in 1979 and exportable surplus equal to 20 percent of its total production by 1982. Even discounting these figures somewhat, Mexico will be a major factor in the future."

(From the Evaluation of the Proposed Refinery/Petrochemical Plant in the State of Alaska, Data Resources, Inc., November 22, 1977.)

GENERAL ECONOMICS/PRODUCER INVOLVEMENT/PROFITABILITY

1. "Finally, when considering the profit potential of petrochemicals in Alaska, we must ask, "Where are the major oil companies?" W. Monte Taylor, Exxon's Manager of Alaska Operations has provided his firm's answer. In a press release reported mid-November, he stated clearly that in Exxon's opinion Petrochemical Production is a non-economic venture in Alaska."

(From Report to the Alaska Royalty Oil and Gas Development Advisory Board, David Reaume, Principle Economist, Division of Economic Enterprise, State of Alaska, December 14, 1977.)

2. "The weight of expert opinion clearly supports the notion that the petrochemical industry has entered a period of slower more hesitant growth and that Alaska is not an economic location for petrochemical manufacturing. In such an atmosphere, buyers of petrochemicals will have considerable control over the prices they pay and may be unwilling to enter in the long-term purchase contracts on anything but the most favorable terms. While we cannot be certain, it is likely that this is at least one of the reasons why the Dow Chemical Company withdrew its letter of interest from Alaska Petrofining. Indeed, in a 1975 study, Dow itself concluded that petrochemical processing in Alaska would only be feasible if a variety of incentives were offered, including a reduced price for feedstock."

(From Report to the Alaskan Royalty Oil and Gas Development Advisory Board, David Reaume, Principle Economist, Division of Economic Enterprise, State of Alaska, December 14, 1977.)

3. "My fourth observation is that ALPETCO's view of the economics of Alaska refining and petrochemical and of the world petrochemical market is a minority view. It is a view that is generally not shared by the major oil or chemical companies, by the trade press, or by government specialists in energy and chemicals in either the United States or Japan. The more general view is that Alaska is not presently a competitive location for a world-scale plant because of transportation factors plus high construction and operating costs."

(From Statement by Arlon Tussing to the Royalty Oil and Gas Development Advisory Board, February 22, 1978.)

General Economics/Producer Involvement/
Profitability Cont.

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4. "Taken together, the higher product transportation costs, the higher capital costs and the higher operating costs add up to the fact that Alaska products would arrive at a West Coast location at appreciable higher cost than the products of an identical West Coast refinery. Therefore, in order to compete with West Coast products, the only resources the royalty refinery has is to obtain royalty crude at a discounted price. Hence, the old maxim: 'In the oil business, always transport the oil as crude oil to the point nearest the ultimate consumer.' Guam Oil (one of the prospective royalty oil bidders) is quoted as saying the required discount is in the \$1.75 - \$4.25 per barrel range. Taking the low figure, each of the 400 permanent jobs in the royalty refinery costs Alaskan taxpayers \$240,000 per year.

In closing, all of the foregoing is even more applicable for petrochemicals. Alaska has about a zero market for petrochemicals and the transportation costs of shipping chemicals are horrendous as compared with shipping crude oil."

(From a letter-to-the-Editor by E. L. Patton,
Alaska Construction and Oil, January, 1978.)

TIMING

1. "In summary, most oil and chemical companies, both Japanese and American, think that this is the time to wait and see what happens."

(From Statement by Arlon Tussing to the Royalty Oil and Gas Development Advisory Board, February 22, 1978.)

2. "And, as I said last time, and I simply quickly summarize. In the state of the circumstances, if you the Legislators have significant doubts about the balance between the benefit to Alaska and the risk, I don't think Alaska loses too much by deferring the decision. This, of course, is contingent upon whether you think royalty oil will be available in the future, whether you think one or two years or three years of draw-down of reserves is going to prejudice your ability later on. But the way in which one sees the future suggests that the perception of all parties as to the value of assured access may improve over time. And, there's no question about it, that the success of this project depends upon the participation of other participants, and the stronger the other participants are, the more closely entwined they are, the more they appear as a party of the first part, the more chances there are for success."

(From testimony by Milton Lipton, Walter J. Levy, and Associates before the Special Committee on Royalty Oil and Gas.)

3. "But, I would think that a year or two is not going to be tragic for Alaska, except that, in a sense, what you're saying is we are turning our back on what has come to us in good faith, because we are hoping for something more. I would...This has to do with the psychological. But, the companies who might otherwise be involved with the ALPETCO group are not going to disappear in a year or two. They are still going to be there for ALPETCO or anybody else, or maybe come in as a party of the first part. I don't know, and I certainly don't hold this out as something of great promise."

(From testimony by Milton Lipton, Walter J. Levy and Associates, before the Special Committee on Royalty Oil and Gas, March 15, 1978.)

