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EXXON COMPANY, U.S.A.
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PRODUCTION DEPARTMENT

December 9, 1975

Joint Gas Pipeline Impact Committee
Alaska State Legislature
425 G Street, Suite 750
Anchorage, Alaska 99501

Attention: Mr. Eric Eckholm

Gentlemen:

There are enclosed for the Committees information the responses of Exxon Company, U.S.A., to the questions submitted with your letter of November 19, 1975.

We did not receive the questions until November 24, 1975, and as you have been advised, the time required in preparing answers prevented us from delivering the answers by the December 8 date.

I plan to make a statement in behalf of our company during the hearing on December 10, 1975.

Yours very truly,

Judd Miller, Jr.
Division Manager

CC's to: Committee Members

QUESTIONS CONCERNING THE PRUDHOE BAY
NATURAL GAS RESERVOIR
AND RELATED MATERIALS

(REQUESTED BY ALASKA STATE LEGISLATURE JOINT GAS
PIPELINE IMPACT COMMITTEE - RECEIVED 11/24/75)

QUESTION: 1. (a) What discount rate does your firm use in evaluating field development investment of the sort envisaged in the Prudhoe Bay Area?

ANSWER: The overall evaluation of any new investment must consider the "cost of capital", the risk, the changing levels and mix of investments, inflationary pressures, future prices, taxes and other governmental and regulatory constraints. The "cost of capital" not only varies between companies in an industry, but also varies for a particular company, such as Exxon, as a function of the changing business environment. An investor is not only interested in the past and present return made by a corporation, but more particularly on the prospects for a level of future return which will reward his risk in an investment.

It has been widely recognized by several financial institutions, energy companies, and government agencies, that the private sector's capital requirements for petroleum investments over the 1970-1985 period will be three to four times the amount required in the last 15 years. In 1974, or more than a year ago, the Chase Manhattan Bank, in its paper, "The Profit Situation", stated the following:

> "...In the United States alone, the petroleum industry's financial needs will exceed half a trillion dollars.
>
> Raising that much money will represent an enormous task .. Part of it can be borrowed but at least three-fourths will have to be generated internally from profits and capital recovery. Nearly half must be obtained from profits alone and, profits will have to grow much faster than in the past. The rate of return on invested capital will need to range between 15 and 20 percent."

Also, in early 1975, Ezra Solomon has testified in connection with the FPC hearing on Docket No. RM 75-14 as follows:

> ...Thus my conclusion on the rate of return question is that the appropriate rate for new investment dedicated to expanding our oil and gas production capacity should now lie in the range of 17-18 percent a year on DCF after-tax basis."

The above quoted returns reflect averages, for the industry and the wide range of investment decisions. Therefore, it is clear that a specific discount rate is a constantly changing target and clearly subject to many variables that range within a band of expectations. However, it is obvious that the 10 percent before-tax rate used in the Aerospace report is clearly inadequate and inappropriate for economic evaluation of any petroleum industry investments in Alaska.

It is essential to realize that the returns quoted above are on total expenditures, and not incremental investments such as development costs of Prudhoe. When only the incremental development costs are used, the acceptable rate of return must be much higher, especially since the exploration costs which are neglected occur many years before the project is brought on stream. As an example, Exxon has been exploring in Alaska since the 1950's, has drilled many dry holes, but has generated no revenue to date. The profit on the Prudhoe Bay venture must bear some of the earlier failures and the long delays before any cash flow is generated.

It is also important to realize that the return for a particular investment opportunity must be adjusted for the specific degree of risk involved. Operating experience in a remote, Arctic environment is very limited and consideration must be given to the probablility that costs could be considerably higher than forecast. In this instance, there is also uncertainty in produce prices, investment and operating costs, and taxes.

Consideration of these factors leads to the conclusion that the rate of return at Prudhoe Bay must be substantially higher than the return required on average investments. This is necessary to recoup exploration costs, both past, present and future, and to yield earnings sufficient to attract the capital required to conduct an active exploration program in a high risk environment such as Alaska.

Therefore, in summary, consideration in investment considerations must include the following:

(1) The overall cost of capital to the individual corporation, considering its overall investment mix, capital structure, long-term debt, and the need for an adequate return by the corporate investor.

(2) The Prudhoe Bay project involves an abnormal amount of uncertainty and risk.

(3) Any analysis of only the Prudhoe Bay development costs as opposed to total cost, requires a higher return to justify the total venture.

QUESTION: 1 (B) If more than one rate is used, indicate the reasons and the circumstances appropriate to each rate.

ANSWER: As noted in 1(A), projects judged to have substantial risk require higher returns to offset the risk and justify the investment.

QUESTION: 2. (A) Are there any circumstances under which a requirement to reinject all gas produced could lead to a reduction in the rate of oil recovery, or in the ultimate recovery?

ANSWER: Exxon's reservoir performance studies, which are based on "reasonably expected circumstances", show that produced gas can be reinjected without causing a reduction in the rate of oil recovery or in ultimate oil recovery.

QUESTION: 2.(b) If so, explain those conditions and estimate the amount of reduction.

ANSWER: Based on our current knowledge of the reservoir, and expected reservoir performance, this question is not applicable - see response to Question 2.(A).

QUESTION: 2.(C) Are there circumstances under which the reinjection of gas could be more costly than production of gas for sale?

ANSWER: Reinjection is an expensive and unnecessary step where gas markets are available. When gas is reinjected, it must be produced a second time and the added gas injection and gas producing costs are substantially higher than the cost of producing the gas directly to sale.

QUESTION: 3. (A) The Aerospace study states (p. 3-30) that gas compression for reinjection will require 5 percent of the gas as fuel. Is this a reasonable estimate?

ANSWER: The fuel estimate of 5 percent of the gas compressed for reinjection is reasonable. However, additional fuel will be required for oil and gas production.

It should be pointed out that our answer to this and all subsequent questions related to the Aerospace and Gruy studies are based upon a cursory review of those studies. A more detailed review of the studies with those who performed the study is needed to be sure we understand the study.

QUESTION: 3. (B) How does this compare with the field consumption of gas to be expected under the assumption of maximum production for sale?

ANSWER: The gas at Prudhoe Bay will ultimately be sold. The question is really one of timing. Fuel associated with gas sales should be comparable regardless of timing. If gas sales are delayed, additional fuel will be required for reinjection and production the second time. Gruy's study would indicate the additional fuel required for gas injected is 5 percent of 5.9 Tcf or 295 Bcf of gas. We believe this figure is understated because our studies indicate the produced and reinjected gas would exceed the 5.9 Tcf estimated by Gruy.

Fuel requirements for oil production are highly uncertain because they are dependent on final reservoir management plans. These plans will be updated and improved upon as the field is produced and production behavior is

observed and evaluated. nevertheless, fuel will be required for oil production whether gas sales are early or late.

QUESTION: 3. (C) Neglecting the gas used as compression fuel, is there any reason why all the reinjected gas could not eventually be recovered?

ANSWER: The recovery of gas reserves will depend upon the abandonment pressure which will be affected by the economic environment. A percentage of the reinjected gas or its equivalent will be recovered.

QUESTION: 3. (D) Assuming that all gas was reinjected, at what point do you estimate the total quantity of gas reinjected would equal the total recoverable gas reserves contained in the reservoir?

ANSWER: We are not sure we understand the question. If no outside gas is injected, the injected gas will come from the recoverable reserve and will never exceed that available. Based on reasonable assumptions of producing conditions, we believe that the total volume of gas reinjected will not equal the total recoverable gas reserves contained in the reservoir prior to depletion of the oil reserves.

QUESTION: 3. (E) Would this quantity (less that consumed in reinjection) actually be recoverable at that point? If more or less, why?

ANSWER: As noted in 3 (B), a percentage of the injected volumes or its equivalent will be recoverable dependent upon the economic abandonment pressure for the field.

QUESTION: 4. (A) Are the cost figures used in the H. J. Gruy model (Aerospace, p. 3-23 and Gruy, p. 10) reasonable?

ANSWER: The cost parameters summarized on p. 3-23 are expressed in 1975 dollars and on that basis are reasonable. However, inflation will substantially affect actual costs and should be taken into consideration. For example, during 1974 drill bits increased 29%, pumps 43%, tubular steel 52%, and certain other items such as valves and fittings were up over 100% in cost. Furthermore, additional captial expenditures which are not listed on p. 3-23 nor p.10 will be required. Those include expenditures for water injection, gas processing, artificial lift, gathering systems, and other lease facilities.

QUESTION: 4. (B) Aerospace (p. 3-22) indicates that the quantity dependent costs are in addition to the costs of water treatment plants, but no cost figures are provided for such plants. Apparently, there are similar additional capital costs associated with gas processing, to control the water and hydrocarbon dew points, and to remove carbon dioxide (Aerospace Report, p. 3-8). Please explain the relative costs of these activities, and any other related activity necessary to prepare the gas for sale, so that the committee can have a general idea of why the costs of producing the gas for sale are higher than the costs of production for reinjection.

ANSWER: Our research indicates Gruy's study included about $4.5 billion (1975$ in capital expenditures for water injection wells and facilities, gas sales treating, gathering facilities, and other lease and service facilities. Gas sales treating facilities were estimated to cost $550 MM by Gruy. Exxon's estimate (1975$) for the gas sales treating facility is comparable to Gruy's.

When costs for sales compression and additional electrical power to support gas sales are added, Exxon's estimate of gas sales facility

costs is increased to $800 MM (1975 dollars). These sales investmants will ultimately be required whether gas is sold early or delayed. The cost to produce the gas to early sales is less than the costs to reinject the gas and produce it a second time. This subject is discussed further in our answer to question 8. (B).

QUESTION: 5. (A) Have you entered into any agreements for the sale of your share of the Prudhoe Bay gas which would require you to produce the gas even if the price obtainable for it was very low?

ANSWER: No. We have not entered into a gas contract; however, we have entered into agreements which grant certain purchasers the right to negotiate for Exxon's gas reserves. These agreements have been made a matter of public record with the Federal Power Commission and the California Public Utility Commission.

Exxon has entered into two agreements involving minor uses of gas for field facility fuel; however, no gas value has been agreed to. These agreements are expected to be superseded by the Unit.

QUESTION 5. (B) What minimum price, if any, is mentioned in any gas sale or option agreement covering North Slope gas to which your firm is a party?

ANSWER: None. A minimum price concept is included in the agreements referenced in the answer to 5 (A) above.

QUESTION: 6. (A) What will become of the heavier hydrocarbons contained in the gas stream (ethane and heavier) if the gas is reinjected?

ANSWER: In the absence of a gas sale, the produced gas will be processed through gas/liquid separation equipment and the liquids will be

commingled with the crude and transported to market.

QUESTION: 6. (B) If it is sold?

ANSWER: When Prudhoe Bay gas is sold, it will be necessary to reduce the water vapor and hydrocarbon dew points of the gas to the extent required by gas pipeline quality specifications. The hydrocarbon liquids removed from the gas stream will either be transported through the oil pipeline and sold, consumed as field fuel or re-injected into reservoir.

QUESTION: 6. (c) To what extent, if any, has your firm committed itself to the sale of these heavier hydrocarbons?

ANSWER: No commitments have been made.

QUESTION: 7. (A) Will the proceeds of the production of oil and gas be shared by the producers on the basis of original oil and gas in place?

ANSWER: The proceeds of the production of oil and gas will not be shared by the Prudhoe Bay owners. Instead, each owner will take-in-kind and dispose of separately, their share of the production. The proper basis for sharing oil and gas production is currently being negotiated.

QUESTION: 7. (B) If not, then how?

ANSWER: See explanation above.

QUESTION 7. (c) If, as is indicated in Gruy, the production of gas for sale

results in a loss of oil, what principle will govern the appointment of this loss among the field's several owners:

ANSWER: None. Once the oil and gas allocation factors referenced in response to question 7 (A) have been established, they will apply to the produced volumes.

Again, we do not like the use of the word "loss". Early gas sales is clearly the most optimum way to produce Prudhoe Bay. Gruy's estimated "loss" associated with early gas sales is a highly uncertain "loss" which, in our view, can be reduced, if not eliminated, by good reservoir management practices. Furthermore, the "loss", if it occurs, is small when compared to the benefits in present value income and other factors which would be associated with early gas sales including a higher condensate reserves, less fuel associated with reinjection of gas, less fuel and higher operating costs associated with producing the gas a second time, and lower costs associated with the reduced oeprating

QUESTION: 8 (A) The Aerospace study indicates that the future field development costs of gas production for sale exceed the costs of field development under a 100 percent reinjection assumption by a substantial amount. (Aerospace, p. 19 indicates a difference of $3.8 billion.) Does your firm generally believe this to be a realistic prediction?

ANSWER: The Gruy study is limited to production over a 23-year period and compares costs for early gas sales with costs for no gas sales where all excess gas is reinjected. As previously pointed out, we have not had a chance to study the Gruy report in the detail we would like, however, we believe the $3.8 billion cost increment associated with early gas sales is approximately correct for the assumptions made. Again, we must emphasize this expenditure is expressed in 1975$ and will be substantially less than the ultimate expenditure required.

QUESTION: 8 (B) If so, please explain the reasons for this $3.8 billion difference; if not, why?

ANSWER: To make the two cases comparable, the gas must be sold under the delayed gas sales case. This would require adding expenditures for gas treating and processing, central compression, additional electrical power, and other lease and service facilities required to handle the sales gas. Additional operating costs must be added to cover production of the gas, the extended life of the field, and the costs of fuel associated with producing and selling the gas. Addition of those factors to the Gruy "no gas sales" case would make that case more expensive than the early sales case. When the present value loss of deferring the income from gas sales and the associated condensate and plant liquids is included as additional cost to defer gas sales, deferral is clearly an uneconomic option which should not be seriously considered.

QUESTION: 9 (A) Pages 3-37 of the Aerospace report indicate that the <u>total</u> costs of producing the gas, considering the lost oil production (at $9/barrel) and the actual field development costs, under maximum pressure maintenance, would be $7.251 billion. Is this a reasonable figure? If not, what would be a reasonable estimate?

ANSWER: The $7.2 billion (1975$) number is comprised of the $3.8 billion cost increment previously discussed and $3.4 billion due to the approximately 400 MM barrel difference in oil recovery reported by Gruy. As previously discussed, this "loss" is uncertain and we believe it can be reduced or eliminated. Other than this difference, our quick examination of the Gruy study leads us to believe it is approximately correct.

QUESTION: 9. (B) The Aerospace report indicates that, assuming a $9/barrel price for oil and a 10 percent discount rate, the cost of gas production will be $47/Mcf (sic 47¢/Mcf) (Aerospace, p. 3-38, 3-30). Is this a reasonable figure? If not, what would be a reasonable figure?

ANSWER: We cannot endorse the calculation and cost estimate for several reasons. The discount rate which was used is clearly too low, the calculation did not include all costs, and the costs were expressed in 1975$. The calculation was based upon a before-income-tax evaluation. Income taxes are a heavy burden to industry and add to the cost of the gas. Furthermore, the costs did not include appropriate exploration expenditures.

Industry makes many unsuccessful exploration expenditures to achieve one successful discovery and its profits on that discovery must carry its failures. The analysis of costs cannot be restricted to a small area of operations. Most of the larger companies operate throughout the United States, and their success in one part of the U.S. must carry failures in other parts. To arrive at the proper costs for a specific reserve and an acceptable return for a particular project is an exercise in futility as witness the FPC's experience. The only reasonable approach is to base gas values on deregulated free market gas pricing policies.

QUESTION: 10 (A) Would your firm be willing to develop the field for gas production (for sale) if the expected revenue from the gas sales were less than the cost of its production? (In other words, are there any circumstances under which your firm would go ahead with development for gas sales even if the present net worth of the field (or your part of it) were to be reduced thereby?)

ANSWER: Exxon cannot undertake projects which do not provide a profit and a reasonable return on investment. Therefore, we would not enter into a venture in which the revenue was less than the cost and which did not yield a reasonable present net worth. Furthermore, any government or other entity which forces expenditures on unprofitable investments is inefficiently utilizing its resources.

QUESTION: (10)(B) Are there any circumstances under which the production of natural gas could be subsidized by the production of oil?

NSWER: It is our view that both oil and gas owners have the right to produce and realize current income from their reserves, and that the oil and gas can be optimumly produced simultaneously in the Prudhoe Bay Field. In view of the large energy potential of the oil and gas, we further believe that with proper free market price incentives, each resource stands alone on its own economic merit and that there is no need for one to subsidize the other.

QUESTION:10 (C) Are there circumstances under which a firm could be compelled to produce the gas even though such production did not make economic sense?

ANSWER: No.

QUESTION: 11. The Aerospace study seems to indicate that the maximum gas production from the Prudhoe Bay reservoir sustainable for any substantial period of time, without undue loss or oil recovery, is about 2.5 Bcf/day. Some pipeline feasibility calculations seem to be predicated on a higher rate of production. Is the Aerospace estimate realistic?

ANSWER: We have on a number of occasions stated, as have other Prudhoe Bay producers, that in our opinion a gas production rate from Prudhoe Bay of between 2 and 2.5 Bcf/

day is reasonable based on current reservoir knowledge and predicted performance. With additional reservoir performance data and after partial depletion of the oil reserves, the gas sale rate might be substantially increased above the 2.5 Bcf/day.

QUESTION: 11 (B) If not, what is a realistic estimate?

ANSWER: See response to question 11. (A).

STATE OF ALASKA

JAY S. HAMMOND, Governor

DEPARTMENT OF LAW

OFFICE OF THE ATTORNEY GENERAL

POUCH K — STATE CAPITOL
JUNEAU 99801

April 2, 1975

M E M O R A N D U M

TO: The Honorable Jay S. Hammond
Governor

FROM: Avrum M. Gross
Attorney General

RE: Recommendation of Gas Pipeline
Task Force

On December 2, immediately after assuming office, you appointed me to chair a task force to review the State's posture concerning alternative transportation systems for North Slope gas. The task force was composed of the Commissioners of Environmental Conservation, Fish and Game, Revenue, Economic Development, Community and Regional Affairs, Commerce, Natural Resources and Highways, as well as the Director of the Division of Policy Development and Planning. At times Lieutenant Governor Thomas has participated with us in our deliberations and, of course, you have from time to time sat in on the sessions as we evaluated information made available to us.

The problem as you stated it was to make an unbiased, comparative evaluation of the TransAlaskan and Canadian routes for transportation of North Slope gas so as to determine what route would best serve the interests of the State of Alaska. Prior to the formation of the task force, you had publicly stated

that you favored a Trans-Alaskan route on the basis of information available to you. Upon assuming office, a great deal more information became available, as well as the machinery to do a comprehensive review of the competing projects. You asked that we consider whether or not your support of a Trans-Alaskan pipeline was justified in light of detailed information developed by the task force.

Your prior support of the Trans-Alaskan pipeline was consistent with the position of the previous administration. Upon undertaking a review of the competing projects, we found that a substantial amount of work remained to be done in evaluating the two proposals. The State had intervened in the legal proceedings before the Federal Power Commission and retained counsel in Washington, D.C. to present the State's position, but until this task force embarked upon its efforts the State's position consisted more of enthusiastic support for an Alaskan route for a pipeline than of careful analysis. You advised the task force that whatever position was ultimately adopted by the State, you wanted to be able to rationally support it and defend it before the Federal Power Commission or Congress should that body ultimately take jurisdiction over the matter. Faced with that mandate, the task force has met regularly since December and has increased its work substantially in the last two months so as to be able to make a recommendation to you prior to initiation of the FPC hearings. The prehearing conference for that proceeding will be April 7, so we are pleased to have met the deadline.

Our efforts have been directed to a comprehensive review of material developed in connection with both projects.

That material was made available primarily from the participants, Alaskan Arctic Gas and El Paso Alaska, who were required to develop the data for submission to the FPC. Representatives of both Arctic Gas and El Paso have appeared before the task force and made extensive presentations concerning their plans. The task force has also utilized consultant studies as a source of knowledge.

As a result of our review, it is the recommendation of the task force that you reaffirm support of a Trans-Alaskan transportation system for natural gas from the North Slope. We will in this report outline the basis for our conclusions. We will not include here the backup data on which our conclusions are based, but we have that data compiled for your review when you wish to make such a review.

A. The Nature of the Projects.

There are basically two competing systems for the transportation of North Slope gas to the continental United States. The first is the so-called Canadian route. Under this proposal, which has been made by the Arctic Gas consortium, gas from Prudhoe Bay would be transported by means of a large-diameter pipeline from Prudhoe Bay east across the Canadian border to a point somewhat south of the Mackenzie River Delta. At that point the pipeline carrying Alaskan gas would join with a lateral from the Mackenzie Delta region which would carry Canadian gas. The main line formed by the convergence of these two laterals follows the Mackenzie River Valley south through the Northwest Territories. After leaving the river valley,

this line continues south to Caroline Junction, Alberta. At Caroline Junction, the main 48-inch pipeline diverges into two pipelines; one heads southwest to the Canadian-Idaho border and the other heads southeast to the Canadian-Montana border. New pipelines which are proposed for construction in the Lower 48 would receive the gas at these border points and transport it to markets in Washington, Oregon and California in the case of the western pipeline and to markets in the midwest and east in the case of the eastern lateral. Theoretically, any surplus Canadian gas from the Mackenzie Delta would also be available for distribution in the United States, though the existence of that surplus is somewhat speculative.

The estimated cost of this transportation system is estimated by the consortium to be 8.3 billion dollars, not all of which is allocable to the Alaskan transportation network. The portion of the price which is allocable to the Canadian lateral should not affect the price of the American gas transported by the line.

The alternative to the Trans-Canadian system is a Trans-Alaskan route which handles the gas in a more complicated manner. This proposal, presently advanced by El Paso Alaska, would take the gas by means of a large-diameter 42-inch pipeline from Prudhoe Bay down the existing corridor of the Alyeska Pipeline. On approaching the southern terminus, the line would leave the pipeline corridor and go to Gravina Point on Prince William Sound. The applicant for the Trans-Alaska line intends to build

at Gravina Point an LNG plant which would reduce the gas to liquefied form. El Paso also proposes to construct a fleet of cryogenic tankers which would then take the liquefied gas to California, where the LNG would be reconverted to its gaseous state. At least initially, all of the North Slope gas delivered to California would be physically consumed on the west coast. This in turn would free gas presently being transported from Texas and New Mexico to the west coast, which could then be made available to markets in the midwest and east via existing distribution systems. If gas deliveries from Alaska increase to the extent that not all of the gas can be consumed in the west, it will be possible to reverse the direction of existing lines. These lines can then be used to transport gas from California eastward to Texas and Louisiana where the gas could be flowed into existing transportation systems and moved to the east and midwest. Although this transportation system is complex, a review of the system by Arctic Gas concludes (somewhat reluctantly) that this system is feasible and, of course, El Paso always has maintained the workability of this approach. This transportation system, including the pipeline, the cryogenic tankers, the LNG plant, the regasification plant, and facilities needed to effectuate displacement is estimated by El Paso in 1973 dollars to be 6.7 billion dollars. An analysis prepared by Arctic Gas critiquing the El Paso project indicates the more realistic figure on the basis of today's dollars would be 8.3 billion dollars, and while that figure may be inaccurate, there is no question but that

the cost of the El Paso proposal is substantially higher than set out in its application. Assuming the El Paso project costs approximately the same as the Arctic Gas project, it will nonetheless be more expensive for the delivery of American gas alone, as the Arctic Gas project will cover transportation of both American and Canadian gas.

Both projects involve the loss of some of the gas in the transportation system itself. The best estimate we have is that the Arctic Gas proposal will involve utilization of approximately nine to ten per cent of the gas for energy in transit. The El Paso loss will be considerably higher--approximately 16 per cent.

