SUB. COMM. ON OIL + GAS LEASING + TAX policies

Subcommittee on Oil and Gas
Leasing and Taxing Policies
Minutes of the Meeting 6 November 1976

Chairman Croft called the meeting to order at 10:05 a.m. Attending the meeting were Croft, Representative Anderson, Representative Davis, Representative Gardner, Senator Huber, Representative Malone, Senator Poland and Representative Rhode. Also in attendance were Mr. Gregg Erickson, Director of Research for the legislature, Mr. Milton Lipton of Walter J. Levy and Associates, oil and gas consultants to the Legislative Council, and Mr. Jack Roderick, Deputy Commissioner of Natural Resources. Chairman Croft called the committee's attention to the minutes of the previous meeting which were approved by unanimous consent.

After a brief introduction, Mr. Lipton was called on by the Chairman to share with the members his views on several issues being addressed by the committee. He indicated that he would like to begin his initial statement with a comment on the issues raised by the Alaska corporate income tax and various pieces of legislation introduced during the last session to tax, in one way or another, the net income of firms producing oil and gas in the State. In his view, it is not difficult to discern why such legislation has been introduced: the allocation formula under which the existing corporate income tax operates is so obviously not "felicitous" to the State's interest.

One of the most important questions that must be addressed in developing any "net proceeds" or other net type tax, is whether the tax is to be "in lieu of" or "in addition to" the current corporate income tax, and --if the former--whether the companies are to have the option of deciding which tax applies. He noted that if no form of "back and forth credit" is allowed between the new net type of tax and the corporate income tax, that firms will end up paying mutliple taxes. The possibility of double taxation thus arises and Mr. Lipton indicated that he was confident that the legislature would want to carefully examine any legal questions raised by such an arrangement before passing it into law.

Such "double" or "multiple" taxation is avoided, however, if the "in lieu" approach is taken. Various possible options exist for the State, if it wishes to implement some sort of "back and forth credit". Lipton observed that these may themselves raise important legal questions which should, of course, be explored. From an economic point of view, however, this system has important advantages, he said.

Mr. Lipton also discussed the administrative burden that a net type tax might place on the government bureaucracy. While not underestimating such problems, he emphasized that he does not believe that these problems would be at all "overwhelming", as some observers seem to fear. On the contrary, he noted that as a practical matter the Department of

Revenue is already making a calculation of net income in the course of preparing its assessment of the so called "reserves tax". This tax requires, among other things, a calculation of the present value of the expected future income stream, which is roughly the same as the "net proceeds". It was easy to make these calculations since the Department of Revenue made relatively arbitrary decisions concerning such factors as expected prices, discount rates, and costs. Absolute accuracy is in no way required in these determinations, and in any case should be left to administrative regulations, not written into the legislation. He suggested that the legislature "Don't worry about pennies, worry about the hundreds of millions of dollars."

Senator Croft noted the difficulties in developing a statutory system of isolating income generated in Alaska, and asked, "Is the net proceeds approach best?" Mr. Lipton answered that in the context of the apparent legal problems, the net proceeds approach has, he understands, the advantage of being associated with the fewest legal problems. He pointed out parenthetically that oil companies have challenged the allocation formula elsewhere, particularly in consuming states where they work to the firms' disadvantage. Because the allocation formula was devised for manufacturing, its application to Alaska and oil production in Alaska is very disadvantageous to the State.

In response to a question from Senator Huber, the consultant noted that two approaches to eliminating "double taxation" are (1) a credit, or (2) abatement of an in lieu tax.

Representative Gardner indicated an interest in determining whether it was advantageous to the State to remain in the multi-state compact. Mr. Lipton responded that he would prefer not to answer that particular question believing that the Department of Revenue has a better answer. Senator Huber observed that perhaps resource producing states should simply forget about the retail type firms and direct its entire tax structure to focus on extractive resources. This was followed by a discussion of the impact of the multi-state compact on forest products for fish processing industries, in which Representative Malone noted that while such impact was quite important it was probably beyond the purview of this committee.

Senator Croft inquired how the existing income tax affects firms doing business wholely or mostly within the State, such as native corporations. Lipton stated that if such corporations are in fact in-state corporations, they do not escape any part of the 9.4% tax on net income, if they have any. In contrast, he observed that "it is very difficult to conjure up any mutli-state oil company doing business in Alaska that would pay a tax on Alaska generated income close to this figure."

Senator Croft observed that during the last session it was his understanding that Mr. Lipton had some reservations concerning the "net type" taxes that had been proposed. Mr. Lipton responded that these reservations concerned specific details of the taxes and indicated that much work had been done towards the end of the session to resolve the problems. In any case he believes that such reservations can be eliminated and suggested that the legislature need not be too specific in such matters as the accounting principles to be used in calculating the tax.

The question of the severance tax was raised by several legislators and discussed at some length. Mr. Lipton indicated that the next session of the legislature would be an appropriate time to reconsider the severance tax. Any increase in the tax should be modest however, and in line with the tax imposed by Louisiana or other states. He recommended that any increases in the tax should be at the higher productivity steps and that some reductions might be order at the lower productivity steps, i.e. for wells producing less than 300 to 500 barrels per day. He once again called attention to the perverse effect of the cents per barrel approach on Cook Inlet oil and referred to his earlier report which discussed this point in detail. Senator Croft asked if there had been any direct effects on Cook Inlet production from the escalating cents per barrel tax . "Not yet," replied Lipton, who went on to indicate that such effects could be expected in the future though. He emphasized that the impact would more likely be on development decisions rather than exploration decisions. During the course of the discussion it was determined that none of the proposals introduced during the last legislative session to increase the severance tax (as a percentage of value) would have raised it to the level already reached (as a consequence of the cents per barrel approach) in relation to some Cook Inlet production. Senator Huber expressed the view that any changes in the severance tax proposed by the subcommittee should incorporate changes designed to eliminate the perverse effects pointed out by Mr. Lipton.

Senator Croft inquired as to the current status of the oil industry in Alberta. Mr. Lipton stated that he had just come from that province and had discussed oil policy there with high officials. Both oil and gas production are highly profitable there, and incentives for further exploration exist in the form of high prices and direct exploration subsidies. The industry has had a particularly good sucess rate in its gas exploration. This is offset partially by a high "royalty", i.e., tax, rate, but that oil industry interest remains high. Senator Huber inquired as to the effect of the "Alberta Heritage Fund" (something similar to the planned "permanent fund") and was told that to Lipton's knowledge the fund had no discernable effect on oil industry interest or activity.

Representative Rhode inquired as to the effect of a high royalty without a severance tax and was told that in Lipton's view there would be no difference. He observed, however, that the thrust of Representative Rhode's question appeared to be "How can we restructure leases to reduce negative incentives?" The answer to this question, Mr. Lipton indicated, would probably lie in a revision of the lease terms, perhaps including the offering of net profit leases in futures sales, with the state's interest being carried by the oil companies. This should be associated with a work obligation, he added.

There followed an extensive discussion of leasing policy in which Lipton emphasized the need to give the Commissioner of Natural Resources flexibility in setting the leasing terms. The consultant observed that the greatest uncertainty now facing firms acquiring leases is not the geological or transportation or political climate uncertainty (at least in Alaska) but rather their uncertainty with regard to price.

In the course of an extensive colloquy between Mr. Jerry McCutcheon (member of the public attending the meeting) and Mr. Lipton, related to the question of entitlements, the importance to Alaska of FEA treatment of Alaska oil was emphasized. Mr. Lipton indicated that it would be advantageous to Alaska to have as many possible outlets for its oil as possible, and thus it would be advantageous to the State to have both the northern tier and California-Texas oil pipelines constructed. However, he cautioned the State to be very careful about taking sides in arguments over which line should be approved first.

In addition to the matters discussed above, Mr. Lipton spoke at some length on the effect on Alaska's revenues of the final destination of Prudhoe Bay crude. This discussion was reported quite extensively in an article in the Sunday, November 7, issue of the Anchorage Times. This article is attached hereto and upon approval by the committee will be made an official part of the minutes of this meeting, along with another article relating more generally to the items discussed above.

Toward the end of the meeting Senator Croft instructed the staff to draft legislation to tax the "net proceeds", following closely the comments of Mr. Lipton, and asked that if at all possible this legislation be available by mid-December or earlier if possible.

Senator Croft also asked the staff to arrange for a meeting between Professors Zeifman and Ainsworth, consultants to the committee on corporate income tax matters, and Mr. Lipton.

Representative Malone moved and asked unanimous consent that his motion from the previous meeting concerning the allocation of $20,000 to the Department of Revenue (see minutes of meeting of October 23) be renewed. After some discussion, which it was noted that there were certain conditions attached to this allocation, the motion was adopted by unanimous consent.

Chairman Croft indicated that the next meeting of the committee will probably be sometime in mid-December but that an exact meeting date will not be set pending further work by the consultants and staff.

Prepared by Gregg K. Erickson
November 10, 1976

Lipton:

Alaska Isn't Getting Fair Tax Share

By SUSAN ANDREWS
Times Staff Writer

Consultant Milton Lipton said ere yesterday the state of Alaska is ot receiving its proper share of income tax from oil and gas.