RISK

1. "I think the biggest risk is that the contract will collapse, as we personally assess the probability of success is not all that great. And this is the risk. Now, what's the cost to Alaska if it does? That is, if an honest effort has been made and you've got this protection, and, whether it's eighteen months or twenty-four months, the ALPETCO group will be out a considerable amount of money. What has Alaska lost? It's a subtle thing. I guess you don't have the answer to that, but let me tell you the impression I have.

Alaska has been involved now in a series of episodes involving contracts with off-takers. And, first, it was on the joint resolution of the Legislature and then it was on the sale of the royalty gas - all for a specific purpose. Has Alaska suffered because of this? Well, at some point, if there is misadventure after misadventure, questions begin to arise about how solid is the thinking up there in Alaska about these things. If the contract doesn't come to fruition in the nineteen months or the twenty-four months, I don't think Alaska has lost a great deal. But, it's just become one more episode. But, I think that's about the greatest risk.

The other risk is that everything is going to go, and the investment's all going to be made, and it may lead to a very, very difficult time. And you may be faced with things which, under the contract, you do not anticipate; that is to say, a real sense of responsibility on the then-administration in the State of Alaska and the Legislature at that time that, hell, we can't let this go down the drain. Maybe that's not all so bad, because, if the thing does come to fruition - if you have to hold for five years or seven years - that's not in the contract, but that's a risk you may have to do this, and it may not even be all that bad.

But, if you're asking me honestly to give you a personal judgment, that we've all discussed, it seems this is the way we assess it. Now you've got to decide whether, if the worst of these come to fruition, how much does Alaska suffer by it? I can't answer that question, but this is about the way which we will try to evaluate. The biggest risk and the highest probability, I think, is that it will not come to pass. What does it cost you? You decide now.

Risk Cont.

The other risk is way down the road, and then you may face things that your successors will feel obligated to do, even though the contract doesn't call for it. They may not be so terrible, if worse comes to worse, and if it turns out to be only a short holding operation. But, these are risks.

CHAIRMAN MILES:

You're talking about another set of risks if everything goes, and then some new unforeseen, or heretofore undiscussed, problems (indisc.). What does...Okay, What are some of those that you haven't yet discussed?

MR. LIPTON:

Well, look...that every step along the line the project looks like it's working out, then the fact you do have off-take contracts. And on the basis of the off-take contracts, commitments are made to finance, whether it's net capital or whether it's equity capital and joint ventures, but commitments are made, because everybody perceives step by step down the line that it's working out. And on that basis, ALPETCO has performed according to the due dates of the contract. But then, about the time when...While all of this is going on, other people are making their own investment decisions, too, in similar expectations, and it turns out that, when the first crude oil is being processed, and the first gas oil from the refinery is going into an ethylene operation, and naphtha is being cracked and products are coming out, all of a sudden you don't have as firm volumes, which changes your average cost of processing, and the prices are somewhat lower than have been anticipated in all the calculations, because nobody is committing you to a firm price in the future. You are going to have to meet competitive prices, whoever is doing this operation. This could put an on-going operation in a cash bind for some time. And that's not a matter of something unforeseen happening. Everybody who is looking at this is willing to acknowledge that this could happen. These imponderables that happen in the world chemical industry. All I'm saying is that at that point the State of Alaska may be faced with commitments they feel obliged to undertake, which go beyond that of the contract, simply because this is one of your major investment projects in Alaska. And, one way or another, you are not going to allow it to founder for the lack of cash flow.

(From testimony of Milton Lipton before the Special Committee on Royalty Oil and Gas, March 15, 1978.)

Risk Cont.

2. "The marketing plan we talked about has two elements. One is the expectation of getting long-term, hell or high-water, take or bake contracts from Japanese chemical consumers - Japanese industry. I did an investigation of this for the Commissioner and found no reason whatever to believe that there was any possibility that they would accomplish that, and I would say that the odds on that part of their program are - maybe they are finite - very close to zilch. Now it is conceivable that the notion that they can market on the West Coast... there is a substantial possibility that, given their cost structure, they can market on the West Coast. There is no basic petrochemical-producing facility on the West Coast."

(From Statement by Dr. Arlon Tussing before the Special Committee on Royalty Oil and Gas, March 16, 1978.)

3. "I think the problem with ALPETCO is that its proposal is a little different. It proposes, rather than conventional financing, what is called project financing where the companies that own ALPETCO are putting up any their own faith in credit. They are not proposing to support the thing. So the bond holders have no recourse against Alaska interest. They can't take Anchorage Natural Gas; They have no recourse. They can't put a lien on Sea Train's ships, they can't put a lien on a native corporation's lands or future income, or anything of that sort. So, their only recourse is against the project itself. So they are going to look with even greater scrutiny than they would at the income statement and whether there is enough income to cover the debt service. Again, the problem here is that the owners don't propose to put up any capital. They propose one-hundred percent debt financing, or, if I read it correctly, there is something like a hundred...seven percent financing. When the thing goes on-stream the facility will have a negative net worth. That is, they will owe more than the plant is worth. And so the only security...the thing that they have to do, since there is no security in terms of an equity cushion, say all the cash flow has to be available for debt repayment - there is no equity cushion - they're not taking any bath, there's no recourse against the owners. Then what is absolutely essential is there be somebody that they can have recourse against. Well, I've convinced the Commissioner and his staff of adequately protecting the State against any legal recourse against the state, or against its revenues, or its royalty oil."