B. Criteria for Assessment.

The basic standard we have used in evaluating these two projects is what is best for the interests of the State of Alaska. We have sought to evaluate which route would produce the greatest benefits for the State in the long run. In evaluating those benefits, we have attempted to categorize them in two basic groups, which incidentally is the same basic grouping the FPC will make in its hearing procedure. The first is environmental. We have tried to evaluate the environmental effects of each line so as to consider the impact each will have on the State. Second, we have tried to consider the long-term economic impact of the line. That investigation has involved a study of the alternative effects of the two lines upon such things as royalty payments which would be made to the State, severance taxes, and property taxes. We will outline our general findings in these two areas.

I. ENVIRONMENTAL IMPACT. Unlike the quantitative measurements which can be applied to revenue comparisons, evaluation of environmental impact is a highly subjective process. There was no clear sentiment in the task force that one route or the other was better from an environmental standpoint. Rather, the conclusion was that each proposal had both benefits and detriments. It was the feeling of the group that, while the choice was not clearcut on the basis of a purely environmental comparison, it should be the State's obligation in the forthcoming FPC proceedings to insure that the detriments we have identified be minimized insofar as possible. We will outline the primary benefits and detriments of each route here, though as I have noted, they were not in themselves the basis for the group's recommendation.

(a) Trans-Alaskan Route.

Advantages

1. Without doubt, the most important environmental asset of a Trans-Alaska route is the fact that the gas pipeline could be constructed in an existing transportation corridor, a corridor which has been studied intensively and about which a tremendous amount of environmental information has been gathered. As construction of the Trans-Alaska oil pipeline proceeds, more information regarding construction practices, revegetation, protection of stream crossings, and other important techniques will be developed.

2. Existing facilities, such as the TAPS haul road, construction camps, access roads, existing highway system, spoil disposal sites, material sites and other critically important ancillary needs could be made available for use to

construct the gas pipeline.

3. A Trans-Alaska gas pipeline would parallel many streams along the corridor in the Arctic, instead of transecting them, which means that the total number of stream crossings on the ecologically sensitive North Slope is reduced along this route.

4. There is a dearth of knowledge about the fishery resources of the Arctic, particularly the offshore fisheries. However, the Alaska gas pipeline route parallels the Sagavanirktok River; our knowledge of its fishery resources is much more detailed than any other river on the North Slope. This greater base of knowledge can be drawn on to minimize the adverse impact on the North Slope fishery, if a Trans-Alaska gas pipeline is built.

5. Natural gas is the cleanest available fossil fuel. For this reason, it is in great demand in those areas of the nation which suffer from air pollution problems. An Alaskan route would insure that some day, if the need should arise, Alaskans could use their royalty gas as a low pollution source of energy. An Alaskan route would preserve that option; a Canadian route would not.

Disadvantages

1. An Alaskan route will mean substantial additional development in the State, particularly along an already heavily impacted pipeline route. With this development will

come the accompanying stresses of "boom growth", inflation, more people and possibly a large tidewater development to liquefy the gas for shipment to the Lower 48 states. This latter development could be sizable and may lead to extensive development in an area which is presently pristine.

2. There may be physical, biological and chemical effects from construction and operation of an LNG plant at tidewater. Excess heat from this process would be discharged from the plant and could have an adverse environmental impact. However, we estimate that this impact may be minimal.

3. Secondary development, spurred by the existence of an LNG facility and the availability of natural gas for industrial uses may cause greater environmental problems than the LNG development itself. An associated large petrochemical industry at tidewater would create its own environmental and socio-economic problems.

4. Any new development inevitably means more people and a new LNG facility built in a presently undeveloped area will mean that a new community may have to be constructed, or that existing communities will have to wrestle with significant new growth. Providing the basic services, such as water, sewer, health facilities, schools, etc., may place a severe burden on both State and affected community resources.

5. The environmental hazards of shipping LNG in cryogenic tankers are probably not of sufficient magnitude to be worrisome (especially when compared to shipping crude

come the accompanying stresses of "boom growth", inflation, more people and possibly a large tidewater development to liquefy the gas for shipment to the Lower 48 states. This latter development could be sizable and may lead to extensive development in an area which is presently pristine.

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4. Any new development inevitably means more people and a new LNG facility built in a presently undeveloped area will mean that a new community may have to be constructed, or that existing communities will have to wrestle with significant new growth. Providing the basic services, such as water, sewer, health facilities, schools, etc., may place a severe burden on both State and affected community resources.

5. The environmental hazards of shipping LNG in cryogenic tankers are probably not of sufficient magnitude to be worrisome (especially when compared to shipping crude

oil by tanker), but the safety hazards to the ships and personnel may be substantial.

6. The energy loss, in the liquefication process, is an environmental liability, especially in an era when energy conservation is needed.

(b) Trans-Canada Route

Advantages

1. Development within Alaska would be minimal if an Alaska-Canada gas pipeline were constructed. The tidewater development of LNG facilities, and tanker movement of the LNG would be eliminated by an overland route from Prudhoe Bay to the midwest. Also, development activity along the Trans-Alaska pipeline corridor would be eliminated.

2. The Alaska-Canada route will cause less problems in Alaska because of the relatively short distance that the pipeline would be within Alaska's borders (from Prudhoe Bay east to the Canadian border). In this sense, however, we are "trading off" Alaskan environmental problems to Canada.

Disadvantages

1. Any viable Alaska-Canada route will undoubtedly breach the ecologically fragile Arctic National Wildlife Range. This range, which is under consideration as a wilderness area, is the last remaining area of the Arctic Coastal Plain in Alaska and perhaps in the North American Continent which is not presently committed to development. An Alaska-Canada pipeline through this area would undoubtedly be the first in a long line of petroleum-related developments in the Range.

Therefore, a decision to route the gas pipeline through the Range may, in effect, be a decision to commit the last untouched wilderness area on Alaska's North Slope to full-scale oil and gas development.

2. A gas pipeline running east to the Canadian border from Prudhoe Bay transects many north-south Arctic streams and may have a serious environmental impact on the North Slope's fish resources. As the pipeline is refrigerated below the freezing point of water, its presence under streams and rivers may impact on natural freezing and thawing processes. Winter survival of fish populations, which in the Arctic is directly tied to adequate supplies of water, may be jeopardized by localized and downstream effects that would be created by a pipeline buried under streams and rivers. In addition, siltation caused by the construction process and stream bed disturbances could have major impact on aquatic habitat.

3. Advocates of an Alaska-Canada pipeline state that snow and ice roads would be used to support construction activities, which would avoid the need to build a permanent access-haul road network. However, there are substantial environmental problems associated with ice road construction. Heavy construction vehicles, rumbling over ice and snow roads, can cause damage to the tundra which may lead to serious subsidence, solufluction and erosion problems. As mute testimony to this fact, swaths of dead vegetation remain today in Naval Petroleum Reserve Number 4 more than 20 years after exploration crews

traveled on ice roads searching for oil and gas. Also, there appears to be a very real question regarding the availability of sufficient snow and water to construct snow and ice roads. Precipitation on the Arctic Slope is light, averaging four to eight inches annually. Therefore, snow availability--coupled with the lack of adequate sources of water for artificial snow manufacture--could be a serious factor in limiting construction of snow and ice roads along an Alaska-Canada pipeline route. In any event, maintenance of the line would utilize all-terrain vehicles at any time of year, with subsequent permafrost and tundra degradation.

4. Wildlife along an Alaska-Canada route will undoubtedly be adversely impacted by construction of the gas pipeline. A route which knifes through the coastal plain of the Arctic National Wildlife Range would breach untouched caribou calving grounds, would traverse and possibly interfere with the denning area and normal movements of a distinct polar bear population, and encroach upon significant resting and feeding grounds utilized by snow geese in preparation for their nonstop migratory flight to the contiguous United States.

5. The Canadian segment of an Alaska-Canada gas pipeline route would carry a very high environmental price tag, as it would traverse a very fragile area which has been touched only lightly by the machines and hands of man. Environmental impact of an Alaska-Canada gas pipeline does not end at the Yukon border; we Alaskans cannot close our eyes to the very

real environmental problems that would be associated with the Canadian leg of the pipeline route. The route traverses some of the most severe permafrost problem areas on the North American continent. Therefore, when writing the equation for determining the true environmental costs of an Alaska-Canada route, the serious problems in Canada must also be considered.

II. ECONOMIC IMPACT. One factor which has substantially affected our analysis in the economic sphere is concern for the possibility that neither the El Paso nor the Arctic Gas proposals may be completely economically viable. Of course, neither the Arctic Gas consortium nor El Paso have indicated in their applications to the Federal Power Commission that there is any real economic risk in the project. Both applicants have submitted cost data which, on the surface, seems to show that gas can be delivered to United States markets at competitive prices. The difficulty is that we find it hard to accept these estimates as completely reliable in light of both general and Alaskan experience with major construction projects of this magnitude. More than two years before the Trans-Alaska oil pipeline is expected to go on stream, its final system cost is now estimated at more than five times the initially announced figure. Overruns of 50 to 400 per cent are the rule, rather than the exception, in large custom designed and built engineering projects such as electrical generating plants, manufacturing plants pioneering new technology (G. M.-Lordsville), sports stadiums and coliseums (New Orleans, Seattle), airports,

urban transit systems (BART, Washington Metro), etc. Accordingly it is reasonable to regard the applicants' pro forma cost figures as establishing only an order of magnitude and a base for escalation far in excess of the rate of general inflation.

Our review of the information available indicates to us that both projects can be projected at an initial cost of 8-8.5 billion dollars, and taking into account the certainty of continual inflation, the near certainty of delays and other difficulties that will occur before either project can be completed, a more realistic estimate for either project would be at least 10 billion dollars. This last figure might well be qualified by the expression "plus 50 per cent or minus 20 per cent".

The significance of this initial cost is that it will necessarily require that tariffs for the transportation of this gas be high--so high in fact as to make the gas possibly noncompetitive with alternate fuel sources. A detailed accounting analysis of the necessary cash flows would be as futile and misleading as detailed cost estimates in judging the overall project viability. Because of engineering, cost and timing uncertainties, a very general procedure is probably as adequate for our purpose as an intensive critique of the applicants' pro forma income statements. Supposing the $10 billion investment were to be depreciated at five per cent per year and that the entire investment had to produce a rate of return of 10 per cent, the initial annualized capital costs would be 1.5 billion dollars. Assuming further

that either system would be capable of delivering into the existing natural gas distribution system of the Lower 48 states one quadrillion BTU (quad) per year, the average capital costs at this level of throughput would be $1.50 per million BTU delivered. Assuming operating costs other than fuel to amount to 10 per cent of the capital costs, a wellhead price of only 25 cents per million BTU would bring the delivered costs at the U.S.-Canadian border or out of a regasification plant on the west coast of the United States, to $1.90 per million BTU.

The assumptions going into this order of magnitude estimate are, we believe, conservative to moderate, so that $1.90 probably represents the minimum price at which Alaskan natural gas could conceivably be delivered into the gas distribution system of the Lower 48 states. An informal survey of the opinions of energy specialists not affiliated with the applicants produced a range of cost estimates for transportation alone running from $1.75 to $2.50 for gas transported by an overland pipeline through Canada and $2.00 to $3.00 for a system that combined a pipeline across Alaska with LNG tankers to the west coast. The implications of these possible economic forecasts are enormous for the State. If the market price of the gas delivered in United States markets is nearly equivalent to the transportation cost alone, the State's royalty and share from severance taxes will be minimal. This is because both royalty and severance tax are based on a percentage of wellhead value, and wellhead value will roughly equal the difference between the market value of the gas and its transportation

cost. If gas is "deregulated", the equality will be precise. If wellhead price is set by the FPC (as is the current practice), the difference will be minimal since we cannot conceive of the FPC setting a wellhead price that would require the gas to be sold at a loss. If the gas can only be sold at a price of, say, $2.50/Mcf, and it costs $2.50/Mcf to get that gas to the market, there is simply going to be no wellhead value left upon which to assess royalties and taxes.

I am sure that our conclusions concerning possible lack of wellhead value must seem confusing, in light of the publicly expressed concerns of a national gas shortage, but if an evaluation is done of the nature of that "shortage", the problem becomes fairly clear. Gas has two basic markets in the United States, a "premium" market and a "nonpremium" market. The premium use of gas is for residential, commercial, and special industrial uses. While the price of premium gas is presently low because it is regulated by the FPC, there is no question but that on a free market the gas could be sold for high prices, perhaps in the neighborhood of $3.00 per Mcf. The nonpremium use of gas is industrial and as boiler fuel. In this market, the maximum price which is paid for gas is about $2.00 per Mcf. The significance of these two markets is that there are different competing products in each. In the premium market, gas competes with middle-distillate fuel oil. In the nonpremium market, gas competes with heavy fuel oil or coal.

The regulatory practices of the U. S. Government have created an unusual situation in regard to the prices at which

"premium" and "nonpremium" gas are sold. Interstate sales of gas are regulated by the FPC, while intrastate sales are not. Since interstate regulation has been on the basis of artificially low wellhead prices, much gas in the United States is used in the same state in which it is produced. There is a shortage in the "premium" market because companies cannot sell gas there advantageously--they can derive higher prices for nonpremium industrial use in the state of production.

If transportation costs for Alaskan gas are excessive, that gas is not going to be able to compete adequately with alternative sources of industrial fuel. The gas could compete on the premium market if conditions stay as they are today, since there is a real shortage in the premium market, and customers will buy the gas at even a high market price. The shortage in the premium market, however, is limited, and in and by itself could not justify the construction of a transportation system of the magnitude proposed. Moreover, if gas is deregulated or if end-use restrictions are placed on the use of natural gas, we can expect to see gas supplies quickly reallocated, with the result that the "shortage" in the premium market will rapidly dissipate. Companies will then direct their gas supplies to those markets where gas could be sold for higher rates than in nonpremium sales, leaving the nonpremium market to use heavy oil and coal. We have some doubts that Alaskan gas would be able to compete against gas from other sources in the premium

market if such a reallocation occurs. The primary competitor in the nonpremium market is oil and coal and the indications to the task force are that in the future Alaska gas will not be able to be delivered to the continental United States for prices competitive with those fuel options.

This issue is, of course, more complex than I have set out here, but suffice it to say that the task force has some concerns about the ability of either project to deliver gas competitively without government subsidy and with the result of a positive wellhead value. If the wellhead value is zero or very small, our royalties from the gas will be very slight and our severance taxes, which are based on wellhead value, will also be minimized. We find this to be a significant feature in our analysis since it has led us to conclude that if we are to derive any significant economic benefit from this developed Alaskan resource, it may well have to be through direct use of the gas ourselves.

That direct use can come in several ways. First, the gas may be made available in Alaska for the "premium" uses I previously discussed, though such a use will only involve a small percentage of the State's royalty share. For instance, the State's royalty share will be approximately 280 MMcf/d from production of 2.25 bcf/d. Even if we developed a natural gas market in the state equal to that which presently exists in Anchorage, it would only use approximately an additional 55.7 MMcf/d.

The real possible benefits for Alaska's gas seem to lie in the development of cheap sources of fuel for possible

industrial use in the state. That industrial use can occur either in the interior or along the coast, where the gas is delivered. The cost of the transportation of such gas in Alaska will be substantially less than the cost of delivering the gas to the continental United States, meaning that we will have a source of cheap fuel here for industries that seek to use it. There are several possibilities which need not be discussed in detail here. Petrochemicals is one form of industrial use which has been discussed previously, and other possibilities exist, such as the Klukwan Iron Ore project in Southeastern Alaska.

Unless we have a Trans-Alaska line, there is no satisfactory way to transport Alaskan gas for Alaskan use. We have considered the possibility of constructing pipelines from Prudhoe Bay to points in Alaska, assuming that a Trans-Canadian route were used to transport most of the gas to continental United States markets. Our conclusion has been that a transportation system just for Alaska's royalty share is not economically feasible. The cost of construction of such a system simply cannot be amortized without resulting in an extremely high cost of gas. Accordingly, it is clearly in the State's best interest in obtaining a maximum return from its North Slope gas to keep that gas in the state for use here, and since we can only do that with a Trans-Alaskan line, it is in the State's interest to support such a route.

To this point our analysis has been based on economic projections which indicate a minimal wellhead value for Alaskan

gas from Prudhoe Bay. It is, of course, entirely possible that our predictions are overly pessimistic and that in the end we will see a reasonable or even substantial wellhead value for the gas. If that is the case, the direct use of Alaska's royalty gas in the state will not be the only benefit derived from the resource, but it will still be a prime benefit. If the wellhead price turns out to be more than we have anticipated, the State will derive royalty and severance taxes based on the wellhead price from both the Arctic Gas and the El Paso proposed systems. The task force does not anticipate that, if the project turns out to be successful, there would be a substantial difference in wellhead price between the Arctic Gas and the El Paso proposals, though there is some indication that a higher wellhead price might be derived under the Arctic Gas proposal. That possibility derives from the fact that the Arctic Gas and El Paso proposals are about the same cost, but the Arctic Gas system would carry a somewhat greater volume of gas, reducing unit transportation cost. However, as we note below, other direct taxes imposed by the State of Alaska on a Trans-Alaskan project would more than compensate for the difference between the two proposals. Moreover, the benefits which would accrue from Alaskan use of Prudhoe Bay gas are sufficiently substantial in and by themselves to outweigh what we anticipate to be a small difference in possible wellhead value, and local use has the added benefit of providing real value to the gas in the event that the economic model we have described is proven correct.

A Trans-Alaska line will also result in revenue from a number of other sources than the gas itself. The property

tax on the Trans-Alaska project would, in the view of the Department of Revenue, produce $68 million more per year than a route through Canada. Under our current gas severance tax law, the wellhead price with a Trans-Canada pipeline would have to be 58.21 cents higher than the Trans-Alaska project to offset in royalty and severance tax payments this substantial difference in property tax. As previously noted, we have concern about the existence of any significant wellhead value after deduction of transportation costs and, accordingly, this comparison is important in evaluating the projects. If the current proposed law was passed providing for a 10 per cent severance tax on wellhead value, then the wellhead differential necessary to make the total revenues from both projects equal is 43.8 cents.

Adding to the direct revenue benefits of a Trans-Alaska line would be the corporate and personal income tax revenues that would accrue to the State. Although difficult to estimate, approximately $42 million more tax revenue is expected during construction of the Trans-Alaska line.

These tax revenues are not, of course, without corresponding burden. Both projects will create substantial demands on State services. It is going to be crucial that we insure a source of revenue to meet those burdens. Property and income taxes provide such a source, even if the economic concerns expressed earlier are valid.

C. A Recommended State Position.

The task force believes that the State in its own best interest should advocate the construction of a Trans-Alaskan

route for the transportation of North Slope gas. This support, however, should be given in full recognition of the fact that it is the State's interest which is being promoted rather than that of a particular company or consortium building a route. We do not recommend that the State necessarily support El Paso Alaska in the construction of a Trans-Alaskan route. To do that would be to wed ourselves to the El Paso proposal and it is not necessarily to our benefit to do so.

We believe it is in the State's interest to support the Trans-Alaskan route but to insist that if that route is approved by the FPC stipulations be contained to insure the promotion of Alaska's interest. First, we must work to insure that the pipeline is certified as a common carrier. Without a detailed discussion of this point, legal doctrines require that common carrier status be obtained in order to insure that Alaska's gas be available at the terminus of the pipeline for Alaskan use. There is some authority that suggests that once gas is commingled in an interstate pipeline it may not be removed without FPC consent. We should make it a prime point in our position to insure that that consent is obtained.

El Paso has not spent the time or the money to evaluate the environmental impact of its line in the same manner as has been forthcoming from Arctic Gas. Relying primarily on the pipeline corridor studies already completed, El Paso suggests that in essence the problem has already been resolved by those studies. That, unfortunately, is an oversimplification. First,

it is unclear whether or not the gas and oil pipelines can in all instances be laid side by side within the same corridor, and it is possible that in certain instances the pipeline will have to be laid outside the existing corridor, creating environmental problems which have not been studied by El Paso. The State should be in a position to press for a route which most efficiently establishes a system compatible with the surrounding environment. Very little review has been done by El Paso of the environmental problems created when its proposed pipeline route leaves the corridor and goes to the Alaskan coast. Again, the State should not feel itself wedded to any position or presentation made by El Paso but should be in a position in the FPC proceedings to vigorously criticize and, if necessary, advocate alternatives. Finally, the financial capacity of El Paso to construct the proposed project is limited. El Paso frankly concedes that if it is granted a certificate, it expects to be joined by other companies and what we may well see is a new consortium created, composed of many of the same parties that presently are in the Arctic Gas consortium. The State should do everything to insure that adequate financial backing is obtained for this project and that the project is, insofar as it can be made so, economically feasible. It is in the State's interests to do so because if the project ultimately becomes subsidized we can reasonably expect that the State will be forced to bear a portion of that subsidy, either through pre-emption of its taxing power or through imposition of other federal controls.

While we have recommended to you that the State support a Trans-Alaskan route, we believe that we must also advise you that there is a great deal of impetus and political pressure tending toward an adoption of the Canadian route by either the FPC or the Congress. Midwestern and eastern states see it in their interest to have North Slope gas come directly to their markets through a pipeline, and when the decision is made we can expect that this large segment of the United States populace will not be ignored. Moreover, there is evidence that the Arctic Gas proposal will use less of the gas itself in the transportation system, which will recommend the system to a national constituency. Finally, as we have noted earlier, the Arctic Gas proposal appears to be cheaper in terms of the construction necessary for the transportation of Alaskan gas. Faced with two marginal economic proposals, the FPC or the Congress may well opt for the one which at least is cheaper on its face, since that would reduce costs to consumers.

We mention these factors because we believe that, while Alaska should promote a Trans-Alaskan route, it should never lose sight of the fact that the Arctic Gas proposal has a substantial chance of ultimately prevailing. Accordingly we believe our position should be not only to promote the Trans-Alaskan route, but actively to criticize the Arctic Gas proposal in an effort to insure that if it is ultimately adopted it will be the best route possible for Alaska. For instance, the Arctic Gas proposal right now is for a line through the Arctic Wildlife

Range. It is the feeling of the task force that it is not in the State's interest to promote intrusion and development of that Range and that the State should attempt to insure that routes are developed for the Arctic Gas proposal (if it is accepted) which will avoid incursions into the Range. Arctic Gas has indicated that if they obtain the certificate which, in their view, will give them eminent domain powers for a pipeline across State lands, they will nonetheless negotiate with the State for such a route. We would expect to do so, but at the same time we should make every effort before the FPC or the Congress to insure that the basic corridor for the route is sound.

We will be meeting with our attorneys in Washington, D.C. over the weekend to discuss how we best can present Alaska's case before the FPC. On April 7 I will participate in the prehearing conference, at which point we will indicate to the hearing officer what basic alignment we will take in the proceeding. I will, of course, await your instruction before advising Washington counsel of that course of action.

AMG:as

CONCLUSIONS

The statements and testimony from communities and knowledgeable individuals have led to the following conclusions relative to the impact of pipeline construction. They are drawn with the aim of placing in perspective the possible courses of action which may be open to the Legislature and which are discussed later in this Summary.

1. The communities found it difficult, in most cases, to determine what effects pipeline construction would have on their areas. Most did not have the staff to do research or make employment and population projections. The communities had very little information on the specific plans for the pipeline at a date early enough to be helpful.

2. The early impact will be in the areas of law enforcement, recreation, unemployment, drugs, alcohol and welfare. These matters will increase the operational costs of local governments, but will not increase the potential for additional revenue. These problems will be associated with a transient population and with pipeline workers looking for recreation.

3. The more permanent population will place demands on schools, public facilities, housing, utilities and government services which, in some communities, will be difficult to meet. Although revenue to the local governments will rise, there will be an over-all lag in revenue, especially in property taxation. Some categories of State shared revenues will rise in proportion to population increases. Where a sales tax is in effect, an increase should be felt almost at once.

