ALASKA NATURAL GAS TRANSPORTATION SYSTEM

OVERSIGHT HEARINGS

BEFORE THE

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

OF THE

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS HOUSE OF REPRESENTATIVES

NINETY-SIXTH CONGRESS

FIRST SESSION

ON

ALASKA NATURAL GAS TRANSPORTATION SYSTEM

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ALASKA NATURAL GAS TRANSPORTATION SYSTEM

MONDAY, OCTOBER 15, 1979

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS,
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D.C.

The subcommittee met, pursuant to notice, at 9:47 a.m., in room 1324, Longworth House Office Building, Hon. Harold Runnels (chairman of the subcommittee) presiding.

Mr. RUNNELS. The subcommittee will come to order.

Today the Oversight and Investigations Subcommittee will begin hearings on the Alaska Natural Gas Transportation System. This subcommittee has been assigned legislative jurisdiction over this project by the House Committee on Interior and Insular Affairs, a responsibility conferred upon the committee under rule X of the rules of the House of Representatives through assignment of jurisdiction over public lands.

I have called these hearings because I feel it is essential for all Members of Congress and the public to be kept informed of the progress toward construction of what will likely be the largest privately financed international business venture of all time. Because the pipeline will transport a domestically produced energy resource from the North Slope of Alaska, through Canada, to critical markets in the Midwest and the west coast, it is unique in an otherwise complicated and uncertain national energy picture.

Two factors, the pipeline's impact on our domestic energy supply picture and the reorganization of Government to accomplish a specific energy goal, underscore my interest in holding these hearings. Today, we will hear from the four project sponsors who will be building the pipeline. We hope to find out how much it will cost and when it is expected to be completed.

Tomorrow we will hear testimony from the new Federal inspector, Mr. John Rhett, who will function as the "one window" contact point with the project sponsors and will carry with him all Federal authority on matters pertaining to preconstruction, construction and initial operation of the system. I believe that Mr. Rhett fully appreciates that the success of this approach will depend on his ability to achieve prompt, coordinated decisionmaking.

There are questions about the pipeline which cannot yet be answered. We want to learn about these issues, whether they are environmental, technical, or financial, and about the issues which have already been resolved through the diligent efforts of the sponsors and the Federal agencies. This subcommittee intends to

keep an open minded and supportive position in the process of identifying and resolving conflicting interests. In any project of this magnitude and complexity those interests are serious and can have long-range impacts. It is our intention to continue to bring significant issues to light through further hearings in the months ahead.

When the transcripts of these hearings are printed, a staff report on the status of this project will also be printed as part of the hearing record. I hope all of you will have a chance to read it.

I would at this time like to thank the witnesses for coming today. Many have had long distances to travel and are taking time away from busy schedules, and we appreciate the effort which they have made. We intend to make their complete testimony available for full distribution to our congressional colleagues and the public. I would ask that all witnesses summarize their statements in about 10 minutes, if that is possible. We will then follow with questions.

Mr. Clausen.

Mr. CLAUSEN. Thank you, Mr. Chairman.

I want to commend you for scheduling these oversight hearings on the proposed Alaska Natural Gas Transportation System and to join with you in welcoming the witnesses to the committee. I am hopeful we can develop the kind of hearing and the data in this hearing process that you have articulated in your opening statement.

Today, we in the Congress realize the urgent national need for establishing energy distribution systems to various regions of our Nation. Hopefully, these hearings will reflect congressional concern in seeing that such systems are actually established.

It seems only yesterday that we as members of the Subcommittee on Public Lands reported a bill entitled Alaska Natural Gas Transportation Act for the full Interior Committee to consider. The primary purpose of this legislation was to expedite a decision on the delivery of the Alaska natural gas to U. S. markets. As you will recall, while this legislation was being considered I expressed three main areas of interest:

One, a provision for new facilities to assure direct gas deliveries to the western and eastern regions of the United States; and second, a need for one department, entity, or administrator to be responsible for approving preconstruction, construction, and initial operation of the gas system; and third, to recognize a need for coordination and cooperation toward achieving energy self-sufficiency here in this Western Hemisphere.

Fortunately, in 1976 Congress enacted the Alaska Natural Gas Transportation Act and mandated that new facilities must be included within the particular route selection by the President. Later, in September 1977, Congress received and approved the President's route decision. In a short period of time afterward, an executive policy board came into existence and later a Federal inspector position was created.

We are now in a position to receive through this subcommittee's oversight and investigative authority an update on the progress toward achieving construction of an Alaska natural gas transportation system.

Mr. Chairman, I am hopeful the subcommittee members and staff will exhibit as much vigor and determination in addressing

the proposed transportation system as we have in addressing the equitable distribution of Alaska North Slope crude oil. Again, Mr. Chairman, we, the members of the committee, are grateful and deeply in your debt for moving quickly in taking the initiative to permit us to develop the kind of a hearing record that is in our area of jurisdiction and responsibility. So I commend you, sir.

Mr. RUNNELS. Do any other members of the subcommittee have an opening statement?

Mr. LAGOMARSINO. Mr. Chairman, just a few words.

I want to join my colleague Mr. Clausen, in commending you and in commending him for holding these hearings. I think while perhaps other oversight committees of the Congress get more press and while they do things that might be more dramatic, the record will show that the work of this subcommittee has been very constructive and has already resulted in some very important legislation and some important issues being discussed and brought to the attention of the public. We made some changes; we have not just made headlines. So I compliment the gentleman.

Mr. RUNNELS. Any other opening statement? If not, I thank each one of you for being here this morning.

Before proceeding to our first witness, we will have inserted as part of the hearing record the staff report previously mentioned, including the appendixes to that report; plus a prepared statement submitted by the General Accounting Office.

Hearing no objection, so ordered.

[The report referred to above entitled, "Alaska Natural Gas Transportation System: Status Report"; and the prepared statement from the General Accounting Office may be found in the appendix. See table of contents for page number.]

Mr. RUNNELS. Our first witness will be Mr. Robert L. Pierce, president and chief executive officer of the Foothills Pipe Lines (Yukon) Ltd.

Is Mr. Pierce here?

Mr. MCMILLIAN. We requested a change in schedule.

Mr. RUNNELS. I know but we are going to try to keep to our schedule and call witnesses as we had them on the witness list.

Is Mr. Pierce in the room?

Mr. PIERCE. Yes.

Mr. RUNNELS. You may proceed.

[Prepared statement of Robert L. Pierce may be found in the appendix.]

STATEMENT OF ROBERT L. PIERCE, PRESIDENT AND CHIEF EXECUTIVE OFFICER, FOOTHILLS PIPE LINES (YUKON) LTD.; ACCOMPANIED BY MURRAY STEWART, EXECUTIVE VICE PRESIDENT; BRUCE SIMPSON, AND RICK COOKE, EXECUTIVE ASSISTANTS

Mr. PIERCE. Mr. Chairman, members of the committee, my name is Robert L. Pierce, president and chief executive officer of Foothills Pipe Lines, Yukon, the company essentially responsible for the construction of the Alaska Highway System in Canada. With me is Mr. Murray Stewart, executive vice president, sitting behind us are Mr. Bruce Simpson and my executive assistant, Mr. Rick Cooke.

During the time available, Mr. Chairman and members of the committee, we would like to provide the committee with a brief summary of the progress made in Canada since the fall of 1977. In that context we will comment upon significant Canadian legislative developments, progress of technical work which has been carried out by the Canadian sponsors, the status of pertinent NEB proceedings, and the outlook for private financing of the Canadian segment of the system.

We would also like to discuss shortly with you as well the proposal to prebuild the substantial portion of the system in order to export an additional 1.04 billion cubic feet of Alberta natural gas to the United States.

The Canadian portion of the system will have an initial capacity to transport approximately 2 to 2.4 billion cubic feet per day of Alaska gas and 1.2 billion feet per day of Canadian gas, with the addition of looping and compression, however. The system could ultimately transport as much as 3.2 billion feet of Alaska gas per day.

Our NEB 1979 capital cost estimate for the Canadian portion of the system was $5.768 billion for a late 1984 startup as compared with the original antitarget of 4.235 billion for a January 1983 start. The increase has been caused primarily for the regulatory and legislative delays occurring in the United States.

We are doing everything possible to minimize our expenses without jeopardizing the current construction schedule. Fortunately, however, the principal cause of cost increases today is delay. Continuing delay makes any project more costly, particularly now, given the current inflation rate in North America and the spiraling cost of capital.

Notwithstanding that we are hopeful, a significant portion of the Canadian-United States segments can be prebuilt within the next 2 years. If this proposal is approved in a timely fashion by the appropriate Canadian and American regulatory bodies, we would believe it would accomplish the following:

One, it would reduce the capital cost of a significant portion of the system;

Two, it would spread out the total construction period;

Three, it would serve to reduce the ultimate total cost of service for Alaska gas;

Four, it would improve the earnings and the cash flow of the project sponsors, thereby strengthening their financial position as they continue their work to complete the total system; and

Five, it would demonstrate that the large diameter high-pressure pipeline can be installed and safely operated without major cost overruns and schedule delays.

To achieve these benefits we have advised the Northwest Alaska that in our view there must be complete dedication of all concerned parties to assure completion of all the components of the prebuilt, including the northern border section, by November 1981.

Further, the Canadian participants in the project believe that not only is such a schedule achievable, but are prepared to join with Northwest to achieve such completion of the northern border pipeline.

In Canada over the past 2 years, we believe there has been significant progress. In April of 1976, approximately 5 months after congressional ratification of the presidential decision, our Parliament passed the Northern Pipeline Act, which gave full force and effect to the agreement reached between our two countries.

Among other things, that act granted certificates of public convenience and they are authorizing the five Foothills subsidiaries to construct and operate the Canadian portion of the system, establish procedures and standards for the filing and review of Foothills tariffs, and limited judicial review of the decisions issued by the National Energy Board in connection with the pipeline.

The act also established the Northern Pipeline Agency, something very much akin to your Federal inspector, and vested it both with the responsibility and the authority to oversee the construction of the pipeline in Canada.

The agency has already issued final terms and conditions on technical requirements for the system and its final terms and conditions on socio-economic and environmental matters are expected to be issued in the near future.

National Energy Board has also worked hard to expedite the Canadian process. It has issued a proposed approach to the incentive rate of return mechanism which was envisioned by the agreement in principal between our two countries; it has issued orders on the proposed mainline and prebuild tariffs of Foothills, as well as the method for regulation of the cost of service contracts, and it has completed hearings on the application of Pan-Alberta to export in excess 1 billion cubic feet of gas per day to the United States through the prebuilt portions of the systems.

The indications are that a decision should be forthcoming on that hearing within the next month and a half.

The board has also established and expedited schedules for all remaining matters affecting the system in Canada, including proof of financing, and the finalization of its approach to the incentive rate of return.

At the company level, Foothills had made a substantial amount of progress in the technical work which must be completed prior to the commencement of construction. Detailed location work is essentially complete for the entire system; design work is in an advanced stage for the entire system, and almost complete for the prebuild portions; geotechnical and geothermal studies are continuing in the Yukon at a high level; frost heave studies are continuing at our facilities in Calgary, and additional pipe burst tests are scheduled for next month.

We are trying to do everything that we set out to do 5 years ago. We can assure you if there is further delay in the project it will not be caused by anything within the reasonable control of our companies.

We remain optimistic about the Alaska natural gas transmission system. We are convinced today as we were before that the project is in the best economic interests of both our countries. We are also convinced that the project should be privately finished without any form of direct governmental participation. Notwithstanding our optimism, we are concerned not only with those delays which have

already ensued, but with those which, if the past is an indicator, may occur in the future.

As private companies, we have the financial strength to continue reasonable expenditures on the project, to make a substantial investment in the project's equity, and to attract the debt financing which is required for its completion, provided that we have satisfactory contractual arrangements with shippers of substance which are perceived as such by the investment community, and which essentially means that there must be a well recognized and accepted tracking system in place.

We cannot, however, be placed in the continuing position of flowing millions upon millions into this project year-after-year without assurance that the project will commence construction on a timely basis and be completed, and that on completion we will be allowed a fair and reasonable return on our investment. We now believe that at least two things should occur soon, if we are to continue funding the project at the present rate.

First, we must be assured that the money which we invest will be recouped in the event the project is not completed because of problems occurring in the United States.

Second, we must be satisfied that once the system is completed we will be allowed to earn a fair and reasonable return on our investment, and there are ongoing proceedings before the National Energy Board in which we will be appearing towards this end within this month.

We would assure you that the Canadian companies involved in this project remain fully committed to the private financing and early completion of the project. As of December 31, 1979, we estimate we will have spent $125 million in the project and, although we intend to continue our financial support, we can only do so for as long as it appears reasonable.

We thank you, Mr. Chairman, and your colleagues for the opportunity to appear before you.

If there are questions we may attempt to answer, we would be pleased to be at your disposal.

Mr. RUNNELS. Thank you very much, Mr. Pierce. I would like to just ask a few brief questions.

In your statement you say the cost escalated from $4.3 billion to $5.6 billion. This is a $1.3 billion increase. I believe you stated that it is due to delays. What kind of delays caused this much escalation?

Mr. PIERCE. Essentially, Mr. Chairman, the agreement between our two countries called for the system to be in being, be completed, and combine delivering gas in January 1973. Subsequently, we were advised by our American colleagues that this date could not be achieved because of certain matters which had to be done in the United States, and we thereupon agreed that the date should be delayed until the fall of 1984.

Now that 1984 date of course was also dependent upon certain things falling into place before that time. I am concerned by some of the evidence that I have read last night that is going before this committee that the 1984 date is beginning to look pretty shaky. Essentially these are dollars as spent, and the longer your project stretches out, the more dollars you have to spend just on basic

inflation which relates to the longer period of time; the more dollars you also have to spend in keeping an operation in place that you expected to start working full out on a particular date and now find you have to keep them for another two years before you can get them working full out.

The chairman is well aware, in private business you soon get to the point that you either lay the people off or you find something else for them to do.

Mr. RUNNELS. Your statement says that it is estimated that at the end of December 31, 1979 you and your other sponsors will have already spent $125 million.

Mr. PIERCE. That is our present estimate.

Mr. RUNNELS. You say you will continue to support it financially as long as it is reasonable. Do you have any estimate as to what you think is reasonable at this point?

Mr. PIERCE. Mr. Chairman, my idea of what has been reasonable has varied almost all of my life. The older I get, the more I find unreasonable; there are more and more things I find unreasonable. I would not have thought the short-term money interest rate of 13-plus percent was reasonable, but we got it. I do not know how much longer it will be reasonable, but I can say this, Mr. Chairman: we are heartened by what we have seen recently—we are heartened by the fact that there is a Federal inspector there. We had originally hoped to see him 2 years ago. We really thought he would have been there before our Parliament, who have appointed the commissioner under the Northern Pipeline. So that is positive.

I think essentially what it boils down to is this: that if we have to fund this project and pay 14 and 15 percent prime rate on money, what is reasonable is a little less than it would have been if we were paying 9 percent on our money. So the delays are very important.

The other side of it is our experience with capital projects is that what causes costs to escalate out of control are delays, because when you estimate something in 1975 or 1976 and say you are going to complete it by a particular date, you are expecting, in the 2 years normally you can control, that you are going to get an awful lot in the ground. When you get past those two years, inflation tends to take off on you. What causes more concern than anything else is your ability to really estimate what it is going to be. What is reasonable?

I would think, Mr. Chairman, we have, this year, cut our expenditures from what we had originally planned to spend. If there is not a continued improvement as we have seen in the last few months, we will cut our expenditures further next year and really just go into a holding pattern.

Mr. RUNNELS. Thank you.

You state that you think that under the free enterprise system that you should be allowed to earn a fair and reasonble rate of return on your investment. Do you have an off-the-cuff estimate of what you think is a fair and reasonable return on your stockholders' investment?

Mr. PIERCE. Before anybody ever thought of the incentive rate of return, Mr. Chairman, we had agreed with Northwest Alaska that we would build the pipeline if we got a 16 percent rate of return to

equity, or the same return, the highest return as was earned by any other pipeline in Canada in similar circumstancess. Now there are not any other pipelines in Canada in similar circumstances.

The evidence before you shows that this will be a very unique thing. But I think I can assure you, Mr. Chairman, that we would expect to earn a higher return on this system with the risks involved than we do on the normal systems that we have been running for the last 20 years, and that are in place with all kinds of loop. And I should say this as well, historically in Canada the rate of return to equity has been higher than it has been in the United States, essentially because money in Canada costs more.

We will be appearing before the National Energy Board again this week and we will be saying to the National Energy Board through professional witnesses, one of whom is well-respected in the United States, that if we were to be compensated on a comparable basis to the other pipelines in Canada, the minimum rate of return we would earn on this project would be 16 percent to equity.

Mr. RUNNELS. Thank you.

Mr. Clausen.

Mr. CLAUSEN. Mr. Chairman, I ask unanimous consent that all members of the subcommittee be permitted to submit questions to the witness because I am sure there will be follow-on questions that will help us develop the kind of record we would like to have.

Mr. RUNNELS. Hearing no objection, it is so ordered.

Some of you people who are standing around the room might like to come up and sit next to us. Feel free to do so.

Mr. CLAUSEN. Yes.

Off the record.

[Discussion off the record.]

Mr. CLAUSEN. It is interesting to note the line of questioning that our chairman has directed to you because I made some similar notes on your testimony that I was going to ask. I wonder if you would elaborate a little more specifically on the point that you made that this increase has been caused primarily by regulatory and legislative delays in the United States? Could you be a little bit more specific on the kind of regulatory and legislative delays that you are talking about?

Mr. PIERCE. Congressman, a great deal of this is set out in other material that will be before you. But for instance, the incentive rate of return system is something that people have been grappling with for the last 14 or 16 months. We are still grappling with it in Canada. Until you know the basis upon which you are going to earn a return, you can hardly go to somebody and say invest, because as we all realize, pipelines being regulated, you do not invest for speculative purposes. The day of the capital gain on a pipeline stock tended to disappear when it was regulated because regulations are not put there to give you more but to give you less. So that is a situation that has been setting for a very long time.

One of the other situations has been the design of the system. Although our system design has been approved and the certificates essentially given, subject to the final engineering, the Northwest Alaska System has just been in the last month, last 2 months that there has been a decision as to the size of the pipeline and the pressure.

I understand, for instance, that the question of the alinement of the system is yet to be determined. Our system is basically alined in Canada. We know we are going to have to change the alinement but that happens in the normal pipeline construction. I understand the question of exactly where the pipeline is going to be in Alaska still remains to be determined, generally. But you cannot complete your designs or do those things until they are in place.

The question of congressional passing, someone told me the other day it is almost a year now since the Natural Gas Pricing Act was passed, whatever it is called down there; it was a matter that was causing substantial concern in respect once again of financing because we did not know whether or not the gas was rolled in. We did not know what the price of the gas was. Now it may well have been that those things could not have been achieved any sooner. But if they had been achieved sooner, if all of them were achieved, including tracking things like that, we would be a lot further ahead than we are today.

Mr. CLAUSEN. I think this is an extremely important question and, under the unanimous consent that has been granted to us, I would like to have you, if you could, prepare for the record a more specific list of the kinds of regulatory and/or legislative inhibiting factors that have had an impact on your efforts.

Quite frankly, it would be interesting, to have a list that applies to the United States, and also a comparative list that would apply to the Canadian legislative and/or regulatory requirements. If we have that on the record it will set the stage for us to follow through and see whether some of these regulatory requirements are indeed nuisance or necessary.

Mr. PIERCE. I would be pleased to do that.

Mr. CLAUSEN. It would be very helpful.

Mr. PIERCE. I take it our counsel could work with the committee's counsel.

Mr. CLAUSEN. Right. It will take some time but I think it is important for us to have this on the record for us to peruse and evaluate.

Mr. PIERCE. Fine. In this respect, I might mention one of the concerns we have is that under the Canadian-United States agreement we are not responsible, when it comes to what our return will be on an incentive basis, for delays that relate to the U.S. Government, its agencies or U.S. shippers.

The problem we have under the agreement, Mr. Chairman, is that those are matters which will be negotiated without us present between both levels of government following the completion of the system, and if they do not agree it will go to international arbitration.

I am afraid if you are going to invest substantial dollars in 1980 that you are not really prepared to sit back until 1984 to find out what your return is going to be.

Mr. CLAUSEN. Along those lines, I have one more question: To your knowledge, is there anything in the way of a line of communication between the United States Federal Energy Regulatory Commission and the Canadian National Energy Board?

Mr. PIERCE. A lack of communication or a line of communication?

Mr. CLAUSEN. Is there a line of communication or is there a lack of communication?

Mr. PIERCE. I do not know whether there is a lack of communication, but there is a line of communication and of course it is provided for in the agreements between the two countries, if their regulatory agency will communicate. I have not seen any indication that there is any lack of communication.

Mr. CLAUSEN. We would appreciate your keeping us advised of what your perception of that communication is as we go along.

Mitchell Sharp of the Northern Pipeline Agency, which I believe is equivalent to our Federal inspector, recently stated that Canada's National Energy Board may not grant export licenses for Alberta gas through the proposed prebuilt United States section until financing for the entire project is approved.

Do you agree with that statement or would you comment on his statement? Is that an accurate statement?

Mr. PIERCE. Congressman, it may have been what Mr. Sharp said; I believe what he is referring to is condition 12 of the conditions of the certificates that we hold.

Condition 12, which is appended to our Northern Pipeline Act, states that the companies shall, before the commencement of construction, file with the Minister of Documents relating to financing of the pipeline—but I think essentially the part he is talking about is the second end of the section—and establish to the satisfaction of the Minister, that is the Minister responsible for the Northern Pipeline Agency, which is presently the president of the Canadian Privy Council, Mr. Baker, and to the satisfaction of the National Energy Board that:

One, financing has been obtained for the pipeline, and I would say this, that since this is a Federal act of the Government of Canada, when they talk about the pipeline it is the pipeline in Canada, because I think that is how it is defined in the act.

Two, protection has been obtained against risk of noncompletion of the pipeline and interruption of construction on a basis acceptable to the Minister and the board.

So it seems that the key matter is that whatever is required must be to the satisfaction of the Board and the Minister. And on that basis, although I think Mr. Sharp is the Deputy Minister, I do not think Mr. Sharp today can determine what will be necessary to satisfy the Minister that the project is proceeding.

Mr. CLAUSEN. Do you think it would be helpful if we tried to obtain from him a clarification of that statement?

Mr. PIERCE. It would be helpful I would think at this time but, having said that, I think all it means in the end is that a nonelected official has indicated what he thinks an elected official will require.

Mr. CLAUSEN. On page 4, and this will be my final question for the moment, you allude to action by the Canadian Parliament on the Northern Pipeline Act. What are the names of the specific Canadian Parliament committees which were actually involved? If you do not have that you can submit it for the record?

Mr. PIERCE. We can submit it.

I think in the end there was a Northern Pipeline Committee, but we will submit it for the record.

Mr. CLAUSEN. Fine.
Thank you, Mr. Chairman.
Mr. RUNNELS. Thank you.
Mr. Williams.
Mr. WILLIAMS. Thank you, Mr. Chairman.

Mr. Pierce, I think all of us are concerned about delays due to legislation or regulation, which cause slowdowns in needed energy construction projects. I do not know if we talked much about the fact that perhaps somewhere there is some legislation or some regulation which may assist construction projects such as yours.

I am wondering, if you know of any legislation or regulation that has assisted you in either the design, location, geotechnical studies which you are doing. Would you share that with the committee?

Mr. PIERCE. Congressman, the Northern Pipeline Agency was set up for that purpose. It was set up for the purpose of assuring that certain public interests were taken care of but, on the other hand, it was there for the expedition of the project. The proof will be in the eating. And I would say to you that at this stage our relations with the Northern Pipeline Agency are satisfactory. At the time the project has been completed, I think we will be in a position to tell you better as to whether or not it is of real assistance.

Mr. WILLIAMS. On pages 7 and 8 you mention assurances that the investment will be recovered in the event the project is not completed because of problems occurring in the United States. What form of assurances do you expect for the recovery of expended funds should noncompletion be caused by the United States? And what do you mean, caused by the United States?

Mr. PIERCE. I would think that we started out on this project on the basis of an agreement between our two countries, which said that the project would be expedited for completion in January 1983. It is now apparent that the project will not be completed by January 1983.

As to what assurances we will need as we go down the line, I am unable to tell you, but I think we have less confidence in words, whether it be in an agreement by our two governments than we have on what we see in relation to expedition of the project. And we are more skeptical today than we were in the beginning, at the time the agreement was approved by both legislatures; what we know now, we would not have $125 million in the project. We would have something in the project but not that much money.

So what is required in the future? I guess that will be determined by what happens over the reasonable future. We think that the Federal inspector has been a very positive thing, but we expected the Federal inspector a couple of years ago. Quite frankly, we were being asked by our American colleagues, get your Parliament going, or they are going to get that act in place, what is holding them up? Eventually the Parliament passed it, passed the act, put in place an agency, an agency in Canada which is for the purpose of providing the one window and establishing quick means of communication and, by the way, which we as the pipeline operators pay for. So we already have that that we are paying for, those Government servants put on the payroll to expedite this pipeline.

So I am not sure what the assurances are, but certainly we are going to have to be absolutely satisfied that—and the financiers are

too—that before much more substantial amounts of money are put in, one, that the project is going to proceed; two, that the project is capable of being financed.

We believe the Canadian portion is, but there is no sense in financing the Canadian portion in Canada if all you are going to build is a pipeline in Canada that has nothing going into it or coming out of it. This is something our people are now studying. Over the next few months, depending on the kind of progress we see, the assurances may vary up or down. I guess we are at the point now that we take an awful lot less for granted than we did before, Congressman.

Mr. WILLIAMS. I agree. It is a pretty serious matter that you are addressing here. It would seem to me to be appropriate to define just what those assurances are. If we know what the goal is, we will know whether or not we have reached it.

Mr. PIERCE. Tracking certainly. The people who invest are prepared to take their own risks but, in taking their own risks, have to be assured that the cost they have incurred can be passed on in a way that is clear and legally unquestionable—and tracking is a most important matter in that respect.

Mr. WILLIAMS. Thank you, Mr. Chairman.

Mr. RUNNELS. Mr. Young.

Mr. YOUNG. Mr. Chairman, I would like at this time to submit an opening statement to the committee for the record. Is it permissible?

Mr. RUNNELS. That is.

Mr. YOUNG. Mr. Chairman and fellow colleagues, I think there is one factor that we are overlooking and that is the fact of the State of Alaska. We have heard a great deal from the Foothills representation, of course, and we will hear from Northwest and from the Federal Government and also from the State.

I have read the testimony of the gentleman before us and that of future witnesses, and it seems of little interest to the role the State will play. I think it has to be recognized by this committee and by those people involved, the Federal Government, the participants of the pipeline, Foothills and Northwest, that it is very, very important to the State of Alaska that this construction starts, but with the understanding there is an interfacing that we have the capability of utilizing our gas, our "State of Alaska's" gas within the State.

We also should recognize that without our one-eighth gas there is little chance of this line being built. Those may be strong words, but I think everyone should be very much aware of them. We are a little sort of like the mouse that roared; we have members on this committee who participated in the taking of the lands away from Alaska which belonged to us under our constitutional rights. Now we note an insensitivity to taking of our oil and gas from the State.

I will remind this committee that there is really only one owner of that oil, it is not the oil companies or the gas companies, it is the State of Alaska. Under our constitution we sold the oil, but we control the flow of the oil and the gas.

Mr. RUNNELS. The one-eighth?

Mr. YOUNG. For the total field because we control the flow, that means we control the flow of oil and gas.

I want to get that out in the open because there is great concern in my State that again we are being ignored, shunted aside; those from gas-producing States, though I see in this committee few oil-producing States, I think they have the same feeling. This is not only a national project, it is a State project.

I have only one question for this gentleman who just testified. It is, you have made the statement there is not going to be any financing for your portion of the line if there is not a tracked system, and yet I have been through Canada, I have seen the work that is being done, you are far ahead, there is alinement of the pipeline already in place, test holds have been drilled extensively, clearing has been done in some areas, you are much further ahead than we are.

I will compliment you on your statement. I think it has been held back by this Congress and this Government of ours. But you are also building the line very close to the proximity of about 27 trillion cubic feet of gas which I believe belongs to part of your consortium. Can this line be started and finished on your side and utilized to deliver gas from that field to the United States?

Mr. PIERCE. The main gas production in Canada today of course is in the Province of Alberta. Province of Alberta would cover somewhere in the neighborhood of about 800 miles of pipe.

The Canadian system totals 2,000 miles of pipe. So I guess categorically the answer would be "No."

Mr. YOUNG. There is no design work in transporting Canadian Alberta gas in this pipeline once it is built?

Mr. PIERCE. The work that is going on in relation to the prebuilt system is for the purpose of transmitting Canadian export gas in the early years to get the system in. But that system we would anticipate on the western leg would go from the southwestern part of British Columbia on the U.S. border up to Calgary; it would be a 36-inch system. On the eastern leg it would go from Calgary to Monchy, Mont., in a 42-inch line. So that essentially the major construction of the prebuilt—and the prebuilt occurs in the lower 48, with a combination of northern border system and whatever system is put on the western legislation.

And yes, our design, we are shooting to make deliveries on the western leg in the fall of 1980, if the necessary regulatory approvals are available, and to make deliveries by November 1981 on the eastern leg through the northern border. Our design work is a long way ahead, our alinement is a long way ahead, and in some ways the right-of-way is there.

Mr. YOUNG. One further thing is the question of pressurization of the line. When the line enters Canada now from Alaska, it is proposed by FERC a 1,200-pound test line. What is the test that you foresee as it goes into Canada and where will we lose the pressure of that line or will we lose any pressure at all?

Mr. PIERCE. As a matter of fact, I think as the system is presently designed, and I should leave this to engineers, when the gas comes out of Canada we boost it up to 1,440 to go into the northern border.

Mr. YOUNG. You do boost it up?

Mr. PIERCE. Sure. That is essentially that that pressure is maintained from Alaska until you get to the Canadian side of Monchy

and then you move it up to provide better economics for Alaska again through the northern border.

Mr. YOUNG. In your design is there any proposal for extracting wet gases out of the Alaskan gases delivered to Canada?

Mr. PIERCE. No, sir, it is not, that is not our gas to extract.

Mr. YOUNG. Thank you.

Mr. RUNNELS. Thank you.

Mr. Santini.

Mr. SANTINI. Mr. Pierce, you have testified on pages 3 and 4 about your understandable concerns on delay and then you just briefly responded in terms of Foothills' efforts, that you feel in some phases in our endeavor at this time you are ahead.

Where do you feel Foothills is at in terms of complying with its own calendar projections?

Mr. PIERCE. We think, Mr. Chairman, that we can still make a November 1984 delivery.

Mr. SANTINI. So you are on schedule in balance?

Mr. PIERCE. In balance we are at a position that we have cut back, you do not get burned twice the same way, you know, but we are still in a position that we have the resources we believe that we can gear you to meet that date.

Mr. SANTINI. You have also testified in response to questions from one of the members of the committee that you lamented—that was not your word, I will probably regret it—the fact that the Federal inspector had not been on the scene sometime earlier. I believe you indicated 2 years ago it would have been helpful. When you made inquiries as to the reasons for the delay in getting the Federal inspector there, what answers or explanations were you offered?

Mr. PIERCE. I cannot really recall but if I had to guess it would be the same kind of reasons that we use in Canada when something does not happen. It is the Government's fault.

Mr. YOUNG. Will the gentleman yield?

Just for the record, the Federal inspector they are referring to is the U.S. inspector.

Mr. SANTINI. I am aware of that.

Mr. YOUNG. Is this Federal inspector today on line and in the field?

Mr. SANTINI. That was my understanding of Mr. Pierce's testimony.

Mr. PIERCE. He has been appointed.

Mr. SANTINI. He has been identified?

Mr. PIERCE. As I understand it, he is one of the witnesses appearing before you.

Mr. RUNNELS. That is correct. He will be the first witness tomorrow.

Mr. YOUNG. Then we will find out where he really is. I am curious.

Mr. SANTINI. I am shocked our Government has been responsible for the delay. I cannot believe that, but—the whole committee has been shocked to near silence.

I am concerned about another matter discussed with our chairman in the past. That is a bottom line concern with regard to your phase of the project. Those of us in the lower 48 have some sensi-

tivity to it and the upper one has some sensitivity to it. What are the legal possibilities as you understand them today for discriminatory taxation by the Provinces on your leg of the pipeline?

Mr. PIERCE. As I understand them, Congressman, none. There is the treaty which exists between our two countries which says there will be no discriminatory treatments. As we understand it, this pipeline cannot be treated any differently than any other pipeline in Canada. As a matter of fact, I would think in that respect, since it relates to an agreement between our two countries, if one is to assume there is ever discrimination that Government levies on its citizens, I would think there would be less discrimination on this pipeline.

Mr. SANTINI. That is good to hear.

Mr. PIERCE. Now that is not to say that the governments of the Provinces will not grind their best taxes.

Mr. SANTINI. We all deal with and are aware of governmental tax efforts, Mr. Pierce, whether Canada or the United States, whether local or Federal.

How are you going to handle the problem that you shared with us this morning, concerning your cost overruns? Where are you going to get that money for the cost overruns? Has that been worked out yet?

Mr. PIERCE. I suppose that assumes there will be a cost overrun.

Mr. SANTINI. The Federal Government is involved, Mr. Pierce?

Mr. PIERCE. That does not necessarily have to follow. We were talking about other agencies which were set up for the purpose of helping. And I said to you that I believe the Northern Pipeline Agency was set up for that purpose. The proof will be in the eating.

When we talk about overrun, we have been involved in projects not as complicated as this, but in the so-called inflationary years we were involved togehter with a number of other companies in putting together a large project which totaled $1.5 billion United States, in 1975 dollars. It was completed this year under budget. So you know the overrun to be, quite frankly, in that case we provided financing for the overrun to the extent of 25 percent.

I am sorry to have to tell you that we are going to have to give some of the money back to the lenders. What really bothers me about that money is that it was 8.25 percent money.

Mr. SANTINI. An encouraging glimmer on a rather dark horizon. Thank you.

Mr. RUNNELS. Thank you. Mr. Lagomarsino.

Mr. LAGOMARSINO. Thank you, Mr. Chairman.

Mr. Pierce, the discussion this morning has been mainly on the Government delays. Are there any other problems you think that could delay the project, assuming you can get the—big assumption—the legislative and regulatory decisions made that you want made and in the proper timely fashion?

Mr. PIERCE. There are always the normal construction risks that delay a project. I think it is fair to say this project is probably more researched than anything else. Essentially we believe if you got the environmental and the regulatory out of the way, it is essentially a pipeline. And it is a pipeline using basic technology. It has a big pipe and it has a lot of money, but it is a pipeline and we have been building pipelines for many, many years.

On the other hand, it seems that man can always invent ways to delay and can never seem to invent ways to expedite. So what else can delay it?

I guess, Congressman, if you could guarantee that Government would only act reasonable and that the people who work for it would not take the position of safety, which is the no-impact position, and on that basis I do not guess any of us would still be here. I am not even sure whether or not the Indians would have been allowed to ride a horse across the prairie, because everything we do has an impact.

There are inherent problems in any kind of a construction project. You can research it, but you cannot dig a hole every inch of the way to find out what is down there. Periodically, even in building a building, you are going to find a great big boulder and you can be in the middle of the prairie where there are not any other boulders and you are going to have to blow it up and it is going to delay the building.

I am not an engineer, but I believe we have as good engineers as exist anywhere in the world. We believe the construction side of the project can be handled in normal fashion.

We know there are going to be people looking over our shoulders all the time. We have had a lot of it up until now. We are not really sure how much that has cost us. But I would bet, on the basis of productivity, our people spend almost as much time making reports, sitting in meetings with various agencies, as they do doing anything productive.

What are the delays going on? The normal construction delays. The project I just described is a project which included a 1,700-mile pipeline from Fort Saskatchewan north of Edmonton to Ohio, across all kinds of States, some of which had no eminent domain. It was completed in budget and included five extraction plants, two or three derivative chemical plants, world scale ethylene plant, and essentially the overall project was completed in budget and on time. So it can be done.

But there are other projects that are delayed. We do not believe that there is a question of construction, the Olympic Village or the Olympic Stadium in Montreal; we believe there are an awful lot of lessons we have all learned, hopefully, on both sides of the table, from the TAPS pipeline.

Mr. LAGOMARSINO. I take it you do not foresee any problem with the availability of supplies.

Mr. PIERCE. Not at this stage. As a matter of fact, we put our pipe orders up some time ago and we have recently called tenders on the prebuilt system and we expect we can get the deliveries, and the prices are essentially within those we have estimated.

The one thing I must say to you quite frankly is, today there are two things I will not try to estimate: One, what is the cost of money going to be, in either your country or mine, over the next 6 months, or what is the inflationary rate going to be? I do not feel badly about this because there seem to be an awful lot of people who are trying to deal with the situation who are not prepared to give any statements.

Mr. RUNNELS. Thank you. Mr. Udall, chairman of the full committee.

The CHAIRMAN. Thank you, Mr. Chairman.

I appreciate your holding these very important hearings and I will try to participate as much as I can. The only thing I wanted to comment on now was our ability to learn the lessons of the past.

This committee is involved, as will be the whole Congress this month, in trying to crank up and write a piece of fast track legislation, to speed up major energy projects here in the United States. I was thinking myself how well this ties in with what we are discussing here today because essentially we built a fast track for the Alaska pipeline.

In the judicial-legislative history the staff notes that in 1976 we set up the structure for making a decision quickly. By 1977 it was all done, action in both countries, action in Congress, everything was done. But I think this suggests that we can move, that we can make decisions. But I am discouraged that we get into this many fast-track disputes. It seems more and more like society has become so complex, so divided, so many interests at stake that every province, every special group can find some reason to go to court, some reason to ask for delay, to ask for information, more studies, and so on.

One of the real tests of our country's ability to work with its neighbor and make decisions is whether or not this pipeline is built. It ought to be built, it should be ahead of where we are now. If you and the other witnesses can tell me what we should have learned from all of this, what lessons for general fast-track efforts, I would be very grateful. I am not sure that I am prepared to draw any specific lessons.

Do you have any thought, any advice to the American Congress about what we might do to expedite major energy decisions?

Mr. CLAUSEN. As a Congress.

Mr. PIERCE. Congressman, I certainly have lots of advice for our Canadian Parliamentarians and I think it is proper for me to have the advice. I guess I would not have any advice for you other than the fact that my wife and I often talk about budget and we often put them together but really, in my experience, whether or not the budget turns out is not how you put it together but how you make sure that it is adhered to and that you move forward.

Our resolution is always great but somehow you have to see that action comes and maybe that is what is tending to be wrong with our system. I am not sure that if Columbus and Isabella were alive today in North America that they would have been able to get him off the ground to discover the country. And it is interesting to think back in those days that she was both, I suppose, the person who could authorize it and who could take whatever steps were necessary to kick him off the shore of Spain.

The CHAIRMAN. That may be putting an analogy on that happy note.

Mr. RUNNELS. Thank you, Mr. Chairman.

Thank you Mr. Pierce for coming here today. We appreciate your testimony and we will have some written questions to submit to you.

Mr. PIERCE. Thank you.

[Questions submitted to Robert Pierce, with responses, may be found in the appendix. See table of contents for page number.]

Mr. RUNNELS. Our next witness will be Mr. John McMillian, chairman and chief executive officer with Northwest Energy Co., Northwest Pipeline Corp., and Northwest Alaskan Pipeline Co.

Welcome to our subcommittee. We appreciate your being here today.

[Prepared statements of John G. McMillian, Mark J. Millard, and Frank P. Moolin may be found in the appendix.]

PANEL CONSISTING OF JOHN G. McMILLIAN, CHAIRMAN AND CHIEF EXECUTIVE OFFICER, NORTHWEST ENERGY CO., NORTHWEST PIPELINE CORP., NORTHWEST ALASKAN PIPELINE CO., AND CHAIRMAN OF THE BOARD OF PARTNERS OF THE TRANSPORTATION CO.; MARK J. MILLARD, CHAIRMAN AND SENIOR MANAGING DIRECTOR, LOEB RHOADES SHEARSON; AND FRANK P. MOOLIN, JR., PRESIDENT, FRANK MOOLIN & ASSOCIATES, AND FORMER SENIOR PROJECT MANAGER FOR THE PIPELINE PORTION OF THE TRANS-ALASKA PIPELINE PROJECT

Mr. MCMILLIAN. I would rather summarize the statement.

I have two gentlemen with me, Mr. Mark Millard, our chief financial adviser, and Mr. Frank Moolin.

Mr. RUNNELS. They may come to the table.

Mr. MCMILLIAN. Mr. Chairman, before I summarize my statement, I would like to say something.

We have a very good working relationship with our Canadian partners. We have made many decisions just over the telephone. I have complete confidence in what they say and do.

I think it is a mutual working relationship. As Dizzy Dean said, "If you can do it, you ain't bragging."

If you will look at their history in pipeline construction, they have constructed over 700 miles per year in Alberta, so their construction record is very good, and we feel very confident about them and their ability to finance the project.

With me today, is Mr. Millard, chairman and senior managing director of the Loeb Rhoades Shearson; Mr. Millard has been involved in the financing of four major interstate transmission lines that now exist in our country and has had many years of pipeline experience.

We also have Mr. Moolin, of Frank Moolin & Associates. He was the man responsible for the pipeline construction of the TAPS system.

The reason that Mr. Moolin is here is to bring forth the comparisons and differences between the two systems, and to talk about the problems that we will be facing and that TAPS faced, how the projects do differ, and why we feel confident that our project can be done.

There have been several events since September 1977, which indicate our increasing need for the Alaskan gas. There has been no increase in the U.S. annual natural gas supply.

The gas reserves continue an 8-year downward trend to 200 trillion cubic feet or a reserve life index of 10 years.