(From statement by Arlon Tussing, Page 19)

JAPANESE MARKETS

1. "The fuel oil expected to be produced in the refinery will be sold in Alaska while the petrochemicals are destined for the most part for the Japanese market. However, a period of time is required during which consumer contracts will be executed, purportedly by Japanese end users. Such a concept might very well be plagued with time delays associated with International political bargaining between the United States and Japanese governments on matters wholly unrelated to this project. These time delays might be quite substantial. Furthermore, an investigatory trip to Japan on the week of January 24 did not discover a major Japanese credit capable of shepherding such a deal through the government bureaucracy. Additionally, our research indicates each of the three leading Japanese trading companies have similar projects underway elsewhere in the world and that at least one of these may have been placed in a holding pattern.

One must question if this plan is not too aggressive."

(From the Sale of Royalty Oil, Review of Financial Proposals, Smith Barney, Harris Upham and Company, February 3, 1978.)

2. "On the whole, ALPETCO's stories simply do not check out. In no case have I been able to find evidence that any Japanese firm is seriously considering a long-term "take or pay" contract or a "hell or high water" contract to buy Alaska petrochemicals. I did, however, find instances where ALPETCO seems to have exaggerated or misrepresented the nature of their contacts with the Japanese."

(From a Statement by Arlon Tussing to the Royalty Oil and Gas Development Advisory Board, February 22, 1978.)

3. "It was conceivable that instances where ALPETCO's claims did not seem to check out were communications problems--which are certainly easy to have in dealing with the Japanese. Perhaps ALPETCO people naively but honestly mistook curiosity and politeness for active interest. Maybe we don't have the whole story.

Japanese Markets Cont.

Yet my experiences were enough to make me wary--and I think you should be wary--about other claims ALPETCO might make to the State of Alaska."

(From Statement by Arlon Tussing to the Royalty Oil and Gas Development Advisory Board, February 22, 1978.)

4. "The fifteen letters are not evidence ALPETCO will fail to get Japanese participation in their project. They are just not evidence of anything at all. What bothers me about their presenting the letters and about ALPETCO's representations about its Japanese connections generally is the hint that ALPETCO is more tuned to the public relations business, than to the chemical business, and that it may see Alaskans as ignorant provincials who can be influenced best by puffery and huxterism."

(From the Statement by Arlon Tussing to the Royalty Oil and Gas Development Advisory Board, February 22, 1978)

5. "From the standpoint of securing the necessary resources from Japan, the proposal is very attractive; but in view of the fact that Japan already is seriously committed in the Saudi Arabian and Iranian petrochemical projects, it is considered very difficult to accept Alaska's proposal at this time.

(From Japan Petroleum News.)

6. "My speculations would be based on the knowledge that they have for several years now, they (the Japanese) have been engaged in negotiations for these three petrochemical joint ventures that I mentioned; one in Singapore, one in Iran, and one in Saudi Arabia. And these projects have kind of been off and on. They'll negotiate for six months, then they'll announce that the Japanese are withdrawing from the negotiations, and then a year later they back into the negotiations. So these things have been going on for quite a long time. So in that sense I'm sure this planning and weighing process is constantly underway."

(From Joe Moore, Consultant - Bonner and Moore, Associates, March 14, 1978.)

Japanese Markets Cont.

7. "The difficulty, of course, is that the companies who are in most direct control of the market are not the ones who are participating here. It becomes a matter of whether one can establish the relationship which makes it possible to do."

(From testimony of Milton Lipton, Walter J. Levy, Consultants, March 15, 1978.)

8. "I think that the foreign market, which is discussed, which is essentially the western perimeter of the Pacific, is probably the most elusive and the most difficult one. It's not because there isn't going to be a growth in chemical demand in Japan, Southeast Asia, and the Pacific basin as a whole; there will be a considerable increase in demand. But the areas from which that chemical demand can be supplied looks to be ever so much more attractive than out of Alaska. I'll give you our quick thinking on this."

(From testimony of Milton Lipton, Walter J. Levy, Consultants, March 15, 1978.)