4. Increased population will accelerate the need for many public improvements, often necessitating substantial financing at a date earlier than normal. In some cases, this presents the community with the problem of meeting higher maintenance costs and debt service payments while raising a question in the minds of community leaders as to whether required substantial tax increases can be sufficient. Without assistance, this may be the case in many communities.

5. Population increases will occur in most Alaskan cities, and in general, the impact will be in proportion to the increase. However, the relative severity of the impact on any community will be more related to the percentage of population increase rather than the number of persons arriving in any given community.

6. Some government leaders are concerned that public improvements made to meet demands during construction may lead to over-building with a resultant debt-burden existing in a community long after construction is completed. In nearly every case, the Committee's conclusion is that the cities will not decrease substantially in population after construction is completed.

7. Even with a lag in revenue receipts, findings show that by 1977, most community revenues will have reflected the population increase and further impact aid, per se, should not be required.

8. The agencies of the State Government will have an important role in meeting many of the problems associated with the pipeline construction, both in the organized communities, the unincorporated communities and in the unorganized borough.

The effectiveness of these agencies will depend upon the money available to them and the direction given by the Administration. The Committee or the Legislature should review whatever plans are drawn to determine their adequacy.

9. Some communities are deficient in certain facilities or utilities and include funding of these deficiencies as related to pipeline impact. Even though there may be a real deficiency, the total demand for financing must be considered along with the amount needed only to meet the impact.

10. Some communities desire to provide improvements which are in excess of the need due to impact alone. In these cases, the impact portion should be isolated and the additional funds needed should be considered separately (see Appendices C & D).

11. There are capital-improvement projects being accelerated because of pipeline construction, but which will be needed regardless of the pipeline within a reasonable period of time under normal growth conditions. Aid made available should be designed to help the community during the interim period only.

Communities which are required to make capital improvements many years in advance of normal requirements may need a higher degree of immediate help, but not beyond the point where local revenues are created to support debt service.

12. Inflationary pressures will be a factor in operational costs of local government. It is believed that this factor need not be considered except for the first year of the impact. (See Appendices C & D).

Draft continued--

The following observations and suggestions for consideration are offered to reflect, as nearly as possible, the composite concern expressed in committee meetings, as well as in hearings and interviews with community leaders and citizens of the various impact areas:

1. Numerous city officials have suggested that increases in State Revenue Sharing would provide the aid so badly needed by the local governments. Administratively, this would be a simple solution, assuming that a general increase in the various categorical formulae used in revenue sharing would provide the amounts of aid necessary in individual cases.

This method was tested against the net needs of the five communities requesting the largest amounts of aid and found successful, if any general formula is to apply. The per-capita needs for operational aid range from about $15 per-capita in the larger communities to over $250 per-capita in the smaller ones.

Categorical grants might be made to the communities in response to formal applications, but this would not provide a total solution covering all communities.

Therefore, the first suggestion is an attempt to formalize grants for operational impact aid on a population percentage increase basis.

As stated earlier, the percentage increase in population is more significant to the community than an increase in actual numbers. Therefore, a formula based upon the percentage increase can be devised to provide for operational impact grants which

apply to all communities affected by population increases.

Assume, for example, that a 12% increase in population would warrant a $20 per-capita grant. Then, a 150% population increase would require a $250 per-capita grant. In order to coordinate the situation of the boroughs with service districts, the Committee feels that grants should be broken down by percentage as follows: 50% for general government, 17% police, 17% fire, and 16% roads.

2. The revenue sharing grants for operational impact costs should be formally requested by the cities, with supporting evidence of need.

3. The Committee has found that per-capita impact costs will drop in 1975 and again in 1976. Any assistance programs should be reviewed for 1975 applications to determine the need, and if it exists, to establish a new per-capita grant formula.

4. Caution should be exercised in making substantial allowance for inflation.

5. Aid for capital improvement programs undertaken on an accelerated basis by the community, and which, under normal growth conditions, would be needed by 1976, 1977 or 1978, could be in the form of a State loan or bond-guarantee program. Such a program should be available to all cities and would enable the smaller communities, which may not be able to sell bonds, to obtain debt financing. A bond-guarantee should assure the smaller communities lower interest rates.

6. In cases where capital improvements are [redacted] required to meet impact needs, but under normal conditions would not be

needed for, perhaps, five years or more, the State could undertake a program to finance a portion of the debt service, or interest, for a period of time.

7. In those cases where debt limitation on general obligation bonds makes it impossible to sell bonds for a capital improvement necessary to meet the impact needs, the State should consider a grant program, if an urgent need can be shown.

8. In those cases where funds are urgently needed by a municipal water utility and the earnings potential is such that the required debt coverage cannot be maintained, the State could establish a loan program, at a reasonable interest rate, to cover the interim period until bonds can either be sold or utility rates increased to improve the earnings.

9. Legislation similar to Senate Bill 235 (an Act creating the Alaska State Electric and Telephone Authority) should make available a loan program for municipal and cooperative electric and telephone systems when other financial sources are unavailable.

10. The State should establish a stronger program to make housing loans or purchase available mortgages if normal financing sources are not available.

11. No doubt, much of the impact of pipeline construction will fall in the areas of responsibility of the various State Departments. Funds should be provided for health services and health nurses; State Operated Schools; police; the Department of Highways for maintenance in the impacted areas; airports and airstrip construction and maintenance; various training programs;

environmental health law enforcement; protection of fish and game along pipeline route; expansion of the Motor Vehicle Division; review of voter registration capability; review of the Court System in impacted communities, and the prosecution of crimes.

The Committee suggests isolation of impact requirements of State Departments in order to prevent permanent build-up of departmental structures.

12. Impact on district and borough schools varies greatly. The per-student requirements range from over $450 to over $900. Since the Foundation Program and the other State contribution programs are quite intricate, a formula based on a per-student ratio and on the percentage increase of students should be devised for each of the communities needing school operational funds.

13. Some school districts will be requesting funds for new construction or for temporary classrooms. Consideration should be given to double-shifting until the population trend is fully established. If there is a clear need for more classrooms, temporary quarters should be provided until the growth pattern is clear.

14. Special action should be taken, either legislatively or administratively, to protect fish and game along the pipeline route.

15. Non-critical construction projects should be delayed until pipeline construction reaches its peak and begins to taper off.

16. The Alaska State Legislature should authorize, if appropriate and necessary, the University of Alaska to lease University land for temporary housing in areas where private land is not available.

17. The Alaska State Legislature should consider the formation of a special agency or task force to investigate and make recommendations to the Administration and the Legislature concerning the availability of federal funds relating to pipeline construction. In light of the urgent needs in various areas of the State, the Committee recognizes that any such agency will need emergency authority. The Committee also feels that such an agency should be composed of members of the Administration and the Legislature or their appointees.

Finally, the Committee concludes that, in general, a case by case approach to the solution of impact problems would best serve to cope with the broad variety of local stresses bound to occur in varying degrees during the pipeline construction period. Suggested legislation to accomplish this approach is offered in "An Act creating the Pipeline Impact Agency" and its companion measure establishing a "Pipeline Impact Fund."

PIPELINE IMPACT
Brief Summary

Several communities more severely affected by pipeline construction will see population increases ranging from 20% up to 150%. Accelerated growth in these proportions places a great burden upon both the State and local governments to provide both the extraordinary operational costs and necessary public improvements to accomodate the increased population.

The State is planning to aid the communities in absorbing part of the additional operational costs incurred, but will be unable to provide any substantial aid in the field of capital improvements because of declining reserves and the prospect of a negative-balance reserve account before substantial revenues accrue to the State from oil production.

In the public improvement categories are schools, streets, sewers and sewage treatment plants, water and other utilities, recreational areas and facilities, libraries, expanded dock facilities, fire and police quarters, and communication facilities, which must be financed and built ahead of schedule, in some cases as much as five or six years.

It is believed that the pipeline construction project is a national interest and that the crash nature of its' construction may be considered as a national effort.

Under the circumstances described above, we want to explore the Federal programs that might be available to assist the heavily impacted communities to prepare for the population boom.

Specifically, the following is a partial list of projects that will be needed by communities and estimated costs involved.

Schools	$10,000,000
Electrical Utilities	14,000,000

Public Buildings & Facilities	$10,000,000
Recreational Facilities	4,000,000
Roads & Drainage	2,000,000
Fire-fighting Facilities	1,000,000
Telephone Utility	1,500,000
Water Facilities	25,000,000
Sewer & Treatment Plants	5,000,000
Libraries	1,000,000
Waste Disposal	120,000
Air Quality Control	25,000
Total	$73,600,000+

A complete assessment of the needs have not been made, but the above represents the needs of the communities most heavily affected by population expansion. It is expected that several other communities that have not been studied, including Juneau, will experience substantial population increases.

It should be noted that several of the cities have already made substantial investments to prepare for the impact. For example, Fairbanks has expended or encumbered over $27,000,000 since 1969 on public facilities and utilities.

Gas Line Depends On Push

The executive vice president of El Paso Natural Gas Co. said in Anchorage last night that unless his company has some evidence of unqualified, enthusiastic support of all Alaskans, El Paso will be forced to abandon its plans for a trans-Alaska gas pipeline.

The official, George Carameros, who also is vice president of El Paso Alaska, was here for only a day, and met yesterday with the special legislative Pipeline Impact Committee, and members of the Alaska Fipeline Education Committee. He also was the guest of honor at an informal reception last night with Anchorage civic leaders.

Carameros told all that El Paso is faced with a crucial decision on whether to spend another $30 million, (in addition to the $2 million already spent) in environmental and engineering studies, preparatory to building a natural gas pipeline from the North Slope to a terminus in Southcentral Alaska.

Arctic Gas Study, which is proposing a trans-Canada gas pipeline to take Prudhoe Bay gas to market, has said it will file applications for its pipeline in January with both the U.S. Federal Power Commission and the Canadian government.

At that time, or within two or three months, El Paso must also file an application.

Carameros said it would cost $3 million just to file an application with the federal commission and that another $27 million expenditure would have to be committed for additional work. He said El Paso cannot proceed in this unless there is support in Alaska for the all-Alaska pipeline.

Carameros said he wants firm, complete backing of El Paso's proposal from the governor, the legislature and the people of the state.

He indicated that the state can exercise "moral suasion" in decisions as to who the oil companies on the North Slope sell their gas, and of course, the state has its own royalty gas of which to dispose.

At this meeting with Sen. Ron Rettig's special impact committee, Carameros indicated that El Paso would like to see the legislature adopt a formal resolution at its next

(See Page 2, Col. 3)

El Paso Asks Support

(Continued From Page 1)

session, in January, supporting the trans-Alaska gas pipeline.

The committee's executive secretary, George Sharrock, said the legislators made no commitment. But he said they are sympathetic to the fact that El Paso's project would have more economic benefits to the state than the trans-Canada proposal.

Carameros said the maximum benefit to Alaska would only come with a plan as proposed by El Paso, and not through that proposed by a consortium of 28 companies, the Arctic Gas Study group.

The trans-Canada plan would pick up Canadian gas from the Mackenzie Delta, for transportation to both Canadian and American markets. Arctic Gas has said the Alaska gas is absolutely essential to a trans-Canada pipeline at this time.

El Paso's plan is to build a pipeline closely paralleling the trans-Alaska crude oil pipeline. A gas liquefaction plant would be built at the gas pipeline's terminus, which has not been decided. Then the super-chilled liquefied natural gas would be moved to the West Coast by refrigerated supertankers.

"We have completed $2 million worth of studies which have convinced us that the economics of a trans-Canada pipeline versus a trans-Alaska pipeline are virtually the same — it would cost as much to go either way," Carameros said.

"Furthermore our studies indicate that the plan we propose is economically feasible, providing we can obtain the natural gas supplies necessary to operate the line. But the biggest consideration of all is that the interests of the Alaska people overwhelmingly lie in committing this resource to an all-Alaska pipeline that will reap enormous benefits for the whole state."

Carameros said that despite strong odds in favor of the trans-Alaska gas pipeline, "there has been a passive attitude on the part of Alaskans which we find very difficult to understand.

"If I were in the shoes of the average Alaskan, I would be standing on the rooftop shouting for state support of an all-Alaska route."

Anchorage Daily Times
12/14/73 p. 1

ARCTIC GAS COMPANIES PUSH NATURAL GAS SYSTEM

By BETZI WOODMAN

Earnest persuaders from Arctic Gas Study Groups are working to convince governments, financiers and the general public in the U.S. and Canada that their proposed pipeline is the most efficient and advantageous means of transporting natural gas from the North Slope and Northern Canada's Mackenzie Delta region to all major United States markets.

Until mid-June, wide-ranging feasibility studies were conducted for the 26 participating firms (a major portion of the pteroleum and natural gas industries in North America), primarily by the Canadian Arctic Gas Study Company. Then it was announced that the Alaska Arctic Gas Study Company would be activated with an office in Anchorage. Named as president and chief executive was Robert Ward, lieutenant governor under Keith Miller and most recently administrator for the Alaska Power Administration. Colonel Amos "Mo" Mathews, soon-to-be-retired from his position as district engineer for Alaska, Army Corps of Engineers, is executive vice president.

Although both men are highly regarded for their administrative and engineering expertise, respectively, neither has a history of gas pipeline experience. The new office, with from 10 to 20 employees probably will have loans of gas experts from among the participating firms.

Alaskan Arctic Gas (AAG) will supervise study programs in Alaska, prepare applications (to be filed this year) to state and federal regulatory authorities for approvals to construct and operate the proposed pipeline, and act as liaison with state government officials and Alaskan residents. The Canadian group will continue to function similarly in Canada.

The two companies were organized as service companies on behalf of the member firms. As study companies, the two entities represent a planning phase. Soon, however, they are to be replaced and developed into Alaskan Arctic Gas Pipeline Company and Canadian Arctic Gas Pipeline Company. The latter two organizations will, in their respective countries, actually apply for authorizations; secure the necessary financing; and build, own, and operate the pipeline. (To avoid confusion among the names of four companies, the general reference will be to Arctic Gas.)

MATHEWS

WARD

Approximately $34 million has been spent in the past five years studying the economic, engineering, and environmental aspects of the proposed pipeline in both countries. Expenditures are expected to total $60 million for further studies, regulatory proceedings, and detailed engineering, prior to governmental approvals.

The pipeline will be a contract carrier, officials say, neither buying nor selling gas, but providing transport for shippers of gas who contract for the service on a long-term basis. It will be essentially a utility-type operation with a regulated rate of return.

Proponents of the Arctic Gas pipeline are hard at work drumming up support for the mammoth project estimated to cost $5.7 billion—and they have their work cut out for them. Pro arguments must be persuasive in the feasibility of the technical aspects of constructing through the Arctic a high-pressure 48-inch line more than two thirds the length of North America.

Advocates must also contend with a number of issues which can complicate procedures as much as or more than the situations which have beset the Trans-Alaskan Pipeline. One immediate concern of Arctic Gas is the proposed El Paso gas pipeline across Alaska from the North Slope to (probably) Seward, where the gas would be liquefied for transport to the west coast. W. P. Wilder, chairman of Canadian Arctic Gas Study Ltd. told government officials of Northwest Territories that delays in approving Arctic's proposals could lead to completion of the El Paso line. "The result would almost certainly be that a pipeline from the Mackenzie Delta would, at the very least, be deferred for a considerable period," Wilder warned. In addition, "exploration for petroleum resources in the North (of Canada) would be severely retarded. Supplies of northern gas would likely be deferred well beyond the point in time that they are required to help meet Canadian needs." Wilder, in fact,

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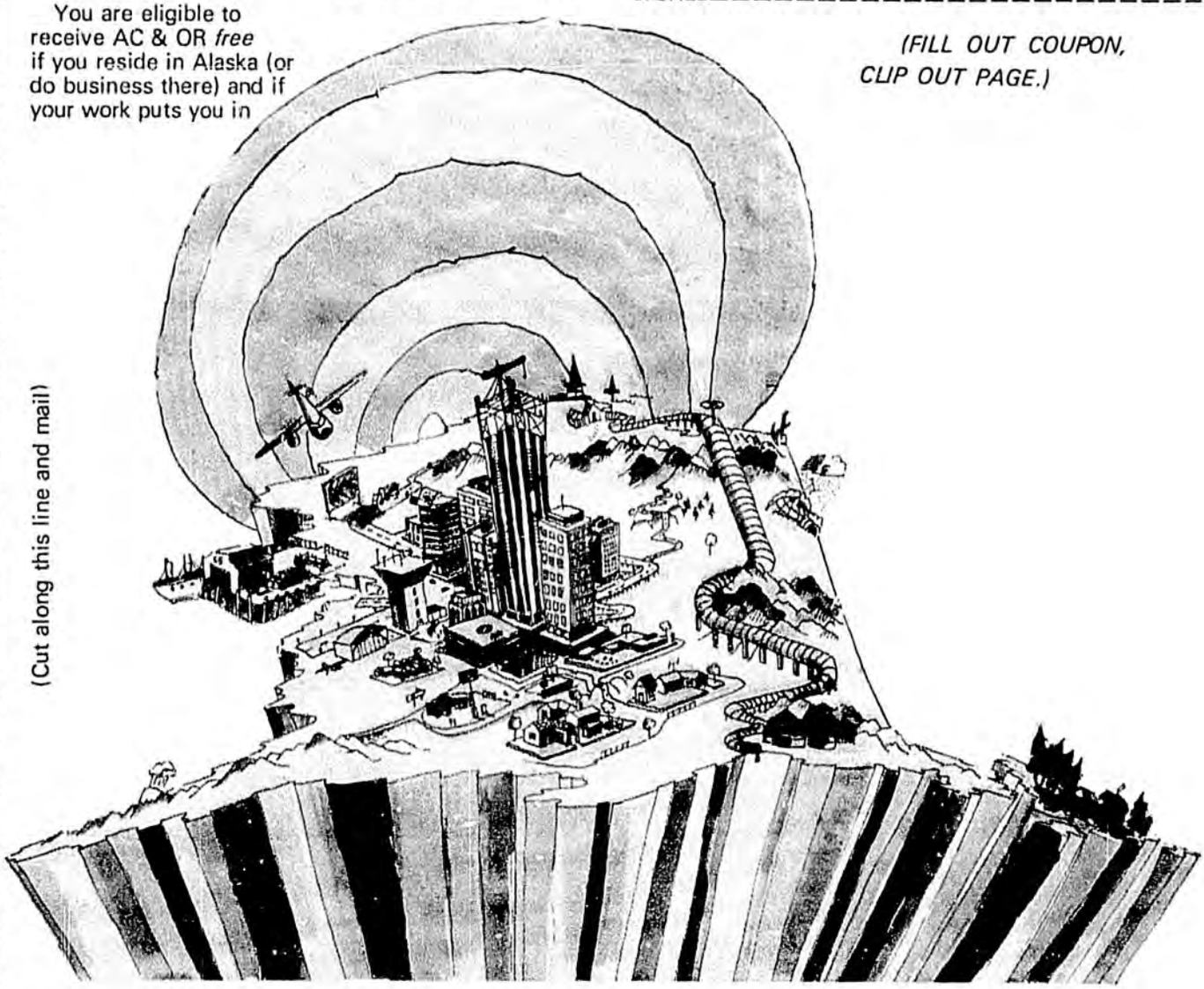

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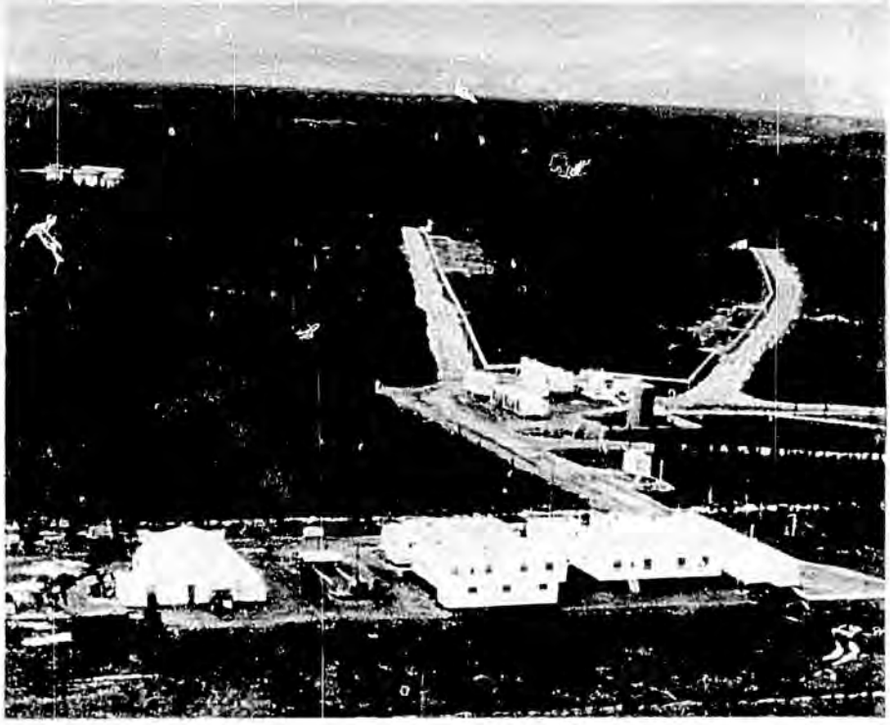

Aerial view of Arctic Gas' $3.5 million Arctic test facility at Sans Sault, NWT. Five 500-ft. sections of 48-in. diameter pipe were installed at the test site. Refrigeration and compressor simulated the flow of natural gas through the pipe sections.

has called the possibility of El Paso's success and thus loss of North Slope gas to Arctic Gas "probably the biggest risk facing our project."

Other serious issues with which Arctic Gas must deal include indeterminate and differing energy policies in Canada and the U.S.; differing regulatory procedures (with that of U.S. on the verge of change) by the two governments; environmental and economic impacts; political considerations in both countries which may in some cases be only indirectly related to this particular project; financial backing and methods for public ownership; legal intricacies of product ownership and export; and the already-recognized potential delay in the matter of Canadian aboriginal land claims.

Basic to the whole project, however, is access to the proven gas reserves in both the Mackenzie Delta and the North Slope. Wilder states that two things are required to achieve a delivery rate of more than four billion cubic feet per day and thus make the transportation of Northern gas economically viable: gas resources of both the Slope and the Delta for volume; and access to not only Canadian markets, but an outlet to the much larger U.S. markets.

At this point, the only promise of North Slope gas for the line is through an option held by Columbia Gas Systems with Sohio for gas from the BP operations. Columbia, a participating member of both study groups, is under the crunch to build reserves for their large distribution in seven eastern states. Atlantic Richfield and Exxon, who have most of the gas of Prudhoe through the gas cap, and are also members of the Arctic Gas Consortium, are not yet committed for their gas transportation.

Before the basic resource of natural gas can be available, however, there must be oil production on the Slope. This, of course, depends on a transportation route for the crude oil — the trans-Alaska oil pipeline. An even further consideration of basics involves the nature of the Prudhoe reservoir and whether the cap gas can be produced without harming the reservoir. The Oil and Gas Conservation Committee has jurisdiction over when the gas will be produced.

To help find answers on which to base such decisions, the state has spent nearly a year on a reservoir simulation project by computer. First basic runs were due in July, but the real crux is not expected until late winter or early spring when all the parameters are defined. Undoubtedly, every company involved on the Slope has taken the prudent step to make its own study. Although a computer will reflect only what program is put into it, it is likely that the oil companies have more information than the state. In any case, judging the results adequately will be a crucial matter.

THE ARCTIC GAS CASE

To back its project, Arctic Gas sets forth a number of advantages besides the overall statement that the route of their gas line represents "the most efficient and advantageous means of providing transportation for large reserves of natural gas to all major U.S. market centers."