The total gas reserve additions in 1978 were 11 trillion cubic feet compared with 26 trillion cubic feet available in Prudhoe Bay. We look at the Alaskan gas system not only to take the gas from

Prudhoe Bay but from the North Slope of Alaska. We believe there is two to three times more gas yet to be discovered in the Prudhoe Bay area.

There has only been one major gas discovery in the United States and that is in the overthrust area in the West, but basically most of the discoveries in the United States have been small scale discoveries.

As we all know, OPEC oil increased from $12.70 a barrel when the project was first approved until today, when it is a floating figure, hard to pin down, but we do know that British Petroleum did announce they bought spot market oil for $35 a barrel.

We do know that new oil in the United States is going for up to $30 a barrel. The cost of this energy and the need for the energy source from Prudhoe Bay, I think, is well known to this committee, so I will not dwell upon that.

I would like to mention to the committee a few of the positive things that have happened since we were here last and then talk about some of the other things.

One positive development that has taken place since the project was approved is passage of the Natural Gas Policy Act. This allowed an energy program to be set forth for our country.

It also established a field price for the natural gas from Prudhoe Bay, Alaska, and allowed us to roll in the pricing of this Prudhoe Bay gas with the lower 48 gas thus insuring its marketability. The President's limited reorganization plan was presented to Congress and approved and the Federal inspector, Mr. Jack Rhett, is now onboard.

We think it is a good selection. He has visited Alaska and all of the major companies dealing with the project. He is positive in his approach. He is firm, but we think he knows big projects and he knows the problems of working with Government and the different Government agencies, and we are very pleased with this man and have great hopes for him.

We have developed two partnerships, and they are strong partnerships, that I think are worth mentioning. We now have six major natural gas transmission companies in the project. Those companies are Northwest Energy Co., Northern Natural Gas Co., United Gas Pipe Line Co., Panhandle Eastern Pipeline Co., Pacific Lighting Development Co., and Pacific Gas and Electric Co.; the last two companies are from California.

This is a strong partnership and we have spent some $100 to $130 million in preplanning, preengineering work. We are planning to increase these expenditures.

The other thing that has happened is that the oil and gas companies have finally executed gas contracts for their gas in Prudhoe Bay, and there are an additional four other transmission companies that we hope will join the project very shortly. We will spend some $400 million in preengineering and development work before our final certificate is approved, and we will spend some $600 million before we lay our first joint of pipe in the ground.

These expenditures are at the risk of the natural gas transmission companies in the project; and we think it's unfair for some other companies to have contracted for gas in the Prudhoe Bay field and not join the project.

They have their right, because we are in effect a common carrier and they can sit back and not join the project and allow the rest of the companies to do this and then come in at the last moment, and we think that is unfair. We are working with these companies and hope we can negotiate with them in a positive manner to join the project.

We have had some very recent decisions from various regulatory agencies. FERC has finally issued the incentive rate of return decision; and we think that this decision is a good decision that we can live with and we are now assured that this decision with its tariff structure will allow us to put together a financing package to go to the financial market for the first time.

The pipeline size and pressure that Mr. Pierce referred to has just been recently approved, so we now know that we are dealing with a 48-inch 1,260-pound pressure system and we can proceed with our engineering work on that basis.

The conditioning plant costs have been determined by FERC, and made is the responsibility of the oil-producing companies, and we think that this is flexible if the oil companies participate in the financing of the project.

We hope so, and we are working with the oil companies as required by the Presidential decision and approved by Congress, that the beneficiaries of the Prudhoe Bay gas sales should participate in the financing of the project, and we have had several meetings with the oil companies. We understand they are meeting with the Government and we plan to continue working with them.

The DOI has recently issued a provisional alinement approval giving us a basis to start doing our detailed engineering, geotechnical and environmental work along the route, and we are working with the DOI, to start the detailed mile-by-mile, foot-by-foot type of engineering that is required.

We have acquired the basic geotechnical data from Alyeska and acquired the camps in agreement with them, so we think that these are the positive things that are happening.

We think there are still some critical items to resolve. We need more equity participants in the project and we need the producer support for financing or we cannot finance the project privately.

We need definitive financing commitments; and Mr. Millard will speak to that. We also need approval of our actual cost and expenditures to date by FERC.

We need the tracking approval by FERC that Mr. Pierce mentioned. This mechanism governs charges for the cost of service from Alaska through Canada and the Lower 48 and is put in place so all the participants will be secure in how they recover their funds.

We need the pipeline stipulations from the Department of Interior and FERC to be approved. This is the legal basis on which we are required to build the pipeline.

As for the project schedule and costs, our project can still be completed in what we call the 1984–85 winter heating season or in November of 1984.

This depends on several factors. It depends upon the oil producers completing the conditioning plant on the same schedule. It depends upon no changes in pipe size or in pressure. It depends

upon the producer's financial support this year in order to go to the lenders in the first quarter of next year.

It means an early resolution from the DOI in rerouting and technical issues in late 1979 or very early 1980. We need a final FERC certificate by January 1, 1981. As to the costs of the project, the capital costs are now estimated for the 730-mile Alaskan portion, with AFUDC dollars, at $6 billion; about $6 billion, or slightly less than $6 billion for the Canadian section; and for the Lower 48, $3 billion, for a total of $15 billion. All in escalated dollars.

The original costs, without AFUDC have escalated and changed, as I mentioned in my written report from $3 billion in the original estimate compared to $5 billion that we have today.

This gives us the cost of service for the transportation of gas for 1984 of approximately $5 per million Btu in 1978 dollars. In 1990 this cost of service would decline to $3.50; the year 2000, the cost would go to $2. The question of private financing has been widely publicized, and we could not go to the financial markets with a definitive absolute request for private financing until the two issues, the incentive rate of return and the tariff issues had been settled.

We now are going forward with the private financing, and Mr. Millard will speak to that.

The CHAIRMAN. I just have one quick question, and I do have to go to make another commitment.

The President's decision stated that the beneficiaries identified as the producers in the State of Alaska should share or participate in the financing of the project.

What can you tell me about that, or have they agreed to?

Mr. MCMILLIAN. No, sir; they have not agreed to. We are working with them, we feel in a positive manner. Now, we have had several meetings with the oil companies involved, Exxon, Arco, Sohio, BP. We met with those companies ourselves and our Government. When I say our Government, I refer to Secretary Schlesinger and the Department of Energy. They feel that they had very positive meetings with them, and so we are working with them but we do not have a commitment.

We need a commitment by the end of this year to meet our schedules.

The CHAIRMAN. Has Mr. Don Young been cooperative and helpful?

Mr. MCMILLIAN. He has been a very cooperative young man. The State of Alaska has not been cooperative in the financing of the project, and I had to report to the President I had some serious doubts that they would be. I had a meeting with the Governor, and it was a positive meeting and he said he is going to get a committee together and get our financial advisers together, and we are trying to work out a way.

Mr. YOUNG. Will the gentleman yield to me?

My name was mentioned?

The CHAIRMAN. I did not mean to start a rally.

Mr. YOUNG. There is a great concern in the State of Alaska. I have urged the State to participate in the financing of this line because I think it protects our interest. We are recognized for our share of gas which is within the President's Directive, that we have

the right to utilize that gas and there has been some reluctance on the part of FERC to allow us to, and that decision was unwise, because it leaves us no alternative to be less cooperative with the Federal Energy Regulatory Commission than as cooperative as we had been before.

Mr. CLAUSEN. Will the gentleman yield?

You have touched on a point that needs some elaboration, Mr. McMillian.

When you say the State of Alaska has been a little less than cooperative, is it the Governor? Is it the legislature or some committees in the legislature?

Can we get that kind of information so we know what we are dealing with?

Mr. MCMILLIAN. Yes, sir; I would be glad to comment on that now, because it was not the Governor. The Governor, Jay Hammond, is a Republican Governor, a good Governor. We like him, and we have been able to get along fine together. The problem has not really been with the Governor.

We think that in the senate, some members have been fairly responsive and some members have been supportive of the State.

The house is another question. It is mainly, I think, that we always hear, we cannot get this through the house. In talking to the house members we always hear, well, we do not want to go first. We try to explain they will not be going first but we do need some kind of commitment from them. But the main point, I would say, of delay is the house rather than either the senate or the Governor's office.

Mr. CLAUSEN. I will follow up later.

The CHAIRMAN. Thank you, Mr. Chairman.

Mr. RUNNELS. Thank you, Mr. Chairman.

Go ahead, Mr. McMillian.

Mr. MCMILLIAN. When you look at the financing of the project, you must break the project down to its incremental parts. We look at Alaska as one part and the Canadian portion as another; and Mr. Pierce has spoken to that project. We have confidence in our Canadian partners they will be able to construct this on time and on budget, and be able to finance this in their own traditional ways.

We have the western leg, and we have two very strong California partners there; PG & E and Pacific Lighting. PG & E will build this on their own system, and since they are the world's largest utility, it is kind of like loose pocket change. They can build it on the existing balance sheet.

In the eastern leg, there are four companies within that group officially today. They are Northern Natural, ourselves, Northern Energy, United Gas, and Panhandle Eastern. These are four good transmission companies, and we believe that the approximately $1.4 billion project can be financed by these companies themselves, but we have an additional company to that portion of the project, and that is Trans-Canada, a large Canadian transmission company which will join Northern Border for a respectable interest of approximately 30 percent.

This not only strengthens the partnership, but I think insures that Canadian exports, pre-Alaskan delivery exports, as brought

forth by the National Energy Board in their decision could be brought in through the Northern Border pipeline. I would like to stress right now the importance of the prebuilding of the Northern Border pipeline, of the concept that we have proposed or really that the Canadian Government came up with.

This would allow us to use surplus Canadian gas that is now available. We have applied for an export license for a 12-year period. We hope this is approved. If it is not approved, Trans-Canada agrees to step up to the table and give us certain arrangements that we think that the project could be financed with, if shorter exports licenses are obtained.

But by having them as a partner we think that it will give us the opportunity to continue the Canadian exports which makes the overall Alaskan project more economical.

Another question was asked about the building of facilities in Canada for Canadian gas. There is a 56-inch loop in Canada, and this line is designed to bring their frontier gas to the Canadian markets when need be, and we also think this is another positive decision that was made by both our Governments, because it not only allows Alaskan frontier gas to be brought to our markets, but also allows frontier Canadian gas to be brought to United States markets.

We feel that when you break the entire system down into the four parts they become much more realistic and manageable and controllable.

The toughest section we have is through Alaska, and that is 40 percent of our total cost, and that is because of the climatic conditions and the other difficulties that we may experience in Alaska.

Mr. Moolin will touch upon this.

We think that the TAPS experience and our amount of planning and preengineering work has given us an acceptable construction risk basis to finance the project and construct the project on time and within budget. We believe in the project. We believe that the project is necessary, and we believe the project in these times and conditions will displace from 600,000 to 700,000 barrels of OPEC oil, depending on Canadian exports and the final volumes of gas delivered from Prudhoe Bay.

We have devoted our time and energy to this project and continue to do so.

We appreciate this committee's interest in this project. We think it is important. We know that there will be other hearings, and we would like to extend to the committee sometime the opportunity to visit the State of Alaska and look at the system, look at the route and look at some of the problems that we will be discussing in the future.

We think once we both have looked at these possible areas of concern, that there might be less concern and at least a better opportunity to discuss these with you, so we would like to offer and extend that invitation to the committee, hoping that we can do that.

If it pleases the chairman, you may ask me questions now or let Mr. Millard and Mr. Moolin finish and ask us all questions.

Mr. RUNNELS. We thank you for your invitation. We have been to Alaska and we only go when it is warm.

We are running a little late, and I will do the best I can to speed up the process of the subcommittee. I know you have two colleagues that have statements. May we have some questions and answers of you at this time, Mr. McMillian?

Mr. McMILLIAN. Please.

Mr. RUNNELS. I thank you for a very comprehensive report to this subcommittee.

Does this pipeline and this system have anything to do in a competitive manner with the Mexican pipeline that we heard about today?

Mr. McMILLIAN. No, sir; we do not think so. We do not think that the surplus Canadian gas or the Mexican gas is competitive with Alaska gas for a lot of reasons. One is that what you are looking at is a domestic supply of gas that is very badly needed, and we think in the time frames that we are talking about, 1984 and 1985, and with only a 10-year reserve life index for the entire natural gas industry, you are going to need all of the volumes of gas you can get from Mexico and Canada and Alaska, so we do not see that they are competitive.

Mr. RUNNELS. Has anything been worked out in the way of a pricing schedule? Did you mention something about $5 per thousand cubic feet of gas?

Mr. McMILLIAN. Total of cost of service.

Mr. RUNNELS. Did I understand you to say your price estimates have escalated from $3 billion to $6 billion?

Mr. McMILLIAN. Yes, sir.

Mr. RUNNELS. Overall this project is estimated to cost $15 billion at this time?

Mr. McMILLIAN. Yes, sir.

Mr. RUNNELS. There are several things that I think are holding up this pipeline. As I remember, we started back in 1976 when Congress passed the Transportation Act. That was 3 years of delay. Then in 1977, the President reached his decision and this decision was reviewed by Congress. That was 1 more year.

You have mentioned that the appointing of the Federal inspector has had a lot to do with overcoming some of these obstacles.

Is this correct?

Mr. McMILLIAN. Yes, sir; we believe it was a very positive move and a good one.

Mr. RUNNELS. You say in your report that over 80 percent of the gas in the Prudhoe Bay field has been committed to 11 major natural gas companies.

What has happened to the other 20 percent?

Mr. McMILLIAN. The other 20 percent, of course, 12½ percent of that is the State's royalty gas. Mr. Young suggests we cannot build the line without State support. We submit that they cannot use the gas until the line is built. So, 12½ percent of that is the State of Alaska's gas, and the rest belongs to major oil producers and companies such as Standard of California, Mobil, Phillips, 2 to 4 percent; but the majority of the gas has been contracted for with the transmission companies.

Mr. RUNNELS. The companies that have purchased that 80 percent, have they joined in the financing of this pipeline?

Mr. McMILLIAN. No, sir; they have not. It has been quite a concern to all of us in the project, because we are spending around $4 million a month on engineering work and geotechnical work and planning.

The two companies that have had the gas for the longest are Columbia Gas and American Natural Resources, and we have invited them to join. We have sent them letters, and copies of the letters are in my testimony. There have been two recent contracts for Arco's gas, with transmission that is Texas Eastern and Texas Gas.

We contacted both ot those companies and hopefully they will join. In the initial comments from American Natural Resources and Columbia Gas, they wonder whether it could be financed privately, and they would like to see further governmental action before they join.

We say to them, that is fine. We are going to get these things done. We need your help now, and we need your assistance now. If you had questions, why did you contract for the gas, because you knew these problems were before us then. We are encouraging these people to join.

If they do not we are going to have to come back to you and ask that the Alaska Natural Gas Transmission Act might be modified, because we think it is unfair for a majority of the industry to have to bear portions of the developmental costs of this project, which keep rising and the others not to bear their part.

We are encouraging them to come in and we are waiving a penalty fee that FERC established on late-comers and trying to get them to come in, and I will keep the committee apprised of this, but it is a concern to us.

Mr. RUNNELS. Let me make sure I understand what you just said.

Did you say your company is spending about $4 million per month?

Mr. McMILLIAN. Our group of companies, our six companies are spending $4 million a month.

Mr. RUNNELS. Mr. Pierce just testified that his group had already spent some $140 million. Is this included in the $4 million?

Mr. McMILLIAN. No, sir; we are talking about two separate amounts in both Canada and Alaska. This does not include the eastern leg.

Mr. RUNNELS. The Sohio pipeline project comes to mind. We held hearings in California repeatedly. We worked on the Sohio project for years trying to untangle a situation that everybody agreed was a good idea. We need a southern leg and a northern leg to move oil across the United States.

I know what happened with the Sohio pipeline proposal. After $40 million of stockholders' moneys had been spent and log jams and delays and so forth by the State of California and the Federal Government, Sohio finally threw their hands up and said, "Forget it". They abandoned the project. Here America sits with no oil pipeline.

I am amazed that people will sign contracts to contract for gas and then not join in the project, because their contract is not worth the paper it is written on if they do not have a delivery system.

Mr. McMILLIAN. Yes, sir, under the act we are in effect a common carrier.

Mr. RUNNELS. Yes; I realize that.

Mr. McMILLIAN. They can transport their gas through our system without putting in a penny.

Mr. RUNNELS. You have got to build it.

Mr. McMILLIAN. If we do not build it it is not any good to them.

Mr. RUNNELS. Under present law nobody else can come in here and advocate building a pipeline, can they?

Mr. McMILLIAN. No, sir.

Mr. RUNNELS. Here you sit with a piece of paper and authority for you and your group to build a pipeline on this side; over here on this side there are some people who own the gas, and they are not joining in the project. So in the meantime, stockholders in Canada and stockholders here in America are spending tremendous amounts of money, and nothing is developing.

Is this correct?

Mr. McMILLIAN. That is correct.

Mr. RUNNELS. Does the fast track legislation affect anything or does this have to do strictly with trying to get people to join the project?

Mr. McMILLIAN. The biggest detriment to the project's progress, was getting the energy bill in place in a timely manner. We thought that would take 3 months. It took a little over 1 year longer. There were a lot of uncertainties, so there was reluctance to go forward by some parties until that happened.

The second most detrimental thing to the project was the incentive rate of return decisions. When it first came out, it was a very negative report; and once you read that you had to grit your teeth to really go foward. But we did, and we worked with FERC, about a 17-month effort in all, but we got that worked out and so that is done.

We have other things that we have to do like a tracking method and working with various governmental agencies and the stipulations and the things that I mentioned to you that we must also resolve in a timely manner.

The transmission companies are saying let us get a little farther down the road and show us this and show us that, and then they will look at joining, so we were on the verge of really coming to the President and Congress asking for a waiver of the Natural Gas Act because of the delay on the incentive rate of return. That is behind us now.

If there is a fast track method we encourage that, and if there is a 17-month delay, or 1-year delay, in a process that need not be when it has clearly been defined in the Nation's best interests, which this project has, by the President and by Congress, then if there is a method for quicker decisions on the fast track method, we need that.

Of course, we think we have some advantage over some of the fast track bills that we have seen, but we would like to see a bill or a method similar to what is being proposed.

Mr. RUNNELS. Is the steel for this pipeline available in America?

Mr. McMILLIAN. We are talking to the U.S steel people. There is one steel mill in the United States that can make 48-inch pipe. The

steel that we require is a very tough steel, a very pure steel, very highly specialized steel. There is some question in our metallurgists' minds whether we can really produce this steel but we are working with the American producers trying to do it.

It is a common steel that is used in Russia, and it is produced in Japan, Germany, Italy, France; but we hope that the U.S. plants and the mills can produce pipe of this quality.

Mr. RUNNELS. Thank you.

May I ask you what is being done with the natural gas at this time?

Mr. MCMILLIAN. It is being reinjected into the reservoir. They do use some gas for fuel to reinject it. There is a cost, reinjection cost that is substantial; but it is not being wasted.

Mr. YOUNG. Will the gentleman yield?

Mr. RUNNELS. Yes.

Mr. YOUNG. That is State law. We do not have any flaring of gas.

Mr. RUNNELS. I am happy to hear that they are not flaring it and warming the air up there.

Thank you.

Mr. Clausen?

Mr. CLAUSEN. Thank you, Mr. McMillian, for a very constructive and comprehensive statement.

We have had you before the committee on numerous occasions, and I have always had respect for the fact that you tell it like it is without any wavering or equivocating, and I want you to know we appreciate the amount of time and effort that you have put into this.

If you were standing on the floor of the House as a Member of Congress to address the so-called fast track legislation that is now pending with a recommendation from the administration for an energy mobilization board, would you be for it or against it on the basis of your experience?

Mr. MCMILLIAN. I would be for it very much. It is a very good, strong bill.

Mr. CLAUSEN. I am going to try to do some tracking myself on the experiences that took place with the Sohio people. It was unbelievable that we could have that kind of delay and I am just wondering if there are relevant factors that occurred in the Sohio problem area to the Alaska natural gas transportation system objective here that we are seeking.

Are there comparable factors?

Mr. MCMILLIAN. We did not have the State of California. We had the State of Alaska.

We have a good working relationship with the pipeline people and the officials in Alaska. Yes, I can give you a chronological development or nondevelopment of events.

I can give you that in writing.

I cannot repeat it right now because it is too detailed and complex, but if you wish I will be glad to furnish it to you with an explanation of each item and each problem.

[In response to Mr. Clausen's inquiry, Mr. McMillian subsequently furnished the information requested in a letter dated November 6, 1979, to Chairman Runnels. That letter may be found in the appendix. See table of contents for page number.]

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Mr. CLAUSEN. Yes; I think it would be extremely helpful. I asked the previous witness to do something along those same lines. I think one of the important efforts that we are attempting to accomplish here is to gather the data, the facts as they are or have been, so that we can use that as a basis of information upon which to communicate with State and Federal agencies that are involved.

We need to have a factual record, and this would be extremely helpful on the basis of experience and not on the basis of theory.

Mr. MCMILLIAN. I wish you would look at Mr. Pierce's comparison very carefully. He was very kind to us in what he said, the way they have their governmental interface and relations set up. They have made decisions, not months but sometimes years ahead of us, and I think it is not a bad process. I know that, compared with us.

Mr. CLAUSEN. On page 2 you refer to section 9 of the Alaskan Natural Gas Transportation Act and state that Congress directed Federal permits should be expedited and given priority consideration.

Of course, this is correct. However, in your opinion, has the executive branch actually followed this congressional mandate?

Mr. MCMILLIAN. I guess there was an unexpected delay in the reorganization bill that was to create the Office of the Federal Inspector.

I think that that is the main one that I was thinking about. We also had a delay, as I mentioned before, of the energy bill approval. During the uncertainty about an energy bill, rigor mortis almost set in within our industry about development of large projects, not knowing where they were really going to go, or whether they were really going to be financed.

The energy bill was another; the reorganization bill was another, but our main hurdle was the incentive rate of return.

Mr. CLAUSEN. Should the Alaskan project be included in fast track legislation, or if needed, should we simply amend existing legislation, if we conclude that our Government is not moving fast enough?

Mr. MCMILLIAN. I will tell you what we are concerned about on the fast track bill that you have. We would like to see a strong fast track bill, an effective bill that would really be fast track.

We are concerned, in comparison with some of the bills, that some of the judicial review processes that we have in our Alaska natural gas bill are better than some of the ones we see. What we would like to ask you for is the best of both.

We would like to say that we have some good traits in our bill, but if there is something that does not allow us to expedite decisions, then we would like to be included for those particular traits in the fast track bill, and I think in the Senate, Senator Stevens from Alaska did introduce an amendment along those lines that we think, if it can be agreed upon, is a very good amendment.

Mr. CLAUSEN. On the basis of your own experience, what do you think the communication between the Federal Energy Regulatory Commission and the National Energy Board has been? Do you think it has been adequate?

Mr. MCMILLIAN. The National Energy Board, I know, has been involved; their contact has been Jeff Edge. Their point of contact

with FERC was Don Smith, and he has recently resigned. I do not know who their contact is now. I think it is the chairman.

I know they have regular meetings, and I know that they discuss things. I think they have a working relationship, but how effective it is, since we are not in these meetings, we do not know.

Some of their decisions favor Canadians, and sometimes we are not always happy with some of their decisions, and sometimes they are not always happy with some of our decisions.

I do know that they talk together and communicate, and I do know there was a great deal of mutual respect between Jeff Edge, the Canadian representative and our Commissioner.

Mr. CLAUSEN. Do you think it would be helpful for those of us in this committee that are going to be involved in monitoring the progress on that particular project for us to meet with our own parliamentary peers of our respective committees and the Canadian Government so that we can mutually discuss what kinds of problems they are having to address, so we do not have to reinvent the wheel in both countries?

Mr. MCMILLIAN. Very much so, and unlike our system here, most of the National Energy Board, decisions do have to go to Parliament or Cabinet, so it is very important for you to understand the Canadian point of view and they to understand yours, and I would encourage that very much. They do have hearings such as you are having today, and even an exchange of witnesses between the two countries to get an exchange of views on national policy would be positive, and I would encourage it.

Mr. CLAUSEN. As you know, and this will be my final point, some of us have been monitoring the disposition of the Alaskan oil and came to realize the number of problems that were evolving. Once we pass a law we anticipate that certain things are going to occur, but that just is not happening, so we have had a continuing monitoring role.

I think the time has come for the people in this country to recognize, like it or not, with the energy demands that are here and the kinds of geopolitical influences and pressures that are occurring every place in the world, that they have to put a very high priority on the development of an adequate, safe, and secure and very functional distribution network between Canada, the United States, and Mexico.

Am I overly concerned or underconcerned or on the right track?

Mr. MCMILLIAN. If anything, you are underconcerned. This is underway, and I agree with you we need this energy exchange; and I could not agree with that statement more.

Mr. CLAUSEN. I am concerned because of what I perceive to be a level of vulnerability. Underlying all of this is a need for an assured energy supply and self-sufficiency, and we do not seem to have people who are adequately concerned about this in positions of influence. I want to develop the most factual record possible to go to the American public and let them know in no uncertain terms that this committee is trying to develop the facts.

Mr. SANTINI. Mr. McMillian, as temporary chairman, it is my turn to welcome you.

I think we ought to put you on part-time status around here. I am sure there are other preoccupations that might not make that possible.

Are you on your timetable?

Mr. McMILLIAN. Not our original timetable.

Mr. SANTINI. How much are you behind?

Mr. McMILLIAN. In the original testimony that we had during the hearings, our target date for completion was January 1 of 1983. We believe if events had transpired we could have met that schedule; but now we are looking at a schedule of 1984, 1985, so we are off our original schedule.

Mr. SANTINI. So you are somewhere between 1 and 2 years behind at this point?

Mr. McMILLIAN. Yes, sir.

Mr. SANTINI. When will your financial cost estimate be ready?

Mr. McMILLIAN. We will have a definitive, not complete, financial cost estimate of the project by the fourth quarter of this year, which we will then base our financing plan on with our financial advisors, and our financial plans will be complete by the fourth quarter of this year around December.

Mr. SANTINI. Do you have any sense of when you will be going to the market?

Mr. McMILLIAN. Yes, sir; we plan to go to the market the first quarter of 1980.

Mr. SANTINI. Thank you, Mr. McMillian.

Thank you, Mr. Chairman.

Mr. RUNNELS. Mr. Young?

Mr. YOUNG. Mr. McMillian, let me say that the feelings are mutual as far as our respective personal roles in this endeavor.

I think you have conducted yourself well, and there have been times when you have possibly offended those in Alaska because they do not understand your frustration.

The State has in no way impeded the construction of this line other than the fact that they have been unable to help finance it. That is a problem of education.

One thing you said that you are on track and you foresaw no real slowdowns under the act and under the fast track act proposed, but have you applied for any of the permits necessary for the construction of this line at this time, crossing of streams, all of that kind of stuff?

Mr. McMILLIAN. We have a constant approval or request process for permits. Now, the actual construction permits are right-of-way permits. No; we have not.

Mr. YOUNG. Do you foresee any delay at the Federal level, for example with the U.S. Fish and Wildlife Service of the U.S. Park Service?

Mr. McMILLIAN. That is always a problem. We see two real problems from that standpoint, and one of them is the snow pad construction. This concerns us because we think this concept was thoroughly disproven and if we were mandated by Government to construct on such a method or mode of construction with snow pads with the uncertainty that it could bring forth, we are afraid that we would have to come back and ask for governmental funds to do those functions.

Mr. YOUNG. Of course, my big interest and the interest of Alaska is the conditioning plant. Northwest has indicated repeatedly in Alaska that the company supports to the maximum extent feasible in-State use of the State's royalty share of Prudhoe Natural Gas. If in fact it does withdraw its one-eighth share of the gas at a point in Alaska, say Fairbanks, for in-State use, is Northwest designing its gasline to carry less gas from that takeoff point further south?

Mr. MCMILLIAN. Our time considerations include those volumes of gas.

Mr. YOUNG. Can a gasline designed to carry 100 percent of Prudhoe Bay production still operate efficiently and economically if the State withdraws its one-eighth royalty share for in-State use?

Mr. MCMILLIAN. The initial design is 2.0, 2.4 cubic feet of gas per day. That can be expanded as more gas is available. We do have flexibility in our design to go to lower or higher volumes.

Mr. YOUNG. If the company cannot economically or efficiently operate its gasline south of Fairbanks with seven-eights of the production stream, will Northwest oppose any State efforts to utilize its royalty gas within Alaska on the grounds it will jeopardize the economic viability of the project?

Mr. MCMILLIAN. I did not get the last part of your question.

Mr. YOUNG. If the State decides to use it, will Northwest oppose any State efforts to utilize its royalty gas within Alaska on the grounds it will jeopardize the economic viability on the project?

Mr. MCMILLIAN. What are you going to do on the financing?

Mr. YOUNG. That, we will get to in another question.

Mr. MCMILLIAN. I would like to work with the State of Alaska in optimizing their resources. Our decision has always been, that we are willing to work with you and will continue to try to work with you, but I think you can understand if we do not get a positive response our attitude would naturally change.

Mr. RUNNELS. Would the gentleman yield at this time?

Mr. YOUNG. Yes.

Mr. RUNNELS. I keep hearing about Alaska helping to finance the project. You do not actually mean that Alaska would have to put out bundles of money to finance it, do you, Mr. McMillian?

Mr. MCMILLIAN. That is what the Presidential order says, and that is what you approved in Congress and, yes, we expect them to do it.

Mr. RUNNELS. As Don Young said, it does not say Alaska has to do it. It says they are encouraged to do it.

Mr. YOUNG. I am sure Mr. McMillian is doing all he can.

Mr. RUNNELS. Do they have bonding authority to do this in the State of Alaska?

Mr. MCMILLIAN. We thought we did, but we kind of wonder now, and we have been working on it for 2 years, but they do have that authority. They could do it and raise revenue bonds.

We put a proposal to the State of Alaska that we thought was probably the least onerous type of request that we could make, and we asked for $1 billion worth of tax-free bonds. The project would be the sole source of credit.

Mr. RUNNELS. I thank the gentleman for yielding.

What types of money are we talking about?

Mr. McMILLIAN. For 2 years we could not get this concept through and get anything done on this concept; and what I am saying, and I mentioned this to the Governor, if they have one-eighth of the gas and are going to use it intrastate, let us see them step up the table and pay one-eighth of the cost.

Mr. YOUNG. And get one-eighth of the profit back, if they are going to finance the line. That is negotiable. I am sure we are working on that. This is a line of questioning really basically to get right down to it, and you know what it is and the committee should know what it is, it is where the conditioning plant should be located.

That is what it is all about. I can tell you how to get that line financed real quickly if that conditioning plant is put in the proper place in the State.

If it is put in Prudhoe Bay as suggested by FERC you will have all kinds of problems and so will FERC. Keep that in the back of your mind.

Northwest is committed to delivery, I believe, under contract, a minimum number of Btu's, 1,100 Btu's per 1,000 feet of natural gas across the Alaskan border into Canada for further transmission to the lower 48.

If the State withdraws all or part of its royalty gas for in-State use, will this action reduce the number of Btu's to below the level required by either contract, treaty or technical terms for that portion of the gas downstream of the Alaskan takeoff point?

If you cannot answer that now you may get an engineer to answer it, too.

Mr. McMILLIAN. Do you mean if you withdraw certain liquid hydrocarbons from your gas stream, then how does that affect the Btu value of gas and will it affect it to below 1,100 Btu's?

Mr. YOUNG. Does it affect a treaty or agreement or contract, as we have set it up now with Foothills and within the act itself?

Mr. McMILLIAN. Let me speak to this in general and see if I can answer your question.

The Canadians made an early decision as to pipe diameter; on 48-inch pipe they chose 1,260 pounds, and it has been approved by our Government and the Canadian Government stated at that time given the state of the art of history, that for this diameter pipe under these kinds of conditions this was the state of the art that they felt comfortable with and did approve.

So that means that when we go into the State of Alaska, we have 1,260-pound, 48-inch line. And they also negotiated between the two countries to build a 56-inch-diameter pipe where the Canadian gas can connect with the Alaska system. The amount of liquids that you can carry in a gas stream are a function of the pressure and temperature.

What you are going to be looking at is at the lowest pressure that you are looking at in the entire transportation system, which is a 56-inch line in Canada and that is 1,100 pounds. We can reconstruct and it depends on the processing method that is chosen; but we can reconstruct this gas and process it so it has 1,150 Btu's. It depends on which liquids they wish to take from Fairbanks, and so on and so forth.

I would like to speak to the processing plant.

In my opinion, and I think in most other people's opinion, you would not be able to transport the gas from Prudhoe Bay to Fairbanks without a North Slope processing plant. You have to remove the water vapor from the gas stream, and the CO_2. You have to remove the sulfur from the gas stream. You have to remove the heavier hydrocarbon C_5's, plus you have to remove butanes and propanes because if you do not you have hydrates in your system.

So there has to be some form of processing plant at the North Slope. That does not mean that a petrochemical complex cannot be built in Fairbanks. There is enough ethane in this gas stream at 2 billion cubic feet a day to build two world-size plants with the ethylene source of your petrochemicals.

We have heard there is a world glut of ethylene and you want those other goodies. Well, to find those other goodies that you want, let us know what they are, and let us know what kind of petrochemical plant a responsible party wants to invest in.

I think we can get you the liquid hydrocarbons that you want without endangering the Btu's. It might be 1,150 or 1,095, but the Btu will still be about what we projected.

Mr. YOUNG. I know this is a complex issue and a lot of rumors are heard. I believe you know my interests and the Interior's interests and the State's interests: The main conditioning plant be established in the interior of Alaska. I am not an expert on what can be taken off and what should be taken off and what is marketable. I think that can be worked out.

Our biggest fear is it will be established in Prudhoe which will take off some of the by-products to use for bunker fuel, and I think that will be a terrible disservice to the United States and, No. 2, it will go by Alaska in the lower 48 and there is going to be a large profit down there, and everybody says that is fine.

Frankly, we do not care about the profit in Alaska anymore because the surplus of dollars, of funding moneys, created by the previous administration and this administration will be of little value.

We need to broaden the economic base within the State of Alaska to establish some interfacing so we do not have the up-and-down process. That is what we are really driving for.

If we can work together on this, and I am sure we will, we can solve a lot of your problems and this Nation's problems and certainly a lot of Alaska's problems.

Mr. MCMILLIAN. I know what you are saying. I think it is terminology when you say processing plant in Fairbanks. You cannot eliminate that much CO_2 in the Fairbanks area. There are other environmental concerns you have to think of carefully.

I think what you want is a petrochemical complex there. If you do have somebody to define whether they want ethylene or what type, we have enough ethylene in that stream for two world-size plants.

Mr. YOUNG. Basically, in the designing you said you were going to spend $400 million in designing the line. Have you taken into consideration the utilization of the State gas, the off-stations on the line?

Mr. MCMILLIAN. Yes.

Mr. YOUNG. Good to hear that.

There has been much discussion about pressurization of line, increasing the pressure from Prudhoe Bay to Fairbanks.

Is that an engineering feasibility? Can you do that and lower the pressure at Fairbanks after the liquids are taken off?

Mr. McMillian. A decision was made by the Canadian Government that operation of the system should be the state of the art. Our opinion is that once you go through a new technological breakthrough, talking about 48-inch-diameter pipe, and unknown costs of time, you go through a technological barrier.

Most of the 48-inch systems are in 1,000 pounds but we are going 25 percent over. If you went to, say, 1,680—that was a popular pressure proposed at one time and was very controversial—you are going 68 percent beyond the known actual technology that we have.

So we feel that to privately finance this we have to have something that we know is reliable, so that we know that our cost estimates are going to be reliable when we design it and we know we can weld this thickness of pipe and other factors.

Mr. Young. May I finish with two questions?

One is, you are saying you want the 1,680 that is unpressurized line and could possibly open it up to an environmental lawsuit?

Mr. McMillian. It is not environmental so much. I think it is a technical problem to create reliability in cost estimates and the other factors that are involved, so it is more of a technological problem than environmental.

Mr. Young. On the bottom line, Northwest Pipeline Consortium will or would support a feasible petrochemical industry in the Fairbanks region if properly proposed to you?

Mr. McMillian. If properly proposed and if it did not require an unusual or exotic technology, we would be glad to support it.

Mr. Young. That is good to hear.

One last thing is, the comment you made about Mr. Rhett I think was well taken—the Federal inspector. I will ask him questions. I hope you will be able to help as time goes by. There seems to be a tendency to underfund his office at this time.

If you see any delaying factors as we go through, I hope you will contact this committee because one of the things we found out with TAPS, it was a whole mores of trying to work with the Federal agencies and getting things agreed to and passed and moving along.

Mr. Chairman, I have some other questions for Mr. McMillian, but I will submit them to him. If he will answer them in writing, I will appreciate it.

Mr. Runnels. Mr. Lagomarsino?

Mr. Lagomarsino. Thank you, Mr. Chairman. I have just a couple of questions.

Do I take it, Mr. McMillian, that your statement is really not that much different from Mr. Pierce's when you talk about the role of Government? You say in your statement that most of the obstacles have been removed when you talk about the Natural Gas Act, the appointment of the inspector and so on.

Then you also have pointed out that the delay in those things has caused the delay in the scheduling from 1983 to 1984, hopefully.

Are we talking about a half empty glass of water as compared to a half full glass of water?

Mr. McMILLIAN. I think that is right. We have these major hurdles behind us that require us to do things now to meet the time schedule. It gives us the freedom and flexibility to go ahead.

We have to file for our certificate and we plan to do it the last of June, first of July, 1980. We would like to have that certificate processed in 6 months and I think it can be because the Federal inspector whom we work with has worked together with us on problems so that this should not attain the complexity of most certificates.

So we hope when we reach that point that it will be expedited in a very efficient manner.

Although we are over the hurdles, the governmental hurdles, there will be others we have to face in the future. That is why I was looking for the best of both worlds in your fast track.

We feel the mechanism we have in effect here with the Federal inspector will allow us to go ahead, but in case something happens——

Mr. LAGOMARSINO. I gather from what you were saying earlier the amendment Mr. Stevens got into the fast-track legislation would help take care of your problem?

Mr. McMILLIAN. Yes, it would give us the best of both worlds.

Mr. LAGOMARSINO. I would take it one of the reasons you are having problems in getting additional investors is because of the uncertainty about the regulatory process as we go down the road?

Mr. McMILLIAN. That is part of the problem.

Mr. LAGOMARSINO. Thank you.

Mr. RUNNELS. Mr. McMillian, I want to congratulate you on your fine testimony. Now I know why you are chairman of the board and chief executive officer—because you certainly know your answers.

You have two gentlemen with you and it is 1 minute before noon. Which one would like to present his testimony at this time?

Mr. McMILLIAN. I would like Mr. Millard first. Mr. Moolin is going to go into more of the problems actually to be faced and might require more time. So I would suggest Mr. Millard go ahead at this time.

Mr. RUNNELS. You are the money man. Please go ahead.

Mr. MILLARD. Thank you, Mr. Chairman.

I think I have been identified by Mr. McMillian in his introductory remarks, and in line with the chairman's admonition, I would like to say that as it frequently happens when you elaborate after Mr. McMillian, one has very little left to do when he has finished. I will only hit the high spots.

Perhaps the most important thing which I can say to you gentlemen of the committee is that there is a great deal of conversation going on about the fact that there are difficulties, that there is a doubt, that there is uncertainty as to whether this pipeline can be privately financed.

I think what all these commentators and critics overlook is the fact that the work on the financing in a true sense had not yet begun. It could not begin because there was no basis in law, in regulatory practice, or in important elements of the total mosaic of

this financing which would have made serious negotiations with financial institutions possible.

Until the passage of the Natural Gas Policy Act, until the determination of the rate, until other equally important things, until the decision in the matter of the incentive rate of return, and until the appointment of the Federal inspector, there was no basis to negotiate with financial institutions.

I think that the people who jump to the conclusion that something which had not begun had failed, act a little bit like men who would permit the travesty of a very famous remark in this form: They are saying you have not been given the tools; have you finished the job?

Now the great progress which has been made in the field of regulation in the last 9 months beginning with the passage of the Natural Gas Policy Act has brought us almost to the point where we can begin seriously negotiating with the financial institutions for the financing of this pipeline. But not quite. We are not quite there because the two matters remain which have been frequently mentioned this morning.

The President's decision wisely stated that it is based on the expectation that the beneficiaries of this pipeline will participate meaningfully in its financing.

I believe that I should testify to the fact that it was not Northwest Alaskan who failed in trying to initiate this work at an early date. We have suffered sometimes disappointments and sometimes just an attitude which might be described as a lack of response.

Now we have full understanding for some of the delays which we encountered on that score both with the oil companies and with the State of Alaska. They have their problems, too, some of which have been resolved in the last few months as ours have been resolved. But they also have profits, and while it is true that some of their profits are a cause of their problems, where the financing of the Alaskan pipeline is concerned that connection for opportunity does not exist.

I think it may be worth your while to see the order of magnitude of what we are talking about. I think for all the beneficiaries of the Alaska pipeline, meaning the oil companies and the State, on the pretax basis the daily cash flow today is on the order of $10 million. I believe that the expansion of crude oil production will increase this cash flow by an order of magnitude of 30 to 40 percent. But I also believe that the incorporation of the Prudhoe Bay gas into the natural gas supply of the Nation would lead to a further increase in the cash flow by the same order of about 30 or 40 percent.

We are dealing, therefore, with very large numbers, and these numbers are important to us because they lay the foundation for what we consider—and we have reason to believe that the oil companies consider in the same sense—as a real basis for harmonious cooperation between our project and the two beneficiaries in financing the pipeline through a massive presence of the beneficiaries' capital in the investment cost of the line.