He told the legislature's Interim Committee on Oil and Gas Taxation and Leasing Policy that a net proceeds tax is the "most desirable" way to separate out income earned here.

Lipton pointed out that oil companies are subject to Alaska's 9.4 per cent corporate income tax. But Alaska is a member of the Multistate Tax Compact, in which income s apportioned to the various states. There are "gross inequities" in the amount of income tax paid to Alaska because of that apportionment. If income is not directly realized within he state, it eludes identification, he said.

He said a net proceeds tax, a tax n lieu of the income tax, would avoid legal obstacles resulting from Alaska's membership in the compact. The net proceeds tax is a tax on income from oil and gas properties, after certain allowable expenses have been deducted.

Lipton said the net proceeds tax would result in the oil companies paying more income tax to the states than at present. Alaska would not simply receive more of the pie. If it results in double taxation, then he said, that is a matter for the oil companies to work out with the other states who are receiving a larger share of income tax than is equitable.

An important aspect of in-lieu taxation, he cautioned, is a provision for crediting it against a company's corporate income tax.

State Rep. Terry Gardiner asked whether the same inequities would apply to income taxes paid in Alaska [illegible]

Legislative Research director Gregg Erickson said it is his understanding that one of the largest Japanese-owned forest products companies has never paid any income tax.

Rep. Hugh Malone, D-Kenai, said those questions need consideration by the legislature but "are beyond the scope of this committee."

The net proceeds tax was one of three tax proposals introduced during the last session of the legislature on which no action was taken. Sen. John Huber, D—Fairbanks, said yesterday the net proceeds tax will be reintroduced, along with an increase in the severance tax, to bring Alaska in line with Louisiana, which has a 12 per cent tax on gross production. The third tax proposal, also expected to be considered again, is an "excess value surtax," or "windfall profits" tax aimed at Prudhoe Bay production.

Lipton, who serves as adviser to a number of oil companies as well as the governments of Alaska, Alberta and Indonesia, advised the committee that it is appropriate for the legislature to review the severance tax now.

"If there is an increase, it ought to be moderate," he said, "not out of line with the top rates in other states. And it ought to retain the idea that the severance tax is related to well productability."

Alaska's severance tax now ranges from 5 to 8 per cent, with the highest-producing wells paying the highest percentage. Lipton suggested that Alaska increase the percentage at the top and lower it at the bottom, so that marginal wells would not be discouraged from production.

Lipton was asked how the net proceeds tax would affect native corporations.

He said if their activity was conducted solely within Alaska, they would be directly subject to the 9.4 per cent corporate income tax. He pointed out that rate would apply to all their income, after subtracting losses. If the state goes the "in lieu" route, oil and gas income would be segregated from other income and losses from other activities could not be subtracted.

Committee Chairman Sen. Chancy Croft, D-Anchorage, asked if Lipton could have suggestions for the "in lieu" approach by mid-December, for the committee's consideration. He said that would be possible.

Regarding the severance tax, Lipton said his firm, Walter Levy and Associates, did not endorse the cents-per-barrel base which the legislature adopted. He said in the case of Cook Inlet oil production, the cents-per-barrel clause has resulted in a steadily-increasing tax burden, while the price of oil has been held rig[illegible] price controls. He said a 1,00[illegible] barrel-a-day well in Cook Inlet now pays 23.6 per cent severance tax.

If the legislature retains the cents-per-barrel formula, Lipton suggested that it be structured so it doesn't retain the present inequities.

"The severance tax belongs in the total Alaska tax package," Lipton said, "but it ought not to be the determining tax in Alaska's income from oil and gas. If it were, that could have an adverse effect on exploration and development."

Oil To Japan Might Be Wise

Shipping Prudhoe Bay crude oil to Japan in exchange for imports of middle-Eastern oil may well be an interim solution to the problem of a West Coast oil surplus when the trans-Alaska pipeline goes into production, according to the state's petroleum consultant Milton Lipton.

At a meeting here yesterday of an interim legislative committee, Lipton said the preferred destination for Prudhoe Bay crude oil is the Midwest, but pipelines to the Midwest are several years away.

He estimated that oil carried by tanker to British Columbia and then by pipeline to the Midwest would result in a wellhead price only 60 cents less than to Los Angeles. Prudhoe Bay oil shipped by pipeline from Los Angeles to Texas would bring a wellhead price about $1.28 less than Los Angeles, and by tanker to the U.S. Gulf Coast, $1.43 less.

Lipton said that Frank Zarb, head of the Federal Energy Administration, has declared that under no circumstances can he foresee the federal government allowing an exchange with Japan. That is understandable, Lipton said, because if the export were allowed, oil companies would lose the incentive to build pipelines from west to east in the U.S.or to make changes in West Coast refineries to handle the higher sulphur Prudhoe Bay oil.

The trans-Alaska pipeline authorization bill forbids the export of oil to Japan without the President's consent. Lipton thinks that approval might be forthcoming if the exchange were for specified volumes of oil over a limited period of time, and if the Alaska oil were carried on U.S. flag tankers.

A third requirement, he said, might be that for barrels of oil exported, a specified number of barrels of oil must go into the nation's strategic oil reserve. If this were a quid pro quo for shipping oil to Japan, it would mean the oil "doesn't really leave the U.S.," he said.

Japanese refiners have a tremendous range of refinery capacities, Lipton said, with a lot of de-sulphurization equipment because they handle a lot of "cruddy crude" from the neutral zone of the Middle East.

Lipton said the anticipated West Coast surplus is the result of a lag in demand over the past 2½ years, an increase in oil prices and the recession. Plus, he said, the U.S. has abandoned restrictions on oil imports, and imports will continue after Alaska crude is available because the California refineries and markets are better suited to imported oil.

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DR. TUSSING: I just have one comment. In my opinion the report of the administration's Gas Pipeline Task Force is an exceptionally thorough, fair and objective review of the relative merits of the three competing gas transportation systems. In view of the political sensitivity of the issue and the compulsion that agencies generally have to find the most favorable arguments for the policies adopted, I think that this is a really admirable document.

There are only a few points in the report on which I would have a different emphasis and there are a number of assumptions in Dr. Knudson's report that I think were biased in favor of the kind of answer that supported the policy. But I don't think these are crucial to the main conclusions of the Task Force report, and when I start my presentation I'll summarize what I think are the principal conclusions and what the implications of those would be.

SENATOR RADER: Unless the Committee objects, why don't we go ahead and listen to your presentation and then open questions to both of you. Would that be appropriate?

DR. TUSSING: Yes.

SENATOR RADER: Is there any objection to that procedure, Committee? Fine.

DR. TUSSING: Okay. I didn't come with a prepared statement. I have some fragments of things, two of which I would like to introduce into the record. One is -- let me back up for a moment and identify myself, as you requested. I'm Arlon Tussing. I'm a professor of Economics at the Institute of Social and Economic Research at the University of Alaska. I have been affiliated with the University for twelve years. I have also served as chief economist of the U.S. Senate's National Fuels and Energy Policy Study under Senator Jackson and continue to serve Senator Jackson as an economic advisor on energy and natural resources.

During the last year I have also served as an advisor on oil and gas issues to the State of California, the Provinces of Nova Scotia, Ontario and British Columbia. I have served for a little over a year on the Royalty Oil and Gas Development Advisory Board, during the period of which the initial negotiations were -- took place on these contracts. I have given consideration in a number of forums and for a number of agencies to various aspects of the Alaska gasline question.

There are a great number of issues I would like to comment on, if I have time. I realize your time is limited and I'm going to try to confine myself to some of the high spots and then let you proceed.

SENATOR RADER: You have two documents that you wanted entered as exhibits?

DR. TUSSING: Yes.

SENATOR RADER: Would you identify those for us?

DR. TUSSING: One is an article headed "An Inkling of the Long Journey", published in "Northern Perspectives", which is the newsletter of the Canadian Arctic Resources Committee. This was published only last month but I wrote it in June. So to the extent that there is anything dated in it, you can understand that.

SENATOR RADER: That would be Exhibit No. 11, according to my records. Is that correct, Recorder?

DR. TUSSING: Yes. Oh.

SENATOR RADER: All right.

DR. TUSSING: The second paper is entitled "Natural Gas Supply Outlook for the West" and it is a summary of my comments at a workshop on economic growth in the West in Los Angeles in August.

SENATOR RADER: And that will be Exhibit No. 12.

(Whereupon Exhibits 11 and 12 were duly marked)

DR. TUSSING: The most important conclusions of the State Task Force report are generally consistent with every other important study and with intuitive common sense, and they are the following: Firstly, that El Paso's Trans-Alaska pipeline LNG tanker system would, if it could be approved, financed, and built and operated in the manner proposed by its sponsors, result in the greatest net revenues to the State treasury and the greatest increase in Alaska gross product, personal income and population. The Alcan systems impact would be second in these respects and Arctic Gas third.

Secondly, with the Arctic Gas system, if it could be approved, financed, built and operated in the manner proposed by its sponsors, would result in the lowest gas transportation costs to the Lower 48. In this respect, the Alcan system seems to be second best and the LNG system worst among the three.