9. "Now the ALPETCO group is operating on the premise that there are chemical purchasers, particularly in Japan, that will offer a premium for an assured supply of petrochemicals. I think they're a minority of one in that respect. They may be right, but none of the major chemical companies and none of the major oil companies believe. And they're going to have to beat their way into a market which is pretty much tied up by the majors already and in competition with a great number of new petrochemical facilities that are going in in OPEC countries and in third-world countries that want to have them for just the same reasons Alaska does. They want them for diversification of their economies, they want to create jobs, they want it as a symbol of national prestige, and in every case that I've looked at they are willing to subsidize. So they're willing to take a substantial amount of the risk. In Saudi Arabia, Saudi enterprises are taking fifty percent of the thing. In Korea, which has no feedstock advantage, the Korean government is undertaking to back-stop them on any operating losses. In Singapore, again, there seems to be...the government seems to be willing to share the risk. In Iran the government is contributing the feedstocks as its equity. And so, then, if there's a...they are in a

Japanese Markets Cont.

position to do so. So we're looking at competition in the world market with a lot of jurisdictions where they're willing to offer something more than Alaska is to beat their way into the market. And there's a large ethylene-producing surplus in the world today. All the projections show that it will be greater in 1980 than it is today. Now that that surplus would be worked off in 1985 if we have normal rates of growth and if no new facilities are planned in other countries between now and then."

(From testimony of Dr. Arlon Tussing before the Special Committee for Royalty Oil and Gas, March 16, 1978.)

SCOMM

#15:8



TESTIMONY BY EARL JOHNSON

BEFORE THE

SENATE SPECIAL COMMITTEE ON ROYALTY OIL AND GAS

STATE OF ALASKA

May 11, 1978

Senators.

Thank you for the opportunity to examine and discuss with you the pending Alpetco contract.

I have examined the Alpetco contract and numerous related reports, correspondence, news items and other data provided by the Committee.

The scope of my concern and my comments is essentially from the standpoint of effective crude oil marketing -- the area of my special expertise -- you have already heard a substantial amount of evidence on the viability of the proposed Petrochemical Facility, its effects on Alaska's economy, its risks and benefits to the state, and probably have well formed opinions on these matters.

The contract is well drawn, and does a good job of correlating a number of diverse elements into an understandable whole. There are, however, several philosophical elements that I feel need further consideration by your committee.

First, I cannot recommend the dedication of Alaska's royalty barrels to the proposed plant until, and unless the plant is completed. It certainly is absolutely necessary for any petroleum plant, especially one of the scope of the Alpetco project,

to have an assured, dependable, long-term raw material supply; but an otherwise viable plant requires such supply only when it is operational. Certainly a contract can be written which would guarantee the crude supply for such a plant when constructed, insofar as Alaska's present and future supplies of royalty oil are sufficient for such guarantees.

Absent some strategy for the use of royalty oil prior to plant completion that I have failed to consider, there appear only two ways in which Alpetco could benefit from pre-completion purchase of royalty oil. The most obvious benefit to Alpetco would be the outright purchase and resale for profit of Alaska royalty oil. Given present crude market conditions in the South 48 and existing government regulations, this appears unlikely. However, with an option to purchase up to 150,000 barrels per day at a price enabling them to reach West Coast ports with North Slope crude at a delivered cost to them under \$12.40 per barrel (11.45 FOB Valdez + 0.95 transportation) and with the West Coast spot market at \$13.00 per barrel or more currently, the opportunity is surely open for them to offer North Slope crude at substantially discounted prices and still retain a considerable profit margin. Whether they actually sold large amounts of crude at discounted prices or not, the market price for North Slope crude would probably be reduced in West Coast markets. There would be no offsetting increase in Gulf Coast markets so

that the net back on Alaskan royalty oil in value would be reduced. The foregoing situation, of course, is based on current circumstances. My original understanding of the contract was that Alpetco might selectively meet the required elements of 10.2 (1) through (3), especially 10.2(3)(d), very early after effective date, thereby advancing the triggering of paragraph 2.2, "Initiation of Deliveries," as early as 60 days after the effective date. Alpetco might then, it seemed to me, begin to take crude in the 9th or 10th month following the effective date. I have just read assurances from Mr. Honig and Governor Hammond that Alpecto would not take crude before the 25th month of the contract, and I find this reassuring.

My greater concern, however, is with the long term conditional dedication by Alaska of most of its known royalty oil. Certainly market conditions for North Slope oil today are discouraging and predictions to 1985 are pessimistic. It seems to me, however, that there are several possible ways that the market could change suddenly and unpredictably, that could greatly improve Alaska's potential for profitable in-kind marketing of its royalty oil. Alaska should weigh such possibilities very carefully before optioning its crude to others -- unless the benefits of granting such option are definite and substantial.

Some of the possible causes of "sudden and dramatic" market changes are (1) Disruption of foreign crude supplies-embargo, etc, (2) OPEC price increases, (3) Presidential imposition of a

fee on foreign oil, (4) Easing of prohibition on crude sales to Japan, and (5) More sympathetic federal regulatory treatment of North Slope royalty oil.

The second possible manner in which Alpetco might utilize pre-operational purchases of crude could be a time-trade arrangement with producers under which Alpetco would sell crude back to North Slope producers currently, in exchange for the right to buy similar quantities from the producers at a later date when it needs crude for actual plant operation. This appears less likely, however, than the resale of crude for profit by Alpetco.

With respect to market changes improving Alaska's in-kind profit potential, it will be argued that such changes would also affect the in-value price, thus increasing the price paid by Alpetco. This argument is valid unless such changes result in regulatory, transportation, or foreign exchange provisions that affect only royalty oil -- in which case in-value prices might not be affected. This would suggest some successful legal or political effort by Alaska to improve the present disappointing price for its North Slope crude.