I think it is fair to say, Mr. Chairman, that these base profits cannot be realized without the existence of the pipeline. That is

obvious. But it is fair to say that it will be extremely difficult to finance the pipeline privately without that contribution.

Congressman Clausen said at the beginning of this meeting this morning it feels almost like yesterday when the act was passed. If I may say so, these 3 years have been very long years. We, for the reasons which I stated, have been condemned to inaction. We are just at the point here we believe financial action can begin. Unfortunately, it is not only a matter of time lost. It is also a matter of ground lost. The facts of finance today are very different from those which existed in 1977. We are dealing with inflation, we are dealing with interest rates and with a rate of inflation unprecedented in the history of the Nation. None of that has led us to jump to the easy conclusion of saying it is time to be done. We are just about, with confidence and determination, to test our belief that it can be done provided assistance in this operation which we need and which we think is justified from the point of view of the parties to whom we look will be there.

I believe that the prebuilding of the Northern Border to which both Bob Pierce and John McMillian referred is an excellent example of the vigor and the inventiveness of the financial community when it can operate in the framework which makes it practical to try to accomplish a certain aim.

I have real hope that the Northern Border will be operative even before ground day on the big system, and that means in a very short period of time.

I also have confidence, and I would like to close by stating that, that when the project moves from being a conversation piece at the general bankers gathering supported or not supported by costs to the area of real hard work, the financial community will respond to it with the full awareness of the national priority which the importance of the Alaskan pipeline has today for the country.

Thank you.

Mr. RUNNELS. Thank you, Mr. Millard.

I understand you are chairman and senior managing director of your firm; is that correct?

Mr. MILLARD. That is correct.

Mr. RUNNELS. And that you have acted for the financial advisor and have testified in this capacity before the Federal Power Commission and committees of the House and Senate.

Mr. MILLARD. I have, sir.

Mr. RUNNELS. You mentioned doubt and uncertainty on the part of those who are saying in a whisper that this pipeline cannot be financed by private individuals. You say they are overlooking one thing, that those in the financial community have not yet begun but are just poised to begin.

Is that correct?

Mr. MILLARD. That is correct.

Mr. RUNNELS. Mr. Clausen said it only seemed like yesterday when the act was passed. Can you tell me what interest rates were when yesterday occurred, when the bill was passed?

Mr. MILLARD. I meant to look it up yesterday but I did not. Speaking from memory, I will say the prime rate in 1977 was on the order of 8 percent and it is today 14½.

Mr. RUNNELS. From 8 percent to 14½. Can your memory tell you what inflation was running at in 1977?

Mr. MILLARD. Between 6 and 8 percent as against 12 to 14 today.

Mr. RUNNELS. Thank you. We now have a timetable where Congress has acted, the President has acted, and now we are waiting on either States or oil companies or somebody to make these other commitments.

Once these commitments are made, how long do you think it will take financial institutions to agree to fund this pipeline?

Mr. MILLARD. I think it may be worth mentioning that the smallest part, if any, of the financing will be in the nature of a public sale. It will be in the nature of private placements with financial institutions here and maybe abroad.

I think that without that in camera aspect of this financing it would take years and it would really be a self-defeating process because you need a commitment of the totality of the funds required before you break ground.

Given the fact that it will be a private placement, I hope that it could be completed essentially in a 6-month period. There will always, Mr. Chairman, be side aspects of the matter which have to be resolved as time progresses but I think the bulk of it, what is necessary in order to get started, can be done in 6 months.

Mr. RUNNELS. Thank you, Mr. Millard.

Mr. CLAUSEN. Mr. Millard, you clearly are recognized and respected as, if not the most knowledgeable financial advisor in the field, certainly very near the top, and I think you lend a high level of credibility to the hearing process that we are attempting to conduct, so we appreciate very much your taking the time to come down here today.

Would you venture to guess or project what these scheduling costs are going to be, the money costs for the projects between now and 1984 in light of the history of inflation, and interest trends since 1976 that you alluded to earlier?

Mr. MILLARD. Mr. Clausen, would you be equally satisfied with an answer which is slightly different from the question which you asked and which would be an answer to the question: What it would be if all of it were to be financed today or tomorrow or the day after.

Mr. CLAUSEN. That is fine.

Mr. MILLARD. I think we are dealing with a long-term interest rate of somewhere between 11 and 12½ percent.

Mr. CLAUSEN. On this project?

Mr. MILLARD. On this project.

Mr. CLAUSEN. For the financing to complete it.

Mr. MILLARD. That is right.

Mr. CLAUSEN. Coming from you that has substance. As I understand, you have had a little experience in this field. Would you relate that experience to the committee on the basis of your background. I understand that you have been involved in a few projects like this for how many years?

Mr. MILLARD. I have been a partner of the predecessor firm of Loeb, Rhoades, Shearson since 1944 and associated with it since 1940, and I probably was the senior man on three or four large intrastate pipeline financing, to wit, the financing of Trunkline,

the financing of Gulf Columbia and the financing of Trans-Western, all three pipelines which are financed as project financing, in other words, not depending on the credit of other parties.

Mr. CLAUSEN. With your previous experience and knowing what we are faced with in this particular project, the magnitude of which appears to be somewhere in the range of $15 billion to $20 billion, does this not frighten you away from your willingness to coordinate the financial aspects of the project?

Mr. MILLARD. Sir, it would be wrong and almost improper if one were to look at the $15 billion project without some degree of trepidation. We feel it. But what helps us a great deal is that we are justified in looking at it in what I might call a segmented way.

There are really four projects from the point of view of the mechanics of financing. There are the two Lower 48 pipelines, the western leg and Northern Border; consider them as having been financed. There is Canada. Robert Pierce spoke with deep knowledge and with the confidence which has always been the hallmark of his company, about their ability to get the job done.

True, some of that Canadian financing will overflow into the U.S. market because the U.S. capital market has always been a source of capital for Canada but it will be bolstered, underpinned and really firmly founded in huge financial resources which public and private institutions in Canada possess which are deeply interested in this particular project.

So we are left now with Alaska. Alaska, as we all know, has been price-tagged for the purposes of these discussions with $6 billion. We believe if we solve the problem of the regulatory environment and of our relations to the parties concerned, these $6 billion can be financed.

Mr. CLAUSEN. References are made on page 5 of your testimony to the so-called financial agreement that you developed between the public and the private sectors of Canada. Would this be an invasion of privacy or are these public sector documents which could be made available to us so we could have the benefit of that kind of arrangement? What would be your response to providing that information?

Mr. MILLARD. Mr. Clausen, I did not refer to any private documents in contradistinction to public documents. I said that public and private sources of financing in Canada would be available.

Mr. CLAUSEN. So there is no formal agreement between the public and the private sector organizations?

Mr. MILLARD. I am not aware of it.

Mr. CLAUSEN. You place a very heavy emphasis on:

> A satisfactory financial agreement with the producers must precede serious conversations with the financial institutions. Failure to obtain that agreement could jeopardize private financing.

Could you elaborate on that?

Mr. MILLARD. I think it can be done in simple words as follows: The world is aware of the importance of the economic contribution which the marketing of Alaskan gas would make to the well-being of the oil giants owning Alaskan gas, and I think it is also known by one and all that all the parties concerned, including these three companies, are very much interested in matters which concern the public welfare in the field of energy.

A refusal by the oil companies to do their financial share, which can be measured in general terms remembering what they have done when it came to financing the movement of the crude oil, and the general development of the Prudhoe Bay field would perhaps be regarded as a vote of no confidence, especially since the very same parties are the ones who probably have maximum experience in the engineering technical and organizational problems which the construction of this pipeline must face.

Mr. RUNNELS. Would the gentleman yield at that point?

Mr. CLAUSEN. Yes.

Mr. RUNNELS. Mr. Millard, on the Alaskan oil pipeline, who owns that pipeline?

Mr. MILLARD. Three companies primarily. In addition to those, there are two or three smaller oil company participants. The largest owner is Standard Oil of Ohio controlled by British Petroleum. Atlantic Richfield and Exxon come next. I believe that amongst the three they own something on the order of 96 percent of the stock of TAPS.

Mr. RUNNELS. Is the reluctance on the part of the oil companies and those who own the oil or gas in Prudhoe to join this system because they do not own the pipeline?

Mr. MILLARD. Mr. Chairman, I find that this is a very difficult question to answer. It requires more knowledge of a hopefully logical and probably very complex attitude in oil company management with respect to the problem which you raise.

If you go back in the history of the American oil industry you will find that the big oil companies have spent 20 years to get out of the natural gas business because they were afraid of regulation. Could it be possible that they want to get back into something which they dreaded so much in the past. One sometimes has the impression that they would welcome combining a higher participation in earnings of the new system than just the ownership of bonds of that system would give them, and I do not believe that northwest Alaskan has ever said a clear-cut no to any such aspirations if they were supported by positive action justifying the proposal.

Mr. RUNNELS. Thank you.

Mr. CLAUSEN. I think for the moment that will suffice. Would you be willing to respond to follow-on questions that some of us on the committee might like to make after we have concluded our hearings? We would like to write to you and then have you respond in writing to some follow-on questions. Will that be agreeable to you, sir?

Mr. MILLARD. I am always available to every member of this committee at any time.

Mr. CLAUSEN. Thank you very much. I think your presentation has been very helpful. I gather from what you are saying that there is a need for something in the way of more of an equity on the part of the producers, an equity interest in this pipeline, than has now taken place.

Mr. MILLARD. If I may, I would just like to say I am not saying at all I do not want to make up anybody's mind, including the oil companies, as to whether they should or want to have a managerial or a decisionmaking participation. If they are talking about

remuneration for money, then the gas companies probably will listen to them with an open mind.

Mr. CLAUSEN. Are you saying equity capital is needed?

Mr. MILLARD. No, I am not saying that. That was asked by the chairman, whether they would want to have or whether I suggested that they wanted to have something like an equity participation. I answered that I have not quite said that but I think their willingness to invest might be encouraged if we can talk to them about the fair distribution of the earnings of this pipeline across the table.

Mr. RUNNELS. I think it should be made clear that it is the President's decision that forbids the oil companies, which we have been talking about, from holding an equity position in this pipeline.

Mr. MILLARD. We are very much aware of that.

Mr. RUNNELS. The members of the committee should understand that.

Mr. MCMILLIAN. I think they are referring to equity in the light of and in the context of managerial control because there could be a very definite conflict between the producers and the gas transportation companies if they had managerial control of the project.

There are many forms of equity. There can be preferred equity where they have no voting rights but have the same income rights as common equity. There are many ways this could be structured within the imagination of man. So we feel that the debt markets will give us our debt. We feel that the pipeline companies themselves, with the help of public offerings, can get the equity.

A real concern is the oil line heritage we were left with and the tremendous cost overruns that were experienced. We are living with that heritage every day. We have to explain that all the time. So what we are asking in our first concept proposal to them is a cost overrun pool of funds that the financial market would be comfortable enough with if there were enough funds for completion.

We think the debt market has enough funds there, we know with the public markets we can create equity as required. We would not mind talking to them about participating in higher earnings as Mr. Millard said, because we think it is fair.

Mr. RUNNELS. Mr. Lagomarsino.

Mr. LAGOMARSINO. I just want to say I very much appreciate your testimony. I think it is very helpful. You have laid it out so we get a better understanding of exactly what the real problems are. Hopefully, as these hearings develop, we can explore some of these things perhaps with you and with others to see if we can be of some assistance in working it out.

Mr. MILLARD. May I thank you for your kind words and thank you in particular for your willingness to work with us.

Mr. RUNNELS. Mr. Santini.

Mr. SANTINI. No further questions, Mr. Chairman.

Mr. RUNNELS. Mr. Weaver.

Mr. WEAVER. Thank you, Mr. Chairman.

When you say working with us, sir, do you anticipate a change in the law in any way?

Mr. MILLARD. It is not quite my domain to think in legislative terms but this frequently occurs to members of my firm and members of Goldman Sachs and of Lehman Brothers, our financial advisers to the project. Certain things which appeared logical in 1976 are less appropriate under the conditions existing today and while no one wants to add to the legislative burdens in Congress, if these matters become very important, which is more than secondary we will have to come to you and put them before you.

Mr. WEAVER. What is the primary feature you are discussing now?

Mr. MILLARD. I think most important now in the ANGTA legislation is the wholesale provision that any shipper of gas can avail himself of the facilities of the system without contributing to its construction, organization, and to all the problems which we are seeing today.

This had some meaning in 1976 for the simple reason it appeared that participation in the system would be at the premium value. As you know, participation in the construction of the system is a task which requires long days and nights in which you worry an awful lot about that.

Mr. WEAVER. Are you asking also the possibility the oil companies be allowed to have an equity share?

Mr. MILLARD. No, sir. I would certainly not suggest that the oil companies, given their long record of a desire to stay out of all regulated industries, be allowed to participate in the managerial function, direct or indirect, in the Alaskan gas transportation system.

I think that the word "equity," as Mr. McMillian suggested, is something which requires definition. We would not mind if they would participate in earnings beyond the limit of a simple bond interest.

Mr. WEAVER. Are you asking in any way for any Federal Government assistance financially?

Mr. MILLARD. I tried to make the point that although some of our well-wishers—and very many of our not-so-well-wishers—say we can do it without such assistance, we are steadfastly continuing in the difficult role of doing it without Federal assistance.

Mr. WEAVER. I know in Mr. Millard's testimony—I have not had a chance to read Mr. McMillian's testimony—you say, "The appointment of a Federal inspector dedicated to the success of the process was a great step forward. This will help speed the project," and, "The sponsors will receive speedy review and approval" of design changes on the job.

I find that all very interesting. In light of that and other matters, some environmental groups have suggested there be set up an oversight committee to watch over environmental considerations as the pipeline is constructed.

Mr. McMillian, would you see any problem with an oversight committee watching to see that we were proceeding in a sound environmental manner?

Mr. MCMILLIAN. No. We have a good working relationship. If it is the type of oversight that advises the Federal inspector, we think that could be very helpful and beneficial to the Federal inspector. We need an operators committee too.

Mr. WEAVER. Thank you.

Mr. RUNNELS. Thank you. The Chair would like to announce that we will recess for lunch and be back at 2 p.m. and start where we left off. Thank you very much.

[Whereupon, at 12:40 p.m., the subcommittee recessed, to reconvene at 2 p.m., the same day.]

AFTER RECESS

Mr. RUNNELS. The subcommittee will come to order.

We will continue from where we were before we recessed for lunch. Mr. Frank Moolin, currently president of Frank Moolin and Associates, Fairbanks, Alaska is now our witness.

You may summarize your 56-page statement, and then we will ask some questions.

Mr. MOOLIN. Thank you, Mr. Chairman.

My comments are going to be brief, as you suggested. They are going to certainly synthesize from the written statement that I prepared and submitted to the subcommittee. I am going to shift gears now and move away from the fundamental program issues that were discussed by Mr. McMillian and the financial issues discussed by Mr. Millard. I am going to discuss what I refer to as the project issues.

I am going to speak to four basic points.

First, there are many similarities but there are also many differences between the proposed gasline and the Alaska crudeline, but I think the subcommittee should recognize that with few exceptions both the similarities and the differences are such that the risks and the potential for cost increases the gasline is going to be exposed to are going to be considerably less than was the case for the crudeline.

Second, today there is much more understanding about the process of building a large pipeline in Alaska. This is true not only from the technical point of view but certainly with regard to management and the Government involvement.

Third, the transporting chilled gas across permafrost is inherently easier than transporting hot oil. And with several exceptions I believe that the technology required to do this is state of the art.

Fourth, the crudeline was a pioneer project. It was built across a tremendous expansion of land with nothing in the way of support infrastructure and to a large extent the gasline is going to be able to take advantage of existing camps, roads, work pads, and so on.

Finally, that a key to cost-effective completion of the pipeline is going to be the commitment of governmental agencies to maintaining a rigorous timetable for making decisions; that Government must recognize that many decisions are going to be made with less than perfect information, yet they are going to be informed decisions based on the best engineering advice that is available.

It is not necessary to reinvent the wheel and relearn many of the lessons we have already learned from Alaska. I cannot emphasize too much to this subcommittee the importance of clear, concise and unequivocal decisions using what we learned from the construction of the crudeline and applying that to the construction of the gasline.

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Recently there has been, and we are pleased to see, some improvement in the decisionmaking process from Government and certainly with the assignment of the Federal Inspector we have confidence that Government recognizes the role that it plays and the very signal role that Government plays in affecting the costs and the schedule for the project.

If I had to sum my entire testimony in a single statement, it would be that the gasline is a different line, the gasline is a different project, being built at a different time under different physical, social and environmental conditions, but it has a huge advantage because of the tremendous body of knowledge that was developed during the design and construction of the crudeline.

My prepared testimony goes into 11 specific areas related to the construction of the crudeline and how the crudeline and gasline are similar or different, but right now I am going to limit my comments to only several of these. They are going to be limited to the infrastructure; second, to the physical scope of work; third, to some of the planning abilities now associated with the gasline, and fourth, the interface between Northwest and the various regulatory agencies.

As far as infrastructure is concerned, the crudeline was a pioneer project. The gasline is not going to be a pioneer project because much of the infrastructure that was required to build the gasline is already in place. The technical problems associated with the crudeline did create cost increases and delay but a very significant cause that also had serious ripple effects throughout the entire project was the total lack of infrastructure, infrastructure so frequently taken for granted in the lower 48.

Infrastructure was almost totally lacking—and when we are talking about infrastructure we are talking about roads, communications systems, camps, places for people to eat and sleep—was totally lacking. There were no roads north of Livengood—a 70-mile road had to be built to the Yukon River and a 360-mile road from Yukon River to Prudhoe Bay.

In October of 1975 we had completed 40 percent of the crudeline. Until that time there was no vehicular access across the Yukon River. Today there is vehicular access all the way north of Fairbanks to Prudhoe Bay, including crossing the Yukon River. The gasline will not by any stretch of the imagination be subjected to the type of uncertainty and disruption that existed during the early phases of the crudeline.

For Alyeska we built 19 pipeline camps; actually a total of 29 camps were built to accommodate a peak work force of 15,000 people. These camps by and large exist today; Northwest has already acquired many of them and intends to make use of them for their facilities.

I do not want anyone to misunderstand me, to understand that the infrastructure existing in Alaska here today is akin to what is found in the lower 48 because it is not. But there have been significant improvements. The fact is, many of the concurrency problems, the pulling of one's self up by the bootstraps that Alaska had to go through, will to a large extent not exist on the gasline.

I do have some concerns about the effective use of some of the infrastructure, however, because I hear comments from regulatory

agencies that they may not permit the use of several of the Alaska camps such as the Prospect Creek and Galbraith, primarily because of small oil spills that occurred, not crude oil but fuel oil spills that occurred in the camps. I believe these problems have been remedied by Alaska.

It still may be necessary for Northwest to take some further action to prevent the situations from developing again. But to require these camps to be moved, to be totally relocated, which has been advocated by some governmental officials, would in my opinion result in an unnecessary environmental impact and certainly unconscionable cost increases. There is nothing wrong with using these camps to build a gasline and I think that everything should be done both by Northwest and the Government agencies to concentrate disturbances at existing camp locations, not create additional problems by having to relocate these small cities, and the tens of millions of dollars associated with them.

The second area I am going to speak to is the physical scope of work, to point out the basic differences between the crudeline and the gasline. I described the crudeline project; I would like to say the crudeline is a civil engineering project that happened to have a pipeline associated with it.

I mentioned the 412 miles of road that had to be built, 137 miles of access roads, the fact there was about 93 million cubic yards of earth work required for the project, and even projects like the Fort Peck Dam only require about 100 million cubic yards of dirt.

One of the concerns, certainly it is in the best interests of Northwest to take advantage of much of the infrastructure, much of the work pad and the dirt work and the civil work already done by Alyeska. It is difficult to find suitable gravel locations, for instance, in the State of Alaska. Many people do not understand this. But gravel is a scarce commodity in the State of Alaska. Many of the best and least costly gravel sites were already mined by Alyeska for building the crudeline. Considerable costs were involved in the mining, hauling, placing and rehabilitating the material sites.

I believe that the gasline should make maximum use of the work pad that was constructed for the crudeline. However, there are comments being made by various regulatory agencies that the gasline alinement should deviate substantial distances from the crudeline. If that takes place, an entirely new work pad would have to be built. Directionally this would significantly increase the gravel requirements and only if there is substantial cost or schedule reduction benefits should any such deviation like this be considered.

I mentioned before a cold gasline is inherently simpler than a hot oil pipeline. One has to be careful to avoid tainting—and I use that in the best of possible sense—tainting the gasline with many of the overly conservative and costly approaches that were mandated for crudeline construction.

I recognize that the Alyeska work pad must be rehabilitated at certain locations, thickened, perhaps widened, extended in width, perhaps additional insulation placed under it so that the below-ground gasline can be placed about 80 feet from the centerline of the crudeline. In absolute terms, this is not a small amount of work; it is a significant amount of work but it is nevertheless orders of magnitude less than the effort that would be required if

an entirely new work pad had to be constructed to build the gasline.

Another element of the physical scope of work that I would like to make a comparison with is the aboveground pipeline system. The quantity of materials and the logistical support and the transportation and the construction that was required for the crudeline was immense compared with what is going to be required for the gasline because the crudeline required 423 miles of the pipeline to be placed aboveground.

The gasline is planned to be in many respect a conventional pipeline. The gas is going to be chilled, it should not result in any thermal degradation of the permafrost. There should be few if any places where the gasline needs to be located above ground. The only exceptions should be river crossings and stream crossings. Many of the negative surprises that we experienced in building the aboveground crudeline, the upsetting situations, cadence breaks—cadence is the essence of cost-effective pipeline construction—are going to be considerably less for the gasline construction. Yet there continues to be a number of written statements from members of regulatory agencies indicating that it may be desirable to place substantial lengths of the gasline above ground.

In my opinion, there is no reason for the gasline to be above ground and the design solutions that we had to use on the crudeline primarily because hot oil is being moved through that or you had or unstable materials are not applicable to the gasline.

One final area that I should bring to your attention about the difference between the gasline and the crudeline construction is the fact that the gasline is planned to be totally buried, essentially totally buried for 741-mile length, whereas only 375 miles of the crudeline were buried.

Using conventional ditching methods, including drilling and shooting much of the ditch, I do not expect unusual problems in ditching for the gasline. However, this statement is predicated upon being able to work from a normal gravel work pad to perform and support the ditching and subsequent pipelaying operations.

In permafrost, ditching is going to be done when the ground is frozen. However, there are statements being made by members of regulatory agencies promoting the use of snow pads. Mr. McMillian referred to this earlier, promoting the use of snow pads, where you actually lay a road of snow in essence down on top of the permafrost instead of gravel, proposing that the ditching for the pipeline be performed only in the wintertime working off these snow pads.

The concept of trying to perform substantial ditching and then subsequent pipe-stringing and laying from a snow pad during the coldest seasons of the year is totally impractical because of two specific reasons: first, because much of the work would have to be done in the coldest and least productive time of the year, but second, and probably most importantly, because of the loss of flexibility.

Working off a gravel pad gives a degree of flexibility that is impossible to obtain with a snow pad. Certainly that is true for construction of the gasline, but even more true for operation of the gasline when, if problems did exist—the settlement, for instance, it

would be necessary to gain access to the line, there would be no gravel pad to get access alongside of the line.

Regardless of the best and the most knowledgeable predictions that were made by the best experts that we could find about the working and weather conditions in Alaska, so-called abnormal conditions caused deterioration of the 6-mile-long snow pad that Alyeska built and required additional construction season to complete the work. If this happens to substantial lengths of the gasline, then I can say with considerable certainty that the schedule slippage will occur and this will be equated into cost overruns.

Just a few words about the planning abilities. Certainly for the crudeline there was little in the way of data base, little in the way of data about working in the Arctic. For the gasline this is not going to be the case. A substantial and even overwhelming data base was generated by Alyeska about work along with the crudeline.

The data base probably includes the most comprehensive soil information that exists about any 800-mile-long stretch of ground in the world. However, a word of caution about this. That is one of the things that can be learned from the crudeline planning and construction, the fact that the number of options and the number of alternatives that are available cannot be kept open forever. There has to be a definitive plan of identifying options, eliminating options that are not cost effective and reducing the number of parallel pads that a project can be carried down.

There is a tendency, what I identify as the Alyeska syndrome, to continue to study, explore and to find different questions that can be asked without making engineering judgments regarding the significance of these questions. This is devastating to the progress, morale and effectiveness of the project team. This can only be brought under control by firm direction from management, both from within Northwest and the Federal inspector's office.

Finally, I conclude my oral statement by making a number of observations about the several recommendations that I think are essential that have to be taken by Northwest and the regulatory agencies.

First, this is the participation, the acceptance and the commitment of agencies. I cannot express to you too strongly how much impact the Government has both on the cost and the schedule of this project, or will have on the cost and schedule of this project.

During planning and design and early phases of the project, it is essential that the Government agencies participate, accept and, most importantly, commit themselves to identifying site and time-specific constraints. This level of involvement is necessary to come up with the detail that is required to build the project and to identify the scope of work and reduce to a minimum those situations that are going to cause upsets in the field.

Second, it is to keep the technological content state of the art. There is a tendency on the part of agencies to use the project as an opportunity to study exotic solutions to problems that may not exist.

There are going to be strong pressures to try unique solutions to problems, and again there has to be firm management direction both within Northwest and by the governmental agencies to keep

the project on course by keeping the technological content state of the art.

Finally, and possibly most important, is that of change control. There has to be a recognition that the source of many of the changes that the project will experience, that is going to affect the cost and the schedule of the project and the quality of the project, will be one or more of the governmental regulatory agencies that have responsibility.

I strongly recommend that a formal program be developed by senior Northwest and Government officials to contain change and to review, approve or disapprove, and document any change that significantly affects the cost, the schedule, or the quality of the project.

Furthermore, Northwest and Government officials should commit themselves to basing their go/no-go decisions on the cost and benefits of proposed changes. Unless a high level containment and formal review of proposed changes is achieved, a myriad of changes is going to end up being built with considerable cost and schedule effects, without control of or even senior management knowledge that the changes are taking place.

Mr. Chairman, that concludes my oral comments.

I am convinced that the project can be cost-effectively completed by taking advantage of the lessons that we learned with Alyeska, and certainly some of the recent evidence that I have seen of Government participation, handing down some decisions, and the involvement of the Federal inspector is going to go a long way to that end.

Thank you.

Mr. RUNNELS. Mr. Young.

Mr. YOUNG. Thank you, Mr. Chairman.

Mr. Moolin, good statement. Two questions.

Three or four times you referred to agencies recommending moving certain camps, agencies recommending this. I would like to, Mr. Chairman, respectfully ask the witness to submit to this committee the same request that Mr. Clausen asked for, for the comparison where you see there can be potential bottlenecks, slowing down of this project. You referred to it three or four times.

Mr. MOOLIN. I will be glad to do that. I cannot tell you offhand.

Mr. YOUNG. I think it would be helpful to this committee.

One thing we do not want to get bogged down like you did, as you know well, you are well-versed with the TAPS project, was the constant, who is on first base?—one reason it went to $10 billion.

There is no way Mr. McMillian or anybody else can control the cost of a project when you do not have control of the project. Hopefully that can be avoided and we should be notified ahead of time.

The snow pads, if I understand your testimony correctly, you envision a line within the working area primarily of the TAPS line?

Mr. MOOLIN. Within the general corridor, yes, but not necessarily as close to the crude line as it could be. For instance, if the——

Mr. YOUNG. You say could be. Who has made that decision?

Mr. MOOLIN. I do not think the decision has been made yet. The Department of the Interior has come down with the decision that

the basic location of the gas line will be about 60 feet minimum from the crude line, but there is considerable—that is a general statement—numerous site-specific locations where agencies are proposing moving the gas line a considerable distance away from the crude line.

Mr. YOUNG. Do you have offhand, the agencies recommending that?

Mr. MOOLIN. No, sir, I do not, but again I will submit that with my supplemental testimony.

Mr. YOUNG. It would be my feeling that the closer proximity with the safety factors that have been established with previous experience, that line should follow that pad, working facilities and corridor, as closely as possible to the TAPS line unless there is real good sound reason for it. Hopefully you can name those agencies so we can ask them to come down and appear before us.

Mr. MOOLIN. Yes, sir.

Mr. YOUNG. On the snow pad, I happen to agree with you. I personally think it is the greatest grass-cutting project in the world, Mr. Chairman. It is like cutting grass. You have seen these make-work projects; you cut the grass and you say you are employed; of course the grass grows back and you have to cut it again. It is a great way to put people to work; you never finish the job. Building a snow pad is similar—in the springtime it thaws out, there is no more snow pad—I am not sure they protect the environment. Next year you build it all over again. It is a great way to build.

Thank you.

Mr. RUNNELS. Thank you.

Mr. Lagomarsino.

Mr. LAGOMARSINO. I do not have any questions. I just wanted to comment that although the witness skipped through his testimony very quickly, I have been reviewing some of the additional comments here and will read the whole thing. I think there is some very good material here that will be of help to the committee in making its evaluation.

Mr. RUNNELS. Thank you. Did you state that you believe most of the gas pipe line will be underground?

Mr. MOOLIN. Yes, sir.

Mr. RUNNELS. Would you state for the record why you say it should be underground rather than aboveground?

Mr. MOOLIN. Yes, sir, it is very simple.

Building aboveground pipeline is many times more expensive than building belowground pipeline. The TAPS crude line was placed aboveground only when it became necessary. It carries hot oil and whenever the pipeline would have to be placed in what is called thaw-unstable soils—in other words, the hot oil would cause the soil to thaw and settle excessively—the crude line would be placed aboveground. The gas line is going to be chilled, operate at below the freezing point of water.

Mr. RUNNELS. Could you tell us how you are going to freeze or chill this line?

Mr. MOOLIN. The gas will be chilled at the compressor stations. So the gas in essence, technically the hurdles are a lot lower in moving cold gas than moving hot oil.

Mr. RUNNELS. We are trying to get a little education as to the difference between gas and oil pipelines.

Mr. MCMILLIAN. If the chairman pleases, I would like to comment.

We are going to have about 26,000 horsepower at each compressor station for the compression of gas. Since it is a gas, it can be frozen and chilled and we are having 7,000 to 13,000 horsepower of refrigeration at each compressor station to chill the gas. So gas will be chilled at each compressor station to complete any degradation. But additional problems of putting the gas line aboveground—I know in your experiences you have watched a gas line blow—and if you have ever watched a gas line blow aboveground, it is an awesome experience.

If you put that belowground where it is protected from sabotage, where it is firmly emplaced, you have an additional safety factor putting it underground. Then in a real cold environment, such as we will be passsing through, when it gets to 60 below zero the heat exchange of the extra coldness created in that atmosphere aboveground will cause problems with liquids falling out and liquid slugs created in the line that cause operational problems. There are all kinds of reasons for us to be belowground.

Mr. RUNNELS. Thank you.

Mr. Moolin, what is the single most uncontrollable cost in building a pipeline?

Mr. MOOLIN. In my experience the single most uncontrollable cost and yet unidentifiable costs are going to be the requirements of governmental agencies.

Mr. RUNNELS. Requirements of Government agencies?

Mr. MOOLIN. Yes, sir.

Mr. RUNNELS. You had a lot to do with the supervision of the TAPS pipeline. You were in on the planning and the construction. Can you tell me how in the world a pipeline system such as TAPS escalated from $900 million to $9.3 billion?

Mr. MOOLIN. I am glad you asked that question.

That would require a lot more time than I am sure you are going to give me. But certainly the numbers thrown out in 1968 when oil was discovered at Prudhoe Bay by building a pipeline across Alaska, some offhand comment about an $800 million project, it was about a project talking about apples and oranges, comparing it with watermelons. The original concept in the minds of people that gave that number was digging the pipeline, placing a pipeline as you do in west Texas or east Texas; you take a ditch, you put the pipeline in the ditch, you take the stuff that you dug out of the ditch and dump it back around the pipeline. That is not the case.

Actually, when you compare the cost increase, if you want to compare an apple with apple, apples with apples basis on the crude line you would have to be looking at a $5.3 billion project which was the first definitive estimate of the project, based on having about half the project aboveground. I have to say placing a pipeline aboveground varies anywhere from 4 to 7 to 10 times more expensive than placing a pipeline belowground.

Mr. RUNNELS. Could the same thing happen with this gas line that happened with the oil pipeline?

Mr. MOOLIN. No, sir. I think people recognize many of the issues that impact the total cost of a program of this size. Some of the actions that have already been taken to get the definitive—to get a detailed definitive design prior to start of construction, No. 1, but second, getting the Federal inspector or involvement in the project at an early stage, these are going to go a long way to preventing overruns.

For all the reasons I indicated, the lack of infrastructure Alyeska was subjected to, also remember it was talked about in 1968 and the project completed in 1977, so the impact of inflation was certainly substantial. But not only the impact of inflation, the cost of maintaining a large organization, keeping a large organization alive for an extended period of time in itself creates or contributes significantly to the total cost of a program.

So to answer your question, the bottom line, I cannot see this $800 million to $7.8 billion type of increase occurring. There can be cost increases but certainly we understand how to control them now.

Mr. RUNNELS. On page 9 of your statement, you say that in over 4 years and over 200 meetings with governmental representatives at all levels, you did not recall a single instance where a Government representative ever mentioned the cost effect of any particular requirement or course of action recommended by the Government. What do you think is the real reason for this and was this ever brought to the attention of any congressional committee?

Mr. MOOLIN. I do not believe that Government ever perceived its role in the crude line project as being one to insure the most cost-effective construction of the line. Government perceived its role—and I think this was reported to the Congress in the GAO report to Congress about the completion of the crude line—I think the GAO report indicates that Government perceived its role as being one of insuring pipeline integrity and making sure that the environmental stipulations were complied with. It did not in fact see its role one of controlling costs, although the stipulations, the agreement between Alyeska and the Government say that the parties shall balance environmental amenities and values with economic practicalities and technical capabilities to be consistent with applicable national policies.

Mr. RUNNELS. On page 16 you state that the Government has recommended that camps be relocated due to fuel oil leakage. What additional cost and what additional environmental impact or damage can be done by from moving these camps?

Mr. MOOLIN. I do not know what the additional cost would be except it is certainly the multimillion-dollar range, less than $5 million but certainly more than $1 or $2.

Certainly any time in Alaska you attempt to build a new camp at a new location, there is additional environmental impact than there would have been if you had continued using the same camp.

Mr. RUNNELS. On page 30 you refer to the Alyeska syndrome whereby people continue to study, explore and continue to ask different questions without ever making engineering judgments regarding the significance of the questions that they ask. Is this trait particular to the Government agencies or is it present in the project companies?

Mr. MOOLIN. No, sir. It certainly is not present in the project companies. Certainly it is in the best interests of the companies that own or operate these pipelines that they be technically complete, that they be able to operate these pipelines. It is not in the best interest of anyone owning these pipelines that there be troubles with the operation because obviously it affects the bottom line of the operation.

The so-called Alyeska syndrome came about with Alyeska because of a very large number of agencies interfacing, individually in some cases, but in many cases in an uncontrolled way and impacting or stipulating and applying conditions that had to be met by Alyeska. These were the additional studies that never seemed to be satisfied and questions that never seemed to be answered.

Mr. RUNNELS. You further state that this can only be brought under control, by firm direction from Northwest management and from regulatory agencies.

Do you think the structure of the Federal inspector's office will completely solve this problem?

Mr. MOOLIN. I think that the Federal inspector, everything I have seen so far, tells me that directionally this is the right way to go. And I think time will tell. It is going to take time, of course.

The Federal inspector is new in his role, but everything I have seen so far and what I have read that the Federal inspector has said leads me to believe that the Federal inspector certainly understands how important this is to control the cost; that Government itself has a big impact on cost and schedule and he understands this.

Mr. RUNNELS. Thank you, Mr. Moolin, for your fine statement.

Is there any other statement you or Mr. McMillian would like to make at this time?

Mr. MOOLIN. No, sir.

Mr. RUNNELS. Mr. McMillian, could you stay? If there are any questions later would you feel free to answer anything that comes up?

Mr. MCMILLIAN. Yes, I will be available through the entire hearing.

Mr. RUNNELS. Tomorrow also?

Mr. MCMILLIAN. Tomorrow also.

Mr. RUNNELS. I want to thank you both for being here.

[Additional written questions submitted to Mr. McMillian by the subcommittee, with responses, may be found in the appendix. See table of contents for page number.]

Mr. RUNNELS. Our next witness will be Mr. John Sproul, Pacific Gas & Electric Co.

[Prepared statement of John A. Sproul may be found in the appendix.]

STATEMENT OF JOHN A. SPROUL, EXECUTIVE VICE PRESIDENT, PACIFIC GAS & ELECTRIC CO.; AND CHAIRMAN OF THE BOARD AND CHIEF EXECUTIVE OFFICER, PACIFIC GAS TRANSMISSION CO.; ACCOMPANIED BY DANIEL E. GIBSON, GENERAL COUNSEL, PACIFIC GAS TRANSMISSION CO.

Mr. SPROUL. Thank you, Mr. Chairman, and members of the committee.

Mr. LAGOMARSINO. If I might interrupt the witness, I wanted to note for the record Mr. Clausen does intend to be here later. I am sure he would want to be here, Mr. Sproul.

Mr. SPROUL. I am an executive vice president of Pacific Gas & Electric Co. and chairman of the board and chief executive officer of the Pacific Gas Transmission Co.

With me here today is Mr. Daniel E. Gibson, the general counsel of Pacific Gas Transmission Co.

I have submitted a prepared written statement for your consideration which I will, as you requested, summarize in, I hope, a reasonably brief manner.

P.G. & E. and its subsidiary PGT have been designated by President Carter to build the western leg of the Alaska Natural Gas Transportation System (ANGTS).

In addition, P.G. & E., through another subsidiary, Calaska Energy Co., is participating in the partnership that will build the Alaska portion of this system. P.G. & E. will also purchase Alaska North Slope gas to serve the 9.1 million people in our service area in northern and central California.

We have entered into a contract with the Exxon Corp. to purchase one-third of its share of the gas production from the Prudhoe Bay field. Thus, you can see that P.G. & E. and PGT are deeply involved in and strongly committed to this overall project. We believe it to be the single most important domestic energy project on the Nation's agenda today.

We propose to loop or parallel our existing pipeline by installing about 882 miles of new 36-inch diameter pipe side-by-side with the existing line. We will need no new compressor stations or additional horsepower to carry the initial volume of North Slope gas along with roughly 1 billion cubic feet of gas we are carrying now.

The authorized western leg design is blessed with the virtue of simplicity. Conventional pipeline design and construction techniques will be used throughout, relying on known, proven technology. The potential for unforeseen problems and difficulties is vastly reduced by the fact that the western leg expansion is essentially a replication of the existing pipeline and, of course, this in itself will minimize disturbance to the environment.

The authorized western leg design can provide for delivery of approximately 30 percent of the initially expected North Slope natural gas. That is about 600 to 700 million cubic feet of gas per day to markets in California, the Pacific Northwest and other Western States, including Arizona and New Mexico.

PGT's portion is estimated, in 1978 dollars, to cost approximately $417 million. P.G. & E.'s portion is estimated on the same basis to cost $212 million. Thus, the total western leg capital cost is estimated at $629 million. These amounts, while sizable, are within the financial abilities of P.G. & E. and PGT.

Mr. McMillian said this morning, "It is pocket change for us," but it is something within our ability to do.

As I am sure you are aware, Mr. Chairman, and other members of the committee, we, along with other sponsors of the Alaska Highway pipeline project, are proposing at this time to prebuild some of the southerly portions of the overall project.

President Carter, in his 1977 decision, recognized that these additional Canadian gas exports could help offset potential gas shortages in the lower 48 States before the completion of the entire project. That is what the prebuild facilities are designed to do, to bring additional gas from Canada in advance of the overall project.

The President also noted that the ready market for the additional Canadian exports could stimulate exploration and development activities in Canada. Even more important, in the long run is that the availability of this additional Canadian gas will support early construction of the portions of the Alaska Highway pipeline project and will thereby help us to finance and complete the rest of the project. The supply is there and so is the need.

Pacific Interstate Transmission Company, an affiliate of Southern California Gas Co., entered into a contract with Northwest Alaskan to purchase 240 million cubic feet per day of this Alberta-source gas for delivery to consumers in southern California.

PGT will "prebuild" approximately 160 miles of the western leg expansion in order to transport the additional 240 million cubic feet per day of Alberta-source natural gas from the international boundary near Kingsgate, British Columbia to a point of interconnection with the pipeline facilities of Northwest Pipeline Corp. near Stanfield, Oreg.

From that point, the gas would be transported over the facilities of Northwest Pipeline and El Paso Natural Gas Co. to southern California.

The total pipeline distance from the Canadian border to the interconnection between PGT and Northwest Pipeline at Stanfield, Oreg., is actually over 277 miles. Cost of PGT's western leg prebuild facilities is estimated to be $116 million, on a 1978 cost basis.

The Federal Energy Regulatory Commission is considering PGT's application at this time. If it issues a final certificate by the end of this year and if all other necessary regulatory approvals, including the Canadian export license, are in place by that time, we may be able to construct enough of the prebuild facilities in 1980 to allow a portion of the projected additional Alberta gas to flow by late 1980.

In addition to the obvious benefit of providing an additional early source of new gas to southern California consumers, prebuilding does offer a number of other substantial benefits. First, transportation costs for Alaska gas should be less because a portion of the western leg facilities will have been installed at an earlier date at less inflated costs.

Second, two-phase construction of the western leg will also make it easier and more economical to obtain labor and materials necessary for the overall Alaska pipeline project.

Third, PGT will gain additional revenues from transportation of the Alberta gas for Pacific Interstate, thus making available additional internally generated funds for financing of the ultimate

phase of the western leg expansion, and reducing the need to issue additional equity shares or long-term debt.