The Task Force report makes one other crucial point but without the emphasis I believe it deserves. In view of the respective routes, design and construction plans, the Alcan system seems to be least vulnerable to cost and schedule overruns, and Arctic Gas the most vulnerable, with El Paso somewhere in between.

Because of the questionable viability and the financing problems of any transportation system for North Slope gas, the prospect of substantial overruns may be the most critical economic issue in choosing among them.

Moving to the contracts for a moment. I intend to get back to the problems of financing. I make no recommendation on whether the Legislature should ratify these contracts. The members should understand, however, that there is no amount of propaganda for lobbying by Alaska or by the three purchasers which will produce a decision in favor of an LNG system unless Canada makes it clear than an overland pipeline system will not be licensed or that Canada will not be able to come to a decision in the foreseeable future.

I personally expect an unbroken chain of decisions in the United States in favor of Arctic Gas by the FPC staff, Judge Litt, the Federal Power Commission and President Carter, based upon the record in the FPC hearing and the investigations of other federal agencies. I do not mean to imply that Arctic Gas is certain to be approved and to be able to build its system, but if the Arctic Gas momentum is to be broken, it will not be the result of any domestic politicking, but of some objective development. For example, a clear signal of Canadian intentions one way or another. While it is remotely possible that El Paso or Alcan might get an important endorsement somewhere along the line, what is almost inconceivable is that the United States Congress would overturn a presidential determination in favor of a Canadian overland pipeline system to substitute its judgment in favor of an LNG system.

The manifest superiority from a national point of view of the overland pipeline system as available is so overwhelming and the regional interests in the construction of such a system in preference to an LNG system is so overwhelming that the number of Congressmen, the number of State Utility Commissions and the number of Governors that the purchasers will be able to move on this is only a small time fraction of the existing lead that Arctic Gas has in this matter.

I think that it is instructive that in El Paso's principal market area that there is virtually no support for its project and in fact great skepticism about El Paso's project for a number of reasons, not least that the gas distributors do not want to be exclusively dependent upon El Paso, as they would be, for all the gas entering their market area. And secondly, they don't want the State of California to be exclusively dependent on a single point for the delivery of their gas, a point which could be interrupted by, for example, a fire at Valdez, which would leave them without any gas supply whatever as their existing supplies would have been displaced eastward into markets or, for example, in the Tenneco and Southern systems, for example.

There is simply no possibility, in my judgment, that Congress would endorse an LNG system. Particularly in the face of the cold wave that has now confronted the Midwest and the East and which will have reinforced its determination to get direct delivery of gas, and in view of the developing Westcoast glut of crude oil which is retrospectively viewed in Congress as the result of the fact that they approved the wrong pipeline in the first place for the oil.

These are circumstances that -- there is nothing which the State of Alaska can do to change. I believe it is clear the United States will favor an overland pipeline through Canada. It also seems likely, that rightly or wrongly, the Federal Power Commission, the Administration, and Congress will accept Arctic Gas argument that an early attachment of the Mackenzie reserves is in the United States' interest and that the Mackenzie route has significant economies of scale compared to the proposed Alcan system. But, the decision will in fact be made in Canada, not in the United States. The United States will accept any overland system that Canada is willing to build in preference to any alternative system.

Canada's orders of preference between the Mackenzie and Alcan routes are not so clear. There are a number of reasons why the Alcan system may make more sense to Canada and with your permission I would like to read a couple paragraphs of my article in "Northern Perspectives" on some of the Canadian reasons for favoring an Alcan system.

"The probable reception of any Alcan proposal by Canadian authorities has been a most difficult issue to forecast. A major appeal of the Arctic Gas project is purportedly its early (if not necessarily more economical) attachment to the Mackenzie reserves. Without this feature, it may be asked, what is the advantage to Canada of accommodating the United States in moving Alaska gas?"

"The attachment of the Mackenzie reserves may, on the other hand, be seen as a major disadvantage of the Arctic Gas system, from at least one Canadian standpoint. There is no particular reason why Canada should not accommodate the United States with a transit line across Canadian territory; after all, a substantial portion of Canada's oil and gas supplies transits the United States. There would seem to be little objection in Canada on nationalistic grounds to American gas moving in either an American or a Canadian-owned pipeline across Canada. The Mackenzie project, in contrast, raises the issue of an American-dominated consortium developing an important frontier area of Canada. The fact that an early MacKenzie connection is being justified in the United States by the (doubtful) proposition that it would lead to greater Canadian exports to the United States aggravates its potential difficulties in Canada. Both its timetable and logistics would be dictated by the convenience of the American interests. The native claims and environmental complications of this route are well known."

And incidentally, I expect that Justice Berger, who is the commissioner for the Canadian government in examining native claims and environmental implications of the Mackenzie pipeline, will come out strongly against the Arctic Gas proposal and against any major pipeline development in the Arctic pending the settlement of the native claims and the resolution of some presently unresolvable environmental issues. He will point out, I believe, that neither of these objections is nearly so strong with respect to a pipeline through the Yukon Territory along the Alcan route.

"The 60 trillion cubic feet of proved reserves in the western provinces", I think it's now about 62 trillion cubic feet in Alberta,"are enough to sustain the expected growth of Canadian demand plus present export" commitments "for about ten years. This would be the case even if there were no further discoveries" in Canada, "but recent exploratory results in Alberta have been rather encouraging, more so in fact than in the delta area. For this reason a decision on an Arctic pipeline carries much less urgency for Canada than it does for the United States."

In other words, Canada does not need a pipeline connection to its frontier areas for ten or eleven years even if there were no further -- to be no further discoveries in Alberta or British Columbia.

"More importantly, however, a decision today in favour of immediate development of the Mackenzie Delta-Beaufort Sea region can be seen to prejudice whether that region or the Arctic Islands (where recent exploration seems to have been more successful) shall be developed first. Either project could strain the capacity of domestic capital markets so that simultaneous construction of the two major pipeline systems under Canadian majority ownership is almost out of the question."

And I go on to say that it is not obvious which of these considerations will finally come to play, but "A decision in favour of Arctic Gas would" "be a reluctant one". It would have to be in the face of a firm decision by Justice Berger who in a sense occupies a similar position as Judge Litt in the procedures in the United States, and it"would be opposed by many quarters within the Canadian federal government, by several provinces and by a large body of Canadian opinion."

As you probably know, the Trudeau government faces an election no later than the fall of 1978. The liberal party is in great trouble, Trudeau is very unpopular at the present time and to run over the Natives and the environmentalists at this time in favor of an Arctic Gas pipeline is probably unlikely, it would be a very im-politic. So there is on the other hand and I have absolute confidence in this, there is a determination at the highest levels of the Canadian government to work out some joint accommodation with the United States for transportation of oil and gas and through exchanges of oil and gas. And I believe that the Alcan proposal offers a very important way out for the Canadian government of its way out of its dilemma.

Turning back to our contracts and the prospects of the Trans-Alaska Pipeline, the only serious substantive argument for the El Paso system from a national standpoint, the only one that has any credibility is that Canada wi. not license an overland pipeline under terms acceptable to the United States. Only Canada can prove or disprove the truth of this proposition and the Administration and Congress are going to wait for this.

Now the -- I do not want to say that there is no chance for a Trans-Alaska pipeline. There is no chance for a Trans-Alaska pipeline so long as there is a chance of a Trans-Canada pipeline and there is nothing that Alaska or El Paso or any of the purchasers can do to influence the decision from the United States in that respect.

The corollary proposition advanced by El Paso that the Canadian government is incapable of granting acceptable terms for an international pipeline because its treaties don't bind the provinces is without merit and can be easily dismissed. The premieres of both British Columbia and Alberta have expressed their in- intention to lay this question to rest to the extent that the Canadian federal government cannot bind the provinces. The provinces have independent authority to make treaties and those of you who are familiar with the Columbia River treaty will recall that it is a treaty between -- or among the United States, Canada and the province of British Columbia. Both Premier Lougheed of Alberta and Premier Bennett of British Columbia have made it absolutely clear that they have no objection to joining in any protocol providing for nondiscriminatory treatment, taxation, regulation, and for that matter a complete quitclaim of regulatory jurisdiction over a transit pipe- line that carries United States gas. So I think that that issue is totally a red herring.

The scenario I see developing on the approval of the pipeline -- or on the determination of a pipeline route is that the Federal Power Commission will find in favor of Arctic Gas, along the same lines as Judge Litt's finding, on the basis that it is environmentally superior on the basis that results in lower cost to consumers, the basis it can be built faster, that it is more easily expansible, and the whole range that the Federal Power

Commission will find it superior in every respect.

At about the same time the Berger C[illegible]ission findings in effect vetoing Arctic Gas will come out in Canada. Now if you'll recall the language of the Alaska Natural Gas Transportation Act, it says the presidential determination -- the FPC recommendation, the presidential determination shall be made without respect to whether Canada has reached a decision on this.