The issue of Alpetco's right under the contract to purchase crude prior to plant completion appears to have significant potential benefit to Alpetco, but such benefit seems to be

essentially unrelated to the successful promotion, construction and operation of the Petrochemical Facility. From Alaska's standpoint the possibility of being obligated to sell royalty oil without total assurance of the benefits calculated for successful plant operation would appear to be an indirect subsidy to the project, and could very well result in lower long-term net back to the State from its royalty oil sales. I believe that the concept of Alaska furnishing royalty oil to supply a plant such as Alpetco's is solid -- but only if the plant is one that can be financed and built based on its own economics, with the state agreeing to furnish the crude at competitive prices to supply the plant, beginning with its completion and commencement of operations.

I am still troubled by the lack of precise definition of "commit" and "commitment" as used in the contract, especially in Alpetco's benchmark requirements in paragraph 10.2. Again, Mr. Honig's letter of May 8, 1978, is somewhat reassuring in its statement that Alpetco's intended meaning of "commit to expend" means "contractually binding agreements, contracts, and purchase orders." My remaining concern, however, is that in practice such agreements, contracts, and purchase orders are conditional, and subject to change or cancellation. Since the dedication of so much of Alaska's future production hinges on interpretation of the one word "commit," the legislature must at least assure itself of a firm and narrow interpretation by the commissioner with respect to all benchmark requirements.

There are a few technical concerns that I feel need comment. These are of less significance but should be considered.

1. The contract never states how much of the state's royalty oil will be utilized in the plant. Generally, the inference seems to be that if the plant is built, then it will process all of the royalty oil purchased. However, paragraph 4.3 is in direct conflict with that concept in that it provides, in part, "If buyer does not use the royalty oil sold and delivered hereunder or traded or exchanged oil in the Petrochemical Facility..." Indeed, if buyer does not use royalty oil or traded or exchanged oil, then what might he use, and with what effect on the State?
2. Paragraph 2.0 provides that seller shall have the right to use the remaining 15% of its crude in any way that it wishes, but paragraph 8.3 provides that state will sell "minimum" quantities of oil in value in order to provide for contract price determination. These two provisions contradict one another, and they raise the more important question -- how little crude can the state sell in value and thereby receive an accurate in value price in the contract? Are there restrictions on the minimum?
3. Paragraph 12.1: In providing for security interest credit protection for the state, I am compelled to comment that the procedures thereunder will turn out to be extremely

complex. As a crude seller, I would have much preferred the bond or L.C. concept. Additionally, is the \$50,000,000 capital and surplus provision adequate for a bank to issue a letter of credit for, say, 60 days runs at 150,000 barrels/day at \$6.00 per barrel?

4. Paragraph 15.2 (Force Majeure). Item (ix) provides that inability to obtain federal, state, or other government permits or licenses shall be regarded as a force majeure, and could hold the contract in limbo for up to four years (longer if state permits are the force majeure item). Presumably, Alpetco could be receiving royalty oil during any such delay.

In closing, I should like to state very clearly, that I would like to see the Alpetco project succeed -- for Alaska's benefit. My expressions of concern herein are genuine, and the result of my best effort to evaluate the contract as I see it -- from a crude oil marketing standpoint. Time for study and preparation has been short, and the subject is complex.

I shall be happy to answer questions directly or indirectly related to my testimony today -- either now or later, in writing.

PETRO MARKETING SERVICES, INC.



Supplementary Statement By

Earl Johnson

Before The
Senate Special Committee on Royalty Oil and Gas
State of Alaska

May 15, 1978

Senators.

Since testifying before this committee on May 11, I have received and noted several items of additional information that I consider pertinent and highly significant -- enough so, in fact, to appreciably alter some of my attitudes toward the Alpetco contract as it pertains to royalty oil purchases. These changes also must affect my testimony and I should like to make the following brief statement prior to further consideration of the Alpetco matter.

Following my testimony on May 11, I discussed the Alpetco contract with Commissioner LeResche and Deputy Commissioner Boness, especially with regard to my testimony which opposed early taking of royalty oil. I characterized such early taking of crude by Alpetco as a probable indirect subsidy to the project by the State due to my visualizing an opportunity for Alpetco to purchase crude under the contract's pricing formula at a price which would permit them to discount North Slope royalty oil on the West Coast -- and still make a profit.

I found my discussion with Mr. LeResche and Mr. Boness very enlightening. Both of these gentlemen are exceptionally well informed both with respect to the subtleties of the Alpetco

contract and with respect to the crude oil marketplace generally.