Fourth, and perhaps most important of all, the successful construction of the prebuild phase of the western leg will, I believe, greatly increase investor confidence in the probable success of the overall ANGTS.

Prebuilding will offer firm and convincing evidence that the U.S. Government is fully committed to and supportive of the construction of the western leg and all other portions of the Alaska natural gas transportation system.

The Federal Government has in fact been encouraging in its approach recently to the regulatory responsibilities regarding the western leg so that it can be built in a reasonable and expeditious manner. The recent appointment of Mr. John T. Rhett, Jr. as Federal inspector is an encouraging sign that the Government is gearing up to expedite the project and Mr. Rhett is moving quickly to set up an effective organization.

All that I have said is very positive but I would be less than candid with you, however, if I did not admit that we face a very real threat in regulatory delay which would thwart our ability to achieve the prebuild delivery schedule. For example, we are still tied up in hearings before FERC with 160 miles of prebuild even though this construction is simply a portion of what was authorized by the President back in 1977.

Second, we are still waiting for the issuance of a final right-of-way permit from the Department of the Interior to allow us to cross the three miles of Federal lands—out of the 160-mile total—that are involved in the western leg prebuild proposal.

We need other subsidiary Federal authorizations and site-specific terms and conditions must be developed to enable us to go to final design.

Of course, one of the key elements in the prebuild equation must come from Canada in its approval of the proposed export of Alberta gas.

Quite simply, if we are to have any hope of delivering the first quantities of Alberta gas by the end of 1980, we must have all final major regulatory approvals in place by the end of this year, 1979.

Mr. Chairman, we believe that the expeditious handling of the western leg prebuild is clearly in the national interest. It is one way, and an important way, to help displace some of the demand for OPEC oil. Even of greater importance, perhaps the prebuild will truly be a testing ground for the entire new regulatory structure which has been established to supervise construction of the Alaska natural gas transportation system.

There have been 2 years of delay during which this vital energy project has been exposed to the ravages of inflation. Nevertheless, we are optimistic that the entire Alaska Highway pipeline project can and will be built, but if we face further delay, gas consumers throughout the United States, and the national interests in energy security will have been badly served indeed.

Thank you for the opportunity to present these remarks and I will be pleased to answer any questions you may have.

Mr. RUNNELS. Thank you, Mr. Sproul. I appreciate your statement. I would like to say that in reading it over I think that I find

in your statement that you are a little leery of what the bureaucracy of the Federal Government is doing to this project. I am reading on page 11.

However, we have worked carefully with Federal agency representatives to familiarize them with the true nature of the western leg.

We are happy to report that there is a growing recognition on the part of Federal officials that the western leg poses no significant environmental problems.

I think this is what we are trying to do in this committee, to educate ourselves and our colleagues so that they will know that building the western leg is slightly different from building the pipeline in Alaska.

Mr. SPROUL. We certainly think so, Mr. Chairman. I might add we need your help. I think we are making progress but whatever you and the members of the committee can do in this regard would certainly be appreciated.

Mr. RUNNELS. This is what we are trying to do.

On page 12 you say:

We are still tied up in hearings before the FERC for the 160 miles of western leg prebuild, even though these facilities are simply a portion of the same facilities that were authorized by the President and conditionally certificated by the FERC almost two years ago in December, 1977.

Why they are still tied up in hearings is beyond me.

Then you say:

We are still waiting for the issuance of a final right-of-way permit from the Department of the Interior to allow us to cross the three miles of Federal lands—out of the 160 mile total—that are involved in the western leg prebuild proposal.

Whoever is sitting on that either ought to be fired or chased off if he does not get about his business. I think that is ridiculous. We will try to do all that we can to expedite some of the bureaucracy that is holding up the western leg.

Mr. SPROUL. Thank you, sir.

Mr. RUNNELS. I think this is why private business becomes frustrated. I think we are guilty on the legislative end too.

Mr. Clausen.

Mr. CLAUSEN. Thank you, Mr. Chairman.

Mr. Sproul, forgive me for being delayed. I have had a chance to read your testimony and, of course, we are delighted to have you give us the benefit of your experience in the problems you have been facing.

We appreciate very much your report today.

With respect to PGT's application for a final certificate for the prebuild facilities before the Federal Energy Regulatory Commission, do you believe the Federal Energy Regulatory Commission is moving expeditiously on this application?

Mr. SPROUL. Sir, I cannot really say that we do. We are hopeful as a result of certain steps that we have taken recently and have asked for a degree of expedition which we hope they will see in a favorable light, that things will now happen rapidly.

I think while you were out of the room I was talking about our need to have all of the regulatory approvals in play by the end of this year if we are to be able to deliver any part of the prebuild quantities by the end of next year.

One of these is, of course, the FERC approval. So maybe they have not gone as fast as we would have liked in the past but,

hopefully, they have been encouraged and have been advised of our degree of need for a quick answer, and we certainy hope we will get it because we have to get it if we are to get this project going.

Mr. CLAUSEN. I am assuming when you say you have to have that in order to get the project going, your situation would be the same as those mentioned by Mr. McMillian this morning, namely, you have to have all the things in line in order to get all your financial arrangements in order, or am I misreading you?

Mr. SPROUL. Our financial arrangements for the prebuild are—this is the prebuild alone and in a sense for the total western leg—really not all that complicated. Sure, it is difficult in a time like this to raise a lot of money but we feel confident we can do it in a conventional manner.

It is not the financial aspects of the prebuild that bother us so much as we need the regulatory approvals so that we can order the pipe, do the final planning, do the final design work so we can get people out in the field next year to start doing the work.

Mr. CLAUSEN. I think this is a natural follow-on to the points my colleague was making. Do you believe that FERC actually has exhibited a degree of understanding and cooperation toward expediting this prebuild process?

Mr. SPROUL. No, sir; I do not.

Mr. CLAUSEN. You cannot be any more forthright than that. What do they relate to you as factors that causes you to make that point?

Mr. SPROUL. It is somewhat difficult for me to respond to that question. Perhaps Mr. Gibson could do better because he is in contact with them all the time, which I am not. But it seems that they do not exhibit the same sense of urgency that we are trying to communicate. Perhaps they do not believe us, that we have to do these things in order to get people in the field next year—to buy the pipe, to do the planning, to get the final engineering done. But we have been before them now for some time.

As I say, I think things are looking up. Dan may be able to give you some detail that I cannot fill in.

Mr. CLAUSEN. Through the course of my questioning I have tried to give people the opportunity to follow up in writing to obtain more specific information and, frankly, more in-depth information, so rather than taking the time of the committee right now I will simply ask that you and your counsel prepare something a little more specific and in as much detail as you feel you can share with us so, again, we will have the kind of hearing record upon which the committee can then start moving toward addressing some of these inhibiting problems.

Mr. SPROUL. We would be glad to do that.

[Editor's Note: In response to Mr. Clausen's request for further details concerning regulatory problems, Mr. Sproul subsequently furnished that information in a letter dated October 30, 1979, to Mr. Clausen. That letter may be found in the appendix. See table of contents for page number.]

Mr. CLAUSEN. How long has your right-of-way permit for crossing 3 miles of Federal lands been before the Interior? I guess the bottom line is has the Department of the Interior moved expeditiously?

Mr. SPROUL. Mr. Gibson advises me that it has been on file since 1974.

Mr. CLAUSEN. That is not what you would describe as being very expeditious, is it?

Mr. SPROUL. I would not characterize it as such.

Mr. CLAUSEN. The same thing would follow, Mr. Gibson. I would like to have you give us a chronological projection of your experience on this matter. Clearly, this has extended over a couple of administrations in the Department and I would like to be able to pin down where the hangup is. We talk about fast track legislation and all that but as I see it, one of the principal purposes of this Oversight and Investigation Subcommittee, one of its present functions, is for us to get to the facts and this would permit us leverage on people who are supposed to expedite procedures.

Mr. RUNNELS. Mr. Lagomarsino.

Mr. LAGOMARSINO. Thank you, Mr. Chairman. I want to compliment you, Mr. Sproul, on your statement. You, in very understandable terms, pointed out some of the problems you have, many of which sound as if they are completely avoidable. I hope this committee is able to find out why some of these things that sound outrageous are happening or are not happening.

Was the idea of the prebuild part of the original plan for the pipeline? Was that part of the package all along?

Mr. SPROUL. You have to go back a ways. Certainly I do not think you can say it was part of the original plan but it was mentioned, I believe, for the first time, in the decision by the National Energy Board of Canada when they selected Mr. McMillian's project as the successful one to build the entire system.

I believe in that decision which goes back a considerable period of time now that NEB said it might be desirable to have what we now call prebuild as a kind of forerunner to the construction of the entire Alaska Highway pipeline project.

Mr. CLAUSEN. Will the gentleman yield?

Mr. LAGOMARSINO. Yes.

Mr. CLAUSEN. Have you had anything in the way of a working relationship with the NEB as contrasted with FERC?

Mr. SPROUL. In a very general sense we have.

Mr. CLAUSEN. In your view is the Canadian National Energy Board inclined to be more expeditious and more responsive by comparison?

Mr. SPROUL. I think that is a fair statement.

Mr. CLAUSEN. You think they are more expeditious and more responsive?

Mr. SPROUL. I do.

Mr. CLAUSEN. Are there more in the way of regulations and/or laws in Canada than what you have to deal with here or are they comparable?

Mr. SPROUL. I suspect comparable in a rough sense. They have an Energy Board which is roughly equivalent to our FERC. They have a Conservation Board in Alberta which is roughly equivalent to the California Public Utilities Commission. Certainly, the general statutory scheme is not the same word for word or is not on all fours, but I think they are generally comparable.

Mr. CLAUSEN. Are the time permit procedures as time consuming as here?

Mr. SPROUL. They do not seem to be, sir, by comparison. One thing I think—and I believe this to be true generally—once you get an administrative decision in Canada, that is pretty much the end of it. The ability to go to court to overturn it or to attack it is somewhat limited.

Here in the United States we have a somewhat different situation. Of course, you cannot blame that on our regulatory agencies.

Mr. CLAUSEN. Thank you. I thank the gentleman for yielding.

Mr. LAGOMARSINO. Obviously, going back to my previous question, the Canadian Government is well aware of the prebuild idea.

Mr. SPROUL. Yes, sir; and we have to have a Canadian permit as part of the overall scheme to accomplish it.

Mr. LAGOMARSINO. Is there any concern on the part of the Canadian Government that should you go ahead with the prebuild and get into the process of importing more of their gas that the rest of the line might not be built?

Mr. SPROUL. Yes, there is that concern. I think it was mentioned this morning when one of the members of the committee read the statement by Mitchell Sharpe, and Mr. Pierce addressed himself to it. They have indicated on a number of occasions that prebuild is not going to go forward until the Canadian Government is satisfied that the entire Alaska Highway pipeline project will be built.

I guess the key to that is what it is going to take to satisfy them that is going to occur. I do not think that has been defined yet, at least to my knowledge it has not been, but the concern that you mention is certainly there.

Mr. LAGOMARSINO. You say, "We have all final regulatory approvals in place by the end of this year, 1979." Are you talking about the process in Canada as well as in the United States?

Mr. SPROUL. I am.

Mr. LAGOMARSINO. I take it the U.S. process has to come first.

Mr. SPROUL. Not necessarily. We just need both of them, U.S. and Canadian, but they do not have to come in sequence.

Mr. LAGOMARSINO. But each is relying on the other.

Mr. SPROUL. Yes, sir.

Mr. LAGOMARSINO. Put it in escrow or something like that.

I am sure it would be probably asking for speculation but can you give me any idea of why Interior has taken over 5 years to not decide on the 3-mile crossing?

Mr. SPROUL. I really am not familiar with the details of that. Perhaps Mr. Gibson is. He has been intimately familiar with those dealings and I think he could probably help you.

Mr. GIBSON. If it please, Mr. Chairman and Mr. Lagomarsino, I would not want to overstress the difficulties that we have had with the Department. Certainly they have been frustrating. But the fact is that we have had our right-of-way permit application on file for the entire western leg since 1974, and the lands that are to be crossed by the prebuild portion of the western leg of course are just a portion of the total amount of lands of approximately 150 miles of Federal lands that are to be crossed by the total western leg.

The Department of the Interior has been processing the application, has considered the environmental impact, issued the environ-

mental impact statement which in part was the basis for the congressional determination of adequacy of environmental impact that preceded the determination for the entire Alaska transportation system.

Since it became clear that the project was going to go forward in 1977, we have continually urged the Department of the Interior to move on our entire application for right-of-way across Federal lands. Ever since we put on file before the FERC in November, 1978, our application for a final certificate for the prebuild portion we have been urging action by the Department of the Interior on that portion.

I must say I do not understand why it should take as much time as it does, but you have to understand it in the context of the way the Government is approaching it.

The Department of the Interior has looked at the matter of the point of view having first developing terms and conditions for the entire right-of-way permit. As Mr. Sproul indicated in his testimony, one of our ironic little tragedies on the western leg is that just because it is a part of the Alaska natural gas transportation system the initial reaction of the uninformed observer is, well, it must be just as complicated as any other part of the Alaska system, therefore, we should apply the same terms and conditions to it.

It took a long time to finally get across the point that it was not as complicated as this. Now the Department of the Interior, I think, is moving along quite well. I really think it has every possibility of getting the right-of-way through those 3 miles of Federal land out by the end of the year.

Mr. LAGOMARSINO. Who have you been dealing with?

Mr. GIBSON. The Department of the Interior has a project office. Mr. William Toskey is the man primarily in charge as the liaison person over there.

Mr. RUNNELS. He is our third witness tomorrow.

Mr. LAGOMARSINO. I want to make one comment that applies to perhaps all the witnesses' testimony. In another committee we were holding a hearing on whether or not we should get into a new system of insurance for American firms that do business overseas. We have insurance called Overseas Private Investment Corporation, OPIC, which insures certain American companies against certain risks, including appropriation by foreign governments of their assets. It was proposed that we expand that program to also cover not only appropriations but "creeping appropriations."

I asked what that was and I was told when the Government, after giving permits to a company to operate, imposes restrictions so onerous that in effect you have taken away a part or all of their assets or their value.

I made the comment that I know a lot of constituents feel that is exactly what is happening in this country but I doubt if anybody would write insurance for American companies against that kind of risk.

Mr. CLAUSEN. In going through your testimony, Mr. Sproul, you seemed to place heavy emphasis on "One of the key elements in the prebuild equation must come from north of our border: Can-

ada's approval of the proposed 12-year export of Alberta gas is necessary if the prebuild concept is to go forward as planned."

Then you go on to say, "The National Energy Board has concluded its omnibus hearings on exports, and we believe it reasonable to expect that a decision on exports will be issued and approved by the Canadian Government by the end of this year."

Are they on track? Is there any reason for you to be concerned because you have placed heavy emphasis on that point? What would be the possibility of delay?

Mr. SPROUL. We think they are on track, Mr. Clausen. I was being, I hope, on the conservative side when I said by the end of this year. I really have some expectation that the Canadian decision will come down well before the end of 1979.

Mr. CLAUSEN. Were you making that point in order to draw the comparison hoping that the United States would keep the same pace?

Mr. SPROUL. Partially, sir. Yes. Right.

Mr. RUNNELS. Mr. Sproul, I want to observe that I believe the Western Leg may have been caught in what we term where I come from, "We walk a switch." I think the State of California and its State agencies were dragging their feet on the Sohio pipeline system and I believe the Federal Government has been dragging its feet on the Western Leg.

You may be the victim of circumstances.

Mr. SPROUL. We really think things are going to get better.

Mr. RUNNELS. Cannot get much worse, can they?

On this pocket change, did you hear Mr. McMillian say it was pocket change?

Mr. SPROUL. Mr. McMillian referred to pocket change when we built the western leg but we think $600 million plus is a little more than that.

Mr. RUNNELS. We thank you very much for your presentation and we will be offering some questions to you for the record.

[Editor's note: Additional questions submitted by the subcommittee, with responses from Mr. Sproul, may be found in the appendix. See table of contents for page number.]

Mr. RUNNELS. Our next witness is Mr. Conrad Pyle, Northern Border Pipeline Co., and Mr. Meierhenry.

[Prepared statement of J. Conrad Pyle may be found in the appendix.]

STATEMENT OF J. CONRAD PYLE, PROJECT MANAGER, NORTHERN BORDER PIPELINE CO.; ACCOMPANIED BY ROY A. MEIERHENRY, TREASURER, NORTHERN NATURAL GAS CO.

Mr. PYLE. Mr. Chairman and members of the subcommittee, it is indeed a great pleasure to be here. This is our first opportunity to appear before this subcommittee. Indeed, it is a great honor to present our project. We are always glad to speak to groups about the Northern Border Pipeline Co. and the prebuild project.

We think it is one of the key hinge pins to getting the Alaska natural gas transportation system off the ground and moving.

Briefly, we have submitted our written statement. I would like to make a few comments to summarize that.

The Northern Border Pipeline Co. is the eastern leg of the Alaska natural gas transportation system which was approved by the President in his decision in 1977. It originates at the Canadian-United States border in Saskatchewan and extends 1,117 miles through five States and ends up in the sixth State of Illinois.

The project is approved by the President, 1,117 miles of 42-inch diameter pipeline with seven compressor stations which was designed to handle about a 1,500 million cubic feet of gas from Alaska.

The partners within the partnership today consist of subsidiaries of Northern Natural Gas Co., United Gas Pipeline Co., Northwest Pipeline Co., Pan Border Gas Co. These four companies are the partners who are now engaged in the project. I would like to describe some of the prebuild portion. Earlier there has been an overall description of what prebuilding for Canadian gas is. The Northern Border has been involved in it.

Three of the companies, the partners within the Northern Border partnership, have purchased gas, Northwest Alaskan whose companies are United Gas Pipeline, purchased 450 million cubic feet a day; Northern Natural Gas Co., purchased 250 million cubic feet a day; Panhandle Eastern Pipeline, who has purchased 150 million cubic feet a day.

For the prebuild project we are proposing building the first 809 miles of the 42-inch diameter pipeline to a point near Ventura, Iowa, together with one 16,200-horsepower compressor station in MacKenzie County, N. Dak.

This would have the capability of transporting 800 million cubic feet a day.

The overall system when expanded for the Alaskan Gas, by the addition of compressor stations and additional 308 miles of 42-inch pipeline would have a capability of transporting 2.2 billion cubic feet a day of gas which would be in addition to roughly 1.4 billion cubic feet a day of Alaskan gas in addition to the 800 million cubic feet a day of Canadian gas.

The benefits from the prebuilding of the Northern Border are numerous. I would like to briefly enumerate the benefits as we view them. First of all, the prebuild would bring the addition of 800 million cubic feet of additional gas reserves into the United States. The Northern Border with various interconnections of the pipelines, the deliveries from the three companies purchasing this gas, indirectly make deliveries from those pipelines that serve almost all the States east of the Rockies.

One of the benefits from the prebuild is it increases the volume through the pipeline by 800 million cubic feet a day. Consumers would benefit from the economies of scale, also service for transporting all the gas would be decreased by the increased volume going through the pipeline.

By prebuilding the project for the Canadian gas in an earlier time frame we would reduce the effects of inflation, decrease the total capital costs of the system itself. Also, if we prebuild and operate the pipeline on Canadian gas prior to the transportation of Alaskan gas, the system would be partially depreciated, depreciation having occurred by the introduction of Alaskan gas, thus reducing the costs of transportation for Alaskan gas.

Additionally, the cash flow generated from the operation of the prebuild project would generate funds, would help finance the Alaskan system. I also see from a project management standpoint immense benefit from building a major portion of our system prior to construction of the Alaskan system, and it would reduce the demand on supplies and contractors in furnishing both materials and labor in construction of the pipeline. By reducing this demand it should make it easier to maintain the schedules and complete the project on time.

Also, by building a large portion of our system prior to the building of the Alaskan system, we would reduce the demand on capital in any given year since the major capital demands for our project would occur in an earlier time frame.

The final reason, which was also enumerated by Mr. Sproul, is that we would increase investor confidence if we can build a major portion of the system prior to getting into construction on the Alaskan system.

Just a minute on the current status of the project in the regulatory scene. We have received a final order of 31-B incentive rate of return rulemaking of September 5 which was one of the major considerations in bringing together our final filing on the cost estimates and the schedule for the project.

We are now in phase 2-B of the hearings in which we will be filing in the future cost estimates and financial statements before the FERC.

I would like to mention just one thing which has occurred within the past week. We have delayed filing our cost estimate as requested to the FERC. We have 30 days to file our cost estimate to accommodate maintaining 1981 service which I will talk about in a few minutes.

I would like to spend just a minute talking about the design of our pipeline, the route and design as opposed to prebuild which is the identical system filed with the FERC, started in 1974, amended in 1976. It is currently the same 42-inch diameter system as approved by the President.

We do have some minor reroutes which we have proposed making. One of them was around an area which was identified by the FERC in earlier hearings, and we have accommodated that reroute.

The second one is around the coal fields in North Dakota, which have been identified after the point in time the President had approved our route. It is one which we very much intend to make as a very minor route deviation. Environmentalists have filed environmental reports with the FERC indicating that this route is equally as environmentally acceptable as the earlier route approved by the President in his decision.

We have one further reroute, which is a last resort, which is a potential reroute around the Fort Peck Indian Reservation. We are negotiating with Fort Peck Indians in trying to get a permit to cross their reservation. It is a unique situation in that the entire route of our pipeline, of course, comes under FERC jurisdiction with right of eminent domain except for the Indian reservation.

So in the event that we are unsuccessful in negotiating for the permit across the Indian reservation, we would require a reroute around that reservation.

We have been encouraged by recent meetings and correspondence with the tribe and expect in the near future to have that resolved.

To get back to our reason for delay in filing the cost estimate, originally our project had been planned on a 2-year construction program, one which we thought was a reasonable and achievable schedule. Since September 5 and the incentive rate of return order, we have proceeded on that original construction plan, which was realistic and achievable in preparing our cost estimates.

During this past month and a half, we have worked towards the cost estimate based on that 2-year construction schedule. We came to the conclusion that if we were to maintain a 2-year construction schedule that it would result in a delay in the in-service date of the project until late 1982. Our original in-service date had been projected in our filing as late 1981.

Late last week, the partners decided that other factors, such as the desire for early delivery of gas and the concerns of the producers, weighed so heavily that we must consider revising our cost estimate and filing it on the basis of a 1-year construction program. We are in progress now of reconstructing our schedules, both construction and procurement activities, and recasting our estimate based on a 1-year construction program which would then result in the same in-service date of late 1981.

I might mention that our reluctance to proceed on a 1-year construction program resulted from the incentive rate of return rule making and procedures. There are a number of aspects of that procedure which place a great deal more risk on the sponsors in the event that they cannot meet the 1-year construction program.

From the standpoint of the sponsors, overruns of the construction schedule would result in additional financing charges, or in this case a financing charge on the cost of the money which reduces the earned rate of return. From the standpoint of the consumers, it could possibly end up in higher cost to the consumer if we are unable to achieve the 1-year program, having attempted it.

One other aspect of the incentive rate of return is that inflation indexing, to protect the sponsors against the ravages of inflation, does not work accurately unless the sponsors are able to make expenditures as projected in their estimate.

As long as we were on a 2-year construction program, we felt quite confident we could control expenditures and be fully protected under the inflation indexing mechanism. On a crash program—1-year construction—this is much more risky and would be much more difficult to control expenditures; and that was weighed in our decision to recast our cost estimate on a 1-year basis.

One further factor that places a great deal more risk on sponsors in going to a 1-year program, is that compressing all of the construction activities into a single year for 809 miles of pipeline, if you compare that to Alaska which is 720 miles, is that it will require a number of construction spreads be active in a single year. We are estimating if we are to do it in a single year, it will take

from eight to nine separate contractors, and in the pipeline industry we refer to them as contract spreads.

This, of course, will run concurrently with construction programs with the west coast companies and also with the construction programs at the Foothills pipeline in Canada. The demand for the labor, contractors' resources, for the materials, pipes, valves and fittings and other equipment required for construction will be much greater during this same time period.

This will tend to decrease the competition between contractors and suppliers of materials and could end up with higher costs for each of these items.

In closing, I would like to make just a few points about Northern Border and the importance that it has to the overall Alaska natural gas transportation System. Mr. Millard recognized that Northern Border was of great importance to financing the overall project. If we could get Northern Border completed and financed and in operation prior to the Alaskan system, it would aid in the financial area from a confidence standpoint in the financial community.

Additionally, Northern Border is the largest segment to be prebuilt of the Alaska natural gas transportation system. It is an 809-mile, 42-inch pipeline which is the largest single section being prebuilt.

One other benefit from the prebuilding of Northern Border is that it has been viewed—and I think accurately so—as being the guinea pig for various new procedures which are going to be applied to the Alaska natural gas transportation system. Unlike the western leg, we will be under the incentive rate of return.

We will be under the cost reporting system to the Federal inspectors and will have to institute the inspection program and environmental training required under the President's decision.

We will have to comply with EEO and MBE requirements as described in the President's decision.

And we have a new one which has recently come up, which is the procurement practices being negotiated between Canada and the United States, making each of the sponsors bid competitively, both to the United States and Canada, to give both of these countries a fair competitive position on supplying goods and services.

So, we see many benefits from the project. We think the Northern Border project is a hinge operation and very important part of the Alaska natural gas transportation system and feel confident because our system is being built in the lower 48 States, is of conventional design, does not have the environmental problems of some of the other segments, that it can be built on schedule.

That concludes my comments, Mr. Chairman. I will be glad to answer any questions.

Mr. RUNNELS. Thank you very much, Mr. Pyle.

Do you have the same feeling that Mr. Sproul had, that you have been had by being associated with the difference between building the pipeline in Alaska and one in the lower 48?

Mr. PYLE. We feel we have been painted with the same brush.

Mr. RUNNELS. People should distinguish between the two. Is this correct?

Mr. PYLE. In my opinion, we feel the project would have gone quicker and simpler if we had not had the additional regulations.

Mr. RUNNELS. Will you have any problem in getting the 42-inch pipe you will need for your segment of the pipeline?

Mr. PYLE. The availability of the pipe size diameters and specifications that we have should not be a problem but, depending on the schedule, a 1-year construction schedule, depending on when all the Federal approvals, and so forth, are forthcoming, it could be a problem to get them soon enough in a short enough time span.

Mr. RUNNELS. You are going to put in 809 miles of new pipeline, is that right?

Mr. PYLE. That is correct.

Mr. RUNNELS. How long do you think it would take you to get 809 miles of new pipe if you placed the order today?

Mr. PYLE. We have had estimates that run from 6 to 12 months in order to get deliveries of that amount of pipe.

Mr. RUNNELS. I guess I am a little confused. I thought that your timetable was 2 years to complete this pipeline?

Mr. PYLE. That is correct.

Mr. RUNNELS. Now it has slipped and you are talking about 1 year. So if you are talking about 1 year, and this will escalate the cost, and so forth, and I believe you said you would have to wait from 6 months to 12 months just to get the pipe——

Mr. PYLE. That is correct.

Mr. RUNNELS. How are you going to finish it in a year if it is going to take you a year to get the pipe?

Mr. PYLE. We are talking about a 1-year construction program with enough advance time to get all the materials and the contractors and equipment on site. Our 1-year construction program would be within the year 1981. We would reserve the year of 1980 to get the delivery of the pipe and the associated materials.

Mr. RUNNELS. How about the right-of-way across the Fort Peck Indian reservation?

Mr. PYLE. We hope to have that in 1980.

Mr. RUNNELS. You do not believe you will have a problem with the coal field, or ironing out the problems to get across the Indian reservation you mentioned in your testimony?

Mr. PYLE. The question on the reroute around the coal field is getting approval from the FERC for the reroute and acknowledgment by their environmentalists that it is indeed not any larger environmental impact than the original route.

Mr. RUNNELS. Do you feel as though your group would have any problems, with the interest rate running what it is today, on the financing of your part of the pipeline?

Mr. PYLE. On the financial end, I guess I would defer to Mr. Meierhenry, who has more expertise in that area.

Mr. MEIERHENRY. Mr. Chairman, in answer to your question, at this point our project is not one to be characterized a pocket change, slightly bigger, but we do not anticipate any major problems, and, as Mr. McMillian alluded this morning, we are looking forward to Trans Canada becoming part of the project in making additional capital available from the Canadian market, also.

Mr. RUNNELS. Thank you very much. We appreciate your testimony today, and we will submit some written questions for the record.

[Editor's Note: Additional questions submitted by the subcommittee, with responses from Mr. Pyle, may be found in the appendix. See table of contents for page number.]

Our next witness for today is Mr. Loeffler, counsel to the State of Alaska. I believe you are appearing in behalf of the Governor, is this correct?

Mr. LOEFFLER. That is correct.

Mr. RUNNELS. Welcome to the warm country.

[Prepared statement of Robert H. Loeffler may be found in the appendix.]

STATEMENT OF ROBERT H. LOEFFLER, COUNSEL, ON BEHALF OF THE GOVERNOR AND THE STATE OF ALASKA

Mr. LOEFFLER. Thank you. Unfortunately, I spend most of my time down here, anyway. I should clarify that I am appearing on behalf of the Governor and his administration, and, therefore, I cannot speak for the Alaskan Legislature, which has received some comment this morning.

I think I will let my prepared testimony be submitted, and I will try and hit the five or six large points that I tried to make in the testimony.

First, the Hammond administration and the Governor personally support the gas pipeline, and they support the Northwest Partnership as the person to construct the pipeline. The Governor has announced it will be a priority of his administration to get the pipeline built.

The next question, of course, is State of Alaska financial participation. To date, we have created an Alaska gas pipeline financing authority although there are some problems with it. In the next few months we are going to be engaged in an effort to consider the various options for State financial participation and to try and gain a consensus within the State on that question. And we hope this will fit into the schedule of both the Federal officials and the Northwest Partnership.

Historically, we have said that the proposal of Northwest for tax-exempt bonds looks attractive to the State, and it still looks attractive, but is by no means the only method of participation and won't necessarily be part of the final package.

As I say, we expect to have some answers within the next few months on those questions.

Speaking for the State of Alaska in terms of its royalty interest, we see the conditioning cost issue, and that is the financial and other responsibilities for the construction of the $2 billion conditioning plants, somewhere in Alaska, as a critical issue to getting the project moving. The FERC has adopted an order which would place the entire responsibility for that plant upon the producers and upon the State.

That order is now undergoing rehearing. There have been rather strident protests filed against the order by both the State and the producers, because we think it is not consistent with what Congress ordered in the Natural Gas Policy Act, and I am afraid unless the

Commission changes its course, and it may, that is one that may end up in court.

More than the legal question, the problem I see there is that for several years now parties have said that the execution of gas purchase contracts is essential to the financing of the pipeline. This past spring and summer either contracts or letters of intent were negotiated.

The difficulty is that the disposition of the conditioning costs in those contracts is not consistent with Order 45. So we have the possibility of the contracts being upset by the action of the FERC.

That is not a sign of progress, and we hope that one way or another the issue will be compromised so that the contracts can stand, and that the people who sign the contracts can join the project and move it forward.

In terms of the State's own interest, as he mentioned, the issue of petrochemicals in the last few years is a vital concern. This issue is related both to the location of the conditioning plant and to the pressure of the gas pipeline at least between Prudhoe Bay and Fairbanks.

We have attempted to get the Commission to look again at that issue, and we have been unsuccessful, and I must report that we have gone to court under the Alaska Natural Gas Transportation Act to try and overturn the Commission's determination on that. By law, that decision must come within 90 days, which is approximately January 3.

There is immense popular interest in Alaska in the question of petrochemicals and the related question of the location of the conditioning plant, and unless that concern is satisfied, I suspect that it will be difficult for Alaska's elected officials to find the consensus and support for State financial participation.

We also have been critical of the FERC's approach to a number of the regulatory issues. We share with Northwest in the frustration at the amount of time and proceedings that the incentive rate of return took. In fact, at the opening of those proceedings we urged the Commission to abandon the concept because it was just going to take a long time and with uncertain benefits. In the last revamping of the incentive rate of return, we think the concept has been substantially changed—I will not say abandoned—but changed from what was originally proposed and, therefore in looking back, we question whether the year and a half spent on those regulatory proceedings was really fruitful.

We also believe that the conditioning cost issue question of the CO_2 content of the gas, certain other quality questions are interrelated and should not be handled piecemeal in separate proceedings. This was the brunt of our last petition to the Commission, which they turned down.

On the question of State-permitting authority, I think it is important to point out I have heard no criticism today of the State of Alaska's pipeline coordinator or the functions under him. The pipeline crosses substantial parts of State land, and there will be a right-of-way issued by the State as well as by the Department of the Interior.

To my knowledge, there are no major problems there. In fact, the State appointed its State pipeline coordinator 1½ years before the

Federal inspector was confirmed, and we now are on our second pipeline coordinator. The first one, I think, got a bit frustrated.

But the comments I have heard this morning have really been directed to the question of the State participation in financing, which is quite different than the problem that affected the Sohio line with apparently the State of California's permitting authority.

Lastly, we do see a hopeful sign in the efforts undertaken by the Secretary of Energy to get the various participants and potential participants to agree on a kind of financial plan. This is an effort that is going on outside the FERC processes.

We have confidence in the individual selected to gather the information and put together the plan, and we hope that this will provide a means of compromising the various outstanding issues of getting the financing established and letting the project go forward.

That is all I have to say and I would be happy to answer any questions.

Mr. RUNNELS. Thank you, Mr. Loeffler. I note in your testimony that you say that the State of Alaska supports the construction of the Alaska gas pipeline, and that it supports the construction of the pipeline by Northwest Partnership along the proposed route. Is that correct?

Mr. LOEFFLER. That is correct.

Mr. RUNNELS. And Governor Hammond has made it a priority of his administration?

Mr. LOEFFLER. That is correct.

Mr. RUNNELS. Further in your testimony you say, "even if the legislature had enacted technically perfect legislation, a change in Federal law—the Internal Revenue Code—to afford tax-exempt status with regard to the authority's bonds was necessary." Are you saying that we need to look at Federal law at this point in time?

Mr. LOEFFLER. I think that question is undergoing a further look by the State. With the oil pipeline, the plans were issued under a provision of the revenue code and applies, I believe, to docks and harbors, and it covered the facilities at Valdez.

I am not a tax lawyer and I do not venture into that area. I had an understanding that there was a revision necessary to be absolutely certain that the bonds were covered, but I would say it is premature, because of the efforts going on under the auspices of the Secretary of Energy, and, second, the efforts going on by the State to reconsider what is the most feasible form of financial support. So, right now, I think it is premature for the subcommittee to look at that.

Mr. RUNNELS. In your statement you say that the proposal, in brief, was that the State create a pipeline bonding authority to issue $1 billion in tax-exempt bonds to assist financing of the gas pipeline. A similar arrangement assisted the financing of the Trans Alaska Oil Pipeline.

Mr. LOEFFLER. Right, but there was no amendment, and I am not saying it is necessary to cover the oil pipeline bonds. One may be necessary for the gas bonds.

Mr. RUNNELS. What makes the gas pipeline different from the oil pipeline according to State——

Mr. LOEFFLER. Because we are not talking about docks and harbors, which I believe is the language existing in the Internal Revenue Code provision. This pipeline does not go anywhere near the water.

Mr. RUNNELS. Also, you stated on page 4, "CO_2 content of the gas must be reduced from 12 percent to 1 percent, its pressure must be increased, and much of the natural gas liquids must be removed from the gas because the 1,260 p.s.i.g. pressure Northwest line cannot accept them.

"The cost of the facilities to perform these conditioning functions approaches $2 billion. The Federal Energy Regulatory Commission in its Order No. 45 has said that the producers must perform these functions and may receive no extra compensation for them."

Does the State of Alaska agree or disagree with Order No. 45?

Mr. LOEFFLER. It strongly disagrees.

Mr. RUNNELS. Why does the State strongly disagree?

Mr. LOEFFLER. There are several reasons. Legally it disagrees because the legislative history of the Natural Gas Policy Act indicates that the gas may be sold for the maximum lawful price without conditioning. And Order No. 45 says this isn't so. So, as a legal matter, we think the Commission is in error, and we have made that argument.

In a pipeline sense we argue, and the producers argue, that the gas as it comes off the oilfield separators is ready to be transported in the ordinary lower-48 sense, and that the additional conditioning that is required here is transportation related; it is not an essential part of production, by distinction.

We also believe it is wrong because the order has created sort of a wedge between the producers and the pipeline, and what is needed is to get the producers in some acceptable form into the financing of the pipeline.

Mr. RUNNELS. I noted that Don Young alluded this morning to certain things which would happen if Northwest Pipeline would do certain things. You stated that the people of Alaska really want a petrochemical complex. Is this what they really want?

Mr. LOEFFLER. From my communications with State officials and my own visits to Alaska, yes, there seems to be a great interest. The reason for that is, as you probably know, Alaska has very little industry, and once the oil and gas disappears, there is little left, and there is a hope this will diversify the industry.

Mr. RUNNELS. Do the people of the State of Alaska take into account that Alaska is a long way from where the market would be. Do the people of the State of Alaska take this into account when they are talking about a petrochemical complex?

Mr. LOEFFLER. There are people from the industry who come to Alaska and say that they want to do it or that it is possible, and that the markets would be not the normal markets, but the Pacific rim, and these people are usually welcomed when they come.

We are undertaking, the State administration, an effort to really determine how much serious interest there is in petrochemicals. The Governor appointed a task force to look at that recently. The task force included not only the administration and legislature, but representatives of the bureaus, Fairbanks, Anchorage, North Slope, and their conclusion was they didn't know; they didn't have

enough information to determine whether a petrochemical industry was feasible, but they wanted to preserve the right. They have heard both sides of the argument, and there are people in the industry who say it is possible in Alaska.

Mr. RUNNELS. Are the people saying this, the ones who have an interest in the oilfields or interest in the gas?

Mr. LOEFFLER. No.

Mr. RUNNELS. These are outsiders?

Mr. LOEFFLER. Yes.

Mr. RUNNELS. I want to thank you for your presentation. We may send you some questions for the record. We appreciate your being here today.

Mr. LOEFFLER. Thank you.

[Editor's note: Additional questions submitted by the subcommittee, with responses from the State of Alaska, may be found in the appendix. See table of contents for page number.]

Mr. RUNNELS. This committee will recess until 9:45 in the morning. I thank those who were our witnesses and those who have come to observe today. Thank you very much.

[Whereupon, at 3:55 p.m., the subcommittee recessed, to reconvene at 9:45 a.m. o'clock, Tuesday, Oct. 16, 1979.]

ALASKA NATURAL GAS TRANSPORTATION SYSTEM

TUESDAY, OCTOBER 16, 1979

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS,
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D.C.

The subcommittee met, pursuant to notice, at 9:50 a.m., room 1324, Longworth House Office Building, Hon. Harold Runnels (chairman of the subcommittee) presiding.

Mr. RUNNELS. The Subcommittee on Oversight and Investigations of the Interior and Insular Affairs Committee will come to order.

Our first witness this morning is John T. Rhett, Federal Inspector. I believe he will be accompanied by Peter Cook, the Executive Officer. Welcome, both of you.

[Prepared statement of Hon. John T. Rhett, Jr., may be found in the appendix.]

STATEMENT OF HON. JOHN T. RHETT, JR., FEDERAL INSPECTOR, OFFICE OF THE FEDERAL INSPECTOR, ALASKA NATURAL GAS TRANSPORTATION SYSTEM, ACCOMPANIED BY PETER COOK, EXECUTIVE OFFICER AND DEPUTY FEDERAL INSPECTOR

Mr. RHETT. Good morning, Mr. Chairman. I am really pleased to have this opportunity to appear before you today and introduce myself and my organization, and to discuss the progress that has been made on the pipeline to date.

I do plan to summarize my statement. I obviously will be open for questions from any of you.

During my nomination hearing on July 12, I characterized the job of Federal Inspector as a most challenging assignment. My experiences during these first 3 months as Federal inspector have more than supported that preliminary assessment of the task which lies ahead.

The diversity of terrain, the sensitivity of the environment, the unique construction conditions, the geographic scope of the project, the number of Government and corporate entities involved, and the cost of the project together pose a considerable challenge to all participants. This, however, should not deter us because the benefits to the sponsors and to the country are substantial.

Completion of the pipeline will deliver a volume of natural gas roughly equivalent to 450,000 barrels of crude oil per day. With the

addition of compression, this system has the potential to deliver enough energy to offset 600,000 barrels of crude oil per day.

Looking at it another way, the gasline will ultimately supply 5 percent of current U.S. natural gas needs for a period of 25 years. This project, therefore, offers us a unique challenge to marshal the resources of a number of communities—Government, industry, financial, academic—to build an energy transportation system with significant and undisputed benefits to the Nation.

I have been asked to lead the Federal Government's response to this challenge. While the Government is neither building nor financing this pipeline, the extent of our regulatory role makes our participation critical to the success of this project. It is my job to assure that the Federal Government exercises its duties both competently and promptly.

In addition, the development and maintenance of a constructive working relationship among all parties is necessary to assure that the project is constructed in a timely and cost-effective fashion, consistent with environmental and public safety requirements.

I am prepared to do everything I can from the Government side to foster such a constructive relationship.

A large percentage of my efforts to date have been directed to "getting acquainted" with the project sponsors, the Federal agencies, the States and especially Alaska and its people; the Canadians; and, indeed, with the project as a whole.

Getting acquainted with the project itself is a challenge.

I have traveled over 32,000 miles in the past 8 weeks in an effort to acquaint myself with the sponsors and the project. The Alaska Natural gas transportation system spans Alaska, four provinces in Canada, and 10 lower 48 States. It covers every conceivable type of terrain from the fragile Arctic tundra to the prairie pothole region in the Dakotas and Minnesota.

I have flown over most of the line in Alaska and Canada and have been on the ground in many places.