What the FPC decision for Arctic Gas and the Berger decision against Arctic Gas will trigger is negotiations between the United States and Canadian government and among the various proponents of gas pipeline systems to see what kind of system can -- is agreeable to all the parties. And it seems to me that the system that is going to be most acceptable to all the parties is a system along the Alcan Highway but departing in some degree from Northwest's and West Coast's strategy for that. In other words it would be a higher capacity pipeline than envisioned by the sponsors. As -- one combination would be to use El Paso's engineering and pipeline design for the northern part of the route. El Paso believes that with high pressure, with 1670 psi they can move up to 3 1/2 bcf a day through a 42 inch pipe. I think that a 42 inch pipe is one of the strongest elements in the Alcan design because that is the kind of pipe that can be rerolled in existing North American facilities.

A disadvantage of the Arctic 48 inch scheme is that it requires the building of a new plant by Stelco for the production of that pipe and it introduces another -- just another of a whole series of uncertainties into what I believe is an oversized -- already an oversized project.

So returning again to the contracts, I do not see what the State accomplishes in terms of the advancing of its goal by selling the gas now. I will -- in response to questions I'd be willing to elaborate on what I think the significance of these contracts are, but I would like to go ahead and spend a couple minutes on what I think some of the problems of building and financing an Arctic Gas pipeline are, regardless of who built it.

There -- these projects are enormously risky no matter what the sponsors and their financial advisors say. Their ability to be financed in conventional -- by conventional private means is extremely suspect. And that -- I'm sure that Whitewell's representation to El Paso and the financial advisor's representations to Arctic Gas and to Northwest are qualified in the same way. That is, if you get as much gas as you say you are going to move through this system and if your costs are the costs that your engineers say you will have and your schedule is what your engineers say you can accomplish and if you do get all the necessary approvals, then the financial -- and you do get the all events full cost of service tariff from the Federal Power Commission and the state utilities that govern the distributors -- or the customers of the system, then you can finance this through conventional project financing.

What I would question is whether all those -- whether all of those conditions are certain enough that the insurance company's pension funds and the other institutional investors that have to buy this pipeline would be willing to risk what may be Ten to Twenty Billion Dollars in financing.

In the first place, there is uncertainty about the gas supply. Now the -- I believe the State's reservior engineers project a probable production, permissible production, or optimum production of about 2 bcf a day. Now that is about or perhaps below the minimum threshold of Arctic and El Paso. That is about the design threshold for Alcan.

Now it is conceivable that after two or three years experience in oil production the Alaska conservation authorities may conclude that that rate of production is not in the State's interest, that the loss of oil -- the value of the oil foregone by that production is greater than the value of the gas produced. Nobody knows what this is going to be. The fact that all the producers and the State of Alaska and the gas purchasers all believe that they can produce say two bcf a day safely isn't good enough for the lenders. They have to have some notion of what the likelihood -- the downside likelihood is. And the downside likelihood -- if there is only a ten percent chance that production will be 1.6 bcf per day and 1.6 bcf per day is not enough to guarantee the payment of the debt on this pipeline, then you just won't be able to go into the capital market. We have the problem of delays in capital cost overruns. Actual construction costs may exceed estimated costs by substantially more than they affect general inflation.

Two years ago, with the help of the Library of Congress, I did some research on this and was unable to come up with a single large custom engineered construction project in the United States over the last ten years which had not exceeded its initial engineering cost estimates by a factor of less than two. And the experience in North America with big custom-engineered construction projects has been that they typically cost two or three times their original projections, even including an allowance for inflation. The cost estimators are like accountants and they prefer a solid, empirically based figure. That is, so many cubic yards of cement at so many dollars a cubic yard to a realistic figure. "They do attempt to project the increase in anticipated labour rates and in the prices of specific materials", and the inflation rates for those specific materials, "but they don't take into account the fact that huge projects, particularly if they involve new technology", as both systems do, both Arctic and El Paso does, "or a remote construction site," and this would apply more to Arctic, "usually don't work the first time around, nor that both the purchaser and the licensing authorities change their minds several times in the course of construction. The cost engineers don't appreciate that such projects are usually clumsily managed and are subject to a number of re-organizations during their design and construction. They don't allow for the fact that materials and equipment are always late and often mis-specified or defective," and that such "enterprises" "suffer not normal, but abnormal labour cost increases. Because of their size and urgency, they are especially vulnerable to wage pressure," and "to featherbedding, and" also "to racketeering."

And I needn't go into great lengths on the problems of the Trans-Alaska oil pipleline, which will --

whose costs will exceed by ten times the initial estimates by the sponsoring companies. I do not project a ten time overrun for Arctic Gas but I think that a doubling of their present projections would not be an unreasonable anticipation in view of the history of large projects in North America. Let's assume that Arctic Gas or that El Paso's project would cost Twenty Billion Dollars and that it would have to be paid for in twenty years and "assume that the investors should receive a 15 percent pre-tax rate of return on total" investments. "Under a conventional utility accounting scheme, the project would need a first year cash flow of four billion dollars just to cover its fixed costs. On a discounted cash flow basis" which is a more rational financial way of looking at it but is not customary in utility accounting, "the annual fixed charge would be about $3.2 billion."

But "with a throughput" of about "a trillion cubic feet" a year, that is about three bcf, "we are talking" about "$3.20 to $4.00 per thousand cubic feet" for transportation costs alone. If less gas can be delivered, if we are talking about two bcf a day, we are talking about Five to Seven Dollars a thousand cubic feet. Now "this charge doesn't include the cost of developing the gas fields, any return to the producers," to the royalty owners, any "operating costs or" any "costs of distribution."

Now both El Paso and Arctic insist that the consumers will accept any price because of the rolled in feature. Now not everybody agrees with this and in fact none of the government sponsored studies -- the Aerospace -- FEA study estimated that "no market for Prudhoe Bay gas would exist in 1985 at a 'city gate' price exceeding $2.40 per million BTU (in 1975 dollars). The Interior Department's study reaches a similar conclusion." Now this price you are almost certain to get, "even without implausibly large cost overruns or shortfalls" in the gas distribution system.

Now, "one assumption of" these "studies mentioned" "is that natural gas" prices have been decontrolled, "and that the Alaska gas is" therefore "priced incrementally."

Incidentally, the -- I don't want to spend a lot of time on it but it is not clear whether deregulation would increase or reduce the price of Alaska gas. I think there is a very strong case for expecting that it would make Alaska gas less valuable for a number of reasons. Deregulation would increase the price of gas in the Lower 48 and therefore reduce consumption in the Lower 48, increase production from the Lower 48 and reduce the gap -- the shortage.

It would also reduce the amount of low priced gas that the pipelines and distributors get which they can roll together with expensive gas to come out with a price that satisfies their consumers. Now I don't want to predict absolutely that deregulation would make Alaska gas less valuable, but I think that that's the probable effect, that by easing the gas shortage in the Lower 48, they make it less willing for gas distributors to pay more for that gas than it is worth at the burner tip.

What it is worth at the burner tip to the average consumer is roughly the price of fuel oil. Now there is some consumers that will pay substantially more and some who will pay only the price of coal or residual oil and so on. But the average consumer is competing with fuel oil. In a deregulated market, after a few years, you'll find that gas distributors will not pay more than that for gas because they don't have any cheap gas to average it with.

So, anyway there are market risks -- there are gas supply risks, market risks, cost overrun risks, and of course you know about the political regulatory and other institutional issues, things like native claims in Canada, the fact that virtually nobody seems able to get any sort of terminal in California. I have looked at this problem again for several different agencies and I wouldn't count on any proposal which requires a major terminal in California at this time until there is a substantial change in the internal institutions of that state or a substantial change in federal-state relationships.

It may be that there is just no way to put a major terminal in California. Anyway you have these problems, so you have the -- so these risks generate the financing problems.

"The financial consequences of the risks I have listed are magnified by the fact that neither" El Paso nor Arctic "can be built in smaller self-sustaining stages." Each is a total "integrated system which" will not flow any gas or flow any cash until the whole thing is completed. "Most of the capital invested", that is Ten to Twenty Billion Dollars or more, will be exposed to all the risk factors for the entire planning and construction period.

Now private lenders "simply will not accept the risks of this sort, and neither project's sponsors are financially large enough to carry them, even if they were willing to do so", and they are not willing to do so. All of the projects propose an "all events" tariff in which the sponsors would be guaranteed a return on equity, as well as a return to debt service, whether or not any gas is ever carried by their project.

El Paso proposes to use federal loan guarantees and Arctic has talked about federal indemnification for overruns. But, neither the "full cost of service all-events tariffs" nor government guarantees are presently in the works and none of these projects can be financed without some sort of government backup. And this is something that I think is independent of the numbers you come out with on any particular thing.

The financing schemes are very conditional and I think that all the sponsors are -- expect they will ultimately have to go to the federal trough either for a subsidy or a loan guarantee, which is the same thing as a subsidy, because they will not be able to produce the cash flow that they project and they will have overrun.

The President, when he makes his recommendations, or the President in his negotiations with Canada, are going to have to come up with something that can be financed.

Now, turning to Judge Litt's conclusions on this, Judge Litt is in effect asking somebody to build an over-sized pipeline on speculation. He is saying that in view of the vast amount -- the vast potential of the North Slope, all the way from Pet Four through the State leases, through the wildlife range, through the Beaufort Sea and the Mackenzie Delta, there may be a vast amount of gas and it is wasteful to build a minimum scale system as Alcan proposes, simply to handle most economically the gas that we know for certain can be produced. But, he is asking somebody to take the risk and the somebody is basically the investment community that is not going to take the risk, even if the probability that the throughputs necessary for Arctic Gas are -- say even if it is a ninety percent probability that Arctic Gas is viable.