In arriving at some of the conclusions outlined in my earlier testimony, I had used a weighted average price FOB Valdez of \$11.45, based on the marketing of 2/3 royalty oil on the West Coast (and Valdez) and 1/3 on the Gulf Coast. These figures are essentially correct, but do not fully address the unique pricing mechanism in the proposed contract. This pricing mechanism contains a feature that substitutes the average point of delivery price of all of the other producers for the actual price of any producer whose actual point of delivery price is lower than the weighted average price of all of the other producers. This feature tends to protect the state from receiving a low price from Alpetco under any circumstance, but especially under those actual crude marketing practices now existing with respect to North Slope crude. Specifically, some 61% of North Slope Crude was marketed at Valdez and on the West Coast during March 1978, with the other 39% going to the Gulf Coast. The calculated weighted average price at TAPS inlet was \$5.16 per barrel (\$11.43 FOB Valdez). However, the pricing in the contract would set the Alpetco purchase price under the contract at \$6.09 at TAPS inlet (\$12.36 FOB Valdez). Since this would result in a delivered West Coast cost to Alpetco of approximately \$13.25, there would obviously be no incentive for Alpetco to exercise its crude option -- and certainly no way to discount in the West Coast Market

(since the going rate for NS crude is approximately \$13.00 per barrel at present.) This pricing anomaly results essentially from the fact that almost all of the crude going to the Gulf Coast is Sohio's. Their crude is thus priced at a weighted average \$4.34 at TAPS inlet. Since the weighted average price of all other producers (excluding Sohio) is \$6.09, this price is substituted in the pricing formula as the price per barrel for Sohio's crude in weight averaging all crudes. The foregoing prices are based on actual volumes and prices as reported to the State for March 1978. I have calculated additional simulated conditions for March and have concluded that even if Sohio commenced marketing an additional 100,000 barrels per day on the West Coast instead of the Gulf Coast, and Exxon and Arco each sold 50,000 more barrels per day on the Gulf Coast instead of the West Coast, the Alpetco price at TAPS inlet would still be \$5.53 (\$11.80 FOB Valez = \$12.70 West Coast). Even this very substantial change in West Coast market balance between companies (which I do not regard as likely in the near future) would not produce a contract price low enough to permit Alpetco to discount significantly in the West Coast market and still achieve a profit on the sale of crude.

Because of this special pricing feature, the full import of which I had not realized at the time of my earlier testimony, I now believe there is very little likelihood of Alpetco's early taking of crude; and even less likelihood that if such early taking does occur (after 25 months), that the State

would be adversely affected as to price. In the light of my more complete information, I visualize the Alpetco's possible sales of crude on the West Coast would have no serious effect in the West Coast marketplace. I retract my earlier statement regarding the crude option to Alpetco constituting an indirect subsidy by the State to the Alpetco projects, since I have been convinced that the State is reasonably protected by the pricing clause.

The foregoing represents a substantial alteration in my testimony since last week. Briefly stated, I now feel much more comfortable about the crude dedication features of the Alpetco contract.

As earlier stated, I have been very favorably impressed with the grasp that your Royalty Commissioner and his staff have of the contract and its implications. Certainly, from the standpoint of the present administration attitude, one can feel assured that the bench mark requirements would indeed be rigidly and narrowly interpreted.

Thank you for the opportunity to amend my earlier testimony. My change of attitude about part of the contract is based on several hours of calculation based on actual March 1978 movements of crude as reported and an application of the Alpetco purchase price clause to these actual crude deliveries and modifications thereof.

SCOMM

#15:9

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TEL. 212-586-5253-4
CABLE "WALTLEVY"

August 30, 1974

Robert Hartig, Esq.
717 K Street
Anchorage, Alaska 99502

Dear Bob:

I've put together for your and your committee's convenience a quick summary of what we had discussed prior to and in the course of the Hearing, dealing with "Alaska's Interest in Natural Gas and a Gas Pipeline." I thought it would be useful for you to have this recap of our preliminary thoughts for the record. As requested, there is appended also a list of questions that your committee may want to pursue.

We have begun to get some information from the Oil and Gas Division of Natural Resources as to NGL. Obviously a lot more work has to be done on this aspect of the problem. In any case, your committee should have available to it, in the course of the Fall, the filings of Alaska Gas Arctic and El Paso, hopefully with a broader range of information than has thus far been put on public record.

I don't know how far you plan to go with possible interrogation of the competing pipeline sponsors. But I would hope that the appended questions, together with and supplementing the ones I discussed with your committee earlier in the month, may be of help. It is not that I am confident that you will get direct answers to any of these, but your asking the questions may provoke more careful consideration on their part as to the various matters with which Alaska will be most concerned.

The enclosed copies would be for possible distribution by you to your committee members. In addition, one copy is going to John Elliott in Juneau for the Legislative files.

With best regards, I am,

Cordially,

Milton Lipton
Milton Lipton

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enc. 6
cc: Mr. John Elliott ✓
enc. 1

LEGISLATIVE AFFAIRS
AGENCY

ALASKA'S INTEREST IN NATURAL GAS AND A GAS PIPELINE

1. It is our purpose in this brief Note to summarize the main points set out in discussion with the Joint Interim Committee on Natural Gas Pipelines on August 8 and 9, prior to and in course of its Hearing in Anchorage. We also append a list of questions which we feel have not been really answered as yet in any of the pipeline companies' submissions, although further information will obviously be forthcoming this fall when Alaska Gas Arctic makes its additional filings with the FPC and NEB and El Paso makes its initial submission to the FPC.