Wilder points out that for Canada to remain self-sufficient in energy (she is the only industrialized nation in the free world in such a situation), she must be able to develop her vast potential energy resources at an adequate rate. Only a small portion of the potential reserves are presently discovered, developed, and now available for present or future use.

The opportunity exists, Wilder said, to take advantage of the growing U.S. demand for oil and gas imports in such a way to make economically feasible the development and utilization of Canada's Arctic petroleum resources. The scale of development required to economically tap these resources is such that it can be provided only by access to the much larger U.S. markets, he says. "Our proposed Arctic Gas pipeline illustrates this well. At full compressor horsepower, the 48-inch diameter line will be able to deliver gas to Canada and U.S. markets at a rate about one third greater than the present total rate of gas demand in Canada. . .we cannot economically reach our Arctic gas resources without the economics of scale of the big U.S. market."

That market, however, is not all that is needed to make the pipeline economically viable. Also necessary is the U.S. gas supply on the North Slope. It is anticipated that a little more than half the four billion cfd will be from Alaska, the other from Mackenzie Delta. All of the Alaskan gas and a substantial portion of the initial flow of Canadian gas will be destined for U.S. markets. "Without the Alaskan gas, a pipeline from the Mackenzie Delta would require discovery of much more gas in northern Canada to economically justify the pipeline. And it would require export of more Canadian gas to U.S. markets."

Once built, the pipeline capacity could be increased in stages in step with the demand growth by means of incremental looping with additional 48-inch diameter pipe. Thus, after the initial export commitment required to get the system built, "the remaining potential gas reserves in the North (Canada) mainland would be economically available to serve Canadian needs exclusively, if required."

A conservative estimate of the potential gas reserves in northern Canada, excluding the Arctic islands, places the total at 100 trillion cubic feet.

Benefits for Canada, then, will include assurance of adequate gas supplies for Canadian needs; generation of hundreds of millions of dollars in government royalties through production royalty and lease payments, as well as large revenues from various taxes; substantial revenue from the sale of this gas; a dynamic and broad-based stimulation of the Canadian economy and national employment flowing from the activities involved in the development and use of this resource; and generation of earnings to a great number of Canadian investors who are anticipated to be majority owners of the pipeline.

Beyond the construction phase, Arctic

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	623	260E Series A
Flywheel Horsepower	300	300
Power To Empty Wt. Ratio	1:214	1:199
Cubic Inch Displacement	700	844
Heaped Capacity	22 cu. yd.	23 cu. yd.
Width of Cut	10'-4"	10'-6.5"
Transmission Speeds	8	9
Kon Tork Differential	No	Yes

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Gas calculates that operation of the pipeline and export of Canadian gas to the U.S. might result in a contribution to Canada's balance of payment position of $500 million to $750 million annually.

Principal benefit to the U.S. would be alleviation of the present critical natural gas shortage, with this line said to be capable of making northern gas supplies available to a much broader (than El Paso's proposal, presumably) area throughout the U.S. from the Pacific coast to the eastern seaboard. With transportation costs to the consuming centers appreciably lower, a maximum wellhead value for the gas would be provided and thus generate revenue to the state.

TECHNICAL

The 26 participating firms in late June agreed on routing of their proposed line for purposes of governmental applications. Precise delineation was not available at AC&O press time and the announcement did not specify the Alaskan portion of the route.

Three routes are being considered from Prudhoe to Canada. One lies east from Prudhoe along the coastal plain, then south up the Mackenzie River valley. This route would cross the Alaska Wildlife Refuge and talks are underway with Department of Interior officials on this matter. Another route skirts the Refuge by crossing the Brooks Range in Alaska and the Richardson Mountains in the Yukon. The coastal route is shorter, appreciably less costly, would traverse a greater area of potential gas supply and is believed to involve less risk of environmental impact.

The companies are also interested in an offshore route and studies are being conducted by Shell Oil Company off Prudhoe in the Arctic Ocean.

South of the 60th parallel, the line will tie in with existing facilities of Alberta Gas Trunk Line, TransCanada Pipelines and Alberta Natural Gas — all of which can be expanded to handle increased volume.

Depending on final route selection, the proposed pipeline, with full delivery capacity, will embrace up to 3,000 miles of 48-inch diameter pipe and some two million horsepower at about 50 compressor and refrigeration stations. Jet engines of the type used in large aircraft will be installed in compressor stations at approximately 50-mile intervals. They will chill the gas and push it through the pipe.

Design operating pressure is 1,680 psi, requiring X70 pipe with a wall thickness of nearly ¾ inch. This will be nearly 2 million tons of steel pipe. At full capacity, the line will be able to handle a maximum gas supply of 4.5 billion cfd, traveling at 8 mph with a delivery capacity in excess of 4 billion cfd, the difference accounted for by line fuel.

The unique design feature involves refrigeration of the gas. Throughout the areas of permafrost, roughly north of 60 degrees latitude, the gas will be refrigerated at each compressor station to about 25° F, so that it will be close to soil temperature and below freezing. This chilled gas concept will allow the pipeline to be fully buried the entire length and avoids risk of any intolerable damage to high ice-content permafrost. The surface will be revegetated to provide a thermal insulation for the permafrost and to arrest alluvial erosion. South of the permafrost area, the gas will be chilled to remove the heat of compression.

The right-of-way and compressor stations will occupy less than 40 square miles in the 1.5 square-mile Yukon and Northwest Territories. Life of the line is planned for 25 years.

The biggest unknown factor in timing will involve time needed to get government authorization Allowing 18 months for this from the time of filing, it would be the first part of 1975 before approvals could be anticipated, at the earliest. With luck, this could provide for assembly and delivery of materials during the summer and

TURN TO PAGE 60

Next Month — THE EL PASO STORY

How to give a mini-business a boost

This year Alaskans will see a boom in small businesses beginning, coinciding with the start of the school year. These small businesses will produce and market a wide range of products, and offer a variety of services. In spite of their basic differences, they will have one thing in common. They will be owned and operated by young people of high school age. It is all part of the nationally-acclaimed Junior Achievement Program, a "learn-by-doing" approach in which students organize and manage their own small-scale businesses.

At Exxon, we are proud to have been able to play a part in introducing Junior Achievement to Alaska. But if Junior Achievement is to continue to be successful, it needs broad community support. That means not only company sponsorship, but individual participation as advisors, and as stockholders, to help give these Mini-businesses a boost.

EXXON COMPANY, U.S.A.

Sound equipment was set up at several locations along possible northern pipeline routes being examined by Arctic Gas. The equipment simulates the sounds of pipeline operations, including compressor stations and refrigeration units, to see what impact they have on animals and birds.

CONTINUED FROM PAGE 56

start of construction during the winter of 1975-76.

Construction in the north would be limited to a winter season of about four months. Equipment would move over snow and ice roads to protect the vegative mat which insulated the permafrost.

With careful planning, it is considered possible to build the northern end of the system as far as the Mackenzie Delta during two winter seasons, 1975-76 and 1976-77. The southern portion could be built during the summer and fall of 1976. This would permit the start of gas flow from the Mackenzie Delta by mid-1977, with extension of the pipeline to the Alaskan North Slope gas during the following winter.

This is considered an optimistic timetable.

The pipelaying will require 9 to 10 mainline construction spreads and two major river crossing crews. The construction spreads in northern Canada would have to complete 60-70 miles each during each winter season, and the prairie spreads would have to complete about 150 miles each during one fall and summer period.

Construction contract costs, excluding materials and based on unescalated 1972 costs could amount to about $20 million per construction spread on the prairies and $30 million to $50 million per spread for each season in northern Canada. The Alaskan extension, depending on route, will require 8 to 10 construction spreads for a winter season's work, and the contract cost per season is expected to be even higher than in northern Canada. The cost of construction equipment may amount to about $10 million per spread on the prairies, and in excess of $15 million for each northern spread. This means that pipeline contractors will be looking at more than $150 million in equipment to handle this job. In addition to pipelaying, other construction work will include compressor stations, refrigeration stations, maintenance bases, camps, winter snow and ice roads, airports, docks and stockpiling areas.

About eight of the compressor and refrigeration stations would have to be completed with the pipelaying for the initial start-up of the line; the remaining compressor and refrigerator stations could be completed during the next couple of years to achieve full design capacity.

This construction schedule is dependent upon labor agreements which preclude the risk of work stoppages. Not only is the construction schedule dependent on this, but the entire economic viability could be seriously jeopardized by any extensive work stoppages. A precedent for such labor agreements was set at construction of the large Churchill Falls hydro-electric project. Responsibility for attaining the agreements would rest primarily with the contractors.

In addition to its own technical staff, Arctic Gas employs 30 consultants and research organizations on its wide range of study programs. These include aspects as diverse as metallurgy, soils mechanics, thermodynamics, transportation and logistics, sociology, economics, and wildlife biology, among others.

Principal study programs include pilot test pipelines at Sans Sault and Norman Wells, NWT, and Prudhoe Bay. Chilled and compressed air, used to simulate natural gas flow, has been circulated through 5,000 feet of 48-inch diameter test pipes. In operation for two years, these test facilities demonstrate that fully-buried chilled gas pipelines can be constructed and operated without any permanent damage to the permafrost. This $7 million program has provided data on stability of gas pipelines in permafrost under various simulated operating conditions: stability of different types of foundations for above-ground structures, effects of a pipeline on various forms of surface cover; drainage problems associated with Arctic pipeline construction; and consutrction methods, design techniques, material, and equipment for use in an ultimate pipeline system.

FINANCES

As envisioned, the Gas Arctic line will be the largest single project ever to be financed by private capital. Without importing some capital, the company could not raise in Canada the over $5 billion for the pipeline traversing Canadian lands, except for some 250-300 miles in Alaska. But the company is confident of its ability to secure more than 50 per cent equity, ownership and financial control in Canada. But while there is need to import capital to develop Canada's potential energy supplies, the nation must also generate greater amounts of capital requirements from Canadian savings, according to one Arctic Gas spokesman.

"The growth of the Canadian capital market can provide the opportunity while the problem which confronts the U.S. with its continuing balance of payments position may underline a need to do so. We do not need to discourage foreign investment in our energy sector; we do need to encourage more Canadian investment," said V.L. Horte of Arctic Gas before the Con-

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This field of grass was grown in six weeks by botanists at Arctic Gas' $3.5 million Arctic test facility at Sans Sault, NWT. A ditch had been dug to accommodate a stretch of 48-in. diameter pipe for testing purposes and then was covered and seeded to see how quickly and effectively a vegetative cover could be restored.

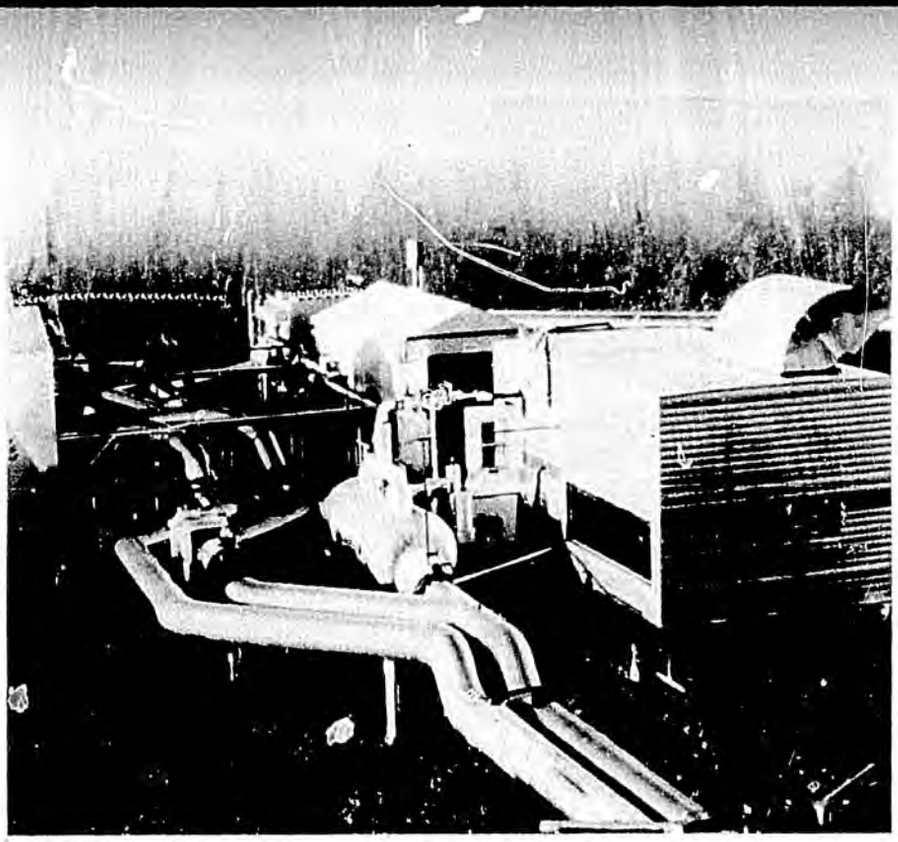
ference Board of Canada.

In May of this year, Wilder urged the investment section of the Canadian Life Insurance Association to "start thinking of increasing your proportion of assets in the energy field . . . (This) growing accumulation of Canadian savings which you gentlemen represent is of considerable interest to Arctic Gas. We are hopeful that it will be a significant factor in achieving majority Canadian ownership (of this project)."

Reactions to the energy situation around Canada seem to be sharply divided. Some fear the large degree of domination of Canada's energy companies by foreign corporations. Others note that without outside help, the level of activity and employment in the resource industries might well have been much slower. Arctic Gas representatives frankly push the international aspects of the project. "Arctic Gas exemplifies the historic spirit of the U.S. and Canadian relations . . . a spirit which recognizes that the interest of each nation can be best served by mutual cooperation —and never more so than in this instance." The recent energy policy report however, stated adamantly that development of Canadian resources would be governed by Canadian needs.

In order to assess the total impact of the pipeline on the Canadian economy during both construction and operation, Arctic Gas has commissioned studies by the Institute for the Quantitative Analysis of Social and Economic Policy at the University of Toronto. Using many sets of circumstances and working with its TRACE econometric model, the Institute is preparing forecasts of the Canadian economy with and without the pipeline. The computer models will measure the potential impact of the line both nationally and regionally in terms of such factors as employment, national income, gross national product, inflation, interest rates, balance of payments and exchange value of the Canadian dollar.

Although studies are not completed, indications from results so far are that there need not be upward pressure on the Canadian dollar resulting from financing and construction of the pipeline. Imported capital resulting from the financing and construction is likely to be at least matched by direct and induced payment for foreign goods and services. Impacts on other major



This pipeline testing facility at Sans Sault, NWT, is one of three operated in the North by Arctic Gas.

economic factors such as price levels and interest costs should be negligible.

In terms of employment generation, preliminary results suggest that total income and employment impact of investment in the pipeline will be on the same order of magnitude as investment in the rest of Canadian industry.

In financing studies, the company's objective is a viable plan which will provide first priority to Canadian investors and a minimum 50 per cent Canadian equity ownership. "The only limitation on Canadian ownership that we can foresee will be the amount of funds that Canadian corporate, institutional and private investors choose to make available."

Of the $5 billion required, the company anticipates that about 20 percent will be equity capital. The $4 billion of debt capital will comprise a combination of such forms as 20- or 25-year first mortgage bonds, some junior debt money which may have provisions for conversion to equity, and bank loans. In addition to more than half of the equity capital, the company expects to be able to raise a substantial portion of the debt money in the growing Canadian capital market. A very large segment of the debt money, as well as the equity, will obviously have to be raised in the U.S.

In Anchorage, Wilder told AC&O that borrowing would not take place before 1975-76 and would then follow traditional finance methods, hoping for long term money. Rate estimate for private placement is 9 to 9¼ per cent.

EL PASO

While the Arctic Gas groups worry over possible success of the El Paso gas line in Alaska, they also have realistically considered this route as one alternative. By so

doing, they avoid the problems encountered by the trans-Alaska consortium when it was alleged that the latter did not consider all alternate means of transporting Alaskan crude oil.

Although Arctic Gas does not believe the El Paso plan is the most economic or advantageous way for the U.S. to tap its large gas reserves on the Slope, the consortium does acknowledge that "it could be done." One potential advantage from the U.S. viewpoint, as seen by Arctic Gas, is that a U.S. transportation system, as opposed to one across Canada, would involve less strain on the U.S. balance of payments.

Wilder says that liquefied natural gas is important when the source cannot be linked with the market by pipeline and he thinks it unlikely that the Federal Power Commission, which would regulate the gas line, would let this gas (North Slope) serve only one market, namely the west coast.

Other industry spokesmen have pointed out that over the long term, Arctic Gas offers high well head value and low local employment, which overall might serve the whole of Alaska better. El Paso promises relatively high local employment and a relatively low well head value because of high transportation costs.

Others question whether present proven Slope reserves are enough for liquefaction.

James Lister, El Paso project director in Houston, says "both lines are needed," and that there is a good case for a line from the Mackenzie Delta and Prudhoe Bay south and neither line is exclusive. He bases his statement not only on the 17 trillion cubic feet of gas Van Horte says is in the Delta, but "there are hundreds of trillions of cubic feet at Mackenzie." Initially, however, El Paso believes their routing has the most advantages.

Lister also says El Paso has extensive pipelines across the country which can accommodate gas transmissions in both directions so their market is not limited to the west coast. He also contends that "we're able to pay the same well head price as anyone" and that the "same people regulate both lines —" meaning the Federal Power Commission which up to now has set the well head value.

The Alaska routing, Lister said, will not only be an all-Alaska pipeline through the state, but "can provide an infinite number of taps off the pipeline to provide an infinite number of energy sources."

Energy taps in Alaska appeal to residents in the interior of the state, particularly in Fairbanks, who see it as potential alleviation to their burdensome icefog problems. Governor William Egan, while not endorsing either proposal, has voiced concern over "how Alaskan gas leaves Alaska" and what benefits it can give the state's people.

Meanwhile, El Paso has "favorable prospects" for gas commitments for their project and their own explorations for gas are well under way. Studies for the pipeline and liquefaction plant are out of the preliminary stages and in-depth studies have begun.

COMPLICATIONS

Hindrances, obstacles and uncertainties suggested in the first part of this dissertation are compounded by numerous unknowns and controversial attitudes among industry and government people. For example, what if the state of Alaska chooses to take its 12½ per cent gas royalty in kind? Would this throw weight to an Alaskan line? Suppose a cents-per-million cubic feet tax were imposed? Suppose the Canadian land claims litigation drags on with no Parliamentary decision until the next election because of political implications? If the issue threatens to become an unifying force to bring down Pierre Trudeau's government, would the Trudeau government, as landlord of the pipeline route, make a negative decision on the right-of-way permit?

What would be the legal ownership of Alaskan gas in the line while in Canada? Would a sudden cut of Middle East oil change attitudes on this and other aspects of the line?

Obviously, the persuaders of Arctic Gas companies have a Herculean task before them, possibly bigger than the actual construction of the line itself, Gargantuan though it is. □

PRESERVING PET 4

Commander J. P. Trunz Jr., is in charge of the Office of Naval Petroleum and Oil Shale Reserves in the Pentagon. Of the four naval petroleum reserves and three naval oil shale reserves administered by his office, the largest in terms of land mass and almost certainly in terms of potential production is Naval Petroleum Reserve No. 4 which covers 37,000 square miles, or about half of Alaska north of the Brooks range.

Trunz would love to bring the oil out of Petroleum Reserve No. 4 but he can't say that. He even said he couldn't say that. From a prepared speech delivered to the Society of Petroleum Engineers in Anchorage, he noted that "We can only assume that the laws affecting that Reserve will be continued as they are presently written, and the Navy would have no plans for the Reserve other than as authorized by these laws."

The Navy hasn't done much with Pet 4 since 1953 except to develop a small quantity of gas in the South Barrow gas field which is being used by the Natives at Barrow and vicinity. That little bit has reduced fuel costs to the Natives by 60 per cent and is said to have saved the government as much in transportation costs as it has spent in all the years it has held Pet 4, about $50 million.

Development of Pet 4 started in 1944 when a potential energy crisis hit the country. Tankers supplying oil to Alaska were needed to supply American troops stationed elsewhere and it looked like petroleum could be in very short supply on the west coast if the war continued for long. At that time all of the North Slope was withdrawn from private exploration and the Navy undertook a major petroleum exploration program called PET-4. This program included the drilling of 36 test wells and 44 core sample holes, seismic shooting of 36,800 square miles, geologic mapping of 21,000 square miles by reconnaissance (semi-detailed and detailed methods), vertical aerial photography of 70,000 miles, and many related studies.

The PET-4 operation demonstrated the presence of a widespread petrolific province, the probability of nine large deposits of recoverable gas and oil, and was abandoned in 1953.

PET-4 did not drill deep enough, essentially only exploring the shallow Cretaceous geologic formations. Of the 80 wells drilled most were concentrated in

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Committee Director and Coordinator
Special Petroleum Impact Committee
326 "H" Street, Room #8
Anchorage, Alaska 99501

Dear Mr. Sharrock:

We have your letter of November 17, 1973 forwarding a copy of Mr. Robert Ditman's letter of September 25, 1973.

Answers to the specific questions related to our department are being channeled through the office of Mr. Robert Favitt, Director of Planning and Research, Office of the Governor.

Sincerely yours,

B. A. Campbell
Commissioner of Highways

CC: Office of the Governor

STATE OF ALASKA

WILLIAM A. EGAN, GOVERNOR

DEPARTMENT OF PUBLIC SAFETY

DEC 5 RECD

OFFICE OF THE COMMISSIONER / POUCH N — STATE CAPITOL
JUNEAU 99801

December 3, 1973

Mr. George Sharrock
Committee Director and Coordinator
Special Petroleum Impact Committee
Alaska State Legislature
326 H Street, Room 8
Anchorage, Alaska 99501

Re: Your letter of 11/17/73

Dear Mr. Sharrock:

The answers to your questions are no doubt best contained in my Supplementary Budget Requests for fiscal years 1974 and 1975. These requests have been forwarded through channels to Governor Egan who has not had the opportunity to review the many requests from all agencies or to formulate his policies and budgetary recommendations.

Inasmuch as requests for additional trooper and protection support is by nature rather nebulous and predicated upon my judgments and opinions, I feel that the answers to your questions must come from the Governor. After all, the level of our service to the public is a value judgment for he alone to ultimately make and implement.

I am certain that this is not the answer you most desire, but am equally certain you can see the merit in having this information come from the person most responsible for the level of police services in the State of Alaska.

Very truly yours,

Emery W. Chapple, Jr.
Commissioner

cc: Governor William A. Egan
Colonel M. E. Dankworth

STATE OF ALASKA

OFFICE OF THE GOVERNOR

WILLIAM A. EGAN, GOVERNOR

STATE PLANNING AND RESEARCH / POUCH AD — JUNEAU 99801
PHONE 586-5386

DEC 3 REC'D

November 30, 1973

Mr. George Sharrock
Committee Director &
Coordinator
Special Petroleum Impact
Committee
326 H Street, Room 8
Anchorage, Alaska 99501

Dear George:

Thank you for your letter of November 17 and the copies of letters sent to several Commissioners. I am, of course, familiar with Bob Ditman's September 25 letter to you, and wish to assure you and the Committee that each of the Commissioners is available to provide factual information to legislative committees either during or between sessions.

The difficulty in this instance lies in the fact that the particular information you are seeking has not yet been finalized. As a former State Commissioner, you are aware that the Governor's Budget Review Committee holds its meetings with all State agencies between October 15 and December 15. This year, the Committee is requiring from each agency a well-documented and well-justified pipeline impact budget in addition to its normal operating budget request. The Committee, in turn, will review each of these impact budgets in light of the State's overall assumptions concerning construction impact, state revenues, surveillance agreements with the Federal government, current information from Alyeska, and other pertinent factors before finalizing them in a budget recommendation to Governor Egan.