Then he turns around and says,"well, the oil companies ought to take this risk." Well, the oil companies are not in this business. The oil -- he is asking the oil companies to put Three, Four, Five Billion Dollars on top of the Four to Seven Billion Dollars it is going to take to develop the field to produce the gas. He is asking them to put it -- to take money that they could use in high return risky ventures and put it into an operation that is going to have a public utility rate of return, where their going to be constrained to make nine percent or something like that. And it just isn't going to happen. It is an appeal to patriotism or [illegible] altruism or something like that that is completely unrealistic.

If Judge Litt and the Federal Power Commission and the President want a big diameter, high pressure pipeline from the North Slope, they are going to have to get the American people to pay for it and to accept the risks through the political system and there is nothing wrong, say with the principal of an all events tariff as long as the probabilities are good, as long as consumers have a substantial chance of benefiting, why shouldn't the consumers take part of the risk? It is not going to happen that way. The Public Utility Commissions don't think the risks justify it, they don't like the idea of socializing private risk in a situation where the investors are guaranteed their return while the consumers and the public take -- have the downside risks. So, when the President of the United States and the Premier of Canada get together to figure out what the system is going to be, they are going to have to look hard at the financing and the other system.

Now, looking at the faults of the Alcan system, there is something from the point of view of the Federal Power Commission. It seems to me that this principal fault can easily be resolved. It is desirable to have a forty-two nch pipe because that pipe can be built and can be rolled in present mills and its -- the technology is a lot more practicable.

El Paso believes that it can run a lot of gas through -- a lot more gas at a higher pressure through the pipe. If the Alcan people were granted a certificate on the condition they would put in a heavy guage pipe.

which could operate with sixteen hundred seventy psi, if the gas were available, by adding more power the incremental costs would be relatively small.

I think these things can be settled but they probably have to be settled in negotiations. It seems to me in conclusion that none of the systems as presently proposed and none of the financing arrangements are presently viable, and that we have yet to see the last of the combinations and permutations. I would say, however, that there is nothing the State of Alaska can do to advance a Trans-Alaska Pipeline LNG system within the U.S. political system. If there is going to be such a system, it will be selected by the Canadians because of their inability or unwillingness to authorize the prompt construction of an overland pipeline by one route or another.

SENATOR RADER: Representative Meekins?

REP. MEEKINS: I don't know exactly where to begin.

SENATOR RADER: Maybe a motion to adjourn. As a matter of fact we should have a recess motion. Let's take a recess here for ten minutes.

(Whereupon the hearing was recessed at 4:00 p.m. and reconvened at 4:15 p.m.)

SENATOR RADER: The Committee will come back to order. During the recess we had several conferences and we decided that no matter what we did, we would have lots of authority for doing it. So, and that includes nothing, I guess. As I recall, Representative Meekins, you had the floor when we recessed.

REP. MEEKINS: Thank you, Mr. Chairman. I hate to try to characterize what you said, but as I understand it, you say that while it is clear that the El Paso line provides great benefits to the State, that in your view it seems very clear that the contracts that were -- that are the subject of this -- of these committees are irrelevant to the decision upon which -- about which gasline will win final approval and that the actual decision will be made in Canada. If that is the case and if it is as clear to you as it seemed in your presentation, how do you explain the fact that administration experts say the opposite?

DR. TUSSING: Well, I think that may be more your speciality than mine. The purpose of these contracts is essentially an internal Alaska political purpose. Suppose you were the Governor and you had become -- and you were under assault from OMAR and the Anchorage Times and from the Anchorage business community for not having given one hundred percent support to everything that the El Paso enthusiasts wanted. And suppose as Governor you were also convinced by your own investigations that El Paso had very little chance and you're -- you would probably be concerned that when Arctic Gas got the final nod that these people would point the finger at you and say that it is only because you didn't sell the royalty gas, or its only because you made these noises about Alcan being an acceptable second choice and that you didn't dump all over the Canadians like we wanted to.

Well, it would seem that it would be an astute political move to go ahead and call everybody's bluff. You will recall that the Legislature almost unanimously, under the leadership of Senator Rader, urged the -- in fact, demanded that the administration go ahead and do this. So, the Governor now can come back to the Legislature with what I think is really a contract that doesn't mean anything for the --

REP. MEEKINS: Is this the hypothetical Governor?

DR. TUSSING: Yes, this is the hypothetical Governor. He now comes back to the Legislature with this can of worms.

SENATOR RADER: A realistic can of worms, huh?

REP. MEEKINS: And a real Legislature.

DR. TUSSING: And you look at it and you decide there is some problems with it, that the State may give up too much in it and I think that Mr. Moody and Dr. Swanson have some valid criticisms -- technical criticisms of the contract or that maybe you shouldn't have sold all the gas, or a whole series of reasons. Or, you may not be convinced that you are buying any political influence. But, what happens if you vote it down? And say -- where is the finger going to point when Arctic Gas gets approved? El Paso can say -- pick up its marbles and go home or something like that. It becomes a real psychological blow, at least within Alaska, to the El Paso effort. And, you guys, by voting this thing down bear the onus. You're the ones who defeated the Trans-Alaska Gas Pipeline.

If you pass it, this hypothetical Governor has exercised his leadership over this hypothetical fractious and undisciplined Democratic Legislature and carried the ball for Alaska. And, when and if Arctic gets the approval, he can show that he has done everything he could, and, in fact more than anybody reasonably expected him to do. He has done just what the enthusiasts for El Paso -- what OMAR has been saying he should do all along. They can't fault him on that. He has managed to carry along these legislators who were riding off in every direction. So, that -- that is what I think the fundamental significance of these contracts are and that is why I say I am not sitting in your seat, so I won't -- and I'm probably not the kind of person who could ever get into one of your seats. And so I won't advise you -- I won't advise you of what you are doing.

SENATOR RADER: Representative Meekins still has the floor.

REP. MEEKINS: Mr. Chairman, I just want to thank you for pointing that out. I never would have thought of it. I would also like you to direct him to be more forthright.

SENATOR RADER: Quit beating around the bush, now. Senator Colletta?

SENATOR COLLETTA: Yes. Dr. Tussing, you know that opened an area that, since you are venturing opinions, it seems to me out of the presentation on the political activities rather than the economic ones that affect the line. You missed the first day but the entire congressional delegation, without regard to party, also say that on the national level they want unanimity of support for this line. Now, am I, you know -- should I believe from a conclusion of your answer to the last question, that all of us are playing a game and isn't the parallel to this line identical to the oil line that came to Alaska on a one vote measure?

You know, I can't help but infer, at least in my own mind, from what you are saying is that regardless of what we do or the congressional delegation does, not only Alaskans, that this decision will be made by two beings and they don't need us, we're playing the game and I would suggest that is wrong. I take offense to it, because in the oil line there were those people who felt very strongly that possibly a route other than through Alaska was beneficial and stood up and took the flak. And I would suggest that in this body right here there are those who still have not concluded that maybe the all Alaskan route is the way to go.

I really take great offense that you are lumping us into playing a show, and that isn't true.

DR. TUSSING: Well, let me deal with the first question -- or the second question, and that is the parallel with the Alaska oil pipeline. I don't see a significant parallel. In that case there was only one proposition before the Congress. There were no responsible corporate sponsors for a Trans-Canada pipeline. There was the unanimous support, the State of Alaska, the oil companies and the administration behind that proposal. Yet the opposition to it managed to mobilize something like forty-two votes for a Canadian alternative which didn't exist.

Now, we have an entirely different situation. The momentum and the weight of the responsible corporate sponsorship, the weight of the agency endorsements within the federal government are all with the Trans-Canada system. The momentum is there. When the Trans-Alaska Pipeline bill was before the Congress in 1973 it was right at the height of the Arab embargo and it was the only thing there that Congress could possibly ratify. And, it -- there is some question of whether it would have gone through without all that -- without all those preconditions. Now the momentum, the establishment, the route to be azoic -- and it's got a far higher -- it starts with a far higher proportion of support, despite the fact that it has got responsible corporate opposition and it has got the State of Alaska and a number of other entities opposed to it. It starts -- Arctic starts stronger in Congress than the Trans-Alaska Pipeline -- oil pipeline ever got in Congress. So, that I don't think it is parallel.

Now, going to the question of the delegation. I hate to -- I'm a little diffident about beating my own drum, but on major national, political questions concerning Alaska, the biggest ones, our delegation, whoever they have been, with perhaps one exception, and our administrations, whoever they have been, have been one hundred percent wrong on these issues and I think that I have got a little better record on that.

Going back, for example, to the question of whether the Secretary of the Interior could or would lift the land freeze and be able to authorize the pipeline without the settlement of Alaska native claims, or to a more fundamental issue, whether there was any legal merit or political horsepower nationally behind the native claims. That were -- with the exception of the second in which Senator Gravel, when he did come in in 1970, was an advocate of the native claims, our delegation and our State administration dismissed the possibility that this could hold up the pipeline and I was practically stoned out of Anchorage in 1969 when I told the Chamber of Commerce that there couldn't be an oil pipeline for maybe seven years and going through the things that had to be done. Well, this was against the unanimous consensus of our administration and our delegation.