I have also visited Northwest Alaskan Pipeline Co. and their principal construction manager, Fluor Engineering. Northwest has assembled a team composed of topflight personnel, thoroughly capable of providing the needed technical engineering support. In addition, the final resolution of the incentive rate of return and pipe pressure issues, reached by the Federal Energy Regulatory Commission in early September will enable Northwest to continue their mobilization effort.

Due to schedule conflicts, I have not yet been successful in arranging a visit to Pacific Gas Transmission Co. and Pacific Gas & Electric Co. headquarters. However, my discussions with Mr. Prudhomme, president of Pacific Gas Transmission Co., have been very constructive and encouraging.

We do plan to meet next Monday and to fly the western leg together. The western leg of the Alaska natural gas transportation system consists of looping the existing Pacific Gas Transmission Co. and Pacific Gas & Electric Co. system.

By virtue of having constructed and operated a gas transmission line on this right-of-way, Pacific Gas Transmission and Pacific Gas & Electric Co. are well prepared to move ahead with their portion of the Alaska natural gas transportation system.

The Federal Energy Regulatory Commission is scheduled to issue a Certificate of Public Convenience and Necessity early next year and I foresee no major problems which the Office of the Federal Inspector and the sponsors cannot resolve. The exclusion of the western leg from the incentive rate of return process further simplifies the Office of the Federal inspector's responsibilities on the western leg.

The Northern Border Pipeline Co. faces a somewhat more complicated set of problems, but the sponsors are doing an impressive job of dealing with them. Northern Border is completing its final filings for a certificate and work on right-of-way acquisition is also proceeding.

By conventional standards, construction of the 800 miles of pipeline necessary to allow early delivery of Alberta gas constitutes a major undertaking. However, the construction problems on this segment will not be unique.

The sponsors' planning process is well underway and should result in an effective marshaling of the necessary manpower, equipment, and materials.

Obviously, construction on a new alinement has potential for surprises. Yet this route underwent careful analysis before Presidential selection and Northern Border is continuing to supplement the existing data base to reduce the potential for both environmental and technical surprises later on.

Of course, all of the questions have not been answered, nor have all of the problems been resolved. But I am firmly convinced that the successful, timely, cost effective, and environmentally acceptable construction of the Alaska natural gas transportation system rests on two critical factors: One, careful and thoughtful planning to foresee and resolve problems early and, two, genuine dedication by all parties, both Government and private alike, to cooperatively resolve the problems which surface.

I am encouraged by what I have seen so far in both of these areas.

For any project, and especially for one of this magnitude, the development of realistic and detailed schedules is a significant element of the total project planning process. All relevant activities and their interrelationships must be considered. In the beginning a certain number of assumptions must be made from which subsequent activity time frames are developed.

Current sponsor schedules assume satisfactory and timely completion of financing, the Federal Energy Regulatory Commission certification process and other major actions. Failure to complete any of these major actions within the assumed time frame thus necessitates reevaluation of the remainder of the schedule. Because project schedules are a major component of the sponsors' certification filings, all existing schedules are now being reviewed. A review of these schedules by Federal Energy Regulatory Commission and myself is currently underway as a part of the sponsor's request for certification.

The schedules presently under review call for Alaskan gas to begin flowing from Prudhoe Bay to the Lower 48 during the winter of 1984-85.

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The eastern and western legs do not involve unique construction situations.

I am convinced that while the Federal Government obviously has to make sure that all of the applicable rules and regulations are carried out, it also must let the companies proceed in order to get these projects moving quickly. This is particularly important with the prebuild section which can bring excess Canadian gas to the lower 48 before Alaskan gas is available.

I do not mean by this that there are not problems. I do not mean that there is not an oversight responsibility; both by me and obviously by you.

The major thing that I do want to emphasize is that we are concentrating on trying to clear all the roadblocks early.

Since my confirmation as Federal inspector in July, I have devoted a great deal of my energies to developing an organization which will be capable of effectively fulfilling all Federal inspector responsibilities. My responsibilities are spelled out in the Alaska Natural Gas Transportation Act, the President's Decision and Reorganization Plan No. 1. The principal ones are:

(1) Coordinating the scheduling and issuance of all Federal authorizations for the project;

(2) Enforcing all relevant Federal statutes, including monitoring compliance with any terms and conditions imposed;

(3) Monitoring all actions taken to assure that cost control, safety and environmental protection objectives are fulfilled while still achieving the timely construction and initial operation of the Alaska natural gas transportation system; and

(4) Establishing a joint, cooperative relationship with affected State governments and the Government of Canada.

The organization of the Office of the Federal Inspector must be capable of fulfilling this wide range of responsibilities and it must do so within a rather unique set of parameters.

The Office of the Federal Inspector is a single purpose organization with a wide scope of responsibilities, with a limited duration. It must be highly flexible, in order to be capable of focusing attention on problems wherever they arise.

Although initially our major headquarters will be located in Washington, we plan to have field offices in the near future on each segment of the pipeline: Eastern, western, and Alaska, we will also establish close liaison with Canada.

As the work builds up in Alaska, the bulk of the Washington personnel will be shifted there.

My full testimony and our quarterly report cover the organization in detail. Copies of the report have been furnished to the staff.

The regulatory decisions that have been made by the Federal Energy Regulatory Commission in the past 2 months have collectively begun to create the positive regulatory climate essential to project success.

For example, the producers are currently evaluating investment options while Northwest Alaskan continues to pursue various other funding sources. In general, the financing community is responding favorably to the recent turn of events. Department of Energy representatives are closely watching this area and are keeping me apprised of developments as they occur.

Another long-standing issue which is nearing resolution is the content of the administrative, environmental and technical stipulations which will be attached to the Department of the Interior's grant of right-of-way across Federal lands. These stipulations have been under development for some time and the project sponsors have actively participated throughout the process.

The Department of the Interior will be ready to issue grants to both the Pacific Gas Transmission Co. and Northern Border before the end of next month. Work on the grant and stipulations for the Alaska segment is also nearing completion.

The Department of the Interior also has the lead responsibility for the preparation of a set of regulations to implement the equal employment opportunity provisions of the Alaska Natural Gas Transportation Act and the minority business enterprise participation requirements of the President's decision.

My staff has been involved with this effort and I am pleased to report that the cooperation evidenced by both the Department of the Interior and Federal Energy Regulatory Commission has been exemplary in this area. When these regulations are finalized, the Alaska Natural Gas Transportation System will have an effective means to assure equal opportunity and to promote minority business enterprise participation in all phases of the project.

Even though these minority business enterprise regulations have not yet been finalized, the Department of Transportation has taken affirmative steps to fulfill the intent of the Alaska Natural Gas Transportation Act and the President's decision in this area.

Late in 1978, the Department of Transportation solicited offers from minority businesses to provide technical assistance in reviewing the design and quality control programs. My staff is actively participating in the final contract negotiations to broaden the scope to include other areas of the Office of the Federal Inspector's interest.

Also of note in the area of technical assistance, I am developing an agreement with the Chief of the Corps of Engineers for assistance in reviewing Northwest's engineering solutions to permafrost-related problems.

This assistance will be provided by a number of the Corps of Engineers' divisions and laboratories, including the Cold Regions Research and Engineering Laboratory which employs some of the world's experts in permafrost dynamics and Arctic engineering.

In addition to their inhouse expertise, the Corps of Engineers will draw upon the resources of the U.S. Geological Survey, and the academic and international engineering communities. This expertise will be invaluable to the Office of the Federal Inspector during the design review stage.

I would like to divert a minute.

During the design phase, we do not plan to be a reactive organization. We plan to be completely active, helping the sponsors and their contractors resolve any problems that might exist. This is, I think, an example of where we will be able to aid by bringing together the top expertise in the country.

The support and cooperation I have gotten from all the agencies is especially appreciated since I do not intend to duplicate existing

expertise which can be made available to the Office of the Federal Inspector.

There exists among the Federal agencies a sincere desire to face the issues squarely and to resolve them with equanimity and prudent haste. This is not to say that reaching agreement has always been easy or quick.

As I have reported already, there are a number of issues which are still unresolved. Yet the lines of communication are open and the flow of information and ideas is steadily increasing. And, more importantly, all key parties both in Government and the private sector are participating. This is a new atmosphere for the Alaska Gas project and I firmly believe it is a healthy one. I intend to do everything I possibly can to see that it continues.

At the September Executive Policy Board meeting, the State of Alaska's pipeline coordinator reported significant progress in the area of socioeconomics in which the State has assumed the lead responsibility.

The State and Northwest Alaskan have been able to reach agreement on a number of provisions which the State believes will be effective in minimizing socioeconomic impacts during construction.

Here again, the case is by no means closed, but the outlook is encouraging. I will continue to follow developments in this area closely.

Socioeconomics is but one of the areas of impact on, and involvement with, the State of Alaska which merits special attention. As mentioned before, the State has participated in the development of the environmental and technical stipulations to assure uniformity of the requirements which will be imposed on both State and Federal lands.

Not only should the requirements be as uniform as possible, but the monitoring and enforcement structures should also be compatible and closely coordinated. The vehicle for the resolution of this and other related issues is, of course, the Joint Federal/State Monitoring Agreement.

Because these issues are both very complex and extremely important, I have personally been involved and will continue to monitor the negotiation process to assure that the details of the agreement are fairly and intelligently developed.

This is also an extremely important area. For the company to be able to project costs, they have to know what to expect. Thus, there has to be an evenhanded, reasonable approach which the companies can predict. A number of surprises will undoubtedly occur in Alaska during construction, I do not want the Federal Government's actions to be one of them.

As the members of this committee are well aware, this is not the first time that the Alaska natural gas transportation system has received congressional attention, nor, I dare say, will it be the last. This project is immense, no matter what measuring tool one applies. Somewhere along the line almost everyone has an interest. Some of the interests are very limited in time; some are quite narrow in scope; and some pervade every facet of the project.

As Federal Inspector, I fully recognize that it is my responsibility to be constantly aware of these interests. During my trips to both

Alaska and Canada, I have met, or tried to meet with, as many groups as possible who have expressed an interest in this project.

While in Washington, I have spent time with representatives of various groups and through these talks I have gained a valuable understanding of the perspective of each of these interests. I have also come to understand that achieving a balance between these interests will not always be easy. Yet, as Federal Inspector, I am prepared to fully accept my responsibility for determining how competing interests will be balanced and for accomplishing this in a fair and responsible manner.

For example, environmental groups have proposed formation of a citizens committee which would be attached to the Office of the Federal Inspector. The perspective which such a citizens committee could bring to the Office of the Federal Inspector could be a valuable asset to the decisionmaking process. I am currently analyzing the available options to determine which alternative will best achieve our common objective: the minimization of environmental damage.

I remain firmly convinced that early, careful planning will accomplish this objective; first by eliminating most of the major potential environmental problems, and second by serving to reduce the severity of the problems which may surface later. The key is to recognize problems early so that they can be solved reasonably and without excessive costs or delays.

The past 3 months have been an education; and a valuable and rewarding one. I am encouraged by what I have seen and I am optimistic about the future. As a result of the dedicated efforts and cooperative attitude evidenced by all sides, a number of problems are now on their way to resolution.

I fully recognize that there are difficult choices ahead, but I stand prepared to assure you that they will be made fairly, intelligently and quickly. If we can succeed in maintaining the forward motion which has already begun, we shall have a successful project which is a credit to us and to the Nation.

Both Mr. Peter Cook, my deputy, and I are available for any questions, Mr. Chairman.

Mr. RUNNELS. Thank you very much for a most enlightening statement. I congratulate you not only on your statement, but also on your appointment. I am no flaming liberal and in my career as chairman of this subcommittee you are the first to indicate to me that you are a conservative. The reason I say this is that you used both sides of your sheets of paper. No other witness has been conservative enough to use their paper that way. I congratulate you. If that is any indication of how you are going to run your office, you and I are going to get along real well.

Mr. RHETT. Mr. Chairman, of course, one of the big issues that is outstanding is the reimbursement issue and I am sure that Mr. McMillian was counting the number of sheets of paper that I used.

Mr. RUNNELS. It is the American taxpayer and the American consumer that should be saying "thank you" because if you are going to operate in this manner, you are going to save money in the long run. I know a lot of people say you are going to be saving for Northwest Pipeline. That is not who you are really saving for.

You are saving money for the American consumer because that is who will pick up the tab. Is this correct?

Mr. RHETT. Yes, sir.

Mr. RUNNELS. How large is your staff today?

Mr. RHETT. Presently it is 26 people. We are exactly on schedule.

Mr. RUNNELS. At its peak during the construction period, what do you think it will be?

Mr. RHETT. In the neighborhood of about 230. We will have about five to six offices, but the bulk of this staff will be in Alaska.

Mr. RUNNELS. What is your budget for fiscal year 1980?

Mr. RHETT. For 1980, $15 million.

Mr. RUNNELS. What in your opinion are the most serious unresolved issues up to this point?

Mr. RHETT. The most serious one is financing. In the 2 months that I have been on board, Mr. Chairman, the whole atmosphere of the project has changed due to the regulatory decisions that have been made. I think the financial community has more confidence in the project as a result.

There are some technical hurdles but in my opinion these can all be overcome by competent engineering, in an adequate period of time and in a cost effective way.

Mr. RUNNELS. I am happy to hear you say that you can see this change of atmosphere and change of feeling. The testimony yesterday indicated a lot of it was due to your being appointed Federal Inspector. What do you think caused the delay in your appointment?

Mr. RHETT. Mr. Chairman, you are a little out of my bailiwick; although it does seem like it took an inordinate amount of time.

I know that the Canadians are about 14 months ahead of us, but I can assure yout that we are catching up fast.

Mr. RUNNELS. In your testimony you have stated that you have visited the western leg and the northern leg and also your various counterparts in Canada. Is this correct?

Mr. RHETT. Yes.

Mr. RUNNELS. I am trying to establish a complete record. It was a long time coming and we are happy that you have been appointed. I have already established that you are conservative; now, to ask you a personal question. We are running a little bit behind on this project. By any chance were you a 7-month baby?

If you do not want to answer, you do not have to.

We are going to assume that you are going to double up and catch up.

Mr. RHETT. Yes, sir.

Mr. RUNNELS. Mr. Clausen.

Mr. CLAUSEN. I want to join my genial chairman in welcoming you before the committee, Jack, and to add to what he has said in a bipartisan tone about how genuinely pleased we are that you have been selected to serve in this capacity. I say this on the basis of the many, many years we worked together on my other committee assignment when you were serving in the Environmental Protection Agency trying to bring some semblance of balance between the economical and environmental considerations we all have to face. I think you are eminently qualified. As you can see by the reception you are receiving from this committee, as well as the

feedback I am hearing, people are genuinely pleased at your appointment. I think there is lots of optimism simply because of the fact you were selected for this important responsibility.

Mr. RHETT. Thank you.

Mr. CLAUSEN. There are a few things.

You made reference to the Joint Federal/State Monitoring Agreement. How voluminous is that agreement?

Mr. RHETT. Mr. Clausen, I cannot really tell you yet because we are still negotiating. It could end up being fairly complex and fairly thick, but the major part of the agreement, that part which establishes a cooperative working relationship, should only be very, very short.

There are a number of difficult problems which, though mainly legal, still have to be worked out. If necessary, the agreement could have appendices to resolve any legal problems.

Mr. CLAUSEN. My reason for asking how voluminous it might be is whether it should be made a part of our record because we are attempting to develop the kind of record that would include the most important documents.

As a part of our total effort it would be helpful if the committee had that or if it is very voluminous a summary of the agreement.

Mr. RHETT. The problem is that neither myself nor the State has approved it as yet. We are still in the middle of negotiations.

I wonder if it might not be appropriate for us to finish this extremely important document and then furnish it to the committee.

Mr. CLAUSEN. That is exactly why I am making the request. As soon as it can be completed I would like to see it, Mr. Chairman, be made a part of the record or the file, depending upon the size of the document.

Mr. RUNNELS. Without objection, it is so ordered.

Mr. CLAUSEN. On page 4 of your testimony with respect to the western leg, you state that "the Federal Energy and Regulatory Commission is scheduled to issue a Certificate of Public Convenience and Necessity early next year and I foresee no major problems which the Office of the Federal Inspector and the sponsors cannot resolve."

While the section regarding your office is encouraging, there appears to be some slippage on the Federal Energy Regulatory Commission western leg approval when compared to testimony received yesterday. Why cannot FERC approval be forthcoming this year?

Mr. RHETT. Mr. Clausen, I think that Chairman Curtis will be here.

Mr. RUNNELS. He is our next witness.

Mr. RHETT. I wonder if I could defer that issue to him?

Mr. CLAUSEN. All right. But I will get back to you.

Mr. RUNNELS. Would the gentleman yield?

If I understood correctly, the Inspector does not really have full sway over the western leg and the Northern Border pipeline system.

Mr. RHETT. No, Mr. Chairman, the Federal inspector will have oversight responsibility on both Lower 48 legs as well as the Alaskan segment.

Mr. RUNNELS. I mean concerning things like issuing the permits like the Department of the Interior's. You mentioned in your statement that the Department is going to be issuing one next month. I was trying to point out the difference between your role in Alaska which is a little different from the role in the Lower 48.

Mr. RHETT. That is particularly true for the western leg, because it does not have the incentive rate of return mechanism which is a very complex experiment. I am sure Chairman Curtis can address this in more detail.

The major thing on the western leg is that the company is well prepared. I am convinced that if something does not really get hung up in the Federal Energy Regulatory Commission right now, and if the Canadian National Energy Board approves the prebuild, that leg will stay on the schedule presented yesterday.

Mr. CLAUSEN. Are you confident that the Department of the Interior will be ready to issue a right-of-way grant to the Pacific Gas Transmission Co. by the end of next month?

Mr. RHETT. Yes, sir. In fact, I discussed this with them yesterday.

Mr. CLAUSEN. Do you have adequate or truly full support and cooperation from the executive branch in the staffing and the funding of your office consistent with what you perceive to be the requirements?

Mr. RHETT. Very much so. In fact it is somewhat unique.

As my budget examiner told me, he was putting on his white hat for these two or three budget exercises that we are going through now, but next year he will put his black hat on. We are getting complete support, yes, sir.

Mr. RUNNELS. Excuse me. You might tell him where your office is so he will know. Where is your office?

Mr. RHETT. It is presently with OMB in the New Executive Office Building.

Mr. CLAUSEN. You make reference to the dedicated efforts and the cooperative attitude evidenced by all sides. Is that unique in your experience? Is this cooperative effort because of the recognition of the energy crisis and the requirements that have to be met here?

Mr. RHETT. I think it is unique. As you know from my background, I have had to work with a number of agencies before. We are just not seeing the turf fighting. People are trying to put their shoulders to the wheel and to make sure that the problems are resolved, but I really think it is the result of two factors. First, it is the energy crisis and the dedicated effort of the top people to resolve the issues. That attitude is filtering down.

The second thing is that the office of the Federal inspector is an experiment in public administration. I think between the power that is given to the Federal inspector and the energy crisis, I am seeing something very unique.

Mr. CLAUSEN. The fact that this was created by the Congress suggests that maybe we have done something right for a change.

Mr. RHETT. I think so, very much so.

Mr. CLAUSEN. Let me just ask you a final question.

A lot of us on the committee and in the Congress have placed a high priority on the establishment of an energy distribution network here in the Western Hemisphere. Are we overstating its

requirements or needs in terms of meeting the energy needs or are we understating it?

I feel very strongly about it. That is the reason why I am pleased to see a person of your caliber aboard to bring it on line as quickly as possible. I would like to have your view on the necessity for an energy distribution network.

Mr. RHETT. I think it is completely essential. I do not think there is any understatement at all. We still have problems in oil distribution; there will be further gas distribution systems. I am just convinced that the country needs this project. I am sure you have read articles in the newspapers which I claim that Mexican gas or liquid natural gas are viable alternatives to the Alaska pipeline. I just do not believe it. We need all of these energy sources. And we also need the distribution systems to be able to carry energy where the country needs it. I think this project is an integral portion of that distribution system.

Mr. CLAUSEN. We certainly look forward to working with you. I am sure the committee will not only follow your activities with interest, but as part of the monitoring effort we want to be in the writing wing with you.

Mr. RHETT. Right, I am looking forward to it.

Mr. RUNNELS. Before the next Congressman asks questions, I might suggest to those of the press, those who are writing, who want to use these seats around here, that they may feel free to come up here and sit down. There is no use standing up when there are seats available.

Mr. RUNNELS. The gentleman from Montana, Mr. Williams.

Mr. WILLIAMS. Thank you, sir.

How will your office and the Federal Energy Regulatory Division divide responsibility in computing costs for the incentive rate of return mechanism?

Mr. RHETT. We are presently negotiating what the exact division of responsibility will be. In fact, I met with Chairman Curtis last Friday. I would assume that we ought to be able to resolve this issue within the next 2 to 3 weeks.

Obviously, I am trying to make sure that I have enough tools to do the job and do the job properly.

Chairman Curtis, though, also by law has certain responsibilities in this area and either I have to satisfy those for him or he has to have some oversight.

Mr. WILLIAMS. Thank you.

What are the employment requirements under the equal opportunity provisions of the act?

Mr. RHETT. Excuse me?

Mr. WILLIAMS. What are the minority employment requirements under the provisions of the equal employment opportunity provisions?

Mr. RHETT. We have a set of regulations that are just about to go out; in general, for EEO we will be trying to at least meet the general pattern of population distribution. Also, in minority business, we are considering dropping the level for contract review from $1 million down to $500,000. I am not sure exactly how this will come out.

Mr. WILLIAMS. We heard a great deal of concern expressed yesterday from officers of both Foothills and Alaska Northwest Natural Gas concerning what they claimed to be the costly and time-consuming delays which they say are caused by legislative and regulatory proceedings here in the United States.

Recognizing that you have not—that your tenure in this specific job is yet limited, do you have some thoughts about those delays? Are they real? And do you have any recommendations for this committee about how legislative or regulatory delays and lags might be prevented in the future?

Mr. RHETT. I think there are two things. One of them you all are presently acting on. That is your Energy Mobilization Board. This is where you finally get a focal point and somebody who is responsible. I think that where the responsibility can be spread around it is difficult to get timely decisions. With your Energy Mobilization Board, handling the priority projects, I think many of these regulatory problems can be overcome.

I also think that you need to watch me and my organization very closely, because this is an experiment in the same thing. It is a little more down on the back end rather than the front end like the Mobilization Board, but I think these two items are not only important, I think they are essential for us to meet our energy needs.

Mr. WILLIAMS. Thank you.

Mr. CLAUSEN. Would the gentleman yield?

Mr. WILLIAMS. Yes.

Mr. CLAUSEN. You have made reference to the Energy Mobilization Board. The Senate has passed a bill. The House Interstate and Foreign Commerce Committee and the Interior Committee have versions of their own. Have you had a chance to evaluate the Senate version? Will it get the job done?

Mr. RHETT. Congressman, I assume we are talking about the general energy field rather than the pipeline. First, let me make sure I understand the question.

Mr. CLAUSEN. One or both.

Mr. RHETT. OK. Let us talk in general.

Mr. CLAUSEN. General energy projects?

Mr. RHETT. Yes, generally I believe it will. I think it is an extremely good bill and I think the authority to expedite should accomplish our purposes and yet not reach the point that we are running roughshod over the States or something of this nature.

Mr. WILLIAMS. If I may reclaim my time.

You are saying, sir, that you prefer the Energy Board to deal with procedural delays and difficulties rather than substantive law?

Mr. RHETT. In general, this is my feeling. I feel we are better off that way. If you have the procedure set up, and if you can isolate the problems early, I personally think the substantive part can be resolved.

Mr. WILLIAMS. From your experience, are the delays occurring because of States or because of Federal law and procedures?

Mr. RHETT. I think it is a combination.

Mr. WILLIAMS. Governors tell us that they are on time and on line and the Federal Government is creating the delay.

Mr. RHETT. I think it is all the way across the board. There are problems statewide, there are local problems, and there are also Federal problems in this. Most States have parallel laws for environmental or consumer protection that can cause delays. And if you have one central focal point where all of these can be laid out, and if you can waive the procedural portions, State, local and Federal, I think we have an opportunity to speed these projects along.

I firmly believe that you always need to be able to "pin the rose" on one person. The head of your board would have the responsibility for making sure that these things are done; there would be no diffusion of responsibility.

Mr. RUNNELS. The chairman is invoking the 5-minute rule as of right now. I tried to be lenient yesterday and tried to be lenient today. If we do not invoke the 5-minute rule—we were here until after 3 o'clock yesterday afternoon. So it is the 5-minute rule.

Next, Mr. Lagomarsino.

Mr. LAGOMARSINO. I will use the 50-second rule. Thank you, Mr. Chairman.

I am sure that you are well aware from your work and also from the testimony yesterday that, unlike so many other projects that we have had the luxury of dragging out for years and so on in the past, if we apply that same standard to this project we may well not have one; that it is not just a question of delay costs money, delay may cost the entire project, as apparently was the case with the Sohio project in southern California. So I compliment you on your statement and on your willingness and eagerness to get on with this job. I think it is essential to the future of the energy-independent feature of our country.

Have you had a chance—this was alluded to earlier but I am not sure the specific question was asked or answered—have you had a chnace to look at the language that Senator Stevens of Alaska inserted in the Mobilization Board bill?

Mr. RHETT. I have read it. We are in the process of analyzing it. However, I need to do more analysis of it. What he is trying to accomplish is extremely good; in other words, the best of both worlds.

I am trying to look at it from a procedural administrative viewpoint. The one thing that I do not think would be helpful is to put another layer over the Federal Inspector. In other words, if the Federal Inspector has to operate under the board, then I am afraid we are going to get two things: We are going to get into administrative and legal problems, plus, again we have reached that point of not having a single focal point of responsibility. I am not sure whether this is adequately taken care of. My lawyers are working on this.

We would be happy to work with the committee's staff on this.

Mr. LAGOMARSINO. Thank you.

I might just say that I hope and I am sure you will share that information with us because we are going to be working on that legislation ourselves pretty soon on the floor.

Mr. RHETT. I will, sir.

Mr. RUNNELS. Mr. Young of Alaska.

Mr. YOUNG. Mr. Chairman, I thank you for invoking the 5-minute rule; I appreciate it.

Mr. RUNNELS. You knew what was coming.

Mr. YOUNG. I knew what was coming. I was late getting here. So I am doubly chastised.

Mr. RUNNELS. No, no, no. It applies to the chairman as well as to the members.

Mr. YOUNG. Mr. Rhett, I want to personally compliment what progress you have made. You mentioned staff, 26 members; how many are in Alaska now?

Mr. RUNNELS. How many what?

Mr. YOUNG. How many staff members are in Alaska now?

Mr. RHETT. My top technical man is there right now; but let me explain that.

Mr. YOUNG. You do not have to explain too much; I am just curious.

Mr. RHETT. I have one staff person there now. But I think it is important for you and the committee to understand the way that I am developing my organization.

I brought one man down from Alaska and he is my top technical man. There is a second man, Paul Steucke, who has been in Alaska for the last 3 or 4 years and will be sent back shortly. But at the same time I struck an agreement with the executive coordinating committee which is run by Curt McVee from Alaska. They agreed to operate for me until I could select a top quality staff. I am getting tremendous support from all quarters. And I might add, it is not just the Federal establishment but it is also Chuck Behlke, the Alaska State Pipeline Coordinator, who is a real pro.

We almost always have somebody in Alaska; as a matter of fact, I plan to be there next Tuesday.

Mr. YOUNG. At the appropriate time I hope you plan on staying for a period of time while you are in Alaska.

Mr. RHETT. Yes, sir.

Mr. YOUNG. This is out of line in a sense. I also have suggested we consider, because the line is 400 miles north of Fairbanks and 400 miles south of Fairbanks within Alaska, that Fairbanks be given some consideration. It is very difficult for me since I am a Representative of all the State. But I had an experience with this during the TAPS operation where a lot of the decisions were made in Anchorage, 400 miles away from the line. I think you should be in the field close to the operation.

Yesterday during the testimony of a couple of witnesses, there was allusion to agency lack of action, not referring to you particularly. Have you run into any difficulties with fish and wildlife, birds and feathers and all those things?

Mr. RHETT. Congressman Young, not really. Now let me explain this.

I have been on board a little over 2 months and I am finding nothing but cooperation. That does not mean that there were not delays in the past. There have been major delays in the past on the project. But I think that since I have come on board, and I hope part of it is leadership that my office has been able to give, that we are finding a very cooperative approach to resolution of problems.

Mr. YOUNG. What is your linkage as far as your answering to anybody other than the President? Who do you answer to?

Mr. RHETT. Theoretically I answer to the President. Of course Vice President Mondale has been intimately involved in the project, as well as Secretary Duncan. I also answer to the oversight committees.

Mr. YOUNG. What I am trying to get across is, I am sure as this line progresses after going through the TAPS line, that there is going to be a lot of people trying to tell you what to do that have nothing to do with the pipeline as far as I am concerned. Do you have to answer to Andrus or Kathy Fletcher or Joan Davenport or Chris Carlson or any of that type.

Mr. RHETT. No. In general, my access has been straight to the Vice President to date.

Mr. YOUNG. One thing I would appreciate not only as a representative from the State but as a member of this committee that if there is any time we can be of assistance to you, please let us know. We want to make sure there are not arbitrary roadblocks of things that really do not make sense. Please feel free to contact this committee—and of course myself, respectively, and we will see if we can help—because your job is very important.

I like the idea of "pinning a rose" on you. I think that is the whole key to the timely construction of this pipeline, not only engineeringwise but delivery to the consumers. I went through this time and again where there would be a delay, for absolutely no reason at all. We dug up pipe that had no reason to be dug up, none whatsoever. Someone said it was not properly done, one group. We had stoppages at crossings, we had to go through four, five different agencies, it was just a whole boondoggle of management.

I hope your position will give you the authority to make those decisions with the responsibility laying upon your back.

Mr. RHETT. I appreciate the offer. You know, I do not want to underplay the fact that, as I have said, we have some tough decisions and some tough head-knocking coming. None of these issues will be easy to resolve; if they were you would not need me.

Mr. YOUNG. But the decision has to be in your hands. That is one thing I was pleased with what you said. Even with Mr. Stevens, my senior Senator, I hope he recognizes that a double layer of brass will not achieve what we are seeking out of this committee. I am sure that is not his intent at all.

Mr. RHETT. I am sure it was not.

Mr. YOUNG. I hope you will make the pertinent decisions regarding construction of this line.

Mr. RUNNELS. The gentleman's time has elapsed.

We want to thank you for being here.

Mr. Cook, do you have any statement you would like to make.

Mr. COOK. Thank you, sir. I think Mr. Rhett has said everything for now.

Mr. RHETT. Good deputy.

Mr. RUNNELS. Jack, you were answering a question as to who you had to answer to. Is your wife in the audience?

Mr. RHETT. Yes, sir.

Mr. RUNNELS. Will she raise her hand, please? She comes from the finest congressional district in America. I did not say where.

Mr. CLAUSEN. And I thought your opening remark was sincere.

Mr. RUNNELS. We thank you for being here. If this committee can be of any assistance at any time, we would hope that you would feel free to keep our staff informed of your operations and on what is going on so that we may be able to help out.

Mr. RHETT. Mr. Chairman, I appreciate the opportunity to appear before you today.

Mr. RUNNELS. Thank you.

Is Mr. Curtis in the audience yet?

Mr. Curtis had another meeting to go to. He wants to appear personally. So we will have Mr. Curlin, accompanied by Mr. Toskey. Mr. Curlin is Assistant Deputy Secretary of the Department of the Interior. We are happy to have you here. You may summarize your statement and it will be included in its entirety.

[Prepared statement of Hon. James W. Curlin, may be found in the appendix.]

STATEMENT OF HON. JAMES W. CURLIN, DEPUTY ASSISTANT SECRETARY, DEPARTMENT OF THE INTERIOR, ACCOMPANIED BY WILLIAM M. TOSKEY, AGENCY AUTHORIZED OFFICER, ANGTS

Mr. CURLIN. Thank you very much, Mr. Chairman. This is the first time before this subcommittee and I am looking forward to this interchange, as well as those in the future which I am sure will occur.

I am prepared to summarize my statement, Mr. Chairman. I would like to do this as briefly as possible and talk about three particular items of interest to the subcommittee:

First, the situations that will be required for grants of right-of-way; second, the alignment of the right-of-way; and third, the unique qualities of the Haines-Fairbanks right-of-way decision.

In that order, then, with regard to the right-of-way grants, the Department of the Interior has responsibility for making these grants over Federal lands. It will have to make grants to each of the following four companies—there will be four grants:

Northwest Alaskan Pipeline Co., Alaskan leg; Northern Border Pipeline Co., eastern leg; Pacific Gas Transmission Co., western leg from the United States-Canadian border to Oregon-California State line; and the Pacific Gas & Electric Co., western leg within the State of California.

For the convenience of the committee, we have included a map attached to the testimony that you may look at if you wish.

According to the current construction schedules, construction will begin first on the eastern leg and the Pacific Gas Transmission segment of the western leg from the United States-Canadian border to Stanfield, Oreg.

The right-of-way grants covering portions of these systems will be executed upon completion of the stipulations and, as the Federal inspector has said, this will be in November. Grants covering the Alaskan leg and the Pacific Gas Transmission segment of the western leg from Stanfield to the Oregon-California line will be done in sequence. The Alaskan leg should be within the next 6 to 9 months.

The cooperation that has been received by the Department from other agencies and the Federal inspectors is a splendid example, I believe, of the cooperation that this administration, is putting forth in pursuing this and other major energy activities.

However, to be perfectly blunt, we do have a problem within the Department of the Interior in balancing the objectives of several of the statutes which we have to work with. One of these, of course, is the Mineral Leasing Act under which the right-of-way grants are made, and the second is the expedited processes of the Alaska Natural Gas Transportation Act which we are discussing today.

There are four things that are required of us with regard to the granting of rights-of-way: The restoration, revegetation, curtailment of erosion that might result from construction; protection of air and water quality that might derive from the activities of this construction and the operation of the pipeline; control or prevention of environment and property damage and hazards to public health and safety, and fourth, the protection of the interests of individuals living in the general area of the right-of-way who rely upon those resources for subsistence.

Now, it is expected in a 4,000-mile pipeline right-of-way project that there are going to be both the extremes of the environment involved and some extremely difficult engineering and environmental problems to be resolved, particularly in the construction through permafrost. It is not exactly what you call state-of-the-art technology, but each and every turn can bring surprises. The Federal inspector has recognized this in his statement and we are prepared to deal with these problems as they come up.

Another responsibility of the Department of the Interior is the impact that may derive on wildlife, fisheries habitat, and so forth. Inevitably there will be damage. This has been acknowledged. Our problem is minimizing that.

I believe through the splendid cooperation that we are receiving from the company and the cooperation we are receiving from the other Federal agencies that we can minimize these impacts and move in an expedited way to accomplish the objectives of the project.

With regard to the Alaska Natural Gas Transportation Act, its objectives are to bring the resources of the Government together to expedite the construction of the project.

The urgent need for the pipeline, combined with the constraints imposed by the incentive-rate-of-return concept, does create some economic tensions between what one might characterize as least cost engineering solutions and the achievement of the environmental protection that I have just summarized.

In addition to the consideration of capital costs for engineering and construction adjustments for environmental reasons, we feel that the life-cycle costing for maintenance of the line should also be considered in the formulation of the incentive rate of return.

Now personally, I do not hold myself out as having any expertise. I have a minimal knowledge with regard to the calculation of this experimental concept of regulation and I am sure that Chairman Curtis will treat this indepth. But the Department has been urging the Regulatory Commission to consider the life-cycling costs, the impact of these costs on both the construction and the maintenance

of this line with regard to the rates, and the company's response to the Government's need to protect and maintain the environment.

We have been seeking mutual solutions. As I mentioned, the progress has been good. It is not to say that we are over the hump yet, but the stipulations are well developed. We are confident we will be able to move expeditiously in November.

Mr. Toskey has just returned from Alaska. He has information of greater detail and on the progress that has been made on formulating the stipulations. These will be compiled in a handbook which will be used by the construction crews at the pipeline, the pipeline management, and the Federal agencies and personnel who are responsible for overseeing these activities. By assembling this in handbook form, we feel that everyone will have information that has been developed and derived by the interaction of the Federal-private sector in the State of Alaska.

The second item is pipeline alignment: The President's decision and report to Congress, in September 1977, set out the general location of the pipeline, that is with regard to paralleling the Alyeska oil line to Delta Junction and then following the Alaskan Highway to the Canadian border. However, there are a number of details with regard to alinement, in placing this natural gas line parallel to the oil pipeline, which still must be resolved.

After a number of exchanges between the company and the Department of the Interior and other agencies, there was a working group assembled in Salt Lake City to discuss the technical concerns that still faced the group in meeting these responsibilities. Membership of this group included representatives of Federal agencies, the State of Alaska, the Trans-Alaska pipeline system (TAPS), and, of course Northwest Alaskan Pipeline Co. itself.

The working group, made up of an impressive mass of expertise, was divided into eight technical teams to examine specific concerns. These teams dealt with construction, thermal problems, geotechnical problems, the proximity problems, hydrology, the cost, erosion control, and biological impacts.

However, while the working group was contemplating these problems and devising solutions and expanding data and information, the company was permitted, of course, to go ahead with its design and planning based upon the resolution of several factors that were agreed to by the company with the working group. And the planning and design has continued on that basis.

There has been one meeting held. There are three meetings scheduled with the working group and the company to convey the information and develop the strategies. The first one was held in September and there will be another meeting held in the early part of November, somewhere between the 8th and 10th. This schedule has not been nailed down.

There still remain a number of concerns that this working group will have to address, however. To summarize: There is the effect of frost heave on the chilled buried line, the effect on ground water, thermal interaction with the hot oil line if it is buried in close proximity to that line, the impact of blasting on the oil line, risk analysis of the mutual impact between oil and gas line during the construction and operation, slope stability of thaw-unstable soils,

crossings of the oil line, and then, of course, the mitigation measures for fish and wildlife and their habitats.

The company continues to work on these in close association with the Department. We have offered our assistance. We will go as far as necessary in resolving these particular problems.

The last item, the Haines right-of-way, is a rather complex situation. The status of ownership of some of the right-of-way is still under advisement.

I have brought with me for inclusion in the record with permission a letter which was transmitted from Assistant Secretary Guy Martin to the General Services Administration, which outlines in detail the problems associated with the Haines right-of-way.

Mr. WILLIAMS. It is so ordered.

Mr. CURLIN. Thank you.

[The letter referred to above may be found in the appendix.]

Mr. CURLIN. Involved in these uncertainties of jurisdiction are certain Native claims which must be resolved by the Alaska Native Claims Appeal Board of the Department of the Interior. You can appreciate that trying to reach a schedule and hold a schedule on something as complex as an appeal procedure with regard to Native claims prohibits us or makes it very difficult to anticipate when this will be resolved.

However, we will be moving as expeditiously as possible to resolve those decisions.

In addition to the Native claims problems, there are three Federal agencies which are involved as well: The Department of the Interior, the General Services Administration, and the Department of the Army.

The Department of the Interior, as soon as the clarification with regard to some of the uncertainties of the ownership of the right-of-way area is resolved, will move expeditiously for grants of right-of-way to the company. However, in the event that certain of these areas are found to be within the realm of the Native claims, then of course this will become a private negotiation with the company and with the Natives.

Just to summarize, we are quite pleased with the cooperation we are getting, with the guidance we are getting from the Federal inspector. The Department has created a counterpart to the Federal inspector's office. Mr. Toskey heads that up. It operates as an independent unit under the Assistant Secretary for Land and Water. We feel in this way we are able to deal with the internal problems of the multiple agencies of the Department of the Interior much in the way the Federal inspector is dealing with the overall Federal agencies.

Mr. YOUNG. Did you say Mr. Koskey?

Mr. CURLIN. Mr. Toskey.

Mr. YOUNG. Is he the same one that held up the lake for P.G. & E. for 3 to 5 years?

Mr. CURLIN. I will let him answer that.

Mr. YOUNG. Are you the same gentleman?

Mr. TOSKEY. No, sir, I have been in the Department of the Interior only 3 months.

Mr. YOUNG. You are not the same one?

Mr. TOSKEY. Yes.

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Mr. YOUNG. You are the same one that was mentioned yesterday?

Mr. TOSKEY. Yes.

Mr. YOUNG. You are the counterpart?

Mr. TOSKEY. I hold the position within the Department of the Interior responsible for coordinating all activities within the Department for the gas line.

Mr. YOUNG. I can see why we are going to have to have the Energy Mobilization Board.

Thank you.

Mr. CURLIN. This concludes my statement and I would be willing to answer questions.

Mr. WILLIAMS. Thank you.

Originally Northwest proposed that the gas pipeline cross over the oil pipeline 64 times. What is the latest proposal?

Mr. CURLIN. We now estimate the cross-overs will be approximately 40.

Mr. WILLIAMS. Thank you.

Mr. Young.

Mr. YOUNG. Mr. Chairman, Mr. Curlin, I was reading your testimony while you presented it. On page 3 you have some remarkable statements. For example, Arctic permafrost is a fragile feature of the northern environment. I have heard that since 1968. I think that has been established.

Is there anything new about the construction or the crossing of streams or location of the pipeline from Prudhoe Bay to Delta?

Mr. CURLIN. We have gained a great deal of experience, Mr. Young. Of course, with each excursion into that area we learn more.

Certainly there are unique situations that will arise. Because of the proximity, however, with the oil line, we do have that base of knowledge upon which to operate. The difference between burying a chilled line and a hot oil line over the surface, of course, can result in different engineering considerations.

I personally do not have the expertise to make any specific judgment. My intuition however, is that while we may run into some surprises from time to time, in general we have the knowledge to carry this project out without major concern.

Mr. YOUNG. Further on page 4, it says hundreds of spawning beds for commercial and sports fish lie in the same general path of the pipeline. Are any of these streams different than were crossed with the oil line?