Recent meetings with officials of Alyeska have confirmed our determination to have a better picture of the logistics of the construction operation before finally identifying the anticipated

impacts and the measures necessary to address them. For example; the results of the current negotiations between Alyeska and the unions will have a substantive affect on population, distribution, leisure time, family relationships, etc. In turn, these matters will affect all areas of state and local services and facilities. Similarly, the final resolution of the question regarding medical services to be provided by Alyeska will impact medical manpower in Alaska, as well as the continuity of vital health programs.

As Commissioner Mallott and I stressed at the Fairbanks hearing before your Committee, the administration and the Legislature have a mutual concern and a mutual goal with respect to the forthcoming construction; to anticipate and meet the needs of Alaskans and their communities so that the maximum social and economic benefit will result from the pipeline construction and operation.

When the Pipeline Coordinating Committee and its sub-committees (including the Budget Review Committee) are satisfied that their assumptions are based on the most current and most dependable data, the base line information and resultant projections will be documented, published and released. With such a tool, the Governor's legislative recommendations on this subject can be discussed on the basis of factual information and authoritative assumptions.

Kindest personal regards.

Sincerely,

R. W. Pavitt, AIP
Director

MEETING OF NORTHWEST FEDERAL REGIONAL COUNCIL WITH
ALASKA SPECIAL PETROLEUM IMPACT COMMITTEE

Seattle, Washington
December 18, 1973

Northwest Federal Regional Council

Dave Dougherty
Executive Director

Bernard E. Kelly (Chairman)
Regional Director
Dept. of Health, Education & Welfare

Jim Agee (Vice Chairman)
Regional Administrator
Environmental Protection Agency

Oscar Pedersen
Regional Administrator
Office of Housing & Urban Development

David Head
Regional Administrator
Law Enforcement Assistance Administration

James Hughes
Regional Director
Department of Labor

Donald Samuelson
Regional Director
Dept. of Transportation

J. Finley
Regional Administrator
Office of Economic Opportunity

S. Trenhaile
Regional Director
Dept. of Agriculture

R. Sampsel
Regional Director
Dept. of the Interior

Special Petroleum Impact Committee

George Sharrock
Director and Coordinator

Senator Ron Rettig (Chairman)
Anchorage, Alaska

Senator Cliff Groh
Anchorage, Alaska

Senator Terry Miller (Senate President)
Fairbanks, Alaska

Representative Tom Fink (House Speaker)
Anchorage, Alaska

Representative Richard McVeigh
Anchorage, Alaska

Senator Robert H. Ziegler, Sr.
Ketchikan, Alaska

Senator Keith Miller
Anchorage, Alaska

Senator H. D. (Pete) Meland
Sitka, Alaska

Representative Robert Hartig
Anchorage, Alaska

Representative Andrew Warwick
Fairbanks, Alaska

Representative Lavell Wilson
Tok, Alaska

c & le Lucille

November 20, 1973

(Members of Special Petroleum Impact Committee)

Dear

I have arranged for the Committee to meet with the Federal Regional Council. I tried to have the Council come to Alaska for the meeting, but found this could not be done. The meeting is set for the morning of December 18th at the Council Headquarters, Arcade Plaza Building, 1321 Second Avenue, Seattle.

It was the intent to hold an Impact Committee meeting early in December to review our report and allow the Committee to make decisions on legislative recommendations. Following our receipt of all information from the communities, it will take about 10 days to prepare the report.

It is believed that combining the Committee meeting with the Regional Council meeting would be best. Therefore, I have arranged for the Committee to meet the morning of December 17th in a conference room at the Regional Council Headquarters at 9:30 A.M.

I plan to have copies of the report to you a few days in advance.

The Northwest Federal Regional Council members are:

Bernard E. Kelly (Chairman)
Regional Director
Dept. of Health, Education & Welfare

Jim Agee (Vice Chairman)
Regional Administrator
Environmental Protection Agency

Oscar Pedersen
Regional Administrator
Office of Housing and Urban Development

Donald Samuelson
Regional Director
Dept. of Transportation

James Hughes
Regional Director
Dept. of Labor

J. Finley
Regional Administrator
Office of Economic Opportunity

S. Trenhaile
Regional Director
Dept. of Agriculture

R. Sampsel
Regional Director
Dept. of the Interior

There is reason to believe that there will be federal programs for aid in some of the impacted areas. The purpose of the meeting with the Council is to explore all possible means. There has been some discussion by the Council regarding pipeline impact and they will have further discussions with their Washington, D.C. offices before December 18th.

Since the Council offices are not far from the Olympic Hotel, reservations will be made there at Government rates.

We should have confirmation on whether you plan to attend the meetings as soon as possible.

Sincerely,

George Sharrock
Committee Director and Coordinator

GS:ta

cc: John Elliott
Executive Director
Legislative Affairs Agency

b.P.S. (John Elliott) In addition to the TRs you will send directly to the Committee members, we will need TRs for Ben Marsh, Trudie Alford and myself.

STATE OF ALASKA
THE LEGISLATURE

POUCH Y - STATE CAPITOL
JUNEAU, ALASKA 99801

LEGISLATIVE AFFAIRS AGENCY

March 12, 1974

M E M O R A N D U M

TO: Russell E. Mulder, Deputy Director

FROM: Greg Machyowsky, Legislative Counsel

SUBJECT: Applicability of Article IX, Sec. 9 of the state constitution (relating to debts incurred by political subdivisions) to loan programs authorized by the state for political subdivisions; applicability of Article III, Secs. 22 and 23 (relating to the executive) to review of Department of Community and Regional Affairs determinations on loan applications by Legislative Budget and Audit Committee.

Whether Article IX, Sec. 9 relates only to bonded indebtedness incurred for capital improvements or to bonded and any other kind of indebtedness for such improvements appears still to be under question; moreover, whether the provision is to be read as prohibiting any debt other than for capital improvements might also be questioned.

In practice it seems the constitutional provision is generally accepted as applying to debt incurred for capital improvements only, primarily bonded debt, and perhaps as well other than bonded debt for capital improvements.

There are at least two permanent statutes now in effect authorizing loans to municipalities, namely AS 46.03.030, authorizing loans for water supply and sewage treatment systems, and AS 44.19.177, authorizing urban renewal loans to municipalities damaged by natural disasters.

To insure against raising of probably the more apparent of the two constitutional questions on Article IX, Sec. 9 noted above, perhaps inserting the following provision would be helpful in loan program enabling legislation:

> <u>If the loan is for a capital improvement the ordinance to be effective must be ratified by a majority of the qualified voters of the municipality voting on the question at a general or special municipal election.</u>

Incidentally, the term "community" if used to describe localities eligible for loans, perhaps should be defined or otherwise indicated as either including or excluding unincorporated communities; presumably it is intended to cover at least cities and boroughs.

A loan program to municipalities which is to be administered by the Department of Community and Regional Affairs but invests the Legislative Budget and Audit Committee with responsibility to approve or disapprove applications would seem to come within the purview of Article III, Sec. 22 of the state constitution, calling for executive and administrative functions to be allocated among principal departments and Article III, Secs. 25 and 26, requiring the head of each department to be appointed by the governor, subject to confirmation by the legislature. Article III, Sec. 22 qualifies the requirements as follows:

> Regulatory, quasi-judicial, and temporary agencies may be established by law and need not be allocated within a principal department.

A loan program, if enacted as a temporary measure, and calling for approval of administrative decisions by a legislative appointed commission may perhaps be viewed as an executive and administrative function vested in a temporary agency and thereby not subject to the requirements for allocating functions within principal departments, with department heads appointed by the executive. In the context of the apparent purpose of the provisions, however, and the general constitutional principle of separation of powers underlying the state constitution, the vesting of final administrative or executive authority in a legislative agency, even on a temporary basis, may be questioned for conformity with the constitution.

Let me know of course if the matters noted require more extensive and specific review in terms of proposed bill or amendment requests.

STATE OF ALASKA
THE LEGISLATURE

LEGISLATIVE AFFAIRS AGENCY

POUCH Y - STATE CAPITOL
JUNEAU, ALASKA 99801

March 12, 1974

M E M O R A N D U M

TO: Senate Community and Regional Affairs Committee

FROM: Russell E. Mulder, Deputy Director

SUBJECT: Draft of CSSB 382 (Pipeline Impact) #1

NOTE: Reference needs to be made to CSHB 505 and SB 382

Section 1. New language stressing "temporary emergency" (p. 1, line 10).

Sec. 2(a). Primarily sec. 2(a)(1) of CSHB 505. The word "seasonal" was removed on p. 1, line 18 between "normal" and "population" and paragraph "(2)" was deleted. Sec. 2(b) is sec. 4 of CSHB 505. Sec. 2(c) is basically sec. 3 of CSHB 505. Sec. 2(d) is a combination of secs. 2(b) and 4(c) of CSHB 505. Sec. 2(e) is partly taken from sec. 4(d) of CSHB 505.

Sec. 3. Taken from sec. 5(a) of CSHB 505. Subsection (b) of that sec. was deleted.

Sec. 4. Primarily the concept embraced in sec. 44.19.589(b)-(1) of SB 382 (p. 3, line 10); limited to grants and providing for approval by Legislative Budget and Audit Committee in lieu of Special Legislative Pipeline Impact Review Committee.

Sec. 5. Same as above except it relates to loans for capital improvements only and "(b)" incorporates sec. 44.19.589(f) of SB 382 (p. 5, lines 1 - 3).

Sec. 6. Same as sec. 44.19.603 of SB 382 (p. 6, lines 25 - 27) but changing Special Legislative Pipeline Impact Review Committee to Legislative Budget and Audit Committee.

Sec. 7. Taken from sec. 12 of CSHB 505.

Sec. 8. Except for a new "(1)" (definition of "department"), basic language taken from sec. 8 of CSHB 505.

Sec. 9. New language patterned after AS 43.25.110 (part of the Alaska Industrial Incentive Act) and AS 43.26.070 (part of the Industrial Incentive Tax Credit Act).

Sec. 10. Same effective date as contained in SB 382 and CSHB 505.

REM:cb

Intent - act
2 pages long
✓ 3 programs
- formula - population
- ~~Amd.~~ discretionary grants (pipeline related impact)
✓ committee - like Rettigs
✓ need not confirm director
- approval only of disbursement of funds

- above their normal operating expenses.
- ~~all~~ expire
< June 30, 1975
no applications approved ~~after that~~ date.
✓ Emergency legis - Temporary
✓ Dept of C&RA.
- ~~no loans~~
✓ grants (limited) to non-cap- improvements (operation)
→ ✓ capital imp. loans okay
✓ - % interest / greater of
(?) 1% the state is currently paying on its obligations
✓ terms / by director which are.

Section 1. Purpose. It is the intention of the legislature to financially assist municipalities in meeting extraordinary ~~operating~~ expenditures caused by pipeline construction impact.

? temporary emergency relief

* It is the purpose of this Act to provide temporary, emergency financial relief to municipalities ~~already incurring extraordinary~~ in order that they can meet extraordinary expenditures caused by or related to pipeline construction.

[redacted]

* Sec. 2. Formula Grants. the Dept. of C & R A. shall

(Sec. 2 of CSHB 505)

(a) yes

(b) yes

(c) Sec. 3 of CSHB 505

(d) Sec. 4(a) "

(e) Sec 4(c)

(f) Sec. 5

Sec. 3. Discretionary Grants. The Department of C. & R A may, with the approval of the B & A Comm, make grants to a municipality demonstrating extraordinary municipal operating expenditures beyond its capability to reasonably meet from growth in receipts from present municipal revenue sources.

Sec. 4. (a) Capital Improvement Loans. The Dept. of C & R A may, with the approval of the B/A Committee, make loans to municipalities ~~[illegible]~~ demonstrating extraordinary municipal capital improvement expenditures beyond...

(b) The ~~Dept~~ dept. shall establish the terms and conditions of the loans but interest may not be charged in excess of one quarter of per cent of ~~the~~ the rate the state is paying on its obligations.

Sec. 5. B/A Com. Approval. —

Sec. 6. Termination Date for Applications

PLEASE NOTE: THE FOLLOWING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT.

Sec. 4. (a) Capital Improvement Loans. The Dept. of C & R A may, with the approval of the B/A Committee, make loans to municipalities ~~[illegible]~~ demonstrating extraordinary municipal capital improvement expenditures beyond...

(b) The ~~Dept~~ dept. shall establish the terms and conditions of the loans but interest may not be charged in excess of one quarter of per cent of ~~the~~ the rate the state is paying on its obligations.

Sec. 5. B/A Comm. Approval. —

Sec. 6. Termination Date for Applications

February 26, 1974

M E M O R A N D U M

TO: Senator Rader

FROM: Russell E. Mulder, Deputy Director

SUBJECT: An inconsistent use of language in SB 382 (1974) and HB 638 (1974)

In reviewing identical bills to create the Pipeline Impact Agency (SB 382 and HB 638) it has been brought to the attention of this office that an inconsistency exists within the bills themselves. In sec. 10 of the bills (p. 2, lines 7-10) it is stated that

> "...The legislature finds, too, that revenue-sharing formulas on per capita or percentage per capita increase basis are less desirable, less effective, and more costly than the case-by-case approach intended in the legislation...."

Sec. 589(c), on the other hand, provides that

> "Grants...shall be made on the basis of percentage increase in population..." (p. 3, lines 19-21)

This conflicting language was brought together during the process of drafting the final bill for introduction from various work drafts. In the final draft the language referring to grants being made on the basis of percentage increase in population should have been changed to reflect the newer thinking as set forth in sec. 10 (Purpose).

In order to resolve this inconsistency, it is suggested that the first sentence of sec. 589(c) be changed to read:

> "Grants under (b)(1) of this section shall be made on a case-by-case basis as demonstrated by need."

REM/sm

CRPA Comm. 2/26/17 SB 382

1) Check const. question re new amendment, i.e., need for a vote of the people for anticipate loans... check with Greg.

look into

---

look into. Separation of powers question
- Need a sec. 26 Board? (section 603)

Anchorage Boro

1.) SB 505 & 382 should be combined.
- #10 mil distributed per formula &
15 mil " by Agency or an emergency (contingency fund).
- [redacted] They have 05

Original sponsor: Rules Committee by request of the Governor

IN THE HOUSE

BY THE COMMUNITY AND REGIONAL AFFAIRS COMMITTEE

CS FOR HOUSE BILL NO. 505

IN THE LEGISLATURE OF THE STATE OF ALASKA

EIGHTH LEGISLATURE - SECOND SESSION

A BILL

For an Act entitled: "An Act relating to assisting municipalities; and providing for an effective date."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

* Section 1. DECLARATION OF PURPOSE. It is the intention of the legislature to financially assist municipalities in meeting certain extraordinary operating expenditures caused by accelerated population growth other than the normal seasonal population increase and which are beyond the capability of the impacted municipalities to reasonably meet. It is the further intention of the legislature that the state respond promptly to the impact needs of municipalities.

* Sec. 2. ELIGIBILITY STANDARDS. (a) Grants to carry out the purposes of this Act may be made to a municipality demonstrating

(1) an annual population growth rate in excess of 2.9 per cent of the base population other than the normal seasonal population increase;

(2) extraordinary municipal operating expenditures beyond its capability to reasonably meet from growth in receipts from present municipal revenue sources.

(b) The base population for measuring the annual population growth rate, for purposes of this section, is the population of the municipality on the first day of the quarter in which this Act takes effect.

* Sec. 3. ESSENTIAL MUNICIPAL SERVICES. Grants made under this Act may be expended only for operating expenditures for essential municipal services specified in the application.

* Sec. 4. GRANT COMPUTATION AND PAYMENT. (a) An existing municipality

or a municipality incorporated after the effective date of this Act is eligible for a grant amount under this Act equal to its annual population growth by June 30, 1975 in excess of the 2.9 per cent growth rate standard established under sec. 2 of this Act multiplied by its per capita general fund expenditures, excluding expenditures for education, capital outlay and debt service, for, in the case of an existing municipality, the last complete fiscal year preceding the effective date of this Act and, in the case of a municipality incorporated after the effective date of this Act, its fiscal year budget.

(b) Total grants under this Act to a municipality with a population of 10,000 persons or more on the first day of the quarter in which the effective date of this Act falls may not exceed $250 per capita of the population growth in excess of the average annual population growth rate standard established under sec. 2 of this Act. Total grants under this Act to a municipality with a population under 10,000 persons on the first day of the quarter in which the effective date of this Act falls may not exceed $400 per capita of the population growth in excess of the average annual population growth rate standard established under sec. 2 of this Act.

(c) The base population for measuring the per capita general fund expenditures for purposes of this section is the population of the municipality on the first day of the quarter in which the effective date of this Act falls.

(d) Grants may be made quarterly based upon quarterly population estimates with final adjustment to be made on June 30, 1975. Final grant payments shall be withheld until after final adjustments of amounts are made on June 30, 1975.

Sec. 5. PREPAYMENTS. (a) A municipality may receive, as a prepayment, up to 50 per cent of the amount it will be entitled to under this Act upon certification by the Department of Community and Regional Affairs that the municipality will more likely than not meet the eligibility standards set

out in sec. 2 of this Act.

(b) Total prepayments to municipalities made under this section may not exceed $5,000,000.

* Sec. 6. APPLICATION. (a) Grants under this Act may be made only upon application by a municipality to the Department of Community and Regional Affairs. Each grant application shall state the essential municipal services for which the grant will be expended. A prepayment grant application may be submitted at any time after the effective date of this Act.

(b) No grant may be expended for purposes other than those specified in the application.

* Sec. 7. ACCOUNTABILITY FOR GRANTS. (a) A municipality shall submit a financial report covering the expenditure of a grant already received under this Act to the Department of Community and Regional Affairs before another grant may be received under this Act.

(b) A municipality receiving grants under this Act shall

(1) maintain a separate account for the grants received under this Act;

(2) provide for an annual independent audit of the separate account for the grants received under this Act; and

(3) submit a copy of the independent audit report to the Department of Community and Regional Affairs.

* Sec. 8. APPROVAL. Grants under this Act shall be made by the Department of Community and Regional Affairs at the direction of the governor subject to approval of the Special Legislative Pipeline Impact Review Committee.

* Sec. 9. POPULATION. A municipality shall submit estimated population and population growth figures to the Department of Community and Regional Affairs. These population and population growth figures are subject to review and approval by the Department of Community and Regional Affairs. The decisions of the Department of Community and Regional Affairs are final as to

(1) population growth figures for the purpose of establishing eligibility under sec. 2 of this Act;

(2) population figures for computing grant amounts under sec. 4 of this Act; and

(3) population figures for computing prepayment amounts under sec. 5 of this Act.

* Sec. 10. PIPELINE IMPACT FUND. There is the pipeline impact fund created for the purpose of carrying out the provisions of this Act. The fund consists of all money made available by appropriations of the state legislature, and from other appropriated funds, all contributions from whatever source, and income and interest derived from the investment of money.

* Sec. 11. SPECIAL LEGISLATIVE PIPELINE IMPACT REVIEW COMMITTEE. There is established the Special Legislative Pipeline Impact Review Committee composed of three members of the senate appointed by the president of the senate and three members of the house of representatives appointed by the speaker of the house. The committee shall select its own chairman.

* Sec. 12. TERM OF MEMBERSHIP. The committee shall be organized within 15 days after the organization of each legislature. Members serve for the duration of the legislature during which they are appointed. If they are reelected or their term of office extends into the next succeeding legislature, they continue to serve until reappointed or the appointment of their successor.

* Sec. 13. VACANCIES. When a vacancy occurs in the membership of the committee, the presiding officer of the house incurring the vacancy shall choose a successor. If the office of the president of the senate or speaker of the house of representatives becomes vacant and a vacancy from the affected house occurs among the membership of the committee, the remaining committee members from the house incurring the vacancy shall appoint a new member.

* Sec. 14. MEETINGS. (a) The committee may meet during sessions of the

legislature and during the interim between sessions at such times and places in the state as the chairman may determine. Members may receive, for the minimum time required to get to and from meetings and for the period while attending meetings, the same travel and per diem allowances provided by law for members of the legislature when attending sessions, except that members of the committee receive no per diem during legislative sessions other than the per diem allowance paid to other members of the legislature.

(b) The members of the committee can validly conduct a meeting and vote by communicating simultaneously with each other by means of conference telephones or similar communications equipment.

(c) A majority of the members of the committee constitute a quorum for the purpose of carrying out its duties under this Act.

* Sec. 15. DUTIES OF COMMITTEE. The committee shall review and approve or disapprove, in whole or in part, the grants made by the Department of Community and Regional Affairs under this Act.

* Sec. 16. DIVISION OF LEGISLATIVE FINANCE ASSISTANCE. The division of legislative finance shall cooperate with the committee and shall furnish technical assistance and personnel, if available, upon request.

* Sec. 17. DEFINITIONS. In this Act

(1) "municipality" means a home rule municipality or a general law municipal corporation and political subdivision, which is a first or second class borough or city incorporated under the laws of the state;

(2) "operating expenditures" means personal services, contractual services, travel, commodities, and up to $20,000 per item of equipment except that it does not include any of these items if part of a capital improvement expenditure;

(3) "population" means nonmilitary population;

(4) "quarter" means a period beginning January 1, April 1, July 1 and October 1 of a calendar year.

* Sec. 18. REGULATIONS. The Department of Community and Regional Affairs may adopt regulations necessary to carry out the purpose of this Act.

* Sec. 19. EFFECTIVE DATE. This Act takes effect on the day after its passage and approval or on the day it becomes law without approval.

Introduced: 2/15/74
Referred: Community and Regional Affairs and Finance

BY THE RULES COMMITTEE BY REQUEST OF THE SPECIAL PETROLEUM IMPACT COMMITTEE

IN THE SENATE

CS for SENATE BILL NO. 382

IN THE LEGISLATURE OF THE STATE OF ALASKA

EIGHTH LEGISLATURE - SECOND SESSION

A BILL

For an Act entitled: "An Act creating the Pipeline Impact Agency; and providing for an effective date."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

* Section 1. AS 44.19 is amended by adding new sections to read:

ARTICLE 8. PIPELINE IMPACT AGENCY.

Sec. 44.19.581. PURPOSE. The legislature finds that construction of the trans-Alaska pipeline, from its commencement to completion over a period of approximately three years, will impose severe to mild strains on local and state governmental services and facilities. While the pipeline construction indubitably will, in the long run, mean immense growth and development to the communities and areas along the pipeline route, and to those areas coming under direct pipeline construction influence, the legislature further finds that localities most affected will be unable to cope with the probable impact on facilities and services brought about by the anticipated overwhelming and sudden increases in numbers of citizens to be served. The legislature finds, also, that communities while likely to be impacted are willing and ready via local taxation to do all possible themselves to meet impact requirements, even to the full limits of local taxation tolerance, nevertheless, recognizing the state will be the prime beneficiary of pipeline construction via realization of enormous oil development revenues for the total state, the legislature finds that local impact financial burdens logically should be borne by the state as its investment in those future revenues. It is, therefore, the intent of the

legislature, in this measure, to provide a means of quickly and decisively determining specific impact problems and, additionally, for moving quickly and decisively to provide funds, facilities, personnel or other means for quick solutions. Finally, the legislature intends via this legislation to meet local and state pipeline construction impact problems as quickly and efficiently as possible in manners similar to the handling of disaster impact problems. ~~The legislature finds, too, that revenue-sharing formulas on per capita or percentage per capita increase basis are less desirable, less effective, and more costly than the case-by-case approach intended in the legislation. Under the formula approach, provision would have to be made for all probable as well as all possible impact contingencies, some of which may never develop.~~

Sec. 44.19.583. PIPELINE IMPACT AGENCY. There is created in the ~~office of the governor~~ Department of Community and Regional Affairs the Pipeline Impact Agency.