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

Our delegation and most Alaska public officials suffer a disease which is endemic to isolated colonial areas and that is, that it is very easy to believe ones own propaganda, to have wishful thinking. Now, I can't believe that our delegation really believes that there is a substantial chance that they could get a majority political vote for the Trans-Alaska pipeline.

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

SENATOR RADER: Any further questions?

REP. CHATTERTON: Yes.

SENATOR RADER: Mr. Chatterton?

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

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

SENATOR RADER: Representative Gruening?

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

DR. TUSSING: Is that a question?

REP. GRUENING: Yes.

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

SENATOR RADER: Representative Miles was seeking the floor.

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

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

REP. MILES: Just California only?

DR. TUSSING: Yes.

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

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

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

DR. TUSSING: Well, again you are asking me to speculate about peoples motives and I can just try to put myself in their place. El Paso, in the first place, wants to assure its customers that it is doing everything it can to obtain gas and a major campaign to build a pipeline system -- a transportation system from Alaska into their market area is such a gesture and it may earn them some Brownie points even if they -- you know, even if they aren't successful. That is one consideration. Now, El Paso is also getting very heavily involved in LNG technology all over the world and wants opportunities to develop and expand this technology.

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

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

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

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

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

SENATOR RADER: Representative Swanson and then Senator Huber.

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

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

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

that I don't think that the --

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

REP. SWANSON: All right.

SENATOR RADER: If you wish to why proceed.

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

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

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

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

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

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

SENATOR RADER: Senator Huber?

SENATOR HUBER: Thank you, Mr. Chairman. Mr. Tussing, the Four Dollar price that you mentioned on gas, is it correct to assume that was an mcf and that it would compare to Twenty Four Dollar a barrel oil price or Sixty-five to Seventy-five Dollar a ton coal price with eight or nine thousand BTU's assumed?

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

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

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

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

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

Otherwise, they have consumers in which they have legal -- to whom they have a legal obligation to serve, who go short. So that for small amounts of gas, at the seasonal peak, or when there is some sort of emergency, the gas distributors may be willing to pay Ten Dollars, may be willing to pay the equivalent of One Hundred Dollar a barrel oil to avoid turning off the valve to their consumers. So -- but you can't take Ten Dollars a thousand cubic feet as the value because you have got to look at the whole cycle. Now, if the gas coming out of the pipeline costs the distributors Six Dollars a million cubic feet and he has got to -- or a thousand cubic feet and he has got to sell it at an average price of say Two Fifty, that means he has got to get a hell of a lot for it in the peak season. He may have to get Ten Dollars for it at the peak season and then he has got surplus gas, he's paying for the gas that comes through that pipeline in midsummer even though his regular residential customers don't need it. And, in that case, he has got to sell it in competition with coal for a dollar or residual fuel oil for Two Dollars.

So, it's not -- there is no single market value price and to know how much, say six hundred fifty bcf of gas or say one hundred million cubic feet of gas per day is worth to a gas distributor in Chicago or Los Angeles depends upon how short they are, how much they have already cut off their low priority customers, what their other alternative gas supplies are. Do they have a lot of flowing -- of gas flowing under old regulated contracts where they are paying Thirty Cents or Fifty Cents and to be used to subsidize the purchase of expensive gas. You have to look at all of these things and then each distributor figures out what the gas is worth to it and what the cheapest alternative is. If it goes to -- say it goes to Four or Five Dollars, they will look at making synthetic methane from oil which is very expensive for base load supply. It is more than the average consumer will pay but if they are trying to -- if they are just trying to fill a gap, it is a lot less risky to build a propane air plant or a plant to make methane out of naphtha for Four Dollars an mcf than it is to commit yourself to twenty years of take or pay year in and year out Four Dollar gas from Alaska. So, Four Dollars is cheaper from an SNG -- from an oil SNG plant than it is from a gas pipeline and I just can't give you the answer and say at what point, at what price Alaska gas prices itself out of the market.

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

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

SENATOR RADER: Senator Huber?

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

Colletta, so I'll let it go.

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

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

DR. TUSSING: Yes.

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

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

REP. CARPENTER: Our memories differ.

SENATOR RADER: Are there any other -- I'd like to ask everybody to keep themselves on the subject of inquiry here. There is opportunity -- there will be opportunity for each of us to express ourselves at a later time as to whether Dr. Tussing's remark characterized a hypothetical or a real governor or legislature or a congressman. We needn't confront him with that today. Our purpose here today is to take his testimony on the subject before us and I would like to limit the questions to that if we might. Senator Croft?

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

DR. TUSSING: I don't -- I'm very skeptical as to whether Arctic can be built. I think it can be approved, that's the -- I think it can be approved in the United States and all other things being equal, it will be approved in the United States. It will get the endorsement of the FPC. But, shortly after the FPC decision we'll get the Berger decision, the National Energy Board in Canada will be second phase hearings next month. The NEB -- I don't know what the NEB will do, it will probably hand the hot potato to the cabinet -- to the Canadian cabinet. But, once the FPC makes its decision and once Berger in effect makes a contradictory decision, what is on the agenda is for negotiations between the United States and Canada as to what can be worked out. And the final decision depends first on those negotiations and second on resolving a lot of questions that involve both government and industry that really haven't been confronted yet. One is the financing question and in what manner shall the respective governments provide the guarantees against the risks in this system and practically any proposal is going to be extremely controversial. Loan guarantees come -- again, raise the question that your socializing the private risk and letting the private owners have the profit, and there is going to be a lot of antagonism in both countries.

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

Another issue that hasn't yet become -- begun to be confronted which is relevant to this royalty gas sale, is how the gas is going to be allocated. If the -- if there is still wellhead price control by the FPC, every gas company in the United States is going to want some of that gas and no company can offer the producers or the State of Alaska more favorable economic terms than any other company. So, there is going to be a lot more -- there is going to be a lot more demand for that gas than there is supply, assuming that some sort of viable pipeline system is hooked up.

The FPC is going to have to decide whose contracts are going to be approved. And even though there is no -- there is no current legal authority for the FPC to allocate gas and -- at least in non-emergency times among pipelines the way it can allocate today and say -- say to Columbia, "you know, Tenneco needs the gas more than you do, so we will turn down the Columbia contract in the -- the proposed contract with Columbia in the public interest because this other system is cut -- it's jeopardizing its number one and number two priority customers while you're still serving threes and fours." So, the FPC is going to decide who gets the gas. That is one of the reasons the producers aren't going out of their way to sign contracts, because -- you know, why should they choose one over another? They are not going to get any price advantage and the contracts -- a lot of them will probably be turned down anyway because the FPC wants somebody else to have the gas. Well, that hasn't yet been dealt with and if gas contracts are going to be used to finance the pipeline, then these have to be executed before a final financial plan goes together. So, in summary, I don't see much chance for construction in -- beginning in '78 unless the U.S. and Canadian governments bite the bullet and say, "we will provide the interim financing and we'll guarantee the thing until you put the final -- until all the final arrangments are made." And I really don't see -- I don't see that. Maybe next winter, if the questions before Congress and the Parliament, and we have got another cold spell like this years, they'll be willing to do it. They may send the Corps of Engineers out to build the thing for all I know but -- but, I don't see it starting in '78.

SENATOR RADER: Senator Croft, were you through?

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

DR. TUSSING: Well, if by the time -- by the time the system is completed, I think there is a good chance that there will be a lot more gas than we know about now. That isn't enough to get -- to get the kind of debt financing I'm talking to. A good chance isn't enough. A good chance is enough to make a risk venture, but if you are risking your own money and you say "I think there is going to be plenty of gas there that we'll be -- that by the time the thing goes on stream we would be able to produce four and one-half bcf from those two areas and that's -- that's the way to average expectation and I'm willing to gamble my money on that." That's fine, but the bond -- the bond-holders want a ninety-nine percent assurance.

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

I think -- now, Judge Litt wants a western leg on the Arctic pipeline and all the Western States want it because they don't believe that they will get the gas under reasonable prices by displacement. Well, the western leg is physically superfluous, at least up to, say one and one-half bcf going to -- going to western systems. Well, so -- so, as part of the political compromise you put the western leg into the system but you don't build it until after the gas starts flowing and the production builds up.

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

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

DR. TUSSING: No. There is no credibility to such a threat by Alaska because once the decision is made, the State's got no -- the State's got no alternatives and all you do by not allowing the gas to be produced -- you may cause problems for oil production which causes the State a lot of problems and you forego the revenue. And, I just can't believe the State is stupid and spiteful enough to refuse to produce the gas just because the rest of the country didn't do -- didn't build the route the State wanted. It just doesn't make sense. And so that threat has absolutely no credibility. In the calculation of rates of return or costs assuming only seven-eighths of the production are just meaningless, you are just not going to do that and nobody will believe that you'll do that.