Availability of Gas

2. Alaska has a strong and continuing interest in the availability of energy for household and industrial consumption within the State at reasonable prices. The State's established oil and gas reserves are obviously more than ample. But the State can directly affect the disposition of its energy resources only through its control over royalty oil and gas.

3. Internal gas consumption can be expected to increase rapidly in Alaska, reflecting both population growth and industrial expansion. Cook Inlet reserves are relatively modest. However, the prospects for additional discoveries in the Inlet and in course, as exploration progressively opens up, in other areas of South Alaska are considered good.

4. The potential use of North Slope gas to supply future needs in the South has therefore to be weighed against the prospect of future gas reserves to be proved up at locations closer to southern population and industrial centers. Further, the unquestioned availability of oil means that the State would not be energy-short, however the gas picture should develop.

5. The prospects for direct gas consumption elsewhere in the State, outside of the Kenai-Anchorage area that's now being served, would depend on the interrelation between (i) population density and hence the economics of distribution and (ii) the availability and cost of alternative fuels (i.e., oil). Fairbanks, for example, might benefit from availability of natural gas. But so far as smaller towns and villages are concerned, it is more likely that oil or bottled gas would be more efficient fuels than piped gas.

6. One further observation about Fairbanks. Alyeska will apparently power its first four pumping stations with gas, piped from the North Slope to the foothills of the Brooks Range. Subsequent pumping stations will be able to operate on gas, but are not planned to initially. It will be recalled that Alaska Arctic Gas expressed its willingness to construct a separate line to Fairbanks if demand made it economically feasible. The possibility could thus be explored of combining Alyeska gas requirements along the half of its route to Fairbanks with other potential gas demand to support a relatively small diameter gas line beyond Pump Station #3 and on to Fairbanks.

7. On balance, it would not appear that the State's own gas requirements, given overall oil/gas availability and prospects, would in itself be a decisive consideration in favor of the El Paso as against the Alaska Gas Arctic project.

Petrochemical Feedstocks

8. Oil and gas derivatives -- naphtha from crude and ethane/propane from NG -- could provide a powerful stimulus to development of a substantial petrochemical industry in Alaska. Uncertain feedstock availability (even more so than feedstock cost) has retarded expansion of petrochemical capacity world-wide. And increasingly, petrochemical investment is moving toward oil/gas producing areas where feedstock availability can be assured (e.g., the Province of Alberta).

9. Alaska could have various interests in a petrochemical industry -- investment and income, relatively high-paying if modest employment, and possible effect on the prices Alaska has to pay for chemical intermediates and even various products. If feedstocks are exported to petrochemical centers in the Lower 48 and processed material imported back into Alaska, the State's consumers would be paying transportation costs twice. This is not to say that petrochemical facilities in Alaska would necessarily mean lower prices; a great deal would depend on the terms and conditions under which feedstocks were made available in support of petrochemical investment. Thus, the net advantages of a petrochemical industry are not entirely clear-cut, although the potential benefits have certainly to be considered.

10. To the extent that private companies determine the disposition of potential gas-based petrochemical feedstocks, export to the Lower 48 is more likely than their retention for use in Alaska. The State may be in a position to control the disposition of a significant volume of NGL through its royalty gas.* The precise volumes are still elusive, but it would appear that something on the order of 35,000 barrels per day would be consistent with associated gas when crude production is at the rate of 1.2 million barrels daily.

* Propane would not only be valuable as a potential petrochemical feedstock but for use as bottled gas in areas of low population density.

11. Normally, there would be minimal stripping of NGL at the North Slope, no more than would be technically necessary for pumping the gas. The extracted NGL could then be commingled with crude in the oil pipeline. If the State opts to take both royalty oil and gas in kind, it would be in a position also to obtain and transport that volume of NGL that is stripped on the North Slope. The routing of a natural gas pipeline would not affect the State's interest in the NGL that would be extracted on the Slope.

12. If the Alaska Gas Arctic line is approved, the remaining liquids would be exported via Canada to the Lower 48. Gas Arctic has indicated that it would be willing to use its good offices to try to arrange possible swaps so as to make NGL available on the south coast in return for the royalty gas that would be transported through its line. It is not clear what Gas Arctic could really do in this respect.

13. If its line is approved, El Paso has indicated its willingness to transport royalty gas for the State as a contract carrier, even though it proposes to buy the rest of the gas for transshipment to the West Coast by LNG tankers. The State could then, to the extent desired, strip additional NGL from its gas on the south coast. How deep a cut would depend on a range of technical and economic considerations.