Sec. 44.19.585. DIRECTOR. The Pipeline Impact Agency is administered by a director of pipeline impact. The director is appointed by the governor and serves at the pleasure of the governor. The appointment of the director is subject to confirmation by a majority of the members of the legislature in joint session.

Sec. 44.19.587. PROGRAM TO ASSIST MUNICIPALITIES DURING PIPELINE CONSTRUCTION. The Pipeline Impact Agency shall administer a state program to provide assistance to municipalities which are adversely affected, economically and socially, by pipeline construction.

Sec. 44.19.589. POWERS AND DUTIES. (a) The director shall

(1) advise and assist the governor in developing planning assumptions and a broad preparedness plan with respect to the economic and social impact that will accompany pipeline construction;

(2) advise and assist the governor in developing policies,

programs and control systems designed to alleviate the economic and social impact resulting from pipeline construction; and

(3) advise and assist the governor with respect to resolving issues related to pipeline construction impact preparedness responsibilities of state agencies which arise concerning two or more of those agencies.

(b) The director, with the approval of the Special Legislative Pipeline Impact Review Committee ~~(as provided for in secs. 595 — 605 of this chapter)~~, may

(1) make loans and grants and purchase evidences of indebtedness with funds from the pipeline impact fund to municipalities economically or socially adversely affected by pipeline construction;

(2) guarantee municipal bonds when a municipality needs to undertake a capital improvement program on an accelerated basis; and

(3) pay (for not more than three years) from the pipeline impact fund a portion of the debt service or interest or both incurred by a municipality for undertaking capital improvements made necessary by pipeline construction.

(c) Grants under (b)(1) of this section shall be made ~~on the basis of percentage increase in population and not on the basis of per capita increase in population~~ Applications for grants shall be made in a form prescribed by the director. A grant shall be allotted according to an agreement made between the director on behalf of the state and the municipality receiving the grant. The agreement may include any provision agreed upon by the parties and shall include in substance the following provisions:

(1) a schedule of grant disbursements, if, as determined by the director, a grant is to be disbursed other than in one sum;

(2) agreement by the municipality to

Insert #1 → (4)

Insert #2

(A) proceed with and complete the proposed project or program expeditiously;

(B) not discontinue operation or dispose of all or part of the project or program for which it receives a grant without the approval of the director;

(C) apply for, and make reasonable efforts to secure, federal assistance which may be available for the project or program, subject to any conditions the agency may require in order to maximize the amounts of that assistance received or to be received for all projects or programs in the state;

(3) agreement by the municipality that, if federal assistance for a project or program becomes available to the municipality which was not included in the calculation of the amount of a grant authorized and disbursed under this section, the value of the federal assistance shall be ascertained and subtracted from the total value of the project or program and the balance shall be proportionately divided between the state and municipality;

(4) provision for alteration or modification of an approved project or program and for remedies in case of failure to perform the agreement between the parties or noncompliance with regulations promulgated by the director under this section.

(d) If funds appropriated by the legislature to provide loans and grants and purchase evidences of indebtedness under this section are not adequate to satisfy amounts required by approved grant applications, funds shall be allocated on the basis of priority established by the director by regulations promulgated to carry out the provisions of this section.

(e) The director shall provide a quarterly report to the legislature with respect to grants made under this section.

(f) The director shall determine the terms and conditions for making a loan and purchasing an evidence of indebtedness under this section.

Insert #3

Sec. 44.19.~~590~~ 607. AUTHORITY TO ACCEPT SERVICE, GIFTS, GRANTS, AND LOANS. When the federal government or an agency or officer of the federal government offers to the state, or through the state to a municipality, services, equipment, supplies, materials, or funds by way of gift, grant, or loan, for the purpose of alleviating the social or economic impact resulting from pipeline construction, the state acting through the director, or the municipality acting through its executive officer or governing body, may accept the offer subject to the terms of the offer and the rules and regulations of the agency making the offer.

Sec. 44.19.~~593~~ 609. PIPELINE IMPACT FUND. There is the pipeline impact fund created for the purpose of carrying out the provisions of sec. 587(b) of this chapter. The fund consists of all money made available by appropriations of the state legislature, and from other appropriated funds, all contributions from whatever source, and income and interest derived from the investment of money.

Sec. 44.19.~~595~~ 701. SPECIAL LEGISLATIVE PIPELINE IMPACT REVIEW COMMITTEE. There is established the Special Legislative Pipeline Impact Review Committee composed of three members of the senate appointed by the president of the senate and three members of the house of representatives appointed by the speaker of the house. The committee shall select its own chairman.

Sec. 44.19.~~597~~ 703. TERM OF MEMBERSHIP. The committee shall be organized within 15 days after the organization of each legislature. Members serve for the duration of the legislature during which they are appointed. If they are reelected or their term of office extends

into the next succeeding legislature, they continue to serve until reappointed or the appointment of their successor.

Sec. 44.19.~~509~~ 705. VACANCIES. When a vacancy occurs in the membership of the committee, the presiding officer of the house incurring the vacancy shall choose a successor. If the office of the president of the senate or speaker of the house of representatives becomes vacant and a vacancy from the affected house occurs among the membership of the committee, the remaining committee members from the house incurring the vacancy shall appoint a new member.

Sec. 44.19.~~601~~ 707. MEETINGS. (a) The committee may meet during sessions of the legislature and during the interim between sessions at such times and places in the state as the chairman may determine. Members may receive, for the minimum time required to get to and from meetings and for the period while attending meetings, the same travel and per diem allowances provided by law for members of the legislature when attending sessions, except that members of the committee receive no per diem during legislative sessions other than the per diem allowance paid to other members of the legislature.

(b) The members of the committee can validly conduct a meeting and vote by communicating simultaneously with each other by means of conference telephones or similar communications equipment.

(c) A majority of the members of the committee constitute a quorum for the purpose of carrying out its duties under sec. ~~608~~ 709 of this chapter.

Sec. 44.19.~~609~~ 709. DUTIES OF COMMITTEE. The committee shall review and approve or disapprove, in whole or in part, the decisions made by the Pipeline Impact Agency ~~under sec. 589(b) of this chapter~~.

Sec. 44.19.~~605~~ 801. DIVISION OF LEGISLATIVE FINANCE ASSISTANCE. The division of legislative finance shall cooperate with the committee and

shall furnish technical assistance and personnel, if available, upon request.

Insert #4

* Sec. 2. This Act takes effect on the day after its passage and approval or on the day it becomes law without approval.

Insert #1

(4) allow A community to ~~may~~ borrow from the fund to cover immediate impact needs in anticipation of tax revenues, grants under this act, federal grants, or other revenue sources.

~~(b)~~ Loans under this ~~section~~ paragraph may be granted upon application and the passage by the local governing body of an ordinance authorizing the borrowing. The ordinance shall specify the anticipated revenue sources and provide for a pledge of the revenues to the repayment of the loans.

(c) Loans under this section shall require concurrence of the Special Legislative Pipeline Impact Review Committee and shall include the following terms:

(1) The loan shall bear interest at a rate not to exceed six per cent a year.

(2) No interest may be charged for the first three years of the loan or until January 1, 1978, whichever is sooner.

(3) If the loan or any part of it is not repaid or otherwise extinguished before the date of commencement of interest, repayment shall be made in equal semi-annual installments, including interest, starting six months following the commencement of interest. The payments schedule shall provide for full payment of the loan over a period of not more than 20 years.

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INSERT # 2

XXXXXXXXXXXXX only for extraordinary municipal operations ing expenditures XXXXX (which are) beyond a municipality's capacity to reasonably meet. In considering population growth ~~shall be given~~ greater weight (shall be given to percentage population growth) than per capita increase in population.

~~See A.L. draft for new language.~~

Insert # 3

((forget underlining))

* Sec. 2. 44.18.591 ELIGIBILITY STANDARDS. (a) Grants to carry out the purposes of this ~~Act~~ chapter may be made to a municipality demonstrating

(1) an annual population growth rate in excess of its average annual growth rate for the period April 1, 1970, through July 1, 1973;

(2) extraordinary municipal operating expenditures beyond its capability to reasonably meet from growth in receipts from present municipal revenue sources; and

(3) that both (1) and (2) of this subsection can be directly attributed to the impact of construction of the trans-Alaska pipeline.

(b) The base population for measuring the annual population growth rate for purposes of this section is the population of the municipality on the first day of the quarter in which the effective

* Sec. 3. 44.18.593 GRANT COMPUTATION AND PAYMENT. (a) A municipality is eligible for a grant amount under this ~~Act~~ chapter equal to its population growth by June 30, 1975 in excess of the average annual population growth rate standard established under sec. 2 of this ~~Act~~ chapter 591 multiplied by its per capita general fund expenditures, excluding expenditures for education, capital outlay and debt service, for the last complete fiscal year preceding the effective date of this Act.

(b) A municipality incorporated after the effective date of this Act is eligible for a grant amount under this ~~Act~~ chapter equal to its population growth by June 30, 1975 in excess of the average annual population growth rate standard established under sec. 2 of this chapter 591 ~~Act~~ multiplied by its per capita general fund expenditures, excluding expenditures for education, capital outlay and debt service, for its fiscal year budget.

(c) Total grants under this ~~Act~~ chapter to a municipality with a population of 10,000 persons or more on the first day of the quarter in which ~~the effective date of this Act falls~~ this Act takes effect may not exceed $250 per capita of the population growth in excess of the average annual population growth rate standard established under sec. ~~2~~ 591 of this ~~Act~~ chapter. Total grants under this Act to a municipality with a population under 10,000 persons on the first day of the quarter in which ~~the effective date of this Act falls~~ this Act takes effect may not exceed $400 per capita of the population growth in excess of the average annual population growth rate standard established under sec. ~~2~~ 591 of this ~~Act~~ chapter.

(d) The base population for measuring the per capita general fund expenditures for purposes of this section is the population of the municipality on the first day of the quarter in which ~~the effective date of this Act falls~~ this Act takes effect.

(e) Grants may be made quarterly based upon quarterly population estimates with final adjustment to be made on June 30, 1975. Final grant payments shall be withheld until after final adjustments of amounts are made on June 30, 1975.

* Sec. 44.19. ~~5~~ 595 PREPAYMENTS. (a) A municipality may receive, as a prepayment, up to 50 per cent of the amount it will be entitled to under this ~~Act~~ chapter upon certification by the ~~Department of Community and Regional Affairs~~ agency that the municipality will more likely than not meet the eligibility standards set forth in sec. ~~2~~ 591 of this ~~Act~~ chapter.

(b) Total prepayments to municipalities made under this section may not exceed $5,000,000.

44.19.597
* Sec. 6. APPLICATION. (a) Grants under this Act may be made only upon application by a municipality to the ~~Department of Community and Regional Affairs~~ agency. Each grant application shall state the essential municipal services for which the grant will be expended. A prepayment grant application may be submitted at any time after the effective date of this Act.

(b) No grant may be expended for purposes other than those specified in the application.

44.19.599
* Sec. 7. ACCOUNTABILITY FOR GRANTS. (a) A municipality shall submit a financial report covering the expenditure of any grant already received under this ~~Act~~ chapter to the ~~Department of Community and Regional Affairs~~ agency before another grant may be received under this ~~Act~~ chapter.

(b) A municipality receiving grants under this Act shall

(1) maintain a separate account for the grants received under this ~~Act~~ chapter;

(2) provide for an annual independent audit of the separate account for the grants received under this ~~Act~~ chapter; and

(3) submit a copy of the independent audit report to the ~~Department of Community and Regional Affairs~~ agency.

44.19.601
* Sec. 8. APPROVAL. Grants under this ~~Act~~ chapter shall be made by the ~~Department of Community and Regional Affairs~~ director at the direction of the ~~governor~~ subject to approval of the ~~Legislative Budget and Audit~~ Special Legislative Fiscal Impact Review Committee.

44.19.603
* Sec. 9. POPULATION. A municipality shall submit estimated population and population growth figures to the ~~Department of Community and Regional Affairs~~ agency. These population and population growth figures are subject to review and approval by the ~~Department of Community and Regional Affairs~~ agency. The decisions of the ~~Department of Community and Regional Affairs~~ agency are final as to

(1) population growth figures for the purpose of establishing eligibility under sec. 591 of this chapter;

(2) population figures for computing grant amounts under sec. 595 of this chapter; and

(3) population figures for computing prepayment amounts under sec. 595 of this chapter.

* Sec. 44.19.605 REGULATIONS. The ~~Department of Community and Regional Affairs~~ agency may adopt regulations necessary to carry out the purpose of this Act.

Insert #4

* Sec. 44.19.805. Definitions. In this chapter
(1) "agency" means the Population Management Agency;

(2) "population" means non-military population;

(3) "municipality" means a home rule municipality or a general law municipal corporation and political subdivision, which is a first or second class borough or city incorporated under the laws of the state;

(4) "operating expenditures" means personal services, contractual services, travel, commodities and up to $20,000 per item of equipment except that it does not include any of these items if part of a capital improvement expenditure;

(5) "quarter" means a period beginning January 1, April 1, July 1 and October 1 of a calendar year.

DRAFT
Law

STF:md
2-23-74

IN THE HOUSE

BY THE COMMUNITY AND REGIONAL AFFAIRS COMMITTEE

CS FOR HOUSE BILL NO. 505

IN THE LEGISLATURE OF THE STATE OF ALASKA

EIGHTH LEGISLATURE - SECOND SESSION

A BILL

For an Act entitled: "An Act relating to assisting municipalities; and providing for an effective date."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

* Section 1. DECLARATION OF PURPOSE. It is the intention of the legislature to financially assist municipalities in meeting certain extraordinary operating expenditures directly attributable to the impact of construction of the trans-Alaska pipeline and which are beyond the capability of the impacted municipalities to reasonably meet. It is the further intention of the legislature that the state respond promptly to the impact needs of municipalities.

* Sec. 2. AS 44.18.571 ELIGIBILITY STANDARDS. (a) Grants to carry out the purposes of this ~~Act~~ chapter may be made to a municipality demonstrating

(1) an annual population growth rate in excess of its average annual growth rate for the period April 1, 1970, through July 1, 1973;

(2) extraordinary municipal operating expenditures beyond its capability to reasonably meet from growth in receipts from present municipal revenue sources; and

(3) that both (1) and (2) of this subsection can be directly attributed to the impact of construction of the trans-Alaska pipeline.

(b) The base population for measuring the annual population growth rate for purposes of this section is the population of the municipality on the first day of the quarter in which the effective

date of this Act falls.

* Sec. 3. ESSENTIAL MUNICIPAL SERVICES. Grants made under this Act may be expended only for operating expenditures for

(1) police protection;

(2) fire protection;

(3) solid waste collection and disposal;

(4) water supply and sewage disposal systems;

(5) health care services;

(6) land use and environmental planning and regulation; and

(7) other essential municipal services specified in the application.

* Sec. 4. GRANT COMPUTATION AND PAYMENT. (a) A municipality is eligible for a grant amount under this ~~Act~~ chapter equal to its population growth by June 30, 1975 in excess of the average annual population growth rate standard established under sec. ~~2~~ 5 of this ~~Act~~ chapter multiplied by its per capita general fund expenditures, excluding expenditures for education, capital outlay and debt service, for the last complete fiscal year preceding the effective date of this Act.

(b) A municipality incorporated after the effective date of this Act is eligible for a grant amount under this ~~Act~~ chapter equal to its population growth by June 30, 1975 in excess of the average annual population growth rate standard established under sec. 5 of this ~~Act~~ chapter multiplied by its per capita general fund expenditures, excluding expenditures for education, capital outlay and debt service, for its fiscal year budget.

(c) Total grants under this ~~Act~~ chapter to a municipality with a population of 10,000 persons or more on the first day of the quarter in which ~~the effective date of this Act falls~~ this Act takes effect may not exceed $250 per capita of the population growth in excess of the average annual

population growth rate standard established under sec. ~~2~~ 591 of this ~~Act~~ chapter. Total grants under this Act to a municipality with a population under 10,000 persons on the first day of the quarter in which ~~the effective date of this Act falls~~ this Act takes effect may not exceed $400 per capita of the population growth in excess of the average annual population growth rate standard established under sec. ~~2~~ 591 of this ~~Act~~ chapter.

(d) The base population for measuring the per capita general fund expenditures for purposes of this section is the population of the municipality on the first day of the quarter in which ~~the effective date of this Act falls~~ this Act takes effect.

(e) Grants may be made quarterly based upon quarterly population estimates with final adjustment to be made on June 30, 1975. Final grant payments shall be withheld until after final adjustments of amounts are made on June 30, 1975.

* Sec. 44.19.585 PREPAYMENTS. (a) A municipality may receive, as a prepayment, up to 50 per cent of the amount it will be entitled to under this ~~Act~~ chapter upon certification by the ~~Department of Community and Regional Affairs~~ agency that the municipality will more likely than not meet the eligibility standards set forth in sec. ~~2~~ 591 of this ~~Act~~ chapter.

(b) Total prepayments to municipalities made under this section may not exceed $5,000,000.

* Sec. 44.19.587 APPLICATION. (a) Grants under this Act may be made only upon application by a municipality to the ~~Department of Community and Regional Affairs~~ agency. Each grant application shall state the essential municipal services for which the grant will be expended. A prepayment grant application may be submitted at any time after the effective date of this Act.

(b) No grant may be expended for purposes other than those specified in the application.

44.19.599
* Sec. 7. ACCOUNTABILITY FOR GRANTS. (a) A municipality shall submit a financial report covering the expenditure of any grant already received under this ~~Act~~ chapter to the ~~Department of Community and Regional Affairs~~ agency before another grant may be received under this ~~Act~~ chapter.

(b) A municipality receiving grants under this Act shall

(1) maintain a separate account for the grants received under this ~~Act~~ chapter;

(2) provide for an annual independent audit of the separate account for the grants received under this ~~Act~~ chapter; and

(3) submit a copy of the independent audit report to the ~~Department of Community and Regional Affairs~~ agency.

44.19.601
Sec. 8. APPROVAL. Grants under this ~~Act~~ chapter shall be made by the ~~Department of Community and Regional Affairs~~ at the direction of the governor subject to approval of the ~~Legislative Budget and Audit~~ Special Legislative Tipeline Impact Review Committee.

44.19.603
* Sec. 9. POPULATION. A municipality shall submit estimated population and population growth figures to the ~~Department of Community and Regional Affairs~~ agency. These population and population growth figures are subject to review and approval by the ~~Department of Community and Regional Affairs~~ agency. The decisions of the ~~Department of Community and Regional Affairs~~ agency are final as to

(1) population growth figures for the purpose of establishing eligibility under sec. ~~9~~ 591 of this ~~Act~~ chapter;

(2) population figures for computing grant amounts under sec. ~~10~~ 593 of this ~~Act~~ chapter; and

(3) population figures for computing prepayment amounts under sec. ~~11~~ 595 of this ~~Act~~ chapter.

* Sec. 10. DEFINITIONS. ~~In this Act~~ In this chapter

(1) "population" means non-military population;

(2) "municipality" means a home rule municipality or a general law municipal corporation and political subdivision, which is a first or second class borough or city incorporated under the laws of the state;

(3) "operating expenditures" means personal services, contractual services, travel, commodities and up to $20,000 per item of equipment except that it does not include any of these items if part of a capital improvement expenditure;

(4) "quarter" means a period beginning January 1, April 1, July 1 and October 1 of a calendar year.

* Sec. 44.19.605 REGULATIONS. The ~~Department of Community and Regional Affairs~~ agency may adopt regulations necessary to carry out the purpose of this Act.

* Sec. 12. EFFECTIVE DATE. This Act takes efffect on the day after its passage and approval or on the day it becomes law without approval.

DRAFT
Law

STF:md
2-23-74

IN THE HOUSE

BY THE COMMUNITY AND
REGIONAL AFFAIRS COMMITTEE

CS FOR HOUSE BILL NO. 505

IN THE LEGISLATURE OF THE STATE OF ALASKA

EIGHTH LEGISLATURE - SECOND SESSION

A BILL

For an Act entitled: "An Act relating to assisting municipalities; and providing for an effective date."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

* Section 1. DECLARATION OF PURPOSE. It is the intention of the legislature to financially assist municipalities in meeting certain extraordinary operating expenditures directly attributable to the impact of construction of the trans-Alaska pipeline and which are beyond the capability of the impacted municipalities to reasonably meet. It is the further intention of the legislature that the state respond promptly to the impact needs of municipalities.

* Sec. 2. 44.18.581 ELIGIBILITY STANDARDS. (a) Grants to carry out the purposes of this ~~Act~~ chapter may be made to a municipality demonstrating

(1) an annual population growth rate in excess of its average annual growth rate for the period April 1, 1970, through July 1, 1973;

(2) extraordinary municipal operating expenditures beyond its capability to reasonably meet from growth in receipts from present municipal revenue sources; and

(3) that both (1) and (2) of this subsection can be directly attributed to the impact of construction of the trans-Alaska pipeline.

(b) The base population for measuring the annual population growth rate for purposes of this section is the population of the municipality on the first day of the quarter in which the effective

03-038

date of this Act falls.

* Sec. 3. ESSENTIAL MUNICIPAL SERVICES. Grants made under this Act may be expended only for operating expenditures for

(1) police protection;

(2) fire protection;

(3) solid waste collection and disposal;

(4) water supply and sewage disposal systems;

(5) health care services;

(6) land use and environmental planning and regulation; and

(7) other essential municipal services specified in the application.

* Sec. 4. GRANT COMPUTATION AND PAYMENT. (a) A municipality is eligible for a grant amount under this ~~Act~~ chapter equal to its population growth by June 30, 1975 in excess of the average annual population growth rate standard established under sec. ~~2~~ 591 of this ~~Act~~ chapter multiplied by its per capita general fund expenditures, excluding expenditures for education, capital outlay and debt service, for the last complete fiscal year preceding the effective date of this Act.

(b) A municipality incorporated after the effective date of this Act is eligible for a grant amount under this ~~Act~~ chapter equal to its population growth by June 30, 1975 in excess of the average annual population growth rate standard established under sec. ~~2~~ 591 of this ~~Act~~ chapter multiplied by its per capita general fund expenditures, excluding expenditures for education, capital outlay and debt service, for its fiscal year budget.

(c) Total grants under this ~~Act~~ chapter to a municipality with a population of 10,000 persons or more on the first day of the quarter in which ~~the effective date of this Act falls~~ this Act takes effect may not exceed $250 per capita of the population growth in excess of the average annual

population growth rate standard established under sec. ~~2~~ 591 of this ~~Act~~ chapter. Total grants under this Act to a municipality with a population under 10,000 persons on the first day of the quarter in which ~~the effective date of this Act falls~~ this Act takes effect may not exceed $400 per capita of the population growth in excess of the average annual population growth rate standard established under sec. ~~2~~ 591 of this ~~Act~~ chapter.

(d) The base population for measuring the per capita general fund expenditures for purposes of this section is the population of the municipality on the first day of the quarter in which ~~the effective date of this Act falls~~ this Act takes effect.

(e) Grants may be made quarterly based upon quarterly population estimates with final adjustment to be made on June 30, 1975. Final grant payments shall be withheld until after final adjustments of amounts are made on June 30, 1975.

* Sec. 44.19.595 PREPAYMENTS. (a) A municipality may receive, as a prepayment, up to 50 per cent of the amount it will be entitled to under this ~~Act~~ chapter upon certification by the ~~Department of Community and Regional Affairs~~ agency that the municipality will more likely than not meet the eligibility standards set forth in sec. ~~2~~ 591 of this ~~Act~~ chapter.

(b) Total prepayments to municipalities made under this section may not exceed $5,000,000.

Sec. 44.19.597 APPLICATION. (a) Grants under this Act may be made only upon application by a municipality to the ~~Department of Community and Regional Affairs~~ agency. Each grant application shall state the essential municipal services for which the grant will be expended. A prepayment grant application may be submitted at any time after the effective date of this Act.