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

DR. TUSSING: Well, there are some difficult -- there are some difficult problems. Suppose your reservior engineering studies show that the optimum rate of production is 1.6 bcf below -- is below the economic threshold of any pipeline system but that you -- but you do run into trouble by keeping injecting that gas and you're not going to flare it. You have some tough -- you have got some tough problems and I don't have an answer to that and let's hope we don't have to face that one. But, it is entirely plausible that you may have the level of production large enough to give you problems as to what to do with the gas, but not large enough to make any transportation system viable. And, of course in the past what was done in that sort of situation is what is being done is Saudi Arabia and Venezuela and the other big isolated fields in the world, they just burn the stuff.

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

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

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

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

SENATOR CROFT: Thank you.

SENATOR RADER: Representative Gruening?

REP. GRUENING: Dr. Tussing, as I understand what you said earlier was that the Canadian government was going to make the choice as to whether it was for either Alcan or Arctic. How is the President going to feel comfortable with making a decision, certifying a route without that stage in the negotiations being very certain? Are they going to amend the Alaska Natural Gas Transportation Act so he has more time? In other.words, he has until July -- or September first and then ninety days if he wants to extend it. Is he going to feel comfortable with making that kind of decision without those things resolved?

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

But, if the President makes the decision, say at the end of '77, you can count on its reflecting his discussions with the Canadians and he is not going to make a decision which is totally incompatible with what he thinks the Canadians are going to do. And both countries are going to bend over backwards not to appear to be forcing the hand of the other and to be blackmailing the other that there -- or leapfrogging or something like that. They're going to try to make it -- they're going to try to come out with compatible decisions, whatever the --

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

DR. TUSSING: Well, the law says that he has to make the decision whether or not Canada has -- he has to make a decision on its merits whether or not Canada has made a decision. And, irrespective of what the process in Canada is, in reality it's going to be a joint decision once the -- once the thing has gone through the regulatory and hearing phases of it and I don't know the exact mechanism by which the United States and Canada will consult on this. I'm sure no mechanism has been set up. But, it's not an insoluble problem, it's a problem whose answer -- whose outcome is impossible to predict with competence now. I don't think anybody can come out with a solid prediction of what will happen in Canada, much less -- I'm as willing to do it as any Canadian. There is no authoritative -- there is nobody who has the authoritative position in Canada to say what Canada's position is on this. But, Canada will have a position of some sort and it will influence the President's decision.

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

SENATOR RADER: Representative Meekins?

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

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

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

And, I don't know why you had to commit one hundred percent of the gas and I think there is some -- there are a couple reasons why you probably shouldn't commit one hundred percent of the gas. Firstly, you have this most favored nation clause, that is, that the price is the highest price paid by any interstate purchaser. Now, it may well be possible for the State, if it kept some -- held some gas back to find a purchaser who would pay a higher price than any of the others and jack up the fate. If it kept some -- twenty-five percent out and waited until -- waited until the bidding process at the time of the completion of the pipeline, you might be able to get a higher price than any of the sales from the -- by the operators because the State might be in a position to sell to a nonjurisdictional purchaser, or to one that has a special tax advantage, like a state entity.

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

SENATOR RADER: Representative Meekins?

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

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

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

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

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

DR. TUSSING: Well, no. That's a -- that's one that depends on the -- it's conditional on deregulation. So, it wouldn't require an FPC approval. The FPC will continue to regulate the transportation and the transportation costs but if that's a feature of the wellhead price, conceivably the FPC could reject the whole contract on the grounds the pricing provisions are not in the public interest but I don't see that as a problem. I just -- let's say what you are giving up are the shortcomings identified by Mr. Swanson and Mr. Moody, as far as I can tell. That is, that there -- that you are giving up options or some possible options for getting a higher price by leaving the gas off the market until you see -- until all the circumstances are sorted out. You know -- for example, the amount the gas is worth to a particular gas distributor does depend on the transportation system. Now, the hierarchy -- the ranking and the order of preference of the different potential customers would change. For an Alcan system probably -- probably Northwest would be your preferred customer in a deregulated situation because the value of gas in its market is essentially the same as it is anywhere else in the country but it is closer, so you have the lowest transportation costs. And, under the LNG system you would probably -- conceivably El Paso would be willing to bid the highest for two reasons. First, because it would be the point of off loading and be closest, and second, because they are quality problems. California probably has the highest premium but as you know, of course PG & E, which is one of El Paso's customers, is part of the Arctic group and would like to bring the stuff overland to California. Now I don't know how much PG & E would give.

REP. MEEKINS: Thank you.

SENATOR RADER: Mr. Chatterton?

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

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

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

STATEMENT OF JACOB ADAMS, VICE-PRESIDENT-LANDS, ARCTIC SLOPE REGIONAL CORPORATION ON H.B. 102

My name is Jacob Adams. I am appearing before the Committee on behalf of the Arctic Slope Regional Corporation in my capacity as Vice-President in charge of Land Selection and Conveyance.

ASRC is strongly opposed to legislation which would impose a tax on proven oil and gas reserves. The proposed legislation would constitute an extremely damaging burden to ASRC and could very well bankrupt the corporation.

ASRC recognizes and appreciates the Legislature's concern over imminent near-term deficits in the State Treasury arising out of predictable imbalance between revenues and expenditures. Expenditures in recent years including revenue sharing with local governments has been a mainstay of supporting their local budget requirements especially in education.

While the Inupiat people of the Arctic Slope have benefited to some degree by State financial support, it has not been to the same extent that more urban areas have benefited.

At the present time, the present cash reserves and future anticipated revenues arising from the Alaska Native Claim Settlement Act, as well as programmed receipts under various exploration and development agreements with major oil companies, have been heavily committed to produce a viable economy in the Arctic based on a profit motivated, free enterprise system. ASRC, without special assistance or subsidy from the State, is underwriting many commercial business ventures, which will ultimately provide revenues to the State in the form of income and business taxes. If prevented from developing on its own initiative because of a new tax burden on proven reserves, which ASRC shall shortly inherit under its mineral in-lieu selection entitlement, the economic future of the Arctic will be seriously impaired.

NERC current $1.5 million in leases in this year...

A tax on reserves is a regressive tax in that it is not gauged on the ability to pay. True, large oil companies can accommodate such taxes by passing on to consumers those costs, but not every corporation, organization or individual can pay. Contrary to the bulk of public opinion there are others in the State of Alaska, in addition to large oil companies, that have a stake in ownership of oil and gas reserves. This other category includes individual lessees, royalty owners, and independent companies.

As you are also aware, at least six native regional corporations have entered into oil and gas exploration agreements which, in addition to base royalties as a land owner, provide for other benefits including net profits provisions, joint ventures or participations, carried working interests, or a combination of all three.

Although we are not here to argue the legal interpretation of Section 21(d) of the Alaskan Native Claim Settlement Act whereby a twenty year tax exemption applies to certain property interests of native corporations and individuals, there are those who believe that native interests in leases in the form of participations as well as royalty interests would be subject to a property tax in the same manner and to the same degree as oil company lessees.

We submit that the property tax being considered would depress the value of unleased native corporation lands as well as those that are presently leased or that shall be leased in the near future. The time of payout in order to receive benefits under a net profits interest would be much delayed. From the regional corporations' standpoint, paying taxes today with the uncertainties of developing a market and unknown future wellhead value of crude oil and natural gas, could create financial havoc if not bring upon the economic demise of the corporations.

A specific example will serve to illustrate our concern. ASRC previously filed in-lieu selections on approximately 18,000 acres within the boundary of the known geologic structure of the Kemik Unit. The Kemik Unit has one completed and shut-in gas well. A second exploratory well is currently drilling and a permit for a third exploratory well is pending. No development wells have been drilled;

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however, the U.S. Geological Survey has indicated that the discovery probably is commercial based on the KGS classification. The Survey and the original operator, Forest Oil Company, indicates a probable produceable volume of 475 bcf of gas. This is certainly no "barn burner" or as we call it "igloo melter" in terms of North Slope operations.

ASRC filed selections within the Kemik Unit because it has over 1.2 million acres of in-lieu subsurface entitlement and the Board of Directors believes such selections should be made first in proven areas of production where fee ownership is not important in order to maximize the spread of its overall land ownership throughout the Arctic Slope.

ASRC's interest in the Kemik Unit upon transfer of the subsurface estate from the Department of the Interior ranges from 12-1/2% royalty under existing Federal leases to 100% mineral interest under unleased lands within the unit boundary.

Based on the reserves attributable to ASRC's interests derived from the operators volumetric calculations, the volume of produceable gas is 213 bcf. Assuming an arbitrary value at the time production commences of $.50/MCF, the value of so-called proven reserves owned by ASRC is $106MM. A 20 mil property tax levy would amount to $2.1MM annually until production commenced.

Since ASRC will probably lease its 100% mineral interest lands reserving a 16-2/3% royalty thereby decreasing its royalty reserves to 64 bcf, the amount of ad valorem taxes paid in the first few years after the tax is imposed may never be recouped as a credit against production taxes. This would be true unless ASRC receives title to the subsurface estate and leases its interest prior to the effective date of the tax law. Actions which force ASRC to land management decisions in haste due to factors (the new tax) beyond its control are unreasonable and patently unfair.