14. A second set of uncertainties revolves around FPC regulatory practice. Would the State's royalty gas carried under contract be deemed to be commingled with gas that El Paso owns? If so, would State gas be subject to FPC jurisdiction? Could, or would, the FPC extend its possible jurisdiction over the end-use of royalty gas? It is these and related questions that Alaska must pursue as intervenor for the record and in future Hearings, so that FPC consideration of the El Paso application also comes to grips with Alaska's concerns.

Economic Interest in
Value of North Slope Gas

15. Alaska has a very considerable economic interest in the value of North Slope gas -- through royalty and severance tax. If the wellhead value of the gas were independent of destination, then pipeline routing would not be a concern in this respect at least. But that is not at all assured.

16. Current FPC practice provides few guidelines to how it will handle the pricing of North Slope gas. It is most unlikely to blanket North Slope gas under its new nation-wide price; nor is there a basis in experience for cost-related pricing. Realistically, the value of North Slope gas will be related to gas values in the Lower 48. Administratively, the FPC would probably have at least to take account, directly or indirectly, of gas values in the alternative markets to which Alaskan gas might move and respective transportation costs.

17. Furthermore, North Slope gas will be produced from around 1980 to the end of the century, so that current FPC practice (and even the concept of gas price regulation separate and apart from other energy costs/prices) may not be relevant to Alaska's economic interest in the long-term value of North Slope gas reserves.

18. For Alaska, the combination of lowest pipeline costs and highest destination price would make for optimum value of its gas resources. Given the range of uncertainties about both, State policy could hardly revolve around minor differences. But this is not to say that Alaska should not be keenly interested in the pipeline cost projections that will be placed in evidence, as well as all relevant material about respective regional gas balances and values. If significant differences should begin to emerge, then the State has to be ready to consider and set out its position.

Investment and Employment

19. Alaska has various interests in the matter of natural gas pipeline construction per se. One has to do with the investment, income, and employment involved in the construction and operation of the respective proposed pipelines. If a natural gas pipeline were to be constructed in staggered timing with Alyeska, the continuity of employment, multiple use of infrastructure, etc. could add to the advantages the State might expect, and spread over a longer time the cost of offsetting disadvantages (such as mobilization and demobilization costs that communities have to suffer).

Environmental Impacts

20. A second has to do with the environmental effects of the proposed pipelines -- including impact on both physical and human environments, and on the plus/minus for government with respect to such impacts.

21. So far as the pipeline route itself is concerned, El Paso would have access to the same corridor as Alyeska -- as specifically anticipated in State legislation. Gas Arctic, for its primary route, would look for right-of-way over a relatively short span of State land, but access to the Federal Wildlife Refuge could be a stumbling block.

22. On the other hand, the liquefaction/terminal infrastructure and shipping density in the Valdez area could add further to the anticipated problems that Alyeska will be bringing.

23. None of the above is intended to add up to a definitive answer as to where Alaska's final interest lies.* The purpose of these early comments was to try to provide a check list of pivotal considerations that will have to

* Nor do we consider here the broader issues of policy and administrative decision that will confront the U.S. and Canadian Administrations, the FPC and National Energy Board.

be weighed in the balance. Meanwhile, the Department of Natural Resources has been cooperating in putting together available material on the NGL content of North Slope gas. And projected filings with the FPC this fall should provide more careful and comprehensive data than has thus far been placed on the record. In sum, the picture should be rather clearer by the next legislative session than at present; and the Interim Committee may be able to expedite the development of relevant facts over the months ahead.

W. J. Levy Consultants Corp.
August 29, 1974

Some Relevant Questions*

NGL Availability

1. What volumes of NGL's would be stripped on the North Slope per MMCFD of associated gas for pipeline transmission? (El Paso; Alaska Gas Arctic, transmission and/or producing companies that will be shippers)
2. Are there technical limitations on the NGL volumes that the State could strip from its royalty gas if the methane were to be tendered for pipeline transmission? (Gas Arctic) What limitations would there be on the volume of NGL's that could be commingled on the North Slope with State royalty oil for movement to the south coast? (Alyeska)
3. Are there technical limitations on the NGL volumes that the State could strip from its royalty gas if the methane were to be tendered for LNG export? (El Paso)

Natural Gas Availability

4. Could the pipeline contract to buy royalty gas subject to the State's option to withdraw such gas for either internal consumption or petrochemical processing? FPC policy? Liquefaction/LNG economics? (El Paso)

* These are selected questions, relevant to the interests of Alaska as set out in the preceding Note, looking toward information that may not be developed in the pipeline companies' FPC and NEB filings.

5. What would be the estimated cost of moving 25-50 MMCFD of North Slope gas to Fairbanks, taking account of Alyeska's intention to supply gas up to Pump Station #4 via an 8-10 inch line? (Gas Arctic)

Transmission Costs

6. If Alaskan and Canadian gas were both to move through the same pipeline within Canada, how would costs be allocated? E.g., fixed costs apportioned on basis of capacities and operating costs charged on basis of throughput; average total costs assessed on basis of throughput; etc.? This could be particularly relevant if the pipeline is designed with excess capacity to accommodate potential expansion of Canadian gas production. (Gas Arctic)