(b) No grant may be expended for purposes other than those specified in the application.

44.19.599
* Sec. ~~7~~. ACCOUNTABILITY FOR GRANTS. (a) A municipality shall submit a financial report covering the expenditure of any grant already received under this ~~Act~~ chapter to the ~~Department of Community and Regional Affairs~~ agency before another grant may be received under this ~~Act~~ chapter.

(b) A municipality receiving grants under this Act shall

(1) maintain a separate account for the grants received under this ~~Act~~ chapter;

(2) provide for an annual independent audit of the separate account for the grants received under this ~~Act~~ chapter; and

(3) submit a copy of the independent audit report to the agency ~~Department of Community and Regional Affairs~~.

44.19.601
\# Sec. ~~8~~. APPROVAL. Grants under this ~~Act~~ chapter shall be made by the ~~Department of Community and Regional Affairs~~ at the direction of the governor subject to approval of the ~~Legislative Budget and Audit~~ Special Legislative Pipeline Impact Review Committee.

44.19.603
* Sec. ~~9~~. POPULATION. A municipality shall submit estimated population and population growth figures to the ~~Department of Community and Regional Affairs~~ agency. These population and population growth figures are subject to review and approval by the ~~Department of Community and Regional Affairs~~ agency. The decisions of the ~~Department of Community and Regional Affairs~~ agency are final as to

(1) population growth figures for the purpose of establishing eligibility under sec. ~~2~~ 591 of this ~~Act~~ chapter;

(2) population figures for computing grant amounts under sec. ~~4~~ 593 of this ~~Act~~ chapter; and

(3) population figures for computing prepayment amounts under sec. ~~2~~ 595 of this ~~Act~~ chapter.

* Sec. 10. DEFINITIONS. In this chapter ~~[illegible] Act~~

(1) "population" means non-military population;

(add "agency")

(2) "municipality" means a home rule municipality or a general law municipal corporation and political subdivision, which is a first or second class borough or city incorporated under the laws of the state;

(3) "operating expenditures" means personal services, contractual services, travel, commodities and up to $20,000 per item of equipment except that it does not include any of these items if part of a capital improvement expenditure;

(4) "quarter" means a period beginning January 1, April 1, July 1 and October 1 of a calendar year.

Sec. 44.19.605. REGULATIONS. The ~~Department of Community and Regional Affairs~~ agency may adopt regulations necessary to carry out the purpose of this Act.

Sec. 12. EFFECTIVE DATE. This Act takes efffect on the day after its passage and approval or on the day it becomes law without approval.

Introduced: 2/15/74
Referred: Community and Regional Affairs and Finance

BY THE RULES COMMITTEE BY REQUEST OF THE SPECIAL PETROLEUM IMPACT COMMITTEE

IN THE SENATE

CS for SENATE BILL NO. 382

IN THE LEGISLATURE OF THE STATE OF ALASKA

EIGHTH LEGISLATURE - SECOND SESSION

A BILL

For an Act entitled: "An Act creating the Pipeline Impact Agency; and providing for an effective date."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

* Section 1. AS 44.19 is amended by adding new sections to read:

ARTICLE 8. PIPELINE IMPACT AGENCY.

Sec. 44.19.581. PURPOSE. The legislature finds that construction of the trans-Alaska pipeline, from its commencement to completion over a period of approximately three years, will impose severe to mild strains on local and state governmental services and facilities. While the pipeline construction indubitably will, in the long run, mean immense growth and development to the communities and areas along the pipeline route, and to those areas coming under direct pipeline construction influence, the legislature further finds that localities most affected will be unable to cope with the probable impact on facilities and services brought about by the anticipated overwhelming and sudden increases in numbers of citizens to be served. The legislature finds, also, that communities while likely to be impacted are willing and ready via local taxation to do all possible themselves to meet impact requirements, even to the full limits of local taxation tolerance, nevertheless, recognizing the state will be the prime beneficiary of pipeline construction via realization of enormous oil development revenues for the total state, the legislature finds that local impact financial burdens logically should be borne by the state as its investment in those future revenues. It is, therefore, the intent of the

legislature, in this measure, to provide a means of quickly and decisively determining specific impact problems and, additionally, for moving quickly and decisively to provide funds, facilities, personnel or other means for quick solutions. Finally, the legislature intends via this legislation to meet local and state pipeline construction impact problems as quickly and efficiently as possible in manners similar to the handling of disaster impact problems. ~~The legislature finds, too, that revenue-sharing formulas on per capita or percentage per capita increase basis are less desirable, less effective, and more costly than the case-by-case approach intended in the legislation. Under the formula approach, provision would have to be made for all probable as well as all possible impact contingencies, some of which may never develop.~~

Sec. 44.19.583. PIPELINE IMPACT AGENCY. There is created in the ~~office of the governor~~ Department of Community and Regional Affairs the Pipeline Impact Agency.

Sec. 44.19.585. DIRECTOR. The Pipeline Impact Agency is administered by a director of pipeline impact. The director is appointed by the governor and serves at the pleasure of the governor. The appointment of the director is subject to confirmation by a majority of the members of the legislature in joint session.

Sec. 44.19.587. PROGRAM TO ASSIST MUNICIPALITIES DURING PIPELINE CONSTRUCTION. The Pipeline Impact Agency shall administer a state program to provide assistance to municipalities which are adversely affected, economically and socially, by pipeline construction.

Sec. 44.19.589. POWERS AND DUTIES. (a) The director shall

(1) advise and assist the governor in developing planning assumptions and a broad preparedness plan with respect to the economic and social impact that will accompany pipeline construction;

(2) advise and assist the governor in developing policies,

programs and control systems designed to alleviate the economic and social impact resulting from pipeline construction; and

(3) advise and assist the governor with respect to resolving issues related to pipeline construction impact preparedness responsibilities of state agencies which arise concerning two or more of those agencies.

(b) The director, with the approval of the Special Legislative Pipeline Impact Review Committee ~~(as provided for in secs. 595 - 605 of this chapter)~~, may

(1) make loans and grants and purchase evidences of indebtedness with funds from the pipeline impact fund to municipalities economically or socially adversely affected by pipeline construction;

(2) guarantee municipal bonds when a municipality needs to undertake a capital improvement program on an accelerated basis; and

(3) pay (for not more than three years) from the pipeline impact fund a portion of the debt service or interest or both incurred by a municipality for undertaking capital improvements made necessary by pipeline construction.

(c) Grants under (b)(1) of this section shall be made ~~on the basis of percentage increase in population and not on the basis of per capita increase in population~~. Applications for grants shall be made in a form prescribed by the director. A grant shall be allotted according to an agreement made between the director on behalf of the state and the municipality receiving the grant. The agreement may include any provision agreed upon by the parties and shall include in substance the following provisions:

(1) a schedule of grant disbursements, if, as determined by the director, a grant is to be disbursed other than in one sum;

(2) agreement by the municipality to

(A) proceed with and complete the proposed project or program expeditiously;

(B) not discontinue operation or dispose of all or part of the project or program for which it receives a grant without the approval of the director;

(C) apply for, and make reasonable efforts to secure, federal assistance which may be available for the project or program, subject to any conditions the agency may require in order to maximize the amounts of that assistance received or to be received for all projects or programs in the state;

(3) agreement by the municipality that, if federal assistance for a project or program becomes available to the municipality which was not included in the calculation of the amount of a grant authorized and disbursed under this section, the value of the federal assistance shall be ascertained and subtracted from the total value of the project or program and the balance shall be proportionately divided between the state and municipality;

(4) provision for alteration or modification of an approved project or program and for remedies in case of failure to perform the agreement between the parties or noncompliance with regulations promulgated by the director under this section.

(d) If funds appropriated by the legislature to provide loans and grants and purchase evidences of indebtedness under this section are not adequate to satisfy amounts required by approved grant applications, funds shall be allocated on the basis of priority established by the director by regulations promulgated to carry out the provisions of this section.

(e) The director shall provide a quarterly report to the legislature with respect to grants made under this section.

(f) The director shall determine the terms and conditions for making a loan and purchasing an evidence of indebtedness under this section.

Insert #3

Sec. 44.19.~~592~~ 607. AUTHORITY TO ACCEPT SERVICE, GIFTS, GRANTS, AND LOANS. When the federal government or an agency or officer of the federal government offers to the state, or through the state to a municipality, services, equipment, supplies, materials, or funds by way of gift, grant, or loan, for the purpose of alleviating the social or economic impact resulting from pipeline construction, the state acting through the director, or the municipality acting through its executive officer or governing body, may accept the offer subject to the terms of the offer and the rules and regulations of the agency making the offer.

Sec. 44.19.~~593~~ 609. PIPELINE IMPACT FUND. There is the pipeline impact fund created for the purpose of carrying out the provisions of sec. 587(b) of this chapter. The fund consists of all money made available by appropriations of the state legislature, and from other appropriated funds, all contributions from whatever source, and income and interest derived from the investment of money.

Sec. 44.19.~~595~~ 701. SPECIAL LEGISLATIVE PIPELINE IMPACT REVIEW COMMITTEE. There is established the Special Legislative Pipeline Impact Review Committee composed of three members of the senate appointed by the president of the senate and three members of the house of representatives appointed by the speaker of the house. The committee shall select its own chairman.

Sec. 44.19.~~597~~ 703. TERM OF MEMBERSHIP. The committee shall be organized within 15 days after the organization of each legislature. Members serve for the duration of the legislature during which they are appointed. If they are reelected or their term of office extends

into the next succeeding legislature, they continue to serve until reappointed or the appointment of their successor.

Sec. 44.19.~~599~~ 705. VACANCIES. When a vacancy occurs in the membership of the committee, the presiding officer of the house incurring the vacancy shall choose a successor. If the office of the president of the senate or speaker of the house of representatives becomes vacant and a vacancy from the affected house occurs among the membership of the committee, the remaining committee members from the house incurring the vacancy shall appoint a new member.

Sec. 44.19.~~601~~ 707. MEETINGS. (a) The committee may meet during sessions of the legislature and during the interim between sessions at such times and places in the state as the chairman may determine. Members may receive, for the minimum time required to get to and from meetings and for the period while attending meetings, the same travel and per diem allowances provided by law for members of the legislature when attending sessions, except that members of the committee receive no per diem during legislative sessions other than the per diem allowance paid to other members of the legislature.

(b) The members of the committee can validly conduct a meeting and vote by communicating simultaneously with each other by means of conference telephones or similar communications equipment.

(c) A majority of the members of the committee constitute a quorum for the purpose of carrying out its duties under sec. ~~603~~ 709 of this chapter.

Sec. 44.19.~~603~~ 709. DUTIES OF COMMITTEE. The committee shall review and approve or disapprove, in whole or in part, the decisions made by the Pipeline Impact Agency ~~under sec. 589(b) of this chapter~~.

Sec. 44.19.~~605~~ 801. DIVISION OF LEGISLATIVE FINANCE ASSISTANCE. The division of legislative finance shall cooperate with the committee and

shall furnish technical assistance and personnel, if available, upon request.

Insert #4

* Sec. 2. This Act takes effect on the day after its passage and approval or on the day it becomes law without approval.

Insert #1

(4) allow A community to ~~may~~ borrow from the fund to cover immediate impact needs in anticipation of tax revenues, grants under this act, federal grants, or other revenue sources.

~~(b)~~ Loans under this ~~section~~ paragraph may be granted upon application and the passage by the local governing body of an ordinance authorizing the borrowing. The ordinance shall specify the anticipated revenue sources and provide for a pledge of the revenues to the repayment of the loans.

(c) Loans under this section paragraph shall require concurrence of the Special Legislative Pipeline Impact Review Committee and shall include the following terms:

A (1) The loan shall bear interest at a rate not to exceed six per cent a year.

B (2) No interest may be charged for the first three years of the loan or until January 1, 1978, whichever is sooner.

C (3) If the loan or any part of it is not repaid or otherwise extinguished before the date of commencement of interest, repayment shall be made in equal semi-annual installments, including interest, starting six months following the commencement of interest. The payments schedule shall provide for full payment of the loan over a period of not more than 20 years.

INSERT # 2

~~only~~ only for extraordinary municipal operations expenditures ~~beyond~~ beyond a municipality's capacity to reasonably meet in considering population growth shall be given greater weight than per capita increase in population.

Insert # 3

((forget underlining))

* Sec. 2. 44.18.591 ELIGIBILITY STANDARDS. (a) Grants to carry out the purposes of this ~~Act~~ chapter may be made to a municipality demonstrating

(1) an annual population growth rate in excess of its average annual growth rate for the period April 1, 1970, through July 1, 1973;

(2) extraordinary municipal operating expenditures beyond its capability to reasonably meet from growth in receipts from present municipal revenue sources; and

(3) that both (1) and (2) of this subsection can be directly attributed to the impact of construction of the trans-Alaska pipeline.

(b) The base population for measuring the annual population growth rate for purposes of this section is the population of the municipality on the first day of the quarter in which the effective

* Sec. 3. 44.18.593 GRANT COMPUTATION AND PAYMENT. (a) A municipality is eligible for a grant amount under this ~~Act~~ chapter equal to its population growth by June 30, 1975 in excess of the average annual population growth rate standard established under sec. 2 of this ~~Act~~ chapter 591 multiplied by its per capita general fund expenditures, excluding expenditures for education, capital outlay and debt service, for the last complete fiscal year preceding the effective date of this Act.

(b) A municipality incorporated after the effective date of this Act is eligible for a grant amount under this ~~Act~~ chapter equal to its population growth by June 30, 1975 in excess of the average annual population growth rate standard established under sec. 2 of this ~~Act~~ chapter 591 multiplied by its per capita general fund expenditures, excluding expenditures for education, capital outlay and debt service, for its fiscal year budget.

(c) Total grants under this ~~Act~~ chapter to a municipality with a population of 10,000 persons or more on the first day of the quarter in which ~~the effective date of this Act falls~~ this Act takes effect may not exceed $250 per capita of the population growth in excess of the average annual population growth rate standard established under sec. ~~2~~ 591 of this ~~Act~~ chapter. Total grants under this Act to a municipality with a population under 10,000 persons on the first day of the quarter in which ~~the effective date of this Act falls~~ this Act takes effect may not exceed $400 per capita of the population growth in excess of the average annual population growth rate standard established under sec. ~~2~~ 591 of this ~~Act~~ chapter.

(d) The base population for measuring the per capita general fund expenditures for purposes of this section is the population of the municipality on the first day of the quarter in which ~~the effective date of this Act falls~~ this Act takes effect.

(e) Grants may be made quarterly based upon quarterly population estimates with final adjustment to be made on June 30, 1975. Final grant payments shall be withheld until after final adjustments of amounts are made on June 30, 1975.

* Sec. 44.19. ~~595~~ PREPAYMENTS. (a) A municipality may receive, as a prepayment, up to 50 per cent of the amount it will be entitled to under this ~~Act~~ chapter upon certification by the ~~Department of Community and Regional Affairs~~ agency that the municipality will more likely than not meet the eligibility standards set forth in sec. ~~2~~ 591 of this ~~Act~~ chapter.

(b) Total prepayments to municipalities made under this section may not exceed $5,000,000.

44.19.597
* Sec. 6. APPLICATION. (a) Grants under this Act may be made only upon application by a municipality to the ~~Department of Community and Regional Affairs~~ agency. Each grant application shall state the essential municipal services for which the grant will be expended. A prepayment grant application may be submitted at any time after the effective date of this Act.

(b) No grant may be expended for purposes other than those specified in the application.

44.19.599
* Sec. 7. ACCOUNTABILITY FOR GRANTS. (a) A municipality shall submit a financial report covering the expenditure of any grant already received under this ~~Act~~ chapter to the ~~Department of Community and Regional Affairs~~ agency before another grant may be received under this ~~Act~~ chapter.

(b) A municipality receiving grants under this Act shall

(1) maintain a separate account for the grants received under this ~~Act~~ chapter;

(2) provide for an annual independent audit of the separate account for the grants received under this ~~Act~~ chapter; and

(3) submit a copy of the independent audit report to the ~~Department of Community and Regional Affairs~~ agency.

44.19.601
* Sec. 8. APPROVAL. Grants under this ~~Act~~ chapter shall be made by the ~~Department of Community and Regional Affairs~~ at the direction of the governor subject to approval of the ~~Legislative Budget and Audit~~ Special Legislative Fiscal Impact Review Committee.

44.19.603
* Sec. 9. POPULATION. A municipality shall submit estimated population and population growth figures to the ~~Department of Community and Regional Affairs~~ agency. These population and population growth figures are subject to review and approval by the ~~Department of Community and Regional Affairs~~ agency. The decisions of the ~~Department of Community and Regional Affairs~~ are final as to

(1) population growth figures for the purpose of establishing eligibility under sec. 591 of this chapter;

(2) population figures for computing grant amounts under sec. 593 of this chapter; and

(3) population figures for computing prepayment amounts under sec. 595 of this chapter.

* Sec. 44.19.605 REGULATIONS. The agency may adopt regulations necessary to carry out the purpose of this Act.

Insert #4

* Sec. 44.19.803. Definitions. In this chapter

(1) "agency" means the Fairbanks Impact Agency;

(2) "population" means non-military population;

(3) "municipality" means a home rule municipality or a general law municipal corporation and political subdivision, which is a first or second class borough or city incorporated under the laws of the state;

(4) "operating expenditures" means personal services, contractual services, travel, commodities and up to $20,000 per item of equipment except that it does not include any of these items if part of a capital improvement expenditure;

(5) "quarter" means a period beginning January 1, April 1, July 1 and October 1 of a calendar year.

Finance

BY THE RULES COMMITTEE
BY REQUEST OF THE
SPECIAL PETROLEUM
IMPACT COMMITTEE

IN THE HOUSE

SB 382
CS FOR ~~HB 315~~

IN THE LEGISLATURE OF THE STATE OF ALASKA

EIGHTH LEGISLATURE - SECOND SESSION

A BILL

For an Act entitled: "An Act relating to assisting municipalities, creating a pipeline impact office; and providing for an effective date."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

*Section 1. AS 44.19 is amended by adding new sections to read:

ARTICLE 8. PIPELINE IMPACT AGENCY.

Sec. 44.19.581. PURPOSE. The legislature finds that construction of the trans-Alaska pipeline, from its commencement to completion over a period of approximately three years, will impose severe to mild strains on local and state governmental services and facilities. While the pipeline construction indubitably will, in the long run, mean immense growth and development to the communities and areas along the pipeline route, and to those areas coming under direct pipeline construction influence, the legislature further finds that localities most affected will be unable to cope with the probable impact on facilities and services brought about by the anticipated overwhelming and sudden increases in numbers of citizens to be served. The legislature finds, also, that communities while likely to be impacted are willing and ready via local taxation to do all possible themselves to meet impact requirements, even to the full limits of local taxation tolerance, nevertheless, recognizing the state will be the prime beneficiary of pipeline construction via realization of enormous oil development revenues for the total state, the legislature finds that local impact financial burdens logically should be borne by the state as its investment in those future revenues. It is, therefore, the intent of the legislature, in this measure, to provide a means of quickly and decisively determining specific impact problems and, additionally, for moving quickly and decisively to provide funds, facilities, personnel or other means for quick solutions. Finally, the legislature intends via this legislation to meet local

and state pipeline construction impact problems as quickly and efficiently as possible in manners similar to the handling of disaster impact problems.

Sec. 44.19.583. PIPELINE IMPACT AGENCY. There is created in the ~~office of the governor~~ Dept. of Comm. & Regional the Pipeline Impact Agency.

Sec. 44.19.585. DIRECTOR. The Pipeline Impact Agency is administered by a ~~director~~ of pipeline impact. The ~~director~~ is appointed by the governor and serves at the pleasure of the governor. (Add legislative confirmation))

Sec. 44.19.587. PROGRAM TO ASSIST MUNICIPALITIES DURING PIPELINE CONSTRUCTION. The Pipeline Impact Office shall administer a state program to provide assistance to municipalities which are adversely affected, economically and socially, by pipeline construction.

Sec. 44.19.589. POWERS AND DUTIES. (a) The director shall

(1) advise and assist the governor in developing planning assumptions and a broad preparedness plan with respect to the economic and social impact that will accompany pipeline construction;

(2) advise and assist the governor in developing policies, programs and control systems designed to alleviate the economic and social impact resulting from pipeline construction; and

(3) advise and assist the governor with respect to resolving issues related to pipeline construction impact preparedness responsibilities of state agencies which arise concerning two or more of those agencies.

(b) The director, with the approval of the ~~Legislative Audit~~ Special Leg. Impact Comm. Committee may

(1) make loans and grants and purchase evidences of indebtedness with funds from the pipeline impact fund to municipalities economically or socially adversely affected by pipeline construction;

(2) guarantee municipal bonds when a municipality needs to undertake a capital improvement program on an accelerated basis; and

(3) pay (for not more than three years) from the pipeline impact fund a portion of the debt service or interest or both incurred by a municipality for undertaking capital improvements made necessary by pipeline construction.

(c) Grants under (b) (1) of this section shall be made and shall be made only for extraordinary municipal operations expenditures beyond a municipality's capacity to reasonably meet. In considering population growth ~~shall be given~~ shall be given to percentage population growth greater weight than per capita increase in population. Applications for grants

shall be made in a form prescribed by the director. A grant shall be allotted according to an agreement made bewteen the director on behalf of the state and the municipality receiving the grant. The agreement may include any provision agreed upon by the parties and shall include in substance the following provisions:

(1) a schedule of grant disbursements, if, as determined by the director, a grant is to be disbursed other than in one sum;

(2) agreement by the municipality to

(A) proceed with and complete the proposed project or program expeditiously;

(B) not discontinue operation or dipose of all or part of the project or program for which it receives a grant without the approval of the director;

(C) apply for, and make reasonable efforts to secure, federal assistance which may be available for the project or program, subject to any conditions the agency may require in order to maximize the amounts of that assistance received or to be received for all projects or programs in the state;

(3) agreement by the municipality that, if federal assistance for a project or program becomes available to the municipality which was not included in the calculation of the amount of a grant authorized and disbursed under this section, the value of the federal assistance shall be ascertained and subtracted from the total of the project or program and the balance shall be proportionately divided between the state and municipality;

(4) provision for alteration or modification of an approved project or program and for remedies in case of failure to perform the agreement between the parties or noncompliance with regulations promulgated by the director under this section.

(d) If funds appropriated by the legislature to provide loans and grants and purchase evidences of indebtedness under this section are not adequate to satisfy amounts required by approved grant applications, funds shall be allocated on the basis of priority established by the director by regulations promulgated to carry out the provisions of this section.

(e) The director shall provide a quarterly report to the legislature with respect to applications and grants made under this section.

(f) The director shall determine the terms and conditions for making a loan and purchasing an evidence of indebtedness under this section.

(g) The director shall defer action on all applications which do not require immediate action until the Ninth State Legislature at which time the director shall submit to the legislature a listing of applcations together with his evaluation of the priority and urgency of each request.

Sec. 44.19.591 AUTHORITY TO ACCEPT SERVICE, GIFTS, GRANTS, AND LOANS. Whne the federal government or an agency or officer of the federal government offers to the state, or through the state to a municipality, services, equipment, supplies, materials, or funds by way of gift, grant, or loan, for the purpose of alleviating the social or economic impact resulting from pipeline construction, the state acting through the director, or the municipality acting through its executive officer or governing body, may accept the offer subject to the terms of the offer and the rules and regulations of the agency making the offer.

Sec. 44.19.592 INITIAL GRANTS TO IMPACT COMMUNITIES. (a) Eligibility Standards.