Another problem that we consider likely to develop that would be harmful to ASRC relates to the contract provisions of our several oil and gas exploration agreements. The agreements provide for, among other things, a reasonable continuous drilling provision in the event of discovery on a lease. It is almost a certainty that we would have to waive the continuous drilling provision until the law expires (if ever) thereby extending the period of field development for many years which would not only affect our cash flow projections but deprive the State of production taxes from ASRC lands.

Although reserves could be assessed under a single discovery well, you would obviously be inviting litigation.

We believe that the Legislature should carefully explore all alternatives to raising sufficient revenues to offset near-term deficits and compare the impact against the obvious detrimental effects of the tax on reserves.

Several alternatives that have been advanced in recent weeks that should thoroughly considered include the following:

1. Indirect borrowing against future oil and gas royalties through an "ABC" type transaction. Selling only a specified quantity of royalty reserves commits only that amount necessary to repay the loan. Royalty production thereafter is free from encumbrances. While further investigation of the applicability of "ABC" financing is needed, we believe it would avoid the question of constitutionality raised by opponents to funding through borrowing. Arlon Tussing, noted University of Alaska economist, has compared the cost effect of taxing reserves against borrowing at low interest rates and concluded that if the State wants to maximize the value of its oil revenues it would be far better off to issue revenue bonds rather than tax reserves in the ground.

2. Another alternative that should be considered is advance payment of severance taxes. Since the producers will be paying severance taxes based on gross wellhead price of oil or gas on a predictable declining basis, payment of advance severance taxes on production with a recapture provision after royalty revenues close the gap between receipts and expenditures should encourage

operators to produce a property beyond what would otherwise be its economic limit. The time of abandonment of marginal properties should be extended for a number of years which would benefit the State and promote good conservation practices.

3. A third alternative that should be considered is a purchase option on State royalty gas with the actual value to be determined at the time of transfer. An option of this nature could be made attractive to large gas utility companies who may be able to accommodate the option payment in their rate base. In any event, the State would not be committing its gas reserves at a fixed price in advance of what the actual value may be at the time production commences. It appears to ASRC that this alternative may be superior to all others

4. Additional competitive lease sales should be programmed to coincide with calendar year budgets of major oil companies to maximize revenues. If the majority of the potential participants in a sale adopt a budget as of the first of a calendar year then it is unwise to schedule a sale for the fourth quarter of a year.

5. Another alternative that has been suggested is advance sale of royalty oil. This appears the least advisable at this time since the value would be heavily discounted by prospective purchasers. However, as an alternative it should be considered.

We wish to thank you for the opportunity to present our viewpoint on the proposed property tax on reserves. Although such a tax may be relatively easy to administer, it has gross inequities and applications. Therefore, if there are other means to raise revenues without inequities, they should be thoroughly investigated and only as a last resort should serious consideration of a tax on reserves be implemented.

One factor that begins to worry ASRC is that the anticipated revenues from Prudoe Bay may not cover rapidly escalating costs of State government at the time production begins. If this occurs, we believe that the tax on reserves will not be phased out as provided for in the various bills with the result that exploration and development on native lands will be further impaired.

STATE OF ALASKA

JAY S. HAMMOND, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE COMMISSIONER

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February 17, 1977

The Honorable Chancy Croft
Chairman, Interim Committee
on Oil and Gas Taxation
Leasing Policy
Alaska State Legislature
Juneau, Alaska 99811

Dear Senator Croft:

Senate Concurrent Resolution 101, passed by the 1976 Legislature, provided that the Administration and the Legislature would undertake a study of long-term oil and gas leasing and taxation policy, and that the study would be presented to the first session of the Tenth Legislature. Subsequent to the passage of SCR 101, the Administration determined that the Department of Natural Resources would have lead responsibility for the leasing phase of the Study, and meetings with legislative leadership and research staff resulted in further agreements that the Commissioner of Natural Resources would serve as the project manager for a joint study of alternative oil and gas leasing methods. For this segment of the Study, the Legislature appropriated $50,000 to the office of the Commissioner of Natural Resources, and an additional amount of $35,000 has been made available by the Legislative Affairs Agency for additional contractual assistance in conducting the study.

From the beginning, this joint study has been undertaken in an atmosphere of constructive cooperation, most likely in recognition of the complexity and importance of the issues involved. Shortly after the conclusion of the last Legislative Session, I participated in meetings with the Interim Committee in an effort to design the components of an effective study of alternative oil and gas leasing methods. Those meetings resulted in agreement on a plan of study which was initiated some time ago and which has been the subject of ongoing briefings and discussions between the Department of Natural Resources and the Interim Committee.

Generally speaking, that study is completed at this time and will be presented through documents and testimony during the present Legislative Session. The first formal presentation of the results of the Study will be made February 17, 1977.

Taken as a whole, the Alaska Oil and Gas Leasing Study which is presented to you today is not intended to reach final conclusions with regard to the oil and gas leasing alternatives that are best for the State of Alaska in the future. Rather, it was designed, as a result of the agreement between the Administration and the Interim Legislative Committee, to provide a sound basic portrayal of the alternative objectives the State might pursue in future oil and gas leasing policy and the alternative leasing methods which could be utilized to optimize our chances for obtaining the chosen objectives. In addition, the Study was designed to provide a comprehensive overview of oil and gas leasing in Alaska by portraying its history, the nature of the present State system and information about other factors which must be considered if new leasing systems are to be utilized in the State.

To accomplish these objectives, the following elements of the Study have been largely completed at the present time.

--A statement regarding the history of State oil and gas leasing in Alaska, including Federal history where relevant, and an analysis of this history indicating the rationale for past decisions and the success or failure of leasing decisions.

--A description of the future oil and gas potential on State land sufficient to allow an analysis of the applicability of alternative oil and gas leasing methods in the context of the potential that exists.

--A description and analysis of the present State policy on leasing and the statutes, regulation and structure which support it.

--A description and analysis of major alternative systems which are practicably applicable to State use in Alaska; all stated in terms of alternative objectives the State might wish to pursue.

--A review and analysis of the practical implications of adoption of various leasing alternatives including budget and personnel requirements, information requirements, and the decision-making structure. Subsequently, this might be supplemented by the design of a criteria for administrative decision-makers to utilize in evaluating alternative leasing methods in various situations.

To conduct the Study, substantial work was done both by the staff of the Department of Natural Resources and by professional independent consultants. Although a substantial number of individual conclusions are reached in various components of the completed study, it should be strongly emphasized that no final comprehensive conclusions on the part of the Administration or members of the Legislature have been reached. Indeed, many elements of the Study present contradictory conclusions, and the overall effect of the study is to present a wide range of alternative objectives and methods to reach them. Speaking for the Administration and as the project manager for the study, it would be my recommendation, following the initial presentation of the study and a briefing on its results, that a period of analysis and public review follow. During this period, comments of others in the public sector should be solicited and further discussions held before final positions are established.

I remain extremely hopeful that the joint cooperative approach to this important and complex issue can be maintained for as long as it remains constructive.

In examining the study as a whole, I have drawn some preliminary conclusions of a general nature which might be of interest as recommendations to the Committee in considering further effort in pursuit of an improved State oil and gas leasing policy.

Overall, the individual studies, regardless of their specific conclusions, tend to indicate that under various circumstances and in pursuit of some objectives, the State could improve its future return from the commitment of oil and gas property by utilizing a broader range of leasing alternatives. As a result, it seems evident that a broadening of the leasing alternatives available to State administrators is in the best interests of the State. What those alternatives should be, and the limitations placed upon them, must be a subject of further deliberations.

Second, as the number of alternatives for future leasing is broadened, it is advisable to broaden the public review process which should be associated with any leasing decision. While final decisions might continue to successfully rest with public administrators, the public process leading to such decisions should be thoroughgoing and in proportion to the importance of the State resource decision. Such process could well include the early publication of comprehensive plans for any lease event under consideration (including the leasing area, the method(s) under consideration, the objectives being pursued, alternatives to be considered, and a review of environmental factors). Second, a component of the public process might well be a published document which relates the proposed lease plan to future State revenue and spending projections and to future State oil and gas leasing plans. In the context of such information, the public process could be most constructive.

Third, it appears that many of the alternatives presented in the leasing study require the possession, by the State, of greater amounts of information regarding potential leasing areas than under the present system. Further study, and perhaps statutory modification, will be necessary to assure the retention of adequate information for certain of the leasing methods proposed.

Fourth, certain of the alternatives undoubtedly require additions and changes in the State administrative structure for oil and gas leasing. Further Administration and Legislative efforts should be devoted to analyzing the practical implications of various leasing alternatives, including budgetary and personnel requirements and the purchase and analysis of necessary subsurface information.

These and other general avenues of inquiry are already being pursued by the Department of Natural Resources and should be the subject of additional joint effort between the Administration and the Legislature. I am extremely hopeful that the lease study presented to you at this time will be helpful in providing a framework for future decision-making. The Administration stands ready to continue in its cooperative efforts with the Legislature to better understand our alternatives and make the best choices for the future.

Very truly yours,

Guy R. Martin

Guy R. Martin
Commissioner