Mr. CURLIN. I believe not.

Mr. YOUNG. Was there any damage to anyone's knowledge to any of the spawning stream?

Mr. CURLIN. Not of a major nature.

Mr. YOUNG. It says, "The exact location of each spawning bed is not known."

Mr. CURLIN. I believe that stands on the facts, yes.

Mr. YOUNG. But it is the same path that we took with the TAPS line.

Mr. CURLIN. I do not disagree.

Mr. YOUNG. To my knowledge, there is only one spawning stream that will be crossed from Delta to the Alaskan border.

Mr. CURLIN. You probably know more about that than I.

Mr. YOUNG. The thing that really bothers me is, this is fine testimony but it is fraught with insinuations there is going to be great environmental damage done when we are really following the parallel path of the TAPS line and we have a counterpart to Mr. Rhett and we are going to hear from the Army in a few moments, and it looks to me we are appearing to build a case to be faced with the same exact problems of delay that was fraught with the TAPS line.

Mr. CURLIN. I would disagree that you could follow that conclusion, Mr. Young. You may interpret it that way. I do not see that as a prospect.

I think the Department is looking at these possibilities. We do have the experience. It was not intended that this statement be inflammatory or to imply that we will have horrendous problems, but merely to recognize that in dealing with these problems there is a responsibility, a legal responsibility on our part, and that we will do the best we can to resolve them.

We all recognize the need for the pipeline. We intend to see that it is constructed expeditiously and with minimal impact on the environment.

Mr. YOUNG. The last sentence, "Thus, some unforeseen damage to spawning beds will inevitably occur," that is an assumption.

Mr. CURLIN. It is an assumption, correct.

Mr. YOUNG. It is inflammatory, to say something like that about spawning streams, that this pipeline is going to cross exactly the same way TAPS did. It has a fine record, to my knowledge there has been no damage. This is a beautiful piece of Interior work.

Thank you, Mr. Chairman.

Mr. RUNNELS. Thank you.

Mr. Lagomarsino.

Mr. LAGOMARSINO. Mr. Curlin, is the Haines right-of-way the one referred to yesterday by the witnesses?

Mr. CURLIN. I am not sure. There is only one Haines right-of-way.

Mr. LAGOMARSINO. They did not use that term. They said there was a 3-mile——

Mr. CURLIN. No, that was a different situation, sir.

Mr. LAGOMARSINO. Can you tell us about that situation?

Mr. CURLIN. The situation to the degree of delay that was implied with regard to the 3-mile sector, is that it? I can address that in a general way. I have no institutional memory on this, sir, so I am having to rely on other information. I think there are three elements, at least two elements that you must consider as background on that particular situation.

The President's decision was pending until the fall of 1977 with regard to this pipeline action. That is the first point.

The second point is that the policy board, which supports the activities of the Federal inspector, had made a decision that it wished to make the stipulations as uniform as possible among all of the legs of the pipeline. Therefore, to get uniformity, they must consider in totality those actions. These stipulations have now been developed. We are ready to move forward.

Those two elements, the delay in the President's decision with regard to the overall project and, second, the wish for uniformity among stipulations on the right-of-way—the right-of-way stipulations are the other factor. We are ready to move.

Mr. LAGOMARSINO. Thank you.

Mr. RUNNELS. Thank you.

Mr. Clausen had an important meeting in his office and he asked if counsel would ask some questions that he had and I agreed to it.

Mr. ROGERS. Thank you, Mr. Chairman.

Welcome to the subcommittee, Mr. Curlin.

Mr. CURLIN. Thank you, sir.

Mr. ROGERS. Have you taken the position formerly occupied by Gary Wicks?

Mr. CURLIN. That is correct. I am known as Wick's replacement.

Mr. ROGERS. Will you be the Department's point of contact for matters concerning the proposed Alaska gas project?

Mr. CURLIN. I will be at the Deputy Assistant Secretary's level, yes, sir.

Mr. ROGERS. Will the staff of the authorized officer in Anchorage be converted over to the proposed Alaska gas project? I am speaking of the office in Anchorage, Mr. Turner, the other gentlemen who have been involved in that office with the Trans-Alaska Pipeline System.

Mr. CURLIN. We do not anticipate that move at this time, no, sir.

Mr. ROGERS. Will the authorized office or staff remain independent as it relates to a chain of command within the Department of the Interior or will it be converted, against the wishes of this subcommittee, into the Bureau of Land Management?

Mr. CURLIN. No, it will not be against the wishes of the subcommittee. We expect it to remain independent.

Mr. ROGERS. Would you please provide for the record a detailed analysis on why it has taken the Department of the Interior 5 years to review Pacific Gas Transmission Co.'s right-of-way permanent grant application?

Mr. CURLIN. We will be pleased to provide that for the committee.

Mr. ROGERS. Thank you.

Thank you, Mr. Chairman.

[Editor's Note: The Department subsequently submitted the information requested above in a letter dated November 1, 1979. The letter may be found in the appendix. See table of contents for page number.]

Mr. RUNNELS. Thank you.

Bill, do you have any statement you would like to make?

Mr. TOSKEY. No, sir, Mr. Chairman.

Mr. RUNNELS. I recognize that you have only been on board for a few months. Is this not correct?

Mr. CURLIN. Sir, a few weeks; 4 weeks, as a matter of fact.

Mr. RUNNELS. Yesterday the Secretary of the Interior, Secretary Andrus, made a recommendation to the President concerning the Northern Tier oil transportation systen. This is fine. We have had a communications problem, they have failed to keep this subcommittee informed on the actions which they have taken over which we have jurisdiction. We do not have a copy of the report.

If you could see that the information is provided to us on his selection yesterday of the Northern Tier oil pipeline proposal, we would appreciate it.

Mr. CURLIN. I will be pleased to do that, Mr. Chairman.

Mr. RUNNELS. The reason we need this information, is that the decision has a kicker in it that we do not quite understand. He made the recommendation, and gave them a reasonable time to get financing and so forth. We would like to have the report for our records to know what a reasonable time is, because if that does not happen, then he recommends another pipeline system. So there are really two recommendations.

Would you see that we get it?

Mr. CURLIN. Yes, we will get that to you, Mr. Chairman.

Mr. RUNNELS. We want to thank you very much for your testimony today and we will be looking forward to visiting with you later.

Mr. CURLIN. Thank you very much.

Mr. RUNNELS. We will now revert back on our schedule. I see Mr. Curtis has come into the room. We will have the Honorable Charles B. Curtis, Federal Energy Regulatory Commission, accompanied by Mr. John Adger, director of Alaska Gas Project Office.

Chairman Curtis, you may summarize your statement, if you wish. It will be included in its entirety in the record, and we will have questions and answers.

[Prepared statement of Hon. Charles B. Curtis may be found in the appendix.]

STATEMENT OF HON. CHARLES B. CURTIS, CHAIRMAN, FEDERAL ENERGY REGULATORY COMMISSION, U.S. DEPARTMENT OF ENERGY; ACCOMPANIED BY JOHN B. ADGER, DIRECTOR, ALASKA GAS PROJECT OFFICE

Mr. CURTIS. Thank you, Mr. Chairman. I will do that.

First, let me express my appreciation to the committee for hearing me out of order. As the chairman was informed, the Commission held hearings this morning of an extraordinary nature to evaluate the circumstances of the accident of the Cove Point LNG facility and to hear a proposal for the resumption of service. That hearing will reconvene this afternoon, and I am grateful for the committee's indulgence in accepting this change in time.

I will attempt to summarize my statement, which, is very short because I recognize that the committee wishes to proceed to questions.

Your invitation requested that I address the Commission's regulatory actions pertaining to the Alaska natural gas transportation system, and the progress of our talks with the Government of Canada regarding agreements regarding a procurement policy for the pipeline.

My statement summarizes the key Commission actions briefly; I have attached a more complete account of what the Commission has done and is doing. With regard to procurement policy, I have also attached to my statement a copy of a letter sent by then Commissioner Don S. Smith to Congressmen Dingell and Eckhardt, reporting on the outcome of Mr. Smith's most recent discussions with the Canadian Government representatives on that subject.

I would like to defer to the State Department and to the Office of the Federal Inspector for any further information on progress in formalizing the agreements referred to in Commissioner Smith's letter.

Mr. Chairman, following the passage of a joint resolution by the Congress in November of 1977, confirming the President's recommendation for the selection of a transportation system, the Commission began an evaluation of various authorizations it would have to grant in the course of completing the certification process for the Alaska natural gas transportation system. This evaluation was an effort to identify those matters on which a decision might be necessary, helpful, or essential in assisting the private parties involved in the project to move forward to the project-financing stage.

Although the Commission's normal posture is to respond to applications made by sponsors of projects, the Commission has taken the initiative in a number of areas to provide timely resolution of the many complex issues which affect the Alaska natural gas transportation system. We believe we have now completed action on the principal decisions required of us to permit the sponsors to formalize and complete project-financing plans. These decisions have to do with the rate of return on equity investent in the project, and with the project.

The rate of return on equity is important for attracting capital support for the project. The project company tariffs establish the contractual conditions which govern provisions of the transportation service. Under the financing framework recommended by the President and approved by the Congress, the tariff provides an essential piece of security for the project's debt, once operations commence. Thus, early resolution of these questions was important to negotiations over financing.

The Commission has also resolved a key design question: the size and maximum allowable operating pressure of the Alaska segments. Although this issue is not normally considered until final certification, application for which in this case was not expected before June of 1980, this issue was selected by the Commission for early resolution in order to facilitate preparation of detailed cost estimates for the Alaska segment. Such estimates are also important, if not essential, to obtaining financing.

The Congress, itself, has provided perhaps the most important of the decisions remaining after passage of the joint resolution approving the President's recommendation. That decision was to fix a price for the gas at the Prudhoe Bay Reserve. Passage of the Natural Gas Policy Act in late 1978 provided a ceiling for the field price of the gas, and rolled in pricing treatment for that price, plus the cost of transporting the gas to market. In the absence of congressional action, the Commission would have been required to make these decisions pursuant to its authority under the Natural Gas Act—a task which I think all parties would agree would have entailed years to bring to successful conclusion.

Mr. Chairman, these three sets of decisions—the rate of return and tariff, the Alaska segment design, and the pricing treatment—we believe provide a foundation for development of a definitive financing plan for the Alaska natural gas transportation system.

Before returning to the specifics in the course of responding to your questions, let me simply, in conclusion, observe that in my opinion the Commission has worked conscientiously and diligently in an attempt to meet the statutory direction to expedite consideration of the project.

Clearly, the most fundamental decision facing the Commission has been the decision on the incentive rate of return, which is a mechanism commanded by the President's decision and affirmed by the Congress. It is a mechanism, the theory of which was sound, which had not previously been developed.

The Commission has confronted an extremely difficult chore, one which we believe and hope, through conscientious efforts, we have now reached a successful conclusion. If the Commission's conclusions survive court review this project will then be able to be presented to the financial markets for the assemblage of necessary capital for its financing.

Mr. Chairman, I recognize that this committee and the Congress in general have justifiable concerns that the agencies of Government are incapable of responding promptly and expeditiously to render decisions on essential energy projects in order to meet the requirements of the nation. I can only say for the Commission's part, it has been a difficult chore; one that I hope this committee will agree we have given an honest and conscientious effort toward, and one that we believe now is in a state where the framework has been established to permit the project to go forward.

With that, I would be happy to attempt to respond to any of your questions.

Mr. RUNNELS. Thank you very much, Mr. Curtis, for an excellent statement.

I think the members of this subcommittee can sympathize with you as to the magnitude of your job. As you stated, just with the rate of return and tariff proceedings before the Commission, you considered almost 1,000 pages, consultant reports, staff reports and comments, and so forth. You said that in 2 months you did what under a jury or a trial situation would take 3 years to accomplish.

We recognize that your job is tremendous. However, I believe that the American people have watched the bureaucracy—and I include the legislative branch as well as the executive branch of Government—drag its feet since October 1973. They do not really understand what is happening to them as far as inflation and the cost of energy are concerned.

I think the majority of the American people want Government to cut or speed up the process somehow. If we in this committee can help you in any way, please feel free to call on us.

Mr. CURTIS. Thank you, sir. I certainly agree with your comments. The mechanisms of Government have not been effective and responsive to the needs of the people.

We have difficult balances to strike. We have processes which simply must be adapted to the demands of the 1970's. That has not been done in the past as effectively as it must be done in the future.

Mr. RUNNELS. Mr. Curtis, you and Mr. Adger, and I know he is a well-informed person and probably knows as much or more about

the Alaska project than anyone, are getting kicked every day. That makes your job that much tougher.

I would like to ask you if you know what the arguments are against locating the conditioning plant in Fairbanks. Is this under your jurisdiction?

Mr. CURTIS. I must give you a complicated answer to the question.

The Commission has rendered a decision which approved the applied-for design specifications for the Alaskan segment of the project, regarding both the size and the pressure of the pipe. I would be happy to offer for the committee's consideration, a copy of the Commission's opinion issued Aug. 6 of 1979 in this docket, which, on page 7, recognizes that the Commission's decision may have some effect on the liquid-carrying capacity of the pipeline, but that the capacity is also affected by other factors, such as the carbon dioxide content of the gas stream, as well as the nature of the conditioning-processing facilities. In that proceeding, the State of Alaska and Earth Resources both urged the Commission to defer its decision and not approve the applied-for pipe size and pressure specifications of the applicant. They did so on the basis that there was an interrelationship between the pipe size and pressure decision and the CO_2 content decision, which would affect the location of the conditioning plant.

The Commission's original proposal was put out for comment, and an opportunity for hearing was afforded. No party requested a hearing before the Commission, and none was held. The Commission stated, "On the basis of the record before us that record supported the choice of 1,260 p.s.i.g. and does not support any other choice."

The Commission has received a petition to vacate. We have denied that petition. The basis of our decision on August 6, and of our determination to deny the petition to vacate, was essentially the determination that the record before us provided support for the applicant's choice of 1,260 p.s.i.g. and the sizing, 48-inch, of the Alaskan segment.

I would point out that the Commission authorized that choice. It does not mandate that choice. Applicant could have chosen another choice and attempted to support it, or applicant may in the future amend its certificate to offer another sizing and pressure provided applicant can justify it as being economically sound and otherwise consistent with the public convenience and necessity.

Thus, it was on that basis the Commission decided to render the decision of August of this year rather than to defer any longer. I call the committee's attention to a statement appearing on page 6 of that decision, which states: "The basic issue therefore is whether the Commission should decide the pressure now or delay its decision, pending further proceedings to compile a more extensive record. In this regard, Alaskan Northwest, the applicant, states in its comments that a choice of any pressure other than 1,260 p.s.i.g. would substantially delay the project." And the Commission quotes from that statement.

[The Commission opinion, issued August 6, 1979, Docket Nos. CP78-123, and others, referred to above, may be found in the appendix. See table of contents for page number.]

Mr. CURTIS. This Commission has taken very seriously its congressional mandate in section 9 and elsewhere in the Alaska Natural Gas Transportation Act to expedite its decisions. We determined that we could defer no longer, and, therefore, given the choice between further delay, which the applicant tells us could substantially add to both the cost and the construction period for this project, and arriving at the conclusion that the record before us supported the specifications as applied for by the applicant, we did confirm and approve those pressure and sizing proposals.

The Commission further recognizes that the issue of who shall bear the cost of the conditioning plant, also influences the positioning of the conditioning plant, since that issue is entangled with a question of allowing amounts for certain production-related cost above ceiling prices set in section 109 of the Natural Gas Policy Act. The Commission has made a decision on that matter although unlike the pipe size and pressure decision, this decision is still subject to rehearing.

Essentially the Commission has this problem: We are under a statutory direction to decide. The participants in our proceeding have asked us to defer and to delay for further consideration and the development of a more extensive record on CO_2 specifications, on pipe sizing and pressure, as well as on the production-related cost issue. In each instance, this Commission has tried to make the decision on the basis of the record before us in carrying out the statutory mandate.

We recognize fully that if the various participants in the case of production-related costs are able to work together outside of the adversarial context of a proceeding before the Commission, there will be a better opportunity that this project will, in fact, go forward and be built under the time schedules targeted for it.

Weighed against that realization is the command that the Commission decide. For example, on the production-related cost issue, the Commission has been working on this issue in various stages—as described more fully in my attachment 1—since February of this year. We have, as of yesterday, received a request to issue an order which will, in essence, hold in abeyance a final Commission decision to allow the Secretary of the Department of Energy to intervene in our proceedings and present matters for our consideration.

The Commission will act upon that request tomorrow, therefore I cannot discuss its merits. Yet, I wanted to draw that outline for the committee so that you understand, as I am sure you do, the record reflects the rock and the hard-place type of position that the Commission finds itself—both giving an opportunity for this evolutionary negotiating process to take place among the various persons who have direct and substantial interests, and at the same time, carrying out the statutory direction to make decisions necessary to get essential elements in place to permit this project to be financed.

Mr. RUNNELS. Thank you very much. My time has expired.

The gentleman from Montana, Mr. Williams.

Mr. CURTIS. I apologize.

Mr. RUNNELS. That is not necessary. Just so we have the details in the record.

Mr. WILLIAMS. Thank you, Mr. Chairman.

I want to comment some, if I may, Mr. Chairman, on the statement which you made concerning the dismay which the public has regarding the legislative and regulatory and judicial delays which have slowed some of the needed energy projects.

I think the Congress and the bureaucracy joins the public in that concern. Out in Montana, which is the State I represent, there are people who have those same concerns, and there are other voices, too. Those other voices are in the vast majority, and they say unquestionably that while they want to cut through the regulations and the restrictions and the redtape and the judicial delays which are preventing needed energy construction projects from going ahead, they do not under any condition wish to return to the "good old days" when industry alone decided its convenience and necessity and the public was left out of those decisions.

Our State of Montana, you know, along with some other States which were rich in natural resources, were used for many years as colonies to industry. We do not want to return to those days; so I guess we will have to find a middle ground here in cutting through the restrictions, regulations, and the redtape, and I commend you, Mr. Curtis, and you, Mr. Chairman, for trying to speed that day when we can stop the foot-dragging and get on with the necessities occasioned by our energy crisis.

Mr. Curtis, does the Commission have sufficient resources with which to dedicate priority actions to this project?

Mr. CURTIS. We will need additional resources in the future, Congressman. One of the ironies confronting the Commission in its last budget cycle was that our authorizing committee cut a substantial portion of the money which we had requested to be devoted to this function on the conclusion, as stated in the committee's report, that we were running far ahead of the applicant and that we should not be spending public moneys until there was a commensurate commitment of private moneys.

That budgetary decision was confirmed by the Appropriations Committees and in the appropriation bill which has been signed into law. We will seek to recover additional moneys in the next fiscal year, which we continue to believe are required for us to adequately carry out our responsibilities.

Mr. WILLIAMS. In closing, Mr. Chairman, I just want to say I was intrigued by Mr. Curtis' description of the rock and the hard place in which the Commission finds itself, and in that description you delineated the scenario and the evolution of some of the processes you go through, and I noted that on more than one occasion the sponsors of the project have asked for delays. I think the record should note that, and I appreciate having your testimony to that effect.

Thank you, Mr. Chairman.

Mr. RUNNELS. Would you care to respond to that?

Mr. CURTIS. I think Mr. Williams is correct; that there have been instances of requesting delays in the pacing of the decision; but I must admit that a fair statement would be that the project sponsors continually urged the Commission to adopt a decision pace that was more ambitious than the Commission was finally able to conclude. However, there have been those instances of delays sought for the project sponsors. A number of parties have request-

ed delays of the Commission; and this is part of the balance of which Mr. Williams speaks. It is incumbent upon the agencies and independent commissions to provide both the forum for the rationalization of a multitude of social goals which represent conflicting but deep commitments on the part of the people, as well as a balance in the procedural mechanisms by which we discharge that decisional responsibility. By that I mean we must afford an opportunity to present views while at the same time allowing for the decision to be rendered in an expeditious and timely manner. It is quite understandable that the participants in the process may disagree, and do disagree rather strongly sometimes, as to the striking of those balances that the Commission comes out with.

Mr. RUNNELS. Where I come from, we have a statement that sort of fits in: Sometime you have to do less butt kicking and more handshaking.

Mr. CURTIS. That is good advice.

Mr. RUNNELS. Mr. Young?

Mr. YOUNG. Mr. Curtis, first, let me say—as one who has supported basically the position I support that we are going to need energy in Alaska, and provide it—you are one of those who supported my position before the hearings we had, which makes it very difficult for me to be terribly upset with you personally. I want you to know that. But there are some questions I would like to ask.

Do you have a copy of the Fairbanks response, *Prudhoe* v. *Fairbanks?*

Mr. CURTIS. Not with me.

Mr. YOUNG. I would like to submit that to you and have one of your staffers read it, because there is pertinent information there.

If I understood your answer to the chairman, the basic decision on pressurization of the line was based upon the applicant's request.

Mr. CURTIS. Yes, sir.

Mr. YOUNG. Were there any other decisions, like the potential for the petrochemical industry? Was that taken into consideration in Alaska?

Mr. CURTIS. Yes. We evaluated the record, which consisted of a number of things: first, a report from the Alaskan delegate, who is the Alaskan project director, Mr. Adger, on my right, as well as the comments received on that report, the minutes of a number of informal meetings, together with the materials developed in the course of Mr. Adger's report to the Commission on which we solicited comments.

Mr. YOUNG. May I interrupt?

Mr. CURTIS. If I may just add, both Earth Resources and the State of Alaska made appearances in that proceeding. Their comments were evaluated by us in reaching the conclusion noted on page 6 that the record before us supported the choice of 1,260 p.s.i.g. We did not believe that the record before us supported any other choice. But that does not mean it was an exclusive decision.

Mr. YOUNG. As long as the chairman does not take all my time up with the answers, and I do appreciate them, because they are informative.

On page 2 of your testimony—is this correct? The Commission issued the delegate's report on May 17, 1979, and there was no request for public hearings?

Mr. CURTIS. That is correct.

Mr. YOUNG. The State did not request it?

Mr. CURTIS. That is correct.

Mr. YOUNG. And Earth Resources did not request it?

Mr. CURTIS. That is correct. They filed comments.

Mr. YOUNG. But they did not request public hearings?

Mr. CURTIS. Yes, sir.

Mr. YOUNG. I think that is important for the record, too.

Second, with your recommendation what will happen to the liquids at Prudhoe Bay?

Mr. CURTIS. It depends on the liquids, as I understand it, Mr. Young. Some of the liquids, the ethanes and the propanes, will be consumed in the act of conditioning. Other liquids could be, as I understand it, transported through the oil pipeline.

Mr. YOUNG. Are any of those liquids going to be utilized for energy to operate the conditioning plant?

Mr. CURTIS. It is my understanding that a good portion of the propanes and ethane would be consumed in the operation of the conditioning plant.

Mr. YOUNG. Did FERC consider the possibility of using the vast quantities of coal located up there for alternate energy and utilizing the ethanes and propanes further down the line?

Mr. CURTIS. The Commission does not have certification authority with respect to the conditioning plants design and process, or as to the fuel which is consumed by it. As you know, Mr. Young, if the conditioning plant is located at Prudhoe, it will be on State land. It is unclear to me whether the State has some certificate authority, or could impose some restrictions which would allow address to the question that you just asked of me, but it is not one that we would address in the course of our proceedings.

Mr. YOUNG. You are in court now over your decision?

Mr. CURTIS. On the pipe size and pressure; yes, sir.

Mr. YOUNG. The Canadian pressure is a 56-inch pipe?

Mr. CURTIS. Forty-eight-inch.

I beg your pardon. The Alaskan segment is 48-inch. The joint segment from Whitehorse to Dawson is 56-inch, 1,000.

Mr. YOUNG. Mr. Chairman, I am not an engineer. I am trying to figure out why one is 48 and one is 56, and what we plan to do with lower pressure on one end and larger pressure on the other end.

We heard testimony there was no plan to transport immediately any Mackenzie field gas. There is more than meets the eye here, and we want to make sure we look at that.

I know my time is running out, Mr. Chairman.

Mr. Curtis, we are not through with this. You have fulfilled your job, I think adequately, and if you sensed the hostility had for some other agencies, you may be well aware of this. I have seen the Federal Energy office guilty of this, and I have been sometimes blaming the delays on your agency, and it appears to me there are a lot of other people undercutting you constantly, which makes your job more difficult.

I am going to continue, as Congressman, and the State is, too, to see if we cannot reverse the decision of the pressure line, or if we cannot deliver that pressure but still deliver gas to where the conditioning should take place and not on the State lines.

Mr. Chairman, I have no further questions.

Mr. RUNNELS. Mr. Lagomarsino?

Mr. LAGOMARSINO. Thank you, Mr. Chairman. Just a couple of specific questions.

On page 5, Mr. Curtis, you say, "The Commission is scheduled to consider action in the first phase of that proceeding this week"—talking about the prebuilt project—"and we are hopeful of completing action in all phases in early 1980."

Could you be more specific?

Mr. CURTIS. I will try.

The Commission has divided its prebuilt applications into three phases, believing this method is the most expeditious way of sorting through the decisions that are required to be made. For example, phase 1 deals with the interrelationship of the prebuilt to the total system. We believe that the Commission's decision on that is essential for early project financing purposes. That is the decision that we expect to make within this next week or so.

With respect to the remaining phases of the decision, if I might relate to what I know is a specific concern of this committee, we intend to make the decision with respect to the western leg before the end of the year.

With respect to the eastern portion of the system, in the northern border, we intend to make that decision in early 1980, and it is for that reason that you have our statement that we hope to conclude the entirety of it by early 1980. We do however, recognize the importance of making a decision on the western leg before the end of calendar 1979, and we intend to make a decision by then.

Mr. LAGOMARSINO. That is very encouraging.

Then you say with regard to the Alaska segment, the project sponsors do not currently plan to file for these approvals until June of 1980.

How long do you think it will take the Commission to act on the applications once they are filed?

Mr. CURTIS. I understand that the applicant hopes for a decision to be rendered by the Commission within 6 months. Assuming that the applicant's submission is complete and well documented, I believe it reasonable to expect the Commission to act within the 6-month period.

Mr. LAGOMARSINO. Thank you.

Mr. CURTIS. I cannot however, judge the adequacy of the application at this time.

Mr. LAGOMARSINO. Thank you.

Mr. RUNNELS. Thank you.

Since Mr. Clausen cannot be here, we will have some questions from his counsel.

Mr. ROGERS. Mr. Curtis, I would like to welcome you today on behalf of Mr. Clausen. He asked that I express to you, in his capacity as being ranking Republican on the full committee, his appreciation for the outstanding job that your Commission has

done in keeping all of the subcommittees, at least on the minority side, informed.

Unfortunately, the Department of the Interior does not do half as good a job as your Commission, and they come under our jurisdiction. Maybe it comes from your training of being independent at the Securities and Exchange Commission?

Who has replaced former Commissioner Don Smith in meeting with the Canadian Government representatives on the proposed Alaska gas transportation system?

Mr. CURTIS. When Commissioner Smith, who had assumed, at my request, primary responsibility for this project on behalf of the Commission, resigned his position on the Commission effective June 30, I took over direct control of the project and have been engaged in the regulatory consultations as contemplated under article 9 of the principles of agreement.

With respect to the functions Commissioner Smith engaged in regarding the procurement aspects of it, that has not been a matter that I pursued. It is the general belief that the State Department and the Federal inspector will pick up that function. In my opinion, this task is more appropriate for the Federal Inspector's broader reach and vision of the project.

Mr. ROGERS. And would you please provide for the record the names and respective positions of the individuals within the Canadian National Energy Board who serve as counterparts to the Commissioners of your Commission?

Mr. CURTIS. We would be happy to do so.

[In response to the above request, the FERC subsequently furnished the following information.]

The NEB is composed of nine members, which form into panels to hear cases. The panel considering matters affecting the Alaska Natural Gas Transportation System (ANGTS) is one dealing with tariffs and financing for the system. That panel is chaired by C. Geoffrey Edge, Vice-Chairman of the NEB, and includes Livia M. Thur and R. B. Horner as Members. Order No. RH-2-79 (copy attached) establishes the subject matter and conduct of the panel hearings.

Another NEB panel is considering applications for net new exports of Canadian gas, among them those sought by the United States and Canadian sponsors of the proposal to "pre-build" the southern segments of the ANGTS. The presiding member of that panel is NEB Chairman J. G. Stabback, and includes J. R. Jenkins and J. Farmer as Members. Order No. GH-2-79 (also attached) establishes the subject matter and conduct of those hearings.

Mr. ROGERS. Thank you very much.

That is all, Mr. Chairman.

Mr. RUNNELS. Mr. Curtis, and Mr. Adger, we want to thank you both for being here today and we appreciate the work you are doing. We are looking forward to working with you in the future.

Mr. CURTIS. Thank you, Mr. Chairman. I especially want to state on behalf of the Commission our appreciation for the fairly unusual experience of the subcommittee's understanding of the difficulties that confront us. There is room for criticism of the Commission's actions, but we hope that the committee can conclude that we have conscientiously attempted to discharge our responsibilities.

We thank you, sir.

Mr. RUNNELS. Thank you very much.

Our next and last witness is Brigadier General Robinson, Deputy Director of Civil Works, Office of the Chief of Engineers, Depart-

ment of the Army, accompanied by Col. Robert Bauchspies, Agency Authorized Officer.

[Prepared statement of Brig. Gen. Hugh G. Robinson may be found in the appendix.]

STATEMENT OF BRIG. GEN. HUGH G. ROBINSON, DEPUTY DIRECTOR OF CIVIL WORKS, OFFICE OF THE CHIEF OF ENGINEERS, DEPARTMENT OF THE ARMY, ACCOMPANIED BY COL. ROBERT BAUCHSPIES, AGENCY AUTHORIZED OFFICER (AAO)

Mr. RUNNELS. Welcome, General, to our subcommittee. You may summarize or give your statement any way you want to. It will be included in the record in its entirety.

General ROBINSON. Thank you very much. It is a pleasure to be here. In addition to being Deputy Director of Civil Works, I am also the Chief of Engineers' representative from the Executive Policy Board, and Colonel Bauchspies is the Agency Authorized Officer.

I appreciate this opportunity to appear and with the chairman's permission I will summarize my statement which has been submitted for the record.

As you are aware, Public Law 94-586 made it clear that the Federal agencies, such as the Corps of Engineers, were to assist the then Federal Power Commission and the President, within the scope of their existing statutory authorities, in carrying out their respective responsibilities pursuant to the act.

Further, Public Law 94-586 indicated clearly that actions necessary or related to the construction and initial operation of the approved transportation system, such as the issuance of permits under the statutory regulatory program of the Corps of Engineers, would continue to be an agency responsibility but would also be expedited and take precedence over other similar permit actions before the agency.

As a result of Public Law 95-158, the Executive Policy Board envisioned in the 1976 act came into existence on an ad hoc basis. The Corps of Engineers, the Environmental Protection Agency, the Federal Energy Regulatory Commission, and the Departments of Transportation and Energy were the first members of the EPB.

The corps was active in all aspects of the work of the EPB to include, of particular relevance to these hearings, active participation in the technical advisory committee to include, by mid-1978, one technical subcommittee concerned with permafrost and another technical subcommittee concerned with geology.

As Mr. Curlin earlier stated, we have been participating in a joint multidisciplinary working group with the corps being the chairman of the geotechnical group for that particular effort.

With congressional approval of Reorganization Plan No. 1 of 1979—Office of the Federal Inspector for Construction of the Alaska Natural Gas Transportation System—by May 31, 1979, and by virtue of Executive Order 12142, the Alaska Natural Gas Transportation System, dated June 21, 1979, the role of the Corps of Engineers changed from that of an active agency participant in interagency technical review and study activities and membership on an ad hoc Executive Policy Board to that of full membership by Presidential designation on an Executive Policy Board with a spe-

cific charter and a concurrent responsibility to appoint an Agency Authorized Officer.

Since Jack Rhett was confirmed by the Senate as the Federal inspector there has been an exchange of ideas between the Chief of Engineers and the Federal inspector, and members of their staffs, upon the Federal inspector's initiative with a view to identifying areas in which the Corps of Engineers could, as a Federal agency, provide technical assistance within its many areas of engineering and related expertise to the Federal inspector and his office on matters pertaining to the preconstruction, construction, and initial operation of the system.

As Jack said in his testimony, we are seeking to achieve a formal agreement for the corps to provide cold weather engineering technical support to the Federal inspector on frost heave problems and provide assistance in the review and design of a cost/schedule control system for the Federal inspector's office while further exploring means to provide corps support on such matters as the review of engineering designs, plans, and specifications; field enforcement of permits and other authorizations; and audit and cost control including application of the incentive rate of return.

In summary, the Corps of Engineers currently occupies a policy advisory role through its membership on the recently established Executive Policy Board and is represented within the Alaska Natural Gas Transportation System through its appointed Agency Authorized Officer, Colonel Bauchspies.

The corps is ready to provide, and to study further means of providing, technical assistance support to the Federal inspector and his office as determined to be necessary, and requested, by the Federal inspector in the public interest for the economical and expeditious completion of the approved transportation system.

This concludes my statement. I will be glad to answer any questions that you may have.

Mr. RUNNELS. Thank you very much. I would like to congratulate you on your direct and to the point testimony.

Would you please elaborate on your agreement to provide technical support to the Federal inspector?

General ROBINSON. The Federal inspector had asked the Chief of Engineers to advise him on the support that might be available from the Corps of Engineers. As a result of that and a particular request back from Jack Rhett, we are considering providing technical support in the frost heave area.

As you probably know, our region does have expertise in this area, and we do intend to bring together all of the expertise that is available, including the academic community, Government agencies, et cetera.

There was one other part that he did ask us for and I believe that was the scheduling costs.

Mr. RUNNELS. On page 2, in the middle paragraph, can you summarize the issues you mention are under study by a geotechnical group?

General ROBINSON. Yes, sir. That ad hoc group is looking at some of the particular construction problems that are entailed in the construction of this pipeline, transporting natural gas under 1,260

psig via a buried 4-foot diameter pipeline through a permafrost area offers unique challenges to the state-of-the-art.

Various technical groups have made a preliminary listing of potential technical problems which require analysis that could occur during construction of ditching operations, after pipe burial and prior to chilled gas flow, and during the actual operation of the system.

These technical areas are, of course, in addition to areas relating to the proximity issue. They deal in part with ditch instability, slope stability, changes in hydrology and erosion control, thaw, pipe floating, frost heave, and the creation of a frost bulb around the pipe.

Mr. RUNNELS. Thank you very much.

Mr. Rogers, I believe, has some questions for Mr. Clausen.

Mr. ROGERS. Thank you, Mr. Chairman. Welcome to the subcommittee, General. I am sure you know the people on this side of the aisle from Public Works and Transportation.

When do you anticipate reaching a formal agreement with the Federal inspector on providing cold weather engineering technical support to the Federal inspector on the frost heave problem?

General ROBINSON. We anticipate we will have complete agreement to include all of the other areas that the Federal inspector asked us to look at by the first of November.

Mr. ROGERS. How many personnel within the corps have been committed to the Alaska Natural Gas Transportation System project?

General ROBINSON. At the present time we just have one Agency Authorized Officer, Colonel Bauchspies. A number have been included in the technical review. All along our districts anywhere along the pipeline have been involved; the Alaska district is particularly involved in the project, and I do not know the exact number of people they have had with them on the project.

Mr. ROGERS. Thank you, sir. Thank you, Mr. Chairman.

Mr. RUNNELS. We want to thank you very much, General, for appearing here today and you, also, Colonel. We will be in touch with you through our staff.

I want to thank the witnesses who have appeared before this subcommittee. I want to thank those who have observed these hearings. Particularly, I want to compliment the staff of this subcommittee for arranging a very fine hearing as far as the chairman is concerned.

These hearings are concluded for today.

[Whereupon, at 12 noon, the subcommittee was adjourned.]

57-087 0 - 80 - 8

A P P E N D I X

Additional Material Submitted for the Hearing Record

ALASKA NATURAL GAS TRANSPORTATION SYSTEM

STATUS REPORT

Prepared by Staff for the

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

of the

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS

of the

U.S. HOUSE OF REPRESENTATIVES

Ninety-Sixth Congress

First Session

December 1979

December 12, 1979

The Honorable Harold Runnels
Chairman
Oversight and Investigations
Subcommittee
1535 Longworth House Office Building
Washington, D.C. 20515

Dear Mr. Chairman:

There is hereby submitted for consideration by Members of the Oversight and Investigations Subcommittee the following report relating to the Alaska Natural Gas Transportation System.

Sincerely,

Timothy W. Glidden
Staff Director-Counsel

Joy R. Gwaltney
Research Consultant

Martha Anne McIntosh
Research Consultant

CONTENTS

I. INTRODUCTION

The Alaska Natural Gas Transportation System (ANGTS) may serve as a prototype for this Nation's proposed "fast track" energy projects. The ANGTS is an ambitious undertaking. Its $15 billion proportions alone serve to support its number one standing within Federal agencies, taking regulatory and administrative precedence over all other projects. The Congress has focused its attention on the system on five separate occasions since 1973, giving the concept form, defining the Federal role, and providing a regulatory climate suitable to a one-of-a-kind project of this magnitude. The executive branch of the Federal government has been equally active: it negotiated a treaty with Canada which was formalized in 1977, the President referenced his full support of the project in a televised energy speech, and then the executive branch effected a limited reorganization of the government to provide a Federal focal point for regulating construction and operation of the pipeline.

This report will trace the progress of this energy project, identify the participants and their responsibilities, and discuss issues which are yet to be resolved.

II. PROJECT DESCRIPTION

The Alaska Natural Gas Transportation System is currently in its design and engineering phase. When operational, the pipeline will transport natural gas 4,787 miles from Prudhoe Bay on the North Slope of Alaska, across the Canadian frontier

to a point near Calgary where it will split into two lines going into the lower 48 states, one toward the West Coast and the other into the Midwest. The pipeline will be capable of transporting 2.4 billion cubic feet of gas per day (bcfd) with a built-in expansion potential to 3.4 bcfd. The cost to construct the system is estimated to be $15 billion in escalated dollars, 1984 dollars, with a completion target date of November 1984.

The Prudhoe Bay field is estimated to contain 26 trillion cubic feet (tcf) of natural gas. By comparison, the total proven U.S. gas reserves (non-Alaskan) are estimated at 185 tcf. The annual rate of consumption of natural gas within the U.S. is 19.9 tcf (1977). Therefore, at peak production the ANGTS could deliver 6 percent of the nation's natural gas requirements from a reserve that represents more than 10 percent of the known U.S. supply of natural gas.

For planning and construction purposes the ANGTS is broken down into four sections, or legs. Although each leg has its own sponsors, contracts, and construction schedules, the system is statutorily a single entity with close coordination both internationally and among the corporate sponsors.

A. Alaskan Leg

The Alaskan Leg will consist of 741 miles of pipeline. It will parallel the Trans-Alaska oil pipeline from Prudhoe Bay to a point south of Fairbanks where it will turn eastward and follow the Alaska Highway and the Haines oil products pipeline right-of-way to the Alaska/Yukon Territory border near Border City, Alaska.

Plans call for a buried pipeline carrying chilled gas at 1260 pounds per square inch (psig) pressure through 48-inch diameter pipe. It is estimated that the Alaskan Leg will cost $6 billion in escalated dollars (a figure which includes finance charges on funds used during construction or AFUDC) to construct. The sponsors of the Alaskan Leg are a consortium of six gas transmission companies, with Northwest Energy Company of Salt Lake City, Utah, acting as the managing partner. The consortium is called the Alaskan Northwest Gas Transportation Company and is composed of Northwest Energy Company, Panhandle Eastern Pipeline Company, Northern Natural Gas Company, United Gas Pipeline Company, Pacific Lighting Corporation, and Pacific Gas and Electric Company. Efforts are being made to have other gas transmission companies join this consortium. Current projections by the sponsors indicate that this leg will be operational by late 1984.

B. Canadian Leg

The Canadian Leg will travel 2,028 miles from the Alaska/Yukon Territory border, parallel to the Alaska Highway, through the Provinces of British Columbia and Alberta to a point near Caroline Junction, Alberta. There the pipeline will split into the Western Leg which will enter the United States near Eastport, Idaho, and the Eastern Leg which will cross the international border at Morgan, Montana.

The design and diameter of the Canadian Leg will vary according to need. Plans call for a buried line using 48-inch diameter pipe from the Alaskan border to Whitehorse, Yukon, where the pipe diameter will increase to 56-inches. This enlargement is intended to accommodate possible future Canadian gas sources in the Beaufort

Sea through the use of a proposed Dempster Highway Lateral pipeline which will connect to the ANGTS at Whitehorse. The pipe dimensions will again change south of Caroline Junction, Alberta, by employing 36-inch diameter pipe for the Western Leg and 42-inch diameter pipe for the Eastern Leg.

The sponsoring consortium of the Canadian Leg is called Foothills Pipe Lines (Yukon) Ltd. Foothills is the parent organization of five subsidiary companies which will construct and operate the line. The Alberta Gas Trunk Line Company owns 50 percent of the outstanding shares of stock in Foothills. The remaining 50 percent is owned by Westcoast Transmission Company Limited.

C. Western Leg

The Western Leg will carry the Alaska North Slope gas 911 miles from the international boundary near Eastport, Idaho, through the states of Washington and Oregon and into California where the line will terminate at Antioch near the San Francisco Bay. This leg is the most conventional of all the ANGTS sections in design, construction techniques, financing, and tariff provisions. It is a full paralleling or "looping" of an existing natural gas pipeline owned and operated by the Pacific Gas Transmission Company (PGT) through Idaho, Washington, and Oregon, and the Pacific Gas and Electric Company (PG&E) in California. PGT is a 53 percent owned subsidiary of PG&E and these two companies will jointly sponsor, finance, construct and operate the Western Leg.