(1) Grants to carry out the purposes of this Act shall be made to a municipality demonstrating an annual population growth rate in excess of ~~four percent;~~ growth from 1970 to 1974

(2) The base population for measuring the annual population growth rate for purposes of this section is the population of the municipality on the first day of the quarter of the calendar year during which the construction date of the trans-Alaska pipeline occurs.

(b) Grant Computation and Payment.

(1) A municipality is eligible for a grant amount under this Act equal to its population growth by June 30, 1975 in excess of the 2.9 percent annual population growth rate standard established under Sec. 2 of this Act multiplied by that percentage which population growth of the municipality in excess of ~~2~~ percent bears to total population growth in excess of four percent for all Alaska municipalities multiplied by the sum or $10,000,000.

(2) Grants may be made quarterly based upon quarterly population estimates with final adjustment to be made on June 30, 1975. Final grant payments shall be withheld until after final adjustments of amounts are made on June 30, 1975.

(c) Prepayments.

(1) A municipality may receive, as a prepayment, up to 50 percent of the amount it will be entitled to under this Act upon certification by the Pipeline Impact Office that the municipality will more likely than not meet the eligibility standards set forth in Subsection (a).

(2) Total prepayments to municipalities made under this section may not exceed $5,000,000.

(d) Application. Grants under this Act may be made only upon application by a municipality to the Pipeline Impact Office. Each grant application shall state the projected population increase in excess of ~~four percent~~ growth rate for the period of July 1, 1974 through June 30, 1975 together with the data upon which the projectsion are based.

(e) Approval. Grants under this Act shall be mady by the Pipeline Impact Office at the direction of the governor subject to approval of the Legislative Budget and Audit Committee.

(f) Population. A municipality shall submit estimated population and population growth figures to the Pipeline Impact Office. These population and population growth figures are subject to review and approval by the Pipeline Impact Office. The decisions of the Pipeline Impact Offices are final as to

(1) population growth figures for the purpose of establishing eligibility under Subsection (a);

(2) population figures for computing grant amounts under Subsection (c) of this Act; or

(3) population figures for computing prepayment amounts under subsection (d).

Sec. 44.19.593. PIPELINE IMPACT FUND. There is the pipeline impact fund created for the purpose of carrying out the provisions of sec. 587(b) of this chapter. The fund consists of all money made available by appropriations of the state legislature, and from other appropriated funds, all contributions from whatever source, and income and interest derived from the investment of money.

Sec. 44.19.595. DEFINITIONS. For purposes of this Act

(1) "construction commencement date" means the date the following occur:

(A) There has been issued to the owner of his agen right-of permits, leases, and title and other rights in lands, and other approvals, permits, licenses and certificates, by federal, state and local agencies that a reasonable and prudent person would consider adeuqate to commence construction of the facilities in the expectation that all other approvals permits, licenses and certificates necessary for the completion of facilities will be obtained;

(B) all approvals, permits licenses and certificates are in full force and effect, unrevoked and without any modification, which might jeopardize the completion or continued construction of the facilities; and

(C) no order, judgement, decree, determination or award of a federal, state or local court or administrative or regulatory agency enjoining, either temporarily or permanently, the construction of the continuation of construction of the facilities is in effect.

Home Rule &

(2) "municipality" means a general law municipal corporation and political subdivision, which is a first or second class borough or city incorporated under the laws of the state;

(3) "operating expenditures" means personal services, contractural services, travel, commodities and up to $20,000 per item of equipment except that it does not include any of these items if part of a capital improvement expenditure;

(4) "quarter of a calendar year" means a period beginning January 1, April 1,July 1, and October 1 of a calendar year.

Sec. 44.19.597. REGULATIONS. The Pipeline Impact Office may adopt regulations necessary to carry out the purpose of this Act.

Sec. 44.19.599. EFFECTIVE DATE. This Act takes effect on the day after its passage and approval or on the day it becomes law without approval.

Sec. 2. This Act takes effect on the day after its passage and approval or on the day it becomes law without approval.

Agency Bill SB 382

1.) change insert #2 per Arch. draft. – done

2.) line 15, p. 3 (of insert) something missing

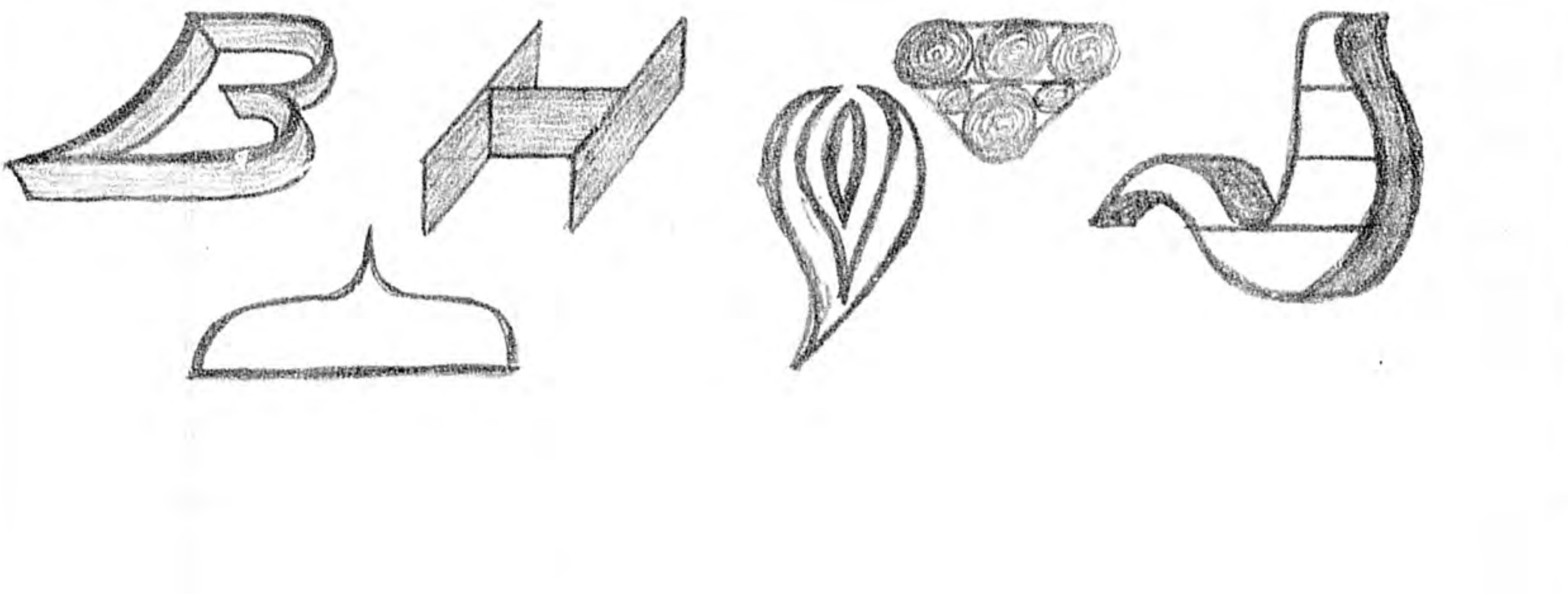
sec. 581. – defer

(1) Budget & Audit will do it.
(2) discretionary grants
(3) formula grants. – director shall make grants according to pop. increase

– "may" per Pettig's bill. (not a finding of need).

see. SB 270 (Slides)

– typo, top of p. 2 "non" in reference "nonrenewable" resource should be taken out.



PLEASE NOTE: THE PRECEDING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT.

Washington Analysis Corporation
1612 K STREET N.W., WASHINGTON, D.C. 20006 (202) 659-8030

APR 7 1980

March 12, 1980

THE ALASKAN GAS PIPELINE

Summary and Conclusions

Although generally recognized as a project vital to U.S. energy security and very significant to economic development in Canada, the proposed pipeline to transport natural gas from Alaska's Prudhoe Bay to the lower 48 states has still not emerged from the planning phase. Recent oil price rises have probably made the project a viable one from an economic perspective, but currently it is tied up in a knot of ill-advised federal decisions that will require new legislation to untangle. While the intent of these government actions was to forestall inequities and speed construction, it is our belief that the strictures laid down are so tight as to prevent funding and building of the pipeline until the law is changed.

A Special Advisor to DOE recently proposed a new financing scheme in an attempt to break the impasse, but it has been unfavorably received by Congress and the White House, as well as the companies involved. We doubt that new legislation will be considered until 1981, and then we expect the debate to drag on for months. Once a new funding plan is approved, pipeline construction companies such as Bannister Continental will be in a strong position to benefit, as will line pipe manufacturers such as Steelco, and other firms engaged in supplying large construction projects. We stress, however, that project start-up is probably at least two years further away from reality than has been commonly assumed.

History of the Pipeline

Plans were conceived for transporting Alaskan oil and gas to the lower 48 states shortly after the great Prudhoe Bay discovery was made in 1968. By 1978, the Trans-Alaskan Pipeline System (TAPS) was in place and sending crude petroleum south. However, the development of the Alaskan Natural Gas Transmission System (ANGTS) has met with a series of delays. Currently gas is being re-injected into the oil reservoir. (Figures on resource and pipeline ownership by North Slope producers are shown in Appendix 1.)

Three groups, the El Paso, Arctic Gas and Alcan consortiums, were formed in 1969 to compete for a government license to build a gas pipeline. The construction certificate was ultimately awarded to Alcan, of which Northwest Energy was the parent company. Among the reasons cited were environmental superiority and Alcan's assurance that its project could be financed entirely in the private sector. Subsequently, Alcan was joined by other pipeline companies (listed in Appendix 2), and became known as the Alaskan Northwest Natural Gas Pipeline Company. The project was the subject of an elaborate treaty between the United States and Canada in 1977.

The proposed 4,800-mile gas pipeline would travel south from Prudhoe Bay, paralleling the oil line to Fairbanks, follow the Alaskan Highway to the Canadian border, then head across Canada and split near Calgary, Alberta, into two segments -- a western leg extending to San Francisco, and an eastern leg to Chicago. The Canadian part of the line would be built by the Foothills consortium, composed of two Canadian firms (listed in Appendix 2). The transmission system would carry about 2.4 billion cubic feet of gas per day and DOE estimates total costs at $23 billion, in 1979 dollars: $2 to $3 billion for the lower 48 portion, $6.0 billion for the Canadian leg, and $15 billion for the Alaskan segment. The great expense of the Alaskan segment is due to field development and gathering systems (estimated at $4 billion), construction of a conditioning plant to clean the gas and separate it into different fuels (estimated at $3.5 billion), and building of the pipeline itself, under difficult Arctic conditions (estimated at $7.5 billion).

Comprehensive design and civil engineering studies have yet to be undertaken and thus the cost estimates are not firm. Design alone is conservatively estimated by DOE at $500 million, and would be completed by 1982 if started now. Construction of the transmission system would take an additional three to four years.

Government Decisions

Starting in 1976, Federal authorities issued a number of rulings on the ANGTS which were supposed to provide for swift construction of the pipeline. The government's intent was to prevent problems similar to those plaguing TAPS. However, the actual effect of determinations made so far by the Congress, the President, and the Federal Energy Regulatory Commission (FERC), has been to hinder seriously the prospects for moving ahead. The difficulties arise mainly with the Alaskan section of the ANGTS, since the Lower 48 and Canadian sections should be relatively easy to finance and construct. However, because the Alaskan portion accounts for more than two-thirds of cost and is the first link to Prudhoe Bay, its status is vital to the rest of the project. The government decisions and their impact to date are reviewed below.

CONGRESSIONAL LEGISLATION: In the Alaskan Natural Gas Pipeline Act of 1976, Congress legislated policy on certain aspects of the pipeline. The Act had two major provisions of interest:

1) Congress stipulated that it would award building rights to whatever company proposed the route finally chosen by the President.

This arrangement committed the Government to backing whatever consortium happened to propose the desirable route, quite aside from the financial and technological strength of the consortium itself. As a result, the ANGTS construction certificate went to a group led by Northwest Energy, a regional transmission company which the oil industry and financial community find difficult to take seriously as a builder of transcontinental pipelines. Moreover, Northwest's Executive Officer, John MacMillian, is viewed as a highly unconventional figure, and his personal ties to President Carter and financial ties to the Carter campaign committee have not helped to diminish the lack of confidence with which many regard his consortium.

2) Congress also insisted that access to the ANGTS be guaranteed for any concern that wishes to ship gas, regardless of participation in the building of the pipeline.

The intent of this stipulation was to prevent the owners of the pipeline from monopolizing access to the system, and to encourage other firms to search for gas. The effect, for now, has been to make participation in the ownership consortium unattractive to other potential shippers. With access guaranteed, they feel little compulsion to participate in the costly, high-risk planning phase of what appears to them as a weak and floundering project.

PRESIDENTIAL DECISION: President Carter issued his decision on pipeline financing and ownership in June, 1977. While it has aroused much controversy, changes will not be easy because The Alaskan Natural Gas Pipeline Act requires Congressional approval of major alterations in the Presidential ruling. The three conditions set by Carter on Alcan's right to build the ANGTS were:

1) Gas producers that develop Prudhoe Bay petroleum resources (i.e., Exxon, ARCO, and Sohio) are forbidden from having any equity ownership -- and hence any management voice -- in the pipeline, and they are restricted to debt financing for any interest they might wish to acquire.

While the oil companies have traditionally stayed out of the gas transmission business, the enormous cost of the proposed pipeline makes conventional approaches questionable. The major North Slope petroleum concerns form one of the few groups with enough money to contribute towards such an undertaking. The Presidential Decision, however, closes off this source of equity capital. It is unlikely that producers would be inclined to tie up billions of dollars in commercial loans that carry a high risk, yet offer low returns and no management rights.

2) None of the pipeline's construction expenses may be billed to consumers before the project is finished. Only after the pipeline is built and operating can owners begin to recover costs through consumer charges.

Consumers are another of the very few groups able to guarantee this multi-billion dollar project. If prevented from incurring surcharges, they can merely ensure timely repayment of costs after the pipeline is built, rather than inspire investor confidence as an exploitable source of capital in the risky precompletion phase. However, the Carter decision makes any other outcome unavoidable.

3) The Federal Government will take no part in financing of the pipeline via guarantees.

This condition was set on the basis of Northwest's assertions that all funds could be raised in the private sector. However, Northwest envisioned consumers and producers -- the latter on a debt as well as a non-management equity basis -- as important sources of capital when it made its assurances. Regardless of Northwest's hopes, this is unlikely to occur. Hence, the Administration, having removed the only alternatives to government participation, then proceeded to eliminate the government as well. President Carter apparently felt federal guarantees were politically unacceptable.

FERC RULINGS: FERC is involved in three major aspects of the natural gas pipeline. It has ruled that:

1) Gas producers must themselves bear all conditioning costs.

Although in the past it was generally accepted that producers would pay for conditioning costs, FERC policy of the last several years has allowed more flexibility in the apportionment of these expenses between producers and pipelines. Hence this decision amounts to a major policy reversal, and probably reflects FERC awareness of the Northwest group's inherent financial weakness, as well as certain fears of "Big Oil monopoly control." At any rate, while producers are willing to share conditioning costs with the pipeline consortium (and even the Presidential Decision envisioned this), carrying the entire burden is unacceptable, especially in view of the substantial non-completion risks. Moreover, FERC, having saddled the producers with responsibility for conditioning, has also ruled that the costs (estimated at well over $.75 per mcf, in 1980 dollars) must not be added to the allowable well-head price ($1.80 per mcf in February 1980, escalating by inflation as measured by the GNP deflator).

2) A variable rate of return (ROR) has been set which ignores the investment tax credit (ITC). The ROR on the Alaskan segment of the line has been placed at a center-point of 17.5% if the project is completed without cost overruns. For the lower 48 leg the figure will be 15%.

Some FERC staffers have complained that the return established by the Commission is too high and will cause unfair prices to consumers. Moreover, while government agencies are directed to overlook the ITC when setting rates of return, the policy has caused concern in this case, due to the prodigious amounts of money involved. Calculations that include the effect of the tax credit place the center-point ROR as high as 30.5%. While such a high return would undoubtedly be a boon to the pipeline's equity owners, the differential between their return and that of prospective lenders is a severe disincentive to the latter. If other parties ultimately secure pipeline debt, the ROR will have to be reduced and the investment tax credit taken into account, because the risk will no longer be so high. And such an extraordinary ROR would be politically unacceptable under those conditions.

Of course, there is the possibility, under the novel variable return concept, that unexpected cost overruns could reduce the ROR to a level well below the 17.5% and 15% figures mentioned above. This, however, only makes for added project risk.

3) One area in which FERC has yet to set policy, and where its ruling is eagerly awaited, regards "tracking" -- pass-through arrangements that automatically send costs forward to consumers. While the Presidential Decision forbids pre-completion surcharges to customers, "tracking" will still be necessary once the pipeline is operating, and it would become immediately relevant if surcharges were permitted. Tracking may have to be put in place by federal legislation that would override state utility commissions. Given the enormous cost of the project, there are many circumstances under which state commissions might wish to protect consumers from bearing any costs not directly related to their own gas consumption.

PROJECT FINANCE: Although it is not strictly a decision of the government, Federal authorities have apparently concurred with Northwest's proposal to finance the pipeline on a non-recourse basis (where lenders could seize only assets of the pipeline, and not those of equity owners, in the event of project failure). While this arrangement certainly protects Northwest's position, it makes it even more difficult for the ANGTS to attract normal debt capital. Such a method of financing, viewed in relation to the absence of any strong "guarantor of last resort," makes the ANGTS particularly risky during the construction phase. Since Northwest lacks the financial strength to allow for conventional recourse, a shift away from project finance would automatically imply a radically altered equity base. Moreover, debt owners may simply demand recourse financing if there are no absolute federal guarantees or perfect "tracking" mechanisms for an all-events tariff.

Outlook

We feel it is virtually certain that the ANGTS will never be built under the arrangements described above. Delays on the Alaskan leg of the project will also hold up "pre-build" of the Canadian portion since authorities in Ottawa -- in a move to protect their own exports going through the line -- have ruled that reasonable assurances for financing of the entire project must be obtained before Canadian firms may begin construction on their segment.

A Special Advisor to DOE, Martin Lipton, recently formulated a plan that would have overturned the troublesome provisions of past federal decisions, but the plan was rejected by the White House and key members of Congress, as well as by sponsors and producers. The scheme contained what we consider to be the essentials for ANGTS construction, namely, federal guarantees and equity participation by North Slope producers. The President and energy legislators on Capitol Hill are against the scheme because they do not want the government to back lucrative rates of return for "Big Oil." Northwest is opposed because it does not want its 100% ownership of the ANGTS tampered with; and producers dislike the plan because their ownership would be disportionate with their financial committment. However, Lipton's proposal represents the considered opinion of an outside source that current financing plans are unworkable, and it tends to confirm the belief that they must be altered in some way. While this specific scheme has been rejected, we expect its general thrust to be adopted eventually. Indeed Lipton's main concern may only have been to stir up debate and provide the initial impetus for change.

The Lipton proposal would have included the conditioning plant in project expenses and established an initial fund of $11 billion to cover the total estimated cost. Two over-run pools would also have been set up: the first a $5.5 billion fund consisting of 90% producer and 10% sponsor monies, and the second a government-backed fund of $10 billion. The over-all capital structure would have been 75% debt and 25% equity. This plan differed somewhat from a proposal Exxon submitted in October of 1979, calling for a similar over-all capital structure, but allowing producers to put up 40% of debt and equity, with conditioning costs borne by sponsors.

Before Congress will ever consent to such a comprehensive revamping of ANGTS financing, Northwest itself will have to admit that its original funding schemes cannot succeed. In our opinion, this confession of failure is inevitable. At that point -- since such an admission would largely defeat the purpose of having chosen Northwest in the first place -- Congress is likely to strike down Northwest's total control of the ANGTS. That of course, is not to say that it will entirely eliminate the Northwest sponsors from the pipeline project. We see diluted Northwest ownership, as envisioned in the DOE and Exxon proposals, as the most likely outcome (though it will only come about over the strenuous objections of John MacMillian). However, to instill true confidence in institutional lenders it might be necessary to bring more than just the North Slope producers in on equity participation; other transmission companies might also be required. This would further erode Northwest's position.

At issue in Congress will be not the necessity of producer participation but its extent and form. Congress will probably favor a degree of control over pipeline construction by ARCO, Exxon and Sohio, but its attitude on the producers' role in pipeline operation is less certain. As mentioned, Northwest has been contemplating a scheme whereby producers would have equity participation in the building of the ANGTS, as well as a guaranteed rate of return on investment once the pipeline was finished, but with no management role after completion. Congress would no doubt favor this scheme as a way of obtaining producer monies while avoiding long-term producer control. However, it is unlikely that producers would readily forego all operating rights over a project into which they have poured billions of dollars. So when the inevitable new financing plan is authorized, we expect that Congress -- unless it prefers massive consumer surcharging or outright federal ownership of the pipeline -- will have little choice but to strike some bargain with the North Slope companies.

This is likely to be a very long, drawn-out process. We doubt that any serious action will be taken during 1980. Legislation may well be introduced after the elections, during the Congressional session commencing in 1981. But debate on such a controversial topic will occupy many months, so that a new ANGTS financing plan will probably not go through until late next year at the earliest. At that point it will still be necessary to complete the engineering studies (which provide the basis for cost estimates) and arrange for financing. Construction could then begin in 1983 with the first gas flowing in 1987.

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Appendix 1

Ownership of Prudhoe Bay Oil, Gas and Pipelines

Company	TAPS 1/	Crude Oil 2/	Natural Gas 3/	Possible ANGTS 4/
ARCO	21.00	20.38	35.7	15/22.5
Exxon	20.00	20.38	35.7	15/25.5
Sohio	33.34	52.96	26.1	10/15.0
BP	15.84	-0-	-0-	--
Mobil	5.00	2.08	.8	--
Phillips	1.66	2.03	.8	--
Amerada Hess	1.50	0.54	.2	--
Union	1.66	-0-	-0-	--
Chevron	-0-	0.84	.5	--
Getty	-0-	.55	.2	--
Other 5/	-0-	.23	.1	60/40
	100.00	100.00	100.0	100

Calculation of Gas Ownership

Company	Associated Gas	Gas Cap	Total 6/
ARCO	20.38	42.24	35.68
Exxon	20.38	42.24	35.68
Sohio	52.96	14.59	26.16
BP	-0-	-0-	-0-
Mobil	2.08	.27	0.81
Phillips	2.03	.26	0.79
Amerada Hess	.54	-0-	0.16
Union	-0-	-0-	.17
Chevron	.84	.40	0.53
Getty	.55	-0-	.17
Other	.23	-0-	.07
	100.00	100.00	100.00

1/ Percentage ownership in the Trans-Alaska Pipeline System, after the July 1974 expansion agreement.

2/ Crude oil ownership of the Prudhoe Bay pool, producing mainly from the Sadlerochit reservoir, but also the Shublik, and Sag River formations. (The Prudhoe Bay field also contains the separate Kuparuk and Lisburne formations.) These figures are subject to revision under the unit agreement, as the reservoir characteristics become more understood.

3/ Natural gas ownership is subject to several uncertain activities. First, the Prudhoe Bay pool contains both associated gas as well as a gas cap, each with different ownership patterns. Second, there is still much disagreement over the amounts of each type of gas in place, and over the extent to which each can be produced. See table of calculations on gas ownership.

4/ Possible percentage ownership in the Alaska Natural Gas Transportation System if the three major gas producers take proportionate shares totaling either 40% or 60%.

5/ Crude oil and associated natural gas producers include: Placid (.04), Louisiana Land (.04), Marathon (.04), and the Hunt family (.09). In the case of the gas pipeline, there is still great uncertainty over the possible equity ownership, but if the gas producers were to own a total of 40% for example, it might be apportioned as shown.

6/ Total gas ownership is based on an assumed apportionment of producable gas of 30% associated in the oil rim and 70% in the gas cap.