Approximately 883 miles of new, 36-inch diameter pipe will be installed alongside an existing pipeline. No new compressor stations will be required to maintain an operating pressure of

911 psig. Through interconnection with other transmission companies, the Alaskan gas will reach markets throughout the Pacific Northwest and the Rocky Mountain States. A segment of this Leg is expected to be operational in late 1980.

D. Eastern Leg

The Eastern Leg will transport gas from the Saskatchewan/ Montana border near Morgan, Montana, for 1,117 miles across North Dakota, South Dakota, Minnesota, Iowa and into Dwight, Illinois, south of Chicago.

The 42-inch diameter pipeline will carry gas at a pressure of 1435 psig to markets throughout the Plains states, the Midwest, the South and the Eastern Seaboard through the existing transmission systems of various partners in the Northern Border consortium. The consortium consists of Northern Natural Gas Company of Omaha, Nebraska, the managing partner, Northwest Energy Company, Panhandle Eastern Pipeline Company, United Gas Pipeline Company, and TransCanada Pipelines, Ltd. TransCanada is the largest gas transmission company in Canada. When the firm joined the Northern Border consortium in October 1979 it became a 30 percent equity partner and agreed to secure the entire debt structure of the Eastern Leg through Canadian markets. The sponsors of this Leg plan to have a portion of it operational in the fall of 1981.

III. BACKGROUND

The term "Prudhoe Bay" became linked with domestic energy resources in 1968 with the first big oil strike on the North Slope. The Prudhoe Bay field is about 18 miles wide and 45 miles long

and is estimated to contain 9.6 billion barrels of recoverable oil associated with 26 trillion cubic feet (tcf) of saleable natural gas. Although part of the natural gas is in solution, a significant amount is in a free gas cap above the oil. A consensus has been reached among various petroleum engineers on the probable size of the gas reserve, however some experts believe that the potential quantity of recoverable gas could range from 72 to 185 tcf.

A. Legislative History

After five years of debate in the courts and within the Federal government on the best route for construction of a pipeline to transport oil from Prudhoe Bay to market, Congress enacted legislation in 1973 which authorized the construction of a pipeline from Prudhoe Bay to Valdez, Alaska. Incorporated in this measure, Public Law 93-153, the Trans-Alaska Pipeline Act, was a provision which heralded the development of the Alaska Natural Gas Transportation System. Section 301 of that Act authorized and requested the President to determine the willingness of the Government of Canada to permit the construction of a natural gas pipeline for Alaska North Slope gas across Canada (Appendix I). Almost immediately an application for a certificate to construct the gas pipeline was filed with the Federal Power Commission (FPC) in the U.S. and its Canadian counterpart, the National Energy Board (NEB), by the Arctic Gas consortium. A competing application was filed six months later, in September 1974, by El Paso Alaska Company, and in July 1976 another application was filed by the Alcan Pipeline Company (later called the Alaskan Northwest consortium). Each proposal included a different pipeline route.

Congress returned to the Alaskan gas pipeline issue in 1976. Recognizing the shortages of natural gas, the large reserve in Prudhoe Bay, the critical need for the Federal government to marshal forces to expedite construction of a gas pipeline, and the disastrous impact delays were having on the cost of constructing the oil pipeline, Congress debated and passed the Alaska Natural Gas Transportation Act, Public Law 94-586 (Appendix II).

This Act was a break from tradition: it structured a route selection process that would draw upon all relevant governmental, public, and private expertise; it gave a new definition to the relationship between the Federal regulatory agencies and the private pipeline sponsors; it acknowledged the need to expedite administrative procedures; it limited judicial review to claims that the Act infringed upon Constitutional rights and to claims that certain actions were beyond the bill's scope of authority; and it called for the appointment of a Federal Inspector to coordinate and direct Federal activities.

Within a year of passage, the President selected a route and issued his Decision and Report to Congress on the Alaska Natural Gas Transportation System. This September 1977 document selected the Alcan Pipeline Company proposal to construct and operate a gas pipeline, it identified the system's components and route, and it set general terms and conditions relating to financing, antitrust policies, environmental and engineering standards, and enforcement of Federal requirements. The Decision in its entirety assumed the force of law when Congress passed Public Law 95-158 approving the President's action.

Congress' most recent examination of Alaskan gas policies occurred in 1978 when it considered and enacted the Natural Gas Policy Act, P.L. 95-621. Two aspects of this complex and controversial Act have direct bearing on the proposed pipeline: first, the Act assured North Slope gas producers a wellhead price of $1.45 per thousand cubic feet plus an allowance for inflation, and second, the Act allowed the cost of Alaskan gas transported through the ANGTS to be "rolled in," a term which refers to a pricing mechanism wherein the price of Alaskan gas is averaged in with the prices of other cheaper gas supplies resulting in a higher overall gas price for all consumers in the ANGTS system, but a lower price than the cost of the Alaskan gas.

B. Negotiations with Canada

The State Department began negotiations with Canada in 1974 in response to the Congressional mandate spelled out in the Trans-Alaska Pipeline Act. The Government of Canada indicated a willingness to first consider an agreement of general applicability, with an agreement on a specific pipeline proposal to follow. The first product of these negotiations was the Transit Pipeline Treaty which was initialled in January 1976 and formally ratified by Congress in 1977. The Treaty governs all existing and future transit pipelines in the two countries for thirty-five years and provides (a) assurances of noninterference with the flow of hydrocarbons, (b) avenues for binding arbitration in the event of disputes, and (c) terms of non-discriminatory treatment by either country with regard to taxation.

The negotiators' second product was an Agreement on Principles, signed in September 1977 which deals specifically with the Alaska gas pipeline. It provides assurances on taxation levels, tariffs, project timetables, and a general designation of route. It also provides an outline of the financing plans, regulatory requirements, competitive contracting mechanisms, and methods of coordination and consultation between the two governments.

The Canadian Parliament moved quickly to give legal status to this Agreement. In April 1978 Parliament assented to the Northern Pipeline Act which established the Northern Pipeline Agency and transferred to it the necessary powers to carry out the Federal responsibilities outlined in the Agreement on Principles. Beyond the Act's similarities to its American legislative counterpart, it goes into a regulatory area where Congress is unable to follow. The Northern Pipeline Act officially grants a certificate of public convenience and necessity to Foothills Pipe Lines (Yukon) Ltd. In the United States issuance of a similar certificate culminates years of regulatory proceedings by the Federal Energy Regulatory Commission and immediately precedes initiation of construction. In short, the Northern Pipeline Act retooled Canadian administrative mechanisms in the form of the Northern Pipeline Agency, a counterpart to our Office of the Federal Inspector.

IV. FEDERAL REORGANIZATION

The need for a coordinated approach to Federal oversight and management of the ANGTS was graphically demonstrated during the construction of the Trans-Alaska oil pipeline. In attempting to

construct the oil pipeline across Federal land in an arctic environment, the sponsors bitterly complained that, in addition to environmental and technical uncertainties, the uncoordinated actions of the Federal government added to construction delays and cost increases.

A. Office of the Federal Inspector

The concept of a "one-window" approach to Federal control over planning, construction, and initial operation of the gas pipeline received Congressional endorsement in the Alaska Natural Gas Transportation Act with the "one-window" being the Office of the Federal Inspector. By Presidential decree and Congressional consent the enforcement powers of all responsible Federal agencies were vested in the Federal Inspector for the purpose of constructing the gas pipeline (Reorganization Plan No.1 of 1979 - Appendix III). Accordingly, the Federal Inspector is responsible for the following:

1) enforcing all Federal statutes relevant to the ANGTS, including the monitoring of compliance with any terms and conditions or stipulations which are attached to any Federal authorization;
2) monitoring actions taken to assure that cost control, safety, and environmental protection objectives are fulfilled while still achieving the timely construction and initial operation of the ANGTS;
3) keeping the President and the Congress informed on project progress, including factors which may delay construction and initial operation of the system and the extent to which the objectives outlined in Number 2 above are being met;

4) establishing a joint surveillance and monitoring agreement with the State of Alaska; and

5) coordinating the scheduling and issuance of all Federal permits and related activities to assure timely and unified decisions.

Simply stated, the Federal Inspector is designated to be the principal point of contact for the pipeline owners, contractors, state agencies, and Canadian entities. He serves at the pleasure of the President. Moreover, the statutory enforcement responsibilities of the Environmental Protection Agency, the Corps of Engineers, the Department of Transportation, the Department of Energy, the Federal Energy Regulatory Commission, the Department of the Interior, the Department of Agriculture, and the Department of Labor have been transferred to the Federal Inspector. These agencies retain their authority to issue necessary permits; however, the Federal Inspector will set the timetable for permitting actions and will be responsible for keeping the agency actions on schedule.

John T. Rhett, Jr. was appointed Federal Inspector by the President and confirmed by the Senate in July 1979. The Office of the Federal Inspector is being organized by function with three field/project offices, corresponding to the three American legs of the pipeline, and a headquarters in Washington. When construction of the Alaskan Leg begins in 1981 the headquarters will be relocated to a site in Alaska. Currently no decisions have been announced on the locations of the field/project offices in Alaska or the lower 48 states.

Staff requirements are expected to include over 200 positions during construction in Alaska with an annual budget of approximately

$30 million. A considerable portion of the budget will be applied to contracts for outside support in the fields of engineering and environmental review and quality assurance. Staff requirements will drop off drastically in late 1985, the anticipated first anniversary of the operation of the pipeline.

B. Agency Authorized Officers

In accordance with provisions of the President's Decision and the Reorganization Plan, each Federal agency with statutory responsibilities relating to the ANGTS has appointed an Agency Authorized Officer (AAO). These officers represent and exercise the internally delegated authorities of their respective agencies in matters pertaining to the project. During the permitting phase of the project the AAOs will be responsible for expediting the issuance of their agency's permits. They will also prepare enforcement handbooks for use by field-level personnel. During the enforcement phase of the project. AAOs will review the enforcement efforts of the Federal Inspector's staff to assure that their agency's policies are being properly carried out. While serving as AAOs for the project, these officials will have other administrative duties within their agencies, they will be located within the Office of the Federal Inspector, and they will relocate to Alaska along with the headquarters staff at the start of the construction phase of the Alaskan Leg.

Organizationally, the AAOs have direct access to the Federal Inspector, the functional elements within their agencies, and their respective members on the Executive Policy Board.

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C. Executive Policy Board

The Executive Policy Board was created through Executive Order 12142 as an advisory body to the Federal Inspector on matters pertaining to overall project management and to specific agency authorities (Appendix IV). The Board is composed of the Secretaries, or their designees, of eight Federal agencies: Agriculture, Energy, Labor, Transportation, Interior, Environmental Protection Agency, Federal Energy Regulatory Commission and the Army Corps of Engineers. Additional members may be elected to the Board by vote of a majority of the members. The Department of State has indicated an interest in participation as a member of the Board. The Chairman is elected annually by majority vote of the members. Recently, the Army Chief of Engineers was elected the Board's first Chairman.

V. REGULATORY ISSUES

During the period from September 1977, when the President announced his selection of the Alcan pipeline proposal, to July 1979, when the Federal Inspector was confirmed, two agencies were the focus of Federal regulatory activity: the Department of the Interior and the Federal Energy Regulatory Commission.

The Department of the Interior took the lead in several areas pertaining to the ANGTS. A set of stipulations to attach to the eventual grant of right-of-way across Federal land was drafted through consultation with the Executive Coordinating Committee, a group of state and Federal officials interested in the environmental and technical standards to be required of the pipeline sponsors. Department officials also began looking at the "proximity" problems,

those difficulties relating to the construction of a cold gas pipeline next to a hot oil pipeline in Alaska's extreme climate. A third area requiring attention was the possible use of the abandoned Haines oil products pipeline right-of-way south of Fairbanks.

The Federal Regulatory Commission began an intensive series of proceedings which will eventually culminate in the issuance of certificates of public convenience and necessity to the sponsors of the various legs.

A. Department of the Interior

1. Stipulations - In May 1979 the Department of the Interior published proposed stipulations which will apply to the construction, operation, and termination of all three American legs of the ANGTS and which encompass administrative procedures, environmental requirements, and general technical standards. These stipulations were revised in September 1979, but will not be considered final until they are attached to the Federal grant of right-of-way. In accepting the grant, the pipeline sponsors will become legally bound to the terms and conditions spelled out in the stipulations.

Although the Federal Energy Regulatory Commission and the State of Alaska must publish terms and conditions applicable within their jurisdictions, the Department of Interior stipulations are significant for two reasons. First, the stipulations will control the environmental and technical standards of construction over two-thirds of the route of the Alaska segment and to a large extent will set the standards for other units of government to follow in exercising their regulatory authorities. Second, the stipulations were drafted to reflect the experience gained in constructing the Trans-Alaska oil pipeline. In

that venture the General Accounting Office, among others, concluded that uncertainty over the interpretation of that project's stipulations complicated planning, delayed the construction schedule, and added to the cost of the project.

The stipulations for ANGTS are general in nature and provide the framework for further planning and design by the sponsors. Control over the details will be afforded the Federal Inspector through the comprehensive "preliminary" plans which include:

- Environmental briefings
- Oil and hazardous substances control
- Air quality
- Pesticides, herbicides, chemicals
- Solid waste management
- Liquid waste management
- Erosion and sedimentation control
- Stream, river, and flood plain crossings
- Material exploration and extraction
- Overburden and excess material disposal
- Clearing
- Visual Resources
- Blasting
- Restoration
- Pipeline contingency
- Quality assurance, quality control
- Surveillance and maintenance
- Cultural resource preservation
- Fire control
- Wetland construction
- Seismic monitoring
- Corrosion control
- River training structures
- Traffic management
- Materials stockpiling

The preliminary plans, along with an analysis of the effect of plans on the Trans-Alaska oil pipeline, will be submitted to the Federal Inspector and will have to be approved in writing before a "notice to proceed" with construction will be issued. In addition, the sponsors are also directed to submit to the Federal Inspector summary network analysis diagrams for use in determining the

adequacy of the sponsor's management approach. This factor was also identified by the General Accounting Office in 1978 as being underemphasized in the Trans-Alaska oil pipeline project and, once again, as being directly related to that project's cost overruns.

The following is a brief summary of the three categories which are addressed in the stipulations for all three ANGTS legs:

a. General Requirements

This category provides to the sponsors: (1) a definition of terms, (2) procedures to be followed in dealing with the Federal government (as represented by the Federal Inspector during all phases of planning, construction, and initial operation), (3) a register of the rights and responsibilities of both the sponsors and the Federal Inspector, and (4) a list of subjects (listed above) for which comprehensive plans are required prior to issuance of a "notice to proceed".

b. Environmental Requirements

The following provisions are contained in this section: (1) the sponsors shall provide environmental briefings to their supervisory and field personnel, (2) pollution control efforts must meet all applicable air and water quality standards, address sanitary and waste disposal, and the use of pesticides, (3) measures to minimize erosion and sedimentation on land and at stream crossings must be undertaken, (4) free passage of fish and big game must be assured during construction, and the sponsors

must avoid disturbances of fish spawning, rearing, and overwintering areas, (5) clearing, debris disposal, and restoration must be accomplished under stated guidelines, (6) the use and storage of explosives must follow a pre-approved plan and shall be limited in certain areas, (7) cultural resources must be identified and protected, and (8) a pipeline contingency plan must specify the steps to be taken in the event of a break, leak, or explosion.

c. Technical Requirements

The standards outlined in this category make reference to proven engineering practices and Federal safety standards and are applied to roads, slope stability, bridges, erosion, and pipeline design. Of special importance are the weld inspection requirements (not less than 90 percent using x-ray radiography), earthquake and fault displacement protection, and pipeline corrosion control and maintenance.

These requirements differ very little among the three legs. More coverage is given to the Alaskan segment because of the nature of the terrain, the proximity of the pipeline to the TAPS line, and the critical balances which exist within the arctic biota. It has been pointed out by Department of the Interior officials that the stipulations are not considered to be a final package. Prior to the time of signing of the grant of right-of-way by the Secretary and the sponsors, further modifications in the stipulations may occur.

2. Proximity - No single issue underscores the technical difficulties in constructing a buried pipeline in an arctic environment like the proximity issue. In passage of the 1973 amendments to the Mineral Leasing Act, P.L. 93-153, Congress found utilization of existing right-of-way corridors across Federal lands to be in the public interest. By encouraging multiple use of these existing corridors, the impact of proliferating pipeline routes on the environment is reduced.

The proposed route of the Alaskan Leg of the ANGTS follows the Trans-Alaska oil pipeline right-of-way for approximately 540 miles. The ANGTS sponsors point to the economic and environmental benefits to be derived from building the gas pipeline on the other side of the gravel work pad which parallels the oil pipeline and from using the same haul road and construction camps that were used in constructing the oil pipeline.

While the owners of the oil pipeline are on record as supporting the construction of a gas pipeline, they have expressed concern over the impact construction of the new gas pipeline will have on operations of the oil line. At present the owners of the oil line are by statute strictly liable for any damages in connection with or resulting from activities in the oil line right-of-way, without regard to fault. These owners are concerned about the effects of blasting during construction of the gas pipeline, the number of times the two lines cross over or under one another, the impact on slope stability of new construction in thaw unstable soils, and a variety of other related geotechnical issues. The oil pipeline owners' risk analysis of the impact of construction

of the gas pipeline adjacent to the existing oil pipeline concludes that substantial damage and spillage of crude oil will occur with the probable consequence of long shutdown periods for the oil pipeline.

The Department of the Interior has the authority to grant multiple uses of existing corridors and to set conditions to assure a safe and harmonious relationship between parties in the same right-of-way. In preparing to set conditions for the Alaskan Leg the Department assembled a working group of technical experts from government and industry for the purpose of identifying the problems that need to be solved before a right-of-way is granted. In June 1979 the Department wrote to the gas pipeline sponsors and allowed them to proceed with planning and design based on their proposed route provided they could (a) resolve twelve major concerns of the working group, (b) consider a number of site-specific route alternatives, and (c) accept seventeen assumptions and conclusions of the work group relating to such issues as a minimum separation distance of the two pipelines of 80 feet, the use of the existing workpad, and the effects of controlled blasting.

The Interior letter was significant because it enabled the sponsors to accelerate their engineering and geotechnical studies to focus on the issues identified by the Interior Department. Tests are being conducted relating to such subjects as frost heave effects, metallurgy, blasting, hydrology, soils, and pipe corrosion. Meetings are continuing between the sponsors, the owners of the

oil pipeline, and the Department of the Interior. Until various technical issues can be satisfactorily resolved, a final route cannot be identified and a firm construction cost estimate is impossible.

3. Haines Right-of-Way - The proposed route of the ANGTS in Alaska will require legal clarification of the ownership of the Haines oil producet pipeline right-of-way from Delta Junction southeasterly past the communities of Tanacross, Tok, and Northway Junction in Alaska. This right-of-way is closely parallel to the Alaska Highway.

The ownership question is complex. The Haines oil products pipeline was constructed in the 1950's by the Army Corps of Engineers for use by the Department of Defense. The 50-foot wide right-of-way across public land was set aside at that time in cooperation with the Bureau of Land Management through several different procedures all authorized under existing law. Over the years much of the public lands traversed by the pipeline was conveyed out of Federal ownership although the right-of-way was reserved for Federal use. Some of the public lands occupied by the pipeline which remain in Federal ownership have been selected by Alaskan Natives or claimed by the State of Alaska.

In 1973, the Corps of Engineers initiated procedures under the Federal Property and Administrative Services Act to relinquish Department of Defense jurisdiction over the pipeline. The General Services Administration began procedures to determine if the remaining lands should be disposed of through public sale or returned to the public domain. The Department of the Interior has announced its intention to grant a right-of-way for the ANGTS across

all Federal lands along the Haines right-of-way. This action will be subject to adjudication as it relates to several land claims filed by Alaska Native corporations before the Alaska Native Claims Appeal Board.

The General Services Administration is expected to either sell or lease lands within its jurisdiction to the gas pipeline sponsors, again subject to the adjudication of land claims by Alaska Natives. With respect to lands determined to be Native lands, the gas pipeline sponsors will negotiate with the owners for purchase of rights-of-way in the same manner involved in access across any private lands. Decisions on claims before the Alaska Native Claims Appeal Board are expected within a few months.

B. Federal Energy Regulatory Commission

1. Incentive Rate of Return - The Incentive Rate of Return (IROR) is a concept which was expressed in the President's Decision for use in deterring cost growth during construction of the pipeline. It is a format that is not available under conventional public utility ratemaking practices and applies only to the Alaskan segment and the Eastern Leg (Northern Border) of ANGTS. The IROR attempts to provide an incentive for management to reduce construction costs by allowing rates of return on equity to be increased if the actual construction costs of the project are at, or below, the target estimates. As cost overruns accelerate, the rate of return diminishes to a predetermined "floor" or minimum amount. On August 29, 1979, the Federal Energy Regulatory Commission (FERC) published its final order setting the terms for the IROR

and pipeline company tariffs. The IROR mechanism has associated with it numerous new definitions, but the tariff schedule boils down to an understanding of four key terms: center rate of return, marginal rate of return, cost performance ratio, and operation phase rate.

"Center Rate of Return": The center rate of return is that return which the sponsors will earn on their equity investment if they are able to build the project at the cost estimate determined by the President in his Decision. This rate may be adjusted later, at the time of final cost estimates perhaps, but currently assumes that the system will be constructed with a 30 percent cost growth in the Alaskan Leg, and a 10 percent cost growth in the Eastern Leg. Given these allowances for cost growth, the sponsors can expect a rate of return of 17.5 percent and 15 percent respectively. If the project is constructed at costs under the final cost estimate, significantly higher rates of return are allowed. If the project is constructed at costs above the final cost estimate, lower rates of return are allowed.

"Marginal Rate of Return": This is the rate of return allowed on cost overruns. The marginal rate has been set at 8 percent, a level below the cost of capital which is expected to act as an incentive to reduce spending on cost overruns. This rate also is the floor of the IROR schedule.

"Cost Performance Ratio": This ratio is used to measure the degree of cost growth or reduction from the projected costs of the project. It is the ratio of Actual Capital Costs to the Projected Capital Costs. A ratio of greater than 1.0 indicates that actual costs are greater than the budgeted costs. As mentioned

above, the Alaskan segment is expected to be built with a 30 percent cost growth (its center rate which would earn 17.5 percent). Therefore, the Alaskan cost performance ratio would be 1.3. The following chart provides a sample schedule for the IROR mechanism given variable cost performance ratios:

Cost Performance Ratio	Rate of Return (%) Alaskan Leg	Rate of Return (%) Northern Border
0.8	23.44	17.62
0.9	21.72	16.56
1.0	20.35	15.70
1.1	19.23	15.00
1.2	18.29	14.42
1.3	17.50	13.92
1.4	16.82	13.50
1.5	16.23	13.13
1.6	15.72	12.81
1.7	15.26	12.53
1.8	14.86	12.28
1.9	14.50	12.05
2.0	14.17	11.85
2.1	13.88	11.67
2.2	13.61	11.35
2.3	13.37	11.35
2.4	13.15	11.21
2.5	12.94	11.08
2.6	12.75	10.96
2.7	12.57	10.85
2.8	12.41	10.75

"Operation Phase Rate": This rate applies to the return on equity which will compensate equity investors for the risks incurred during operation of the pipeline. It has been set by FERC at 14 percent for the Alaskan segment, and 13 percent for the Eastern Leg.

Another feature of the final FERC order on project tariffs is that the tariffs are to be "cost-of-service" rather than the conventional fixed-rate tariffs. The cost-of-service tariff allows the project sponsors to charge their customers rates adequate to recover their full expenses regardless of fluctuations in costs or volumes

of gas transported. These tariffs will not become effective until the system is completed, thereby removing the consumers from risk of noncompletion of the system. A provision has been adopted in the event of an extended total cessation of service for thirty consecutive calendar days under which the sponsors would forfeit their return on and of equity until service resumes. Debt service will be allowable in all events except non-completion.

2. Conditioning Costs - Settlement of the issue of who should be responsible for gas conditioning costs was FERC's second major challenge. Unlike other issues in the ANGTS proceedings, this conditioning question directly involved the producers of Prudhoe Bay natural gas - Atlantic Richfield, Exxon, and Sohio. The conditioning decision was also thought to be the most likely to result in litigation. It was made on August 24, 1979, as FERC Order No. 45. The two central questions addressed were who should be responsible for the construction and operation of a conditioning facility, and what allowances, if any, should be permitted in the $1.45 per mcf ceiling price of Alaskan gas to reflect conditioning costs?

"Conditioning" is defined by FERC as any treatment of the raw gas which is necessary to render it transportable through the ANGTS. This includes chilling and compressing the gas, water removal, and cleansing the gas stream of sulfur, hydrogen sulfide, oxygen, carbon dioxide and other impurities. Quality specifications for Alaskan gas have not been made final by regulatory authorities in either the United States or Canada. The debate centers on the levels of carbon dioxide to be allowed. Some carbon dioxide removal is

required to prevent corrosive chemical reactions from occurring in the pipeline (such reactions occur at CO_2 levels above 3 percent by volume). A further reduction of carbon dioxide content below 3 percent permits the transportation of a greater volume of gas, thereby enhancing the transportation efficiency of the system. Therefore, a 3 percent level could be required for pipeline safety considerations, but a lower level would clearly benefit the transporters and shippers. The cost of gathering and conditioning Alaskan gas has been estimated at $.75 per million btu (1978 dollars). A conservative cost estimate for construction of a gas conditioning facility is $2 billion.

FERC Order No. 45 places responsibility for conditioning on the producers, a responsibility which the producers say will reduce their return on gas sales significantly. The FERC order accomplishes this in two ways. First, it amends the Commission's interim regulations implementing the Natural Gas Policy Act of 1978 (P.L.95-621) to allow first sellers (the producers) to apply to the Commission for an allowance on the costs incurred in removing carbon dioxide from levels of 3 percent or lower. Second, the Commission publicly announced a statement of policy that any costs incurred by shippers or transporters to condition gas will be considered "imprudently incurred" and not recoverable in their tariffs. In the first instance, producers cannot expect to pass-through costs to condition gas to the 3 percent level and may "apply" for an increase in the wellhead ceiling price for their gas only for costs to condition it below 3 percent. In the second instance, FERC has announced that it will not approve any tariff submitted by

the pipeline company which reflects conditioning costs. FERC has gone one step further by adjusting its previously issued tariff order (the incentive rate of return rulemaking) to reflect a prohibition on passing through any conditioning costs from transporter to shipper, except to remove carbon dioxide to levels below 3 percent.

The rationale for the final decision on conditioning costs is based on a line of reasoning that has been evident in all FERC decisions on ANGTS: the need for a reasonable distribution of the financial burden of constructing the system among the potential beneficiaries. In the President's Decision the producers were specifically prohibited from equity participation in the pipeline. Although it is yet considered a possibility that the producers will proffer some form of debt guarantee, FERC has determined that the capital investment required for the conditioning facilities would only be a further financial burden on the ANGTS and that it is an appropriate responsibility of the producers.

A discussion of project financing will follow later in this report, however, officials of the Department of Energy considered FERC's Order No. 45 on conditioning costs so integrally related to an overall financing structure that the Secretary of Energy requested a rehearing to allow additional time for financing proposals involving the producers to emerge. The request was granted by FERC and the effective date of Order No. 45 was stayed until December 5, 1979.

3. Pipeline System Design - Design standards for the construction of any pipeline must identify two basic factors: operating pressure and pipe diameter. Debate on pipeline design centered

primarily on the Alaskan Leg and portions of the Canadian Leg where "conventional" standards do not exist because of extreme climatic conditions. International agreement was necessary because the pipe design used in Alaska would necessarily be followed across the border into Canada at least as far as Whitehorse, Yukon, where the "joint-use" segment begins. This segment stretches from Whitehorse to the point at Caroline Junction, Alberta, where the line bifurcates. It is this portion of the pipeline which is designed to carry future quantities of Canadian gas when such resources begin to flow from potential reservoirs in the Beaufort Sea.

American and Canadian government technical representatives began meeting soon after Congress approved the President's Decision. That document identified the desirability of a 48-inch diameter pipeline and created a predisposition to a 1260 psig operating pressure by stating that the facilities approved by the President are those contained in the Alcan application. Alcan (later Alaskan Northwest) applied for 1260 psig.

The Decision goes further, however, by suggesting that the sponsors should consider greater operating pressures in order to increase throughput of gas. The matter was left for resolution by FERC and the Canadian National Energy Board (NEB).

For their part, the Canadians expressed reservations about the safety and reliability of a high pressure system. Their technical representatives pointed out that the capital cost estimates of such a system are questionable because the high pressure design goes beyond proven technical standards, which are conventional

systems operating below 1100 psig. As a result of these concerns, the Canadian NEB selected a large diameter pipe, 56-inch, and an operating pressure of 1080 psig for the joint-use section.

The Canadian design decision on the joint-use segment effectively narrowed the options for system design north of Whitehorse. The choices became the 1260 psig system proposed by the sponsors of the Alaskan Leg, or a thicker walled 48-inch diameter pipe which could operate at 1400 psig, 1440 psig, or 1680 psig, as proposed by other parties to the FERC design proceedings.

The choice of operating pressure is important, not only because of the relationship of the pressure to throughput (directly proportional), but also because there is a relationship between the pressure and the ability of the gas stream to carry natural gas liquids. These gas liquids, or NGL, are hydrocarbons containing more carbon atoms in each molecule and are "richer" than natural gas (which is composed mostly of methane).

	Energy Values	
Source	Btu*/cubic foot	Btu/barrel
Natural Gas:		
C_1 (methane)	950	2,478,000
Gas Liquids:		
C_2 (ethane)	1,700	2,916,000
C_3 (propane)	2,550	3,824,000
C_4 (butane)	3,354	4,162,000
C_5 (pentane)	4,015	4,625,000
Crude Oil:		
C_6 and higher	--	5,800,000

*British Thermal Units

The State of Alaska is looking very closely at the ability of the gas stream to carry the NGL in order to keep open the option of developing a world-class petrochemical industry using the NGL as

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feedstocks. The State's principal objective is to relieve the "boom-bust" cycles associated with direct export of its raw materials. In the case of the State's royalty oil, agreements were reached to insure construction of in-state refining capacity. State officials contemplate a similar venture for their royalty gas and they specifically support development of a petrochemical plant near Fairbanks where unemployment now stands at 14 percent.

Alaska's comments in FERC's proceeding on system design underscore the interrelationship of several major issues under review by FERC in separate proceedings. The State recommended an omnibus proceeding to resolve at one time (a) pipeline design, (b) location of the conditioning plant, and (c) carbon dioxide content of the gas stream. State officials contend that a decision on the sponsors' pipeline design could foreclose the possibility of transporting the NGL to Fairbanks through the pipeline. The level of CO_2 in the pipeline affects the safety and efficiency of the pipeline. However, once CO_2 is removed, the ability of the gas stream to transport the NGL is reduced.

FERC announced on August 6, 1979, its decision to approve the sponsors' system design of 48-inch diameter pipe and 1260 psig operating pressure. The Commission indicated that it would consider the complex NGL carrying capacity issue in the context of the carbon dioxide proceeding rather than delay a system design decision. The State of Alaska has challenged the FERC decision. It filed an appeal in the U.S. Court of Appeals for the District of Columbia Circuit on October 5, 1979. Under the judicial review process mandated in the Alaska Natural Gas Transportation Act, the Court has 90 days to rule on the complaint.

4. Terms and Conditions - Similar to the Stipulations of the Department of the Interior, FERC's Terms and Conditions are requirements that are attached to the certificate of public convenience and necessity and relate specifically to private lands. FERC's draft Terms and Conditions were published for comment in May 1979 and proposed that the pipeline sponsors prepare a handbook for all private landowners along the right-of-way containing information on construction schedule, environmental and safety practices, and settlement procedures. Also recommended is the installation of toll-free telephone lines to the pipeline companies for use by the affected landowners when questions arise. The FERC document also proposed conditions relating to the issuance of stop-work orders by government field officials. Final action by FERC on its Terms and Conditions is pending consultation with the Federal Inspector.

VI. SPECIAL CONCERNS

Three issues of special significance to the ANGTS have not been fully resolved to date. The first is the question of project financing: Can the sponsors of the ANGTS attract major lenders for debt support? The second issue involves the location of the gas plant. The third special concern is with the implementation of procurement agreements between the United States and Canda.

A. Financing

A major factor in the selection of the Alcan proposal by the President and its concurrence by Congress was the pledge of the

sponsors that the system would be privately financed. The foundations for a financing plan were laid in the President's Decision. This 1977 document stands out in the midst of the 1979 financing imbroglio by virtue of its simplicity. It has withstood determined attempts since 1977 to soften its requirements. However, the first and only test of the Decision's financing tenets and the sponsors' solemn pledges to secure private financing will come during the first quarter of 1980 when major lenders will be given a financial prospectus and asked to materially support the $15 billion project.

The Decision includes the following requirements:

1. The sponsors shall provide for private financing of the project;
2. The producers of Alaskan gas shall be excluded from ownership of the gas pipeline. They may not be equity members of the sponsoring consortium, have any voting power in the project, have any role in the management or operations of the project, or have any continuing financial obligation in relation to debt guarantees associated with initial project financing after the project is completed and the tariff is put into effect;
3. The producers of Alaskan gas may provide guarantees for project debt; and
4. A variable rate of return shall be set to provide substantial incentives to construct the project without incurring overruns.

The report accompanying the President's Decision outlines a plan to enable private financing by allocating the project's risks. It provides:

1. The equity investment in the project shall be placed at risk under all circumstances and considered the first funds spent. The rate of return on equity will compensate sponsors for bearing this risk;
2. Major beneficiaries of the project, the producers and the State of Alaska, should participate in the financing either directly or in the form of debt guarantees;
3. The burden of cost overruns shall be shared by equity holders and consumers through the variable rate of return; and
4. Consumers will provide debt service in the event of service interruption only after the pipeline is completed and service begins.

Conventional financing structures consist of cash from sponsors, who hold title to the facilities being financed, and cash from lenders, who require a reasonable rate of return on their principal over a specified period of time. A 50 percent debt, 50 percent equity capital structure is customary for major natural gas pipeline companies in the lower 48 states.

The equity investors, or sponsors, generally "risk" their capital; that is, in the event of project failure the equity owners obtain a return of their investment only in the event assets remain after repayment of principal and accrued interest to lenders. By contrast, lenders, such as major insurance companies,

pension funds, and banks, do not perceive their advances as "risk" capital, but require assurances, under any circumstances, of recovery of their principal with interest.

Various risks associated with a $15 billion project, portions of which are to be constructed in an arctic environment, will be critically examined. The risk of non-completion encompasses factors such as unmanageable cost overruns, unforeseen technical problems, or delaying legal or regulatory obstacles which could cause the project to be abandoned prior to completion. The risk of service interruption, once the pipeline is operational is based on the possibility that problems along the pipeline, within the gas conditioning plant, or associated with gas reserve itself could stop or reduce gas flow to consumers. Another risk is that of project abandonment once it has been completed. For example, if interruption of service continued for an extended period of time, the project could fail. A final type of risk which will be examined by lenders is the risk that the gas, once onstream, will cost too much to market. Whereas, most of these risks are associated with construction of the Alaskan Leg of the pipeline, their impact on financing falls equally on all segments of the system because revenues will depend on the flow of Prudhoe Bay gas.

The sponsors of the Alaskan Leg propose a 75/25 debt to equity ratio and non-recourse "project financing" to construct their $6 billion segment of the pipeline. This proposed unconventional financing structure results from the relatively small size of the six pipeline companies in the consortium and their

correspondingly narrow equity base. The partners' capital structures are presently highly leveraged and they do not have the advantage of owning the resource to be transported. By comparison, it was the asset of owning the oil reserves which enabled the sponsors of the Trans-Alaska oil pipeline to leverage the sizeable cost overruns which they experienced in construction of that pipeline.

Non-recourse "project financing", as distinguished from "balance sheet" financing, will have significance for ANGTS debt lenders. In "project financing" a new enterprise or project entity is created which, in and of itself, could generate sufficient revenues to pay its operating costs, interest and principal on its debt, and a return on and, ultimately, a return of equity to its investors. In other words, the pipeline's equity owners will not be responsible for debt service if construction is delayed or abandoned, if the gas turns out to be unmarketable, or if gas shipments are reduced or interrupted. The only source of funds for the purpose of debt repayment will be the gas consumer. To protect the consumer from unreasonable risk, the President's Decision and Report limits the payment of debt service by consumers to the operating phase, not the construction phase. Consumers will share the risk of service interruption, not the risk of non-completion. Debt lenders will face the risk of non-completion without recourse. In the case of the more conventional "balance sheet" financing, the sponsoring companies would have to place their entire assets behind the project debt.

Within this framework of risk allocation the sponsors of the Alaskan Leg have endeavored to reduce lender uncertainty by working to secure positive regulatory action on major rate-making issues, by trying to attract other gas transmission companies into their consortium as equity partners, and by encouraging the other project beneficiaries, the gas producers and the State of Alaska, to help finance the system. The sponsors' efforts and other events in government have combined to help establish a favorable regulatory climate: the pipeline system design, incentive rate of return, and tariff issues were addressed by FERC; the appointment of a Federal Inspector with strong decision-making authority has had positive implications; Congress passed the Natural Gas Policy Act which set a wellhead price for Prudhoe Bay gas without need of further onerous regulatory review; and, gas sales contracts between the producers and gas transmission companies were initialed.

Lender uncertainty currently centers around four factors: (a) whether the Federal government can be self-disciplining and assure timely action, (b) the need for additional expenditures by the project sponsors for design, engineering, and other technical work, (c) whether the other major beneficiaries will provide debt support or overrun guarantees, and (d) whether there can be assurances of perfect shipper tracking once the project is completed. An examination of the last two factors follows.

1. Major Beneficiaries

Producers - The sponsors of the Alaskan Leg point out that the main producers of Prudhoe Bay gas, Exxon, Atlantic Richfield, and Sohio will realize $50 billion in 1979 dollars from the sale of their natural gas. The producers, however, respond that before any gas can be shipped they must invest $1 to $2 billion in field development, $2 billion to construct the gas conditioning plant, and potentially another $2 billion to institute waterflooding in the Prudhoe Bay reservoir. An impasse was broken in July 1979 when the President publicly accused the producers of foot-dragging and announced that he had instructed the Secretary of Energy to meet with the producers and discuss ways to help finance the project. Secretary Schlesinger met with the producers on August 8, 1979, and outlined that the producers should provide the $2 billion for the gas conditioning plant and $2.7 billion in guarantees against cost overruns on the pipeline. The producers replied that they would not commit funds without a voice in the management of the project. In October 1979 Exxon presented a counter-proposal to the Department of Energy pledging the producers to a 40 percent equity and a 40 percent debt role in project financing provided that (a) construction and operation of the conditioning plant would become the responsibility of the sponsors, (b) producer participation in system ownership would be approved by FERC, and (c) the present partnership agreement would be revised for a two-thirds vote on significant issues.

The other two producers indicated they agreed with the general outline of the Exxon proposal. Further meetings on the issue are expected to take place to narrow the distance between the Secretary of Energy's plan and the Exxon proposal while keeping within the provisions of the President's Decision and Report.

State of Alaska - Alaska is included on the list of major beneficiaries by virtue of its "producer" status as owner of 12.5 percent of the Prudhoe Bay gas and because of the predictable revenue increases and employment benefits which would result from construction of the project. It is anticipated that the State could realize as much as $7.5 billion from the sale of Prudhoe Bay gas in the form of royalties and severance taxes, as well as $50 million per year in property taxes. Several hundred permanent jobs would be created in addition to the sizeable labor force needed during the project's construction period.

In 1978 the sponsors of the Alaskan Leg requested the State of Alaska to support the project in the form of $1 billion in tax-exempt revenue bonds and $500 million in convertible debentures, which are interest-bearing securities that are exchangeable for preferred equity after construction is completed. Later that year the State Legislature passed a bill to set up the Alaska Gas Pipeline Financing Authority through which the State could issue the $1 billion in tax-exempt bonds. Technical revisions to the bill became necessary after questions arose as to the legal ability of the Authority to issue bonds. In addition,

the revenue bonds could only have been issued after the U.S. Congress acted to amend the Internal Revenue Code to give the project special tax-exempt status. In looking further at the bonding authority, State officials began to discuss the possibility of tying policy objectives to the revision amendments to insure in-state hire and the availability of comprehensive information on the sponsors' overall financing plan. The sponsors withdrew their proposal for State participation after a special session of the State Legislature in August 1979 failed to give approval to either the technical amendments for debt participation or to any form of equity participation.

The reluctance of the State Legislature to act on this measure despite Governor Hammond's indication that the pipeline was a priority project in his administration was based on the Legislature's conclusion that the State was being asked to become a lender without sufficient financial information on the project, well in advance of the sponsors' formal proposals to other lenders. Under these circumstances the Legislature objected to unconditional commitment of funds. Other factors contributed to the Legislature's conclusion including the following: a commonly shared belief that the sponsors' actions during the debate had alienated Alaskan groups which traditionally support growth and development; the fact that no action was taken by the sponsors to secure the necessary change in law by the U.S. Congress; the fact that the requested equity contribution represented one-half of the State's annual operating budget; the compounded risk

which would result from committing State revenues, which are heavily dependent on Prudhoe Bay oil production income, to another venture associated with the same reservoir; and, the hope of legislative leaders that the financing issue could be used to leverage support from the sponsors for locating the gas conditioning plant in Fairbanks. Although several options for financial participation are actively being examined by the State, it is likely that the agreement finally reached on producer participation will have a strong impact on the State's participation plan.

2. Shipper Tracking

In deciding whether or not to participate in financing on a non-recourse basis, lenders will look both at the ability of the sponsors to complete construction and at the project's tariff arrangements. The tariff is a lengthy legal and operating document that defines how the company owning and operating the pipeline will charge its customers "the shippers" and what transportation services will be provided by the company. At a minimum, tariff arrangements are expected to provide sufficient dollars to cover debt obligations under each and every circumstance.

FERC approved the cost-of-service tariff applications of both Alaskan Northwest and Northern Border which allows them to automatically pass along costs associated with operation of the pipeline without prior approval by FERC. The key issue is the extent to which the shippers will be able to "track" or

pass the costs along to local distribution companies and ultimately to end users. The obstacle to perfect "tracking" by the shippers of all legitimate charges is the separation of regulatory authority between FERC and the state utility commissions. Under normal operating conditions all transportation costs could be expected to be passed along to the end user. However, a question remains as to whether or not the individual state regulatory authorities will approve agreements requiring pass-through of costs, particularly debt service, during periods of service interruption.

B. Location of the Conditioning Plant

The State of Alaska strongly supports a Fairbanks location for the gas conditioning plant. The Alaskan Leg sponsors have proposed that the plant be located at Prudhoe Bay. A decision on location will be based on factors under review in several FERC proceedings including pipeline system design, CO_2 content, and conditioning costs. Responsibility for construction of the facility has not been finally assigned and is a significant factor in development of a financing plan. The plant is expected to cost in excess of $2 billion and to take four and one-half years to construct with a 1,000 person workforce.

FERC gave direction to the debate on location in July when it released a draft environmental impact statement which was prepared by its environmental staff in cooperation with the Environmental Protection Agency. FERC prefaced this action with two explanations. First, even though the facility does not come under certification requirements, the agency felt compelled to present all relevant

information on ANGTS to the public. Second, FERC determined that an environmental assessment was necessary because (a) the conditioning facility will be a major construction project, and (b) the facility is not covered under Sections 8(e) and 10(c) of the Alaska Natural Gas Transportation Act and is therefore subject to the requirements of the National Environmental Policy Act. Public hearings on the draft impact statement were held in September.

On the basis of environmental factors, the July draft statement concluded that a Prudhoe Bay site would be superior to the Yukon River and Fairbanks alternatives and that the North Slope site would have the fewest adverse effects. The land in the vicinity of Prudhoe Bay has already undergone significant development by the petroleum industry and the North Slope Borough has proposed zoning in the area of preferred industrial development.

Another strong argument supporting a Prudhoe Bay site is based upon the sponsors' desire to employ the most cost-effective construction methods available. Although construction costs on the North Slope are higher than in Fairbanks, the coastal location of the Prudhoe Bay site enables it to be served by barges. Barges are able to transport very large modules which can be set in place on prepared gravel pads, eliminating the need for extensive on-site construction in extremely adverse conditions. The modules are fabricated at locations in the lower 48 states where assembly costs are lower and productivity and quality assurance are more

reliable. An inland location in Alaska, such as Fairbanks, requires the transporation of much smaller components on trucks or by rail with a greater degree of on-site assembly resulting, in the opinion of the sponsors, in higher overall costs.

The State's primary objective is to encourage long-term industrial expansion and provide permanent employment opportunities within the State. State officials argue that the economies of scale used to justify the Prudhoe Bay site are outweighed by lower costs in Fairbanks. They urge recognition of the State's proposal to construct a petrochemical manufacturing facility in Fairbanks with its concomitant co-location economies with the conditioning plant. At present the State is acting through legal channels to keep all of its options open and is seeking the support of the sponsors in exchange for the State's participation in the financing of the pipeline.

C. Procurement: "Canadian Content"

The issue of procurement practices to be followed by the United States and Canada in constructing the ANGTS was an important and difficult aspect of the negotiations on the Agreement on Principles. Canadian procurement policy, commonly referred to as the "Canadian Content" policy, runs counter to normal United States' policies on international trade. Canadian policies are outlined by the National Energy Board in its July 1977 decision approving a joint project for delivery of northern gas:

"In respect to Canadian content: (1) The Company shall so design its program for the procurement of goods and services for the project to assure that:

(a) Canadians have a fair and competitive opportunity to participate in all facets of the project;
(b) the level of Canadian content is optimized, so far as practicable, with respect to the origin of products, services, and their constituent components;
(c) maximum advantage is taken of opportunities provided by the project to establish and expand supplier firms in Canada; and
(d) maximum advantage is taken of opportunities provided by the project to foster research and development technological activities in Canada."

To assure that Canadian policies are used only to give Canadian firms a fair opportunity to compete, rather than to allow them to obtain contracts without regard to competition from outside Canada, Sections 7 and 8 were added to the Agreement on Principles (Appendix V). Section 7 was added to provide the standard of "generally competitive terms" and the factors to be weighed in determining whether or not competition was being unfairly restrained. Section 8 was added to provide a consultation mechanism for resolution of any differences which might arise. Section 7 also lists the available remedies, including the renegotiation of contracts or the reopening of bids. Also contained in the Agreement on Principles, however, is a statement of objectives which has been used to fortify the "Canadian Content" procurement policy. The preface states, in part, that it is desirable to maximize related industrial benefits of each country through construction and operation of the pipeline system. Thus, "Canadian Content" has come to mean a Canadian procurement policy which has as its goal the enhancement and expansion of Canadian industry.

Two events occurring in February 1978 focused attention on Canadian procurement policies. First, during the debate in the Canadian House of Commons on the pipeline enabling legislation, officials stopped just short of giving legal status to the Foothills' target of 90 percent "Canadian Content." Deputy Prime Minister Allan J. MacEachen was quoted as saying that the Canadian government would assist the sponsors in reaching that goal. The second event was Canada's announcement on February 20, 1978, that it had selected a 56-inch, 1080 psig pipeline system design for the 1,085 mile segment between Whitehorse, Yukon, and Caroline Junction, Alberta. United States officials had informed their Canadian counterparts that they preferred a 48-inch system because they felt that it would provide the lowest cost of service, a cost that the American gas consumer will ultimately have to assume. Deputy Prime Minister MacEachen was quoted as saying that a key reason his government prefers the 56-inch version is that the large size pipe is currently made by two Canadian companies but isn't made in the United States.

In light of these events, development of detailed procedures and safeguards under Section 8 of the Agreement on Principles is essential. Fundamental elements of the consultation mechanism are (a) the assurance of access to all relevant documents to insure that the procurement process is on a competitive basis, and (b) the assurance that access to this information will be provided within a timeframe which has meaning in the bidding process. The consultation procedures under Section 8 have not

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yet been agreed to despite the advanced progress of procurement activities for the Canadian Leg of the ANGTS. Consultation is expected to involve officials of the Northern Pipeline Agency and the Office of the Federal Inspector rather than the traditional governmental authorities, the Canadian National Energy Board and the Federal Energy Regulatory Commission. It is hoped that a regular exchange of information will take place with the understanding that each party must have full access to all relevant forms and documents.

VII. CONCLUSION

The Subcommittee on Oversight and Investigations of the Committee on Interior and Insular Affairs held hearings on October 15 and 16, 1979, concerning the Alaska Natural Gas Transportation System. The purpose of the hearings was to focus attention on the current status of the regulatory decisions affecting construction of the pipeline, to meet the newly appointed Federal Inspector, and to receive testimony from the pipeline sponsors outlining their plans and requirements.

It was apparent from the testimony received that the level of confidence in the project had improved significantly in the weeks immediately preceding the hearings. This confidence was reflected in statements by both the sponsors and the Federal regulators and could be attributed to two factors. First, a combination of regulatory decisions and the appointment of the Federal Inspector enabled the sponsors to begin formulating credible cost estimates and financial proposals to present to potential

lenders. Second, events occurring in oil exporting countries had revived the sense of urgency within the United States to develop a greater degree of energy self-sufficiency. The Alaska Natural Gas Transportation System is the only project on the drawing boards that would provide a major new domestic energy supply to the nation in the near future. On several occasions President Carter has reiterated his commitment to building the gas pipeline in order to improve our national security position with respect to increasing energy supplies and with respect to reducing the outflow of dollars to oil producing nations.

Future milestones which will determine the fate of the pipeline are (1) an agreement among the participants on financial support roles, (2) the ultimate decision of lenders on debt support, (3) the outcome of technical challenges to construction of the pipeline in Alaska and northern Canada, and (4) the development of a working relationship between the sponsors and the Federal Inspector during construction of the pipeline. The Subcommittee will continue to review progress at each of these milestones and will schedule oversight hearings when appropriate.

APPENDIX I

Public Law 93-153
93rd Congress, S. 1081
November 16, 1973

An Act

To amend section 28 of the Mineral Leasing Act of 1920, and to authorize a trans-Alaska oil pipeline, and for other purposes.

* * * * * *

TITLE III—NEGOTIATIONS WITH CANADA

SEC. 301. The President of the United States is authorized and requested to enter into negotiations with the Government of Canada to determine—

(a) the willingness of the Government of Canada to permit the construction of pipelines or other transportation systems across Canadian territory for the transport of natural gas and oil from Alaska's North Slope to markets in the United States, including the use of tankers by way of the Northwest Passage;

(b) the need for intergovernmental understandings, agreements, or treaties to protect the interests of the Governments of Canada and the United States and any party or parties involved with the construction, operation, and maintenance of pipelines or other transportation systems for the transport of such natural gas or oil;

(c) the terms and conditions under which pipelines or other transportation systems could be constructed across Canadian territory;

(d) the desirability of undertaking joint studies and investigations designed to insure protection of the environment, reduce legal and regulatory uncertainty, and insure that the respective energy requirements of the people of Canada and of the United States are adequately met;

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(e) the quantity of such oil and natural gas from the North Slope of Alaska for which the Government of Canada would guarantee transit; and

(f) the feasibility, consistent with the needs of other sections of the United States, of acquiring additional energy from other sources that would make unnecessary the shipment of oil from the Alaska pipeline by tanker into the Puget Sound area.

The President shall report to the House and Senate Committees on Interior and Insular Affairs the actions taken, the progress achieved, the areas of disagreement, and the matters about which more information is needed, together with his recommendations for further action. Presidential report to congressional committees.

SEC. 302. (a) The Secretary of the Interior is authorized and directed to investigate the feasibility of one or more oil or gas pipelines from the North Slope of Alaska to connect with a pipeline through Canada that will deliver oil or gas to United States markets. Study.

(b) All costs associated with making the investigations authorized by subsection (a) shall be charged to any future applicant who is granted a right-of-way for one of the routes studied. The Secretary shall submit to the House and Senate Committees on Interior and Insular Affairs periodic reports of his investigation, and the final report of the Secretary shall be submitted within two years from the date of this Act. Investigation costs. Reports to congressional committees.

SEC. 303. Nothing in this title shall limit the authority of the Secretary of the Interior or any other Federal official to grant a gas or oil pipeline right-of-way or permit which he is otherwise authorized by law to grant.

* * * * * *

APPENDIX II

Public Law 94-586
94th Congress

An Act

To expedite a decision on the delivery of Alaska natural gas to United States markets, and for other purposes.

Oct. 22, 1976
[S. 3521]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

Alaska Natural Gas Transportation Act of 1976.

SHORT TITLE

SECTION 1. This Act may be cited as the "Alaska Natural Gas Transportation Act of 1976". 15 USC 719 note.

CONGRESSIONAL FINDINGS

SEC. 2. The Congress finds and declares that— 15 USC 719.

(1) a natural gas supply shortage exists in the contiguous States of the United States;

(2) large reserves of natural gas in the State of Alaska could help significantly to alleviate this supply shortage;

(3) the expeditious construction of a viable natural gas transportation system for delivery of Alaska natural gas to United States markets is in the national interest; and

(4) the determinations whether to authorize a transportation system for delivery of Alaska natural gas to the contiguous States and, if so, which system to select, involve questions of the utmost importance respecting national energy policy, international relations, national security, and economic and environmental impact, and therefore should appropriately be addressed by the Congress and the President in addition to those Federal officers and agencies assigned functions under law pertaining to the selection, construction, and initial operation of such a system.

STATEMENT OF PURPOSE

SEC. 3. The purpose of this Act is to provide the means for making a sound decision as to the selection of a transportation system for delivery of Alaska natural gas to the contiguous States for construction and initial operation by providing for the participation of the President and the Congress in the selection process, and, if such a system is approved under this Act, to expedite its construction and initial operation by (1) limiting the jurisdiction of the courts to review the actions of Federal officers or agencies taken pursuant to the direction and authority of this Act, and (2) permitting the limitation of administrative procedures and effecting the limitation of judicial procedures related to such actions. To accomplish this purpose it is the intent of the Congress to exercise its constitutional powers to the fullest extent in the authorizations and directions herein made, and particularly with respect to the limitation of judicial review of actions of Federal officers or agencies taken pursuant thereto. 15 USC 719a.

DEFINITIONS

15 USC 719b.

SEC. 4. As used in this Act:

(1) the term "Alaska natural gas" means natural gas derived from the area of the State of Alaska generally known as the North Slope of Alaska, including the Continental Shelf thereof;

(2) the term "Commission" means the Federal Power Commission;

(3) the term "Secretary" means the Secretary of the Interior;

(4) the term "provision of law" means any provision of a Federal statute or rule, regulation, or order issued thereunder; and

(5) the term "approved transportation system" means the system for the transportation of Alaska natural gas designated by the President pursuant to section 7(a) or 8(b) and approved by joint resolution of the Congress pursuant to section 8.

FEDERAL POWER COMMISSION REVIEWS AND REPORTS

Proceedings, suspension. 15 USC 719c. 15 USC 717w.

SEC. 5. (a)(1) Notwithstanding any provision of the Natural Gas Act or any other provision of law, the Commission shall suspend all proceedings pending before the Commission on the date of enactment of this Act relating to a system for the transportation of Alaska natural gas as soon as the Commission determines to be practicable after such date, and the Commission may refuse to act on any application, amendment thereto, or other requests for action under the Natural Gas Act relating to a system for the transportation of Alaska natural gas until such time as (A) a decision of the President designating such a system for approval takes effect pursuant to section 8, (B) no such decision takes effect pursuant to section 8, or (C) the President decides not to designate such a system for approval under section 8 and so advises the Congress pursuant to section 7.

(2) In the event a decision of the President designating such a system takes effect pursuant to this Act, the Commission shall forthwith vacate proceedings suspended under paragraph (1) and, pursuant to section 9 and in accordance with the President's decision, issue a certificate of public convenience and necessity respecting such system.

(3) In the event such a decision of the President does not take effect pursuant to this Act or the President decides not to designate such a system and so advises the Congress pursuant to section 7, the suspension provided for in paragraph (1) of this subsection shall be removed.

Recommendation, submittal to President.

(b)(1) The Commission shall review all applications for the issuance of a certificate of public convenience and necessity relating to the transportation of Alaska natural gas pending on the date of enactment of this Act, and any amendments thereto which are timely made, and after consideration of any alternative transportation system which the Commission determines to be reasonable, submit to the President not later than May 1, 1977, a recommendation concerning the selection of such a transportation system. Such recommendation may be in the form of a proposed certificate of public convenience and necessity, or in such other form as the Commission determines to be appropriate, or may recommend that no decision respecting the selection of such a transportation system be made at this time or pursuant to this Act. Any recommendation that the President approve a particular transportation system shall (A) include a description of the nature and route of the system, (B) designate

a person to construct and operate the system, which person shall be the applicant, if any, which filed for a certificate of public convenience and necessity to construct and operate such system, (C) if such recommendation is for an all-land pipeline transportation system, or a transportation system involving water transportation, include provision for new facilities to the extent necessary to assure direct pipeline delivery of Alaska natural gas contemporaneously to points both east and west of the Rocky Mountains in the lower continental United States.

(2) The Commission may, by rule, provide for the presentation of data, views, and arguments before the Commission or a delegate of the Commission pursuant to such procedures as the Commission determines to be appropriate to carry out its responsibilities under paragraph (1) of this subsection. Such a rule shall, to the extent determined by the Commission, apply, notwithstanding any provision of law that would otherwise have applied to the presentation of data, views, and arguments. Rule.

(3) The Commission may request such information and assistance from any Federal agency as the Commission determines to be necessary or appropriate to carry out its responsibilities under this Act. Any Federal agency requested to submit information or provide assistance shall submit such information to the Commission at the earliest practicable time after receipt of a Commission request. Cooperation.

(c) The Commission shall accompany any recommendation under subsection (b) (1) with a report, which shall be available to the public, explaining the basis for such recommendation and including for each transportation system reviewed or considered a discussion of the following: Report, public availability.

(1) for each year of the 20-year period which begins with the first year following the date of enactment of this Act, the estimated—

(A) volumes of Alaska natural gas which would be available to each region of the United States directly, or indirectly by displacement or otherwise, and

(B) transportation costs and delivered prices of any such volumes of gas by region;

(2) the effects of each of the factors described in subparagraphs (A) and (B) of paragraph (1) on the projected natural gas supply and demand for each region of the United States and on the projected supplies of alternative fuels available by region to offset shortages of natural gas occurring in such region for each such year;

(3) the impact upon competition;

(4) the extent to which the system provides a means for the transportation to United States markets of natural resources or other commodities from sources in addition to the Prudhoe Bay Reserve;

(5) environmental impacts;

(6) safety and efficiency in design and operation and potential for interruption in deliveries of Alaska natural gas;

(7) construction schedules and possibilities for delay in such schedules or for delay occurring as a result of other factors;

(8) feasibility of financing;

(9) extent of reserves, both proven and probable and their deliverability by year for each year of the 20-year period which

begins with the first year following the date of enactment of this Act;

(10) the estimate of the total delivered cost to users of the natural gas to be transported by the system by year for each year of the 20-year period which begins with the first year following the date of enactment of this Act;

(11) capability and cost of expanding the system to transport additional volumes of natural gas in excess of initial system capacity;

(12) an estimate of the capital and operating costs, including an analysis of the reliability of such estimates and the risk of cost overruns; and

(13) such other factors as the Commission determines to be appropriate.

(d) The recommendation by the Commission pursuant to this section shall not be based upon the fact that the Government of Canada or agencies thereof have not, by then rendered a decision as to authorization of a pipeline system to transport Alaska natural gas through Canada.

Transportation system, recommendation, submittal to President.

(e) If the Commission recommends the approval of a particular transportation system, it shall submit to the President with such recommendation (1) an identification of those facilities and operations which are proposed to be encompassed within the term "construction and initial operation" in order to define the scope of directions contained in section 9 of this Act and (2) the terms and conditions permitted under the Natural Gas Act, which the Commission determines to be appropriate for inclusion in a certificate of public convenience and necessity to be issued respecting such system. The Commission shall submit to the President contemporaneously with its report an environmental impact statement prepared respecting the recommended system, if any, and each environmental impact statement which may have been prepared respecting any other system reported on under this section.

15 USC 717w.

Environmental impact statement, submittal to President.

OTHER REPORTS

Comments, submittal to President.
15 USC 719d.

Public availability.

SEC. 6. (a) Not later than July 1, 1977, any Federal officer or agency may submit written comments to the President with respect to the recommendation and report of the Commission and alternative methods for transportation of Alaska natural gas for delivery to the contiguous States. Such comments shall be made available to the public by the President when submitted to him, unless expressly exempted from this requirement in whole or in part by the President, under section 552(b)(1) of title 5, United States Code. Any such written comment shall include information within the competence of such Federal officer or agency with respect to—

(1) environmental considerations, including air and water quality and noise impacts;

(2) the safety of the transportation systems;

(3) international relations, including the status and time schedule for any necessary Canadian approvals and plans;

(4) national security, particularly security of supply;

(5) sources of financing for capital costs;

(6) the impact upon competition;

(7) impact on the national economy, including regional natural gas requirements; and

(8) relationship of the proposed transportation system to other aspects of national energy policy.

(b) Not later than July 1, 1977, the Governor of any State, any municipality, State utility commission, and any other interested person may submit to the President such written comments with respect to the recommendation and report of the Commission and alternative systems for delivering Alaska natural gas to the contiguous States as they determine to be appropriate. Comments, submittal to President.

(c) Not later than July 1, 1977, each Federal officer or agency shall report to the President with respect to actions to be taken by such officer or agency under section 9(a) relative to each transportation system reported on by the Commission under section 5(c) and shall include such officer's or agency's recommendations with respect to any provision of law to be waived pursuant to section 8(g) in conjunction with any decision of the President which designates a system for approval. Report to President.

(d) Following receipt by the President of the Commission's recommendations, the Council on Environmental Quality shall afford interested persons an opportunity to present oral and written data, views, and arguments respecting the environmental impact statements submitted by the Commission under section 5(e). Not later than July 1, 1977, the Council on Environmental Quality shall submit to the President a report, which shall be contemporaneously made available by the Council to the public, summarizing any data, views, and arguments received and setting forth the Council's views concerning the legal and factual sufficiency of each such environmental impact statement and other matters related to environmental impact as the Council considers to be relevant. Report to President.

PRESIDENTIAL DECISION AND REPORT

SEC. 7. (a)(1) As soon as practicable after July 1, 1977, but not later than September 1, 1977, the President shall issue a decision as to whether a transportation system for delivery of Alaska natural gas should be approved under this Act. If he determines such a system should be so approved, his decision shall designate such a system for approval pursuant to section 8 and shall be consistent with section 5(b)(1)(C) to assure delivery of Alaska natural gas to points both east and west of the Rocky Mountains in the continental United States. The President in making his decision shall take into consideration the Commission's recommendation pursuant to section 5, the report under section 5(c), and any comments submitted under section 6; and his decision to designate a system for approval shall be based on his determination as to which system, if any, best serves the national interest. 15 USC 719e.

(2) The President, for a period of up to 90 additional calendar days after September 1, 1977, may delay the issuance of his decision and transmittal thereof to the House of Representatives and the Senate, if he determines (A) that there exists no environmental impact statement prepared relative to a system he wishes to consider or that any prepared environmental impact statement relative to a system he wishes to consider is legally or factually insufficient, or (B) that the additional time is otherwise necessary to enable him to make a sound decision on an Alaska natural gas transportation system. The President shall promptly, but in no case any later than September 1, 1977, notify the House of Representatives and the Transmittal to Congress, delay. Notice to Congress.

Senate if he so delays his decision and submit a full explanation of the basis of any such delay.

(3) If, on or before May 1, 1977, the President determines to delay issuance and transmittal of his decision to the House of Representatives and the Senate pursuant to paragraph (2) of this subsection, he may authorize a delay of not more than 90 days in the date of taking of any action specified in sections 5 and 6. The President shall promptly notify the House of Representatives and the Senate of any such authorization of delay and submit a full explanation of the basis of any such authorization.

Notice to Congress.

(4) If the President determines to designate for approval a transportation system for delivery of Alaska natural gas to the contiguous States, he shall in such decision—

(A) describe the nature and route of the system designated for approval;

(B) designate a person to construct and operate such a system, which person shall be the applicant, if any, which filed for a certificate of public convenience and necessity to construct and operate such system;

(C) identify those facilities, the construction of which, and those operations, the conduct of which, shall be encompassed within the term "construction and initial operation" for purposes of defining the scope of the directions contained in section 9 of this Act, taking into consideration any recommendation of the Commission with respect thereto; and

(D) identify those provisions of law, relating to any determination of a Federal officer or agency as to whether a certificate, permit, right-of-way, lease, or other authorization shall be issued or be granted, which provisions the President finds (i) involve determinations which are subsumed in his decision and (ii) require waiver pursuant to section 8(g) in order to permit the expeditious construction and initial operation of the transportation system.

Chairman, appointment.

(5) After a decision of the President designating an Alaska natural gas transportation system takes effect under section 8, the President shall appoint an officer of the United States, with the advice and consent of the Senate, or designate a board (consisting of such an officer, so appointed with the advice and consent of the Senate, as chairman and such other individuals as the President determines appropriate to serve on such board by reason of background, experience, or position) to serve as Federal inspector of construction of such transportation system, except that no such individual or officer may have a financial interest in the approved transportation system. Upon enactment of a joint resolution pursuant to section 8 approving such a system the Federal inspector shall—

Joint surveillance and monitoring agreement, establishment.

(A) establish a joint surveillance and monitoring agreement, approved by the President, with the State of Alaska similar to that in effect during construction of the trans-Alaska oil pipeline to monitor the construction of the approved transportation system within the State of Alaska;

(B) monitor compliance with applicable laws and the terms and conditions of any applicable certificate, rights-of-way, permit, lease, or other authorization issued or granted under section 9;

(C) monitor actions taken to assure timely completion of construction schedules and the achievement of quality of construction, cost control, safety, and environmental protection objectives and the results obtained therefrom;

(D) have the power to compel, by subpena if necessary, submission of such information as he deems necessary to carry out his responsibilities; and

(E) keep the President and the Congress currently informed on any significant departures from compliance and issue quarterly reports to the President and the Congress concerning existing or potential failures to meet construction schedules or other factors which may delay the construction and initial operation of the system and the extent to which quality of construction, cost control, safety and environmental protection objectives have been achieved.

(6) If the President determines to designate for approval a transportation system for delivery of Alaska natural gas to the contiguous States, he may identify in such decision such terms and conditions permissible under existing law as he determines appropriate for inclusion with respect to any issuance or authorization directed to be made pursuant to section 9.

(b) The decision of the President made pursuant to subsection (a) of this section shall be transmitted to both Houses of Congress and shall be considered received by such Houses for the purposes of this section on the first day on which both are in session occurring after such decision is transmitted. Such decision shall be accompanied by a report explaining in detail the basis for his decision with specific reference to the factors set forth in sections 5(c) and 6(a), and the reasons for any revision, modification of, or substitution for, the Commission recommendation. Transmittal to Congress.

(c) The report of the President pursuant to subsection (b) of this section shall contain a financial analysis for the transportation system designated for approval. Unless the President finds and states in his report submitted pursuant to this section that he reasonably anticipates that the system designated by him can be privately financed, constructed, and operated, his report shall also be accompanied by his recommendation concerning the use of existing Federal financing authority or the need for new Federal financing authority. Financial analysis.

(d) In making his decision under subsection (a) the President shall inform himself, through appropriate consultation, of the views and objectives of the States, the Government of Canada, and other governments with respect to those aspects of such a decision that may involve intergovernmental and international cooperation among the Government of the United States, the States, the Government of Canada, and any other government.

(e) If the President determines to designate a transportation system for approval, the decision of the President shall take effect as provided in section 8, except that the approval of a decision of the President shall not be construed as amending or otherwise affecting the laws of the United States so as to grant any new financing authority as may have been identified by the President pursuant to subsection (c).

CONGRESSIONAL REVIEW

SEC. 8. (a) Any decision under section 7(a) or 8(b) designating for approval a transportation system for the delivery of Alaska natural gas shall take effect upon enactment of a joint resolution within the first period of 60 calendar days of continuous session of Congress beginning on the date after the date of receipt by the Senate and House of Representatives of a decision transmitted pursuant to section 7(b) or subsection (b) of this section. 15 USC 719f.

(b) If the Congress does not enact such a joint resolution within such 60-day period, the President, not later than the end of the 30th day following the expiration of the 60-day period, may propose a new decision and shall provide a detailed statement concerning the reasons for such proposal. The new decision shall be submitted in accordance with section 7(a) and transmitted to the House of Representatives and the Senate on the same day while both are in session and shall take effect pursuant to subsection (a) of this section. In the event that a resolution respecting the President's decision was defeated by vote of either House, no new decision may be transmitted pursuant to this subsection unless such decision differs in a material respect from the previous decision.

(c) For purposes of this section—

(1) continuity of session of Congress is broken only by an adjournment sine die; and

(2) the days on which either House is not in session because of an adjournment of more than 3 days to a day certain are excluded in the computation of the 60-day calendar period.

(d)(1) This subsection is enacted by Congress—

(A) as an exercise of the rulemaking power of each House of Congress, respectively, and as such it is deemed a part of the rules of each House, respectively, but applicable only with respect to the procedure to be followed in that House in the case of resolutions described by paragraph (2) of this subsection; and it supersedes other rules only to the extent that it is inconsistent therewith; and

(B) with full recognition of the constitutional right of either House to change the rules (so far as those rules relate to the procedure of that House) at any time, in the same manner and to the same extent as in the case of any other rule of such House.

"Resolution."

(2) For purposes of this Act, the term "resolution" means (A) a joint resolution, the resolving clause of which is as follows: "That the House of Representatives and Senate approve the Presidential decision on an Alaska natural gas transportation system submitted to the Congress on ————, 19 . and find that any environmental impact statements prepared relative to such system and submitted with the President's decision are in compliance with the Natural Environmental Policy Act of 1969."; the blank space therein shall be filled with the date on which the President submits his decision to the House of Representatives and the Senate; or (B) a joint resolution described in subsection (g).

42 USC 4321 note.

Referral to congressional committees.

(3) A resolution once introduced with respect to a Presidential decision on an Alaska natural gas transportation system shall be referred to one or more committees (and all resolutions with respect to the same Presidential decision on an Alaska natural gas transportation system shall be referred to the same committee or committees) by the President of the Senate or the Speaker of the House of Representatives, as the case may be.

(4)(A) If any committee to which a resolution with respect to a Presidential decision on an Alaska natural gas transportation system has been referred has not reported it at the end of 30 calendar days after its referral, it shall be in order to move either to discharge such committee from further consideration of such resolution or to discharge such committee from consideration of any other resolution with respect to such Presidential decision on an Alaska natural gas transportation system which has been referred to such committee.

(B) A motion to discharge may be made only by an individual favoring the resolution, shall be highly privileged (except that it may not be made after the committee has reported a resolution with respect to the same Presidential decision on an Alaska natural gas transportation system), and debate thereon shall be limited to not more than 1 hour, to be divided equally between those favoring and those opposing the resolution. An amendment to the motion shall not be in order, and it shall not be in order to move to reconsider the vote by which the motion was agreed to or disagreed to. Debate limitation.

(C) If the motion to discharge is agreed to or disagreed to, the motion may not be made with respect to any other resolution with respect to the same Presidential decision on an Alaska natural gas transportation system.

(5) (A) When any committee has reported, or has been discharged from further consideration of, a resolution, but in no case earlier than 30 days after the date of receipt of the President's decision to the Congress, it shall be at any time thereafter in order (even though a previous motion to the same effect has been disagreed to) to move to proceed to the consideration of the resolution. The motion shall be highly privileged and shall not be debatable. An amendment to the motion shall not be in order, and it shall not be in order to move to reconsider the vote by which the motion was agreed to or disagreed to.

(B) Debate on the resolution described in subsection (d)(2)(A) shall be limited to not more than 10 hours and on any resolution described in subsection (g) to one hour. This time shall be divided equally between those favoring and those opposing such resolution. A motion further to limit debate shall not be debatable. An amendment to, or motion to recommit the resolution shall not be in order, and it shall not be in order to move to reconsider the vote by which such resolution was agreed to or disagreed to or, thereafter within such 60-day period, to consider any other resolution respecting the same Presidential decision.

(6) (A) Motions to postpone, made with respect to the discharge from committee, or the consideration of a resolution and motions to proceed to the consideration of other business, shall be decided without debate.

(B) Appeals from the decision of the Chair relating to the application of the rules of the Senate or the House of Representatives, as the case may be, to the procedures relating to a resolution shall be decided without debate.

(e) The President shall find that any required environmental impact statement relative to the Alaska natural gas transportation system designated for approval by the President has been prepared and that such statement is in compliance with the National Environmental Policy Act of 1969. Such finding shall be set forth in the report of the President submitted under section 7. The President may supplement or modify the environmental impact statements prepared by the Commission or other Federal officers or agencies. Any such environmental impact statement shall be submitted contemporaneously with the transmittal to the Senate and House of Representatives of the President's decision pursuant to section 7(b) or subsection (b) of this section. 42 USC 4321 note. Submittal to congressional committees.

(f) Within 20 days of the transmittal of the President's decision to the Congress under section 7(b) or under subsection (b) of this section, (1) the Commission shall submit to the Congress a report commenting on the decision and including any information with regard to that decision which the Commission considers appropriate, Report, submittal to Congress.

Hearings. Report, submittal to Congress.

and (2) the Council on Environmental Quality shall provide an opportunity to any interested person to present oral and written data, views, and arguments on any environmental impact statement submitted by the President relative to any system designated by him for approval which is different from any system reported on by the Commission under section 5(c), and shall submit to the Congress a report summarizing any such views received. The committees in each House of Congress to which a resolution has been referred under subsection (d)(3) shall conduct hearings on the Council's report and include in any report of the committee respecting such resolution the findings of the committee on the legal and factual sufficiency of any environmental impact statement submitted by the President relative to any system designated by him for approval.

Congressional committee hearings.

Waiver, submittal to Congress.

(g)(1) At any time after a decision designating a transportation system is submitted to the Congress pursuant to this section, if the President finds that any provision of law applicable to actions to be taken under subsection (a) or (c) of section 9 require waiver in order to permit expeditious construction and initial operation of the approved transportation system, the President may submit such proposed waiver to both Houses of Congress.

(2) Such provision shall be waived with respect to actions to be taken under subsection (a) or (c) of section 9 upon enactment of a joint resolution pursuant to the procedures specified in subsections (c) and (d) of this section (other than subsection (d)(2) thereof) within the first period of 60 calendar days of continuous session of Congress beginning on the date after the date of receipt by the Senate and House of Representatives of such proposal.

(3) The resolving clause of the joint resolution referred to in this subsection is as follows: "That the House of Representatives and Senate approve the waiver of the provision of law ( ) as proposed by the President, submitted to the Congress on , 19 ." The first blank space therein being filled with the citation to the provision of law and the second blank space therein being filled with the date on which the President submits his decision to the House of Representatives and the Senate.

(4) In the case of action with respect to a joint resolution described in this subsection, the phrase "a waiver of a provision of law" shall be substituted in subsection (d) for the phrase "the Alaska natural gas transportation system.".

AUTHORIZATIONS

15 USC 719g.

SEC. 9. (a) To the extent that the taking of any action which is necessary or related to the construction and initial operation of the approved transportation system requires a certificate, right-of-way, permit, lease, or other authorization to be issued or granted by a Federal officer or agency, such Federal officer or agency shall—

(1) to the fullest extent permitted by the provisions of law administered by such officer or agency, but

(2) without regard to any provision of law which is waived pursuant to section 8(g) issue or grant such certificates, permits, rights-of-way, leases, and other authorizations at the earliest practicable date.

(b) All actions of a Federal officer or agency with respect to consideration of applications or requests for the issuance or grant of a certificate, right-of-way, permit, lease, or other authorization to which subsection (a) applies shall be expedited and any such application or

request shall take precedence over any similar applications or requests of the Federal officer or agency.

(c) Any certificate, right-of-way, permit, lease, or other authorization issued or granted pursuant to the direction under subsection (a) shall include the terms and conditions required by law unless waived pursuant to a resolution under section 8(g), and may include terms and conditions permitted by law, except that with respect to terms and conditions permitted but not required, the Federal officer or agency, notwithstanding any such other provision of law, shall have no authority to include terms and conditions as would compel a change in the basic nature and general route of the approved transportation system or those the inclusion of which would otherwise prevent or impair in any significant respect the expeditious construction and initial operation of such transportation system. Terms and conditions.

(d) Any Federal officer or agency, with respect to any certificate, permit, right-of-way, lease, or other authorization issued or granted by such officer or agency, may, to the extent permitted under laws administered by such officer or agency add to, amend or abrogate any term or condition included in such certificate, permit, right-of-way, lease, or other authorization except that with respect to any such action which is permitted but not required by law, such Federal officer or agency, notwithstanding any such other provision of law, shall have no authority to take such action if the terms and conditions to be added, or as amended, would compel a change in the basic nature and general route of the approved transportation system or would otherwise prevent or impair in any significant respect the expeditious construction and initial operation of such transportation system.

(e) Any Federal officer or agency to which subsection (a) applies, to the extent permitted under laws administered by such officer or agency, shall include in any certificate, permit, right-of-way, lease, or authorization issued or granted those terms and conditions identified in the President's decision as appropriate for inclusion except that the requirement to include such terms and conditions shall not limit the Federal officer or agency's authority under subsection (d) of this section.

JUDICIAL REVIEW

SEC. 10. (a) Notwithstanding any other provision of law, the actions of Federal officers or agencies taken pursuant to section 9 of this Act, shall not be subject to judicial review except as provided in this section. 15 USC 719h.

(b)(1) Claims alleging the invalidity of this Act may be brought not later than the 60th day following the date a decision takes effect pursuant to section 8 of this Act.

(2) Claims alleging that an action will deny rights under the Constitution of the United States, or that an action is in excess of statutory jurisdiction, authority, or limitations, or short of statutory right may be brought not later than the 60th day following the date of such action, except that if a party shows that he did not know of the action complained of, and a reasonable person acting in the circumstances would not have known, he may bring a claim alleging the invalidity of such action on the grounds stated above not later than the 60th day following the date of his acquiring actual or constructive knowledge of such action.

(c)(1) A claim under subsection (b) shall be barred unless a complaint is filed prior to the expiration of such time limits in the United States Court of Appeals for the District of Columbia acting as a

Special Court. Such court shall have exclusive jurisdiction to determine such proceeding in accordance with the procedures hereinafter provided, and no other court of the United States, of any State, territory, or possession of the United States, or of the District of Columbia, shall have jurisdiction of any such claim in any proceeding instituted prior to or on or after the date of enactment of this Act.

(2) Any such proceeding shall be assigned for hearing and completed at the earliest possible date, shall, to the greatest extent practicable, take precedence over all other matters pending on the docket of the court at that time, and shall be expedited in every way by such court and such court shall render its decision relative to any claim within 90 days from the date such claim is brought unless such court determines that a longer period of time is required to satisfy requirements of the United States Constitution.

USC prec. title I.

(3) The enactment of a joint resolution under section 8 approving the decision of the President shall be conclusive as to the legal and factual sufficiency of the environmental impact statements submitted by the President relative to the approved transportation system and no court shall have jurisdiction to consider questions respecting the sufficiency of such statements under the National Environmental Policy Act of 1969.

42 USC 4321 note.

SUPPLEMENTAL ENFORCEMENT AUTHORITY

Compliance order or civil action.
5 USC 719i.

SEC. 11 (a) In addition to remedies available under other applicable provisions of law, whenever any Federal officer or agency determines that any person is in violation of any applicable provision of law administered or enforceable by such officer or agency or any rule, regulation, or order under such provision, including any term or condition of any certificate, right-of-way, permit, lease, or other authorization, issued or granted by such officer or agency, such officer or agency may—

(1) issue a compliance order requiring such person to comply with such provision or any rule, regulation, or order thereunder, or

(2) bring a civil action in accordance with subsection (c).

(b) Any order issued under subsection (a) shall state with reasonable specificity the nature of the violation and a time of compliance, not to exceed 30 days, which the officer or agency, as the case may be, determines is reasonable, taking into account the seriousness of the violation and any good faith efforts to comply with applicable requirements.

Civil penalty.

(c) Upon a request of such officer or agency, as the case may be, the Attorney General may commence a civil action for appropriate relief, including a permanent or temporary injunction or a civil penalty not to exceed $25,000 per day for violations of the compliance order issued under subsection (a). Any action under this subsection may be brought in any district court of the United States for the district in which the defendant is located, resides, or is doing business, and such court shall have jurisdiction to restrain such violation, require compliance, or impose such penalty or give ancillary relief.

Jurisdiction.

EXPORT LIMITATIONS

15 USC 719j.
15 USC 717w.

SEC. 12. Any exports of Alaska natural gas shall be subject to the requirements of the Natural Gas Act and section 103 of the Energy

Policy and Conservation Act, except that in addition to the requirements of such Acts, before any Alaska natural gas in excess of 1,000 Mcf per day may be exported to any nation other than Canada or Mexico, the President must make and publish an express finding that such exports will not diminish the total quantity or quality nor increase the total price of energy available to the United States. 42 USC 6212. Presidential finding, publication.

EQUAL ACCESS TO FACILITIES

SEC. 13. (a) There shall be included in the terms of any certificate, permit, right-of-way, lease, or other authorization issued or granted pursuant to the directions contained in section 9 of this Act, a provision that no person seeking to transport natural gas in the Alaska natural gas transportation system shall be prevented from doing so or be discriminated against in the terms and conditions of service on the basis of degree of ownership, or lack thereof, of the Alaska natural gas transportation system. 15 USC 719k.

(b) The State of Alaska is authorized to ship its royalty gas on the approved transportation system for use within Alaska and, to the extent its contracts for the sale of royalty gas so provide, to withdraw such gas from the interstate market for use within Alaska; the Federal Power Commission shall issue all authorizations necessary to effectuate such shipment and withdrawal subject to review by the Commission only of the justness and reasonableness of the rate charged for such transportation.

ANTITRUST LAWS

SEC. 14. Nothing in this Act, and no action taken hereunder, shall imply or effect an amendment to, or exemption from, any provision of the antitrust laws. 15 USC 719*l*

AUTHORIZATION

SEC. 15. There is hereby authorized to be appropriated beginning in fiscal year 1978 and each fiscal year thereafter, such sums as may be necessary to carry out the functions of the Federal inspector appointed by the President with the advice and consent of the Senate under section 7. 15 USC 719m.

SEPARABILITY

SEC. 16. If any provision of this Act, or the application thereof, is held invalid, the remainder of this Act shall not be affected thereby. 15 USC 719n.

CIVIL RIGHTS

SEC. 17. All Federal officers and agencies shall take such affirmative action as is necessary to assure that no person shall, on the grounds of race, creed, color, national origin, or sex, be excluded from receiving, or participating in any activity conducted under, any certificates, permit, right-of-way, lease, or other authorization granted or issued pursuant to this Act. The appropriate Federal officers and agencies shall promulgate such rules as are necessary to carry out the purposes of this section and may enforce this section, and any rules promulgated under this section through agency and department provisions and rules which shall be similar to those established and in effect under title VI of the Civil Rights Act of 1964. Discrimination, prohibition. 15 USC 719*o*. Rules. 42 USC 2000d *et seq.*

REPORT ON THE EQUITABLE ALLOCATION OF NORTH SLOPE CRUDE OIL

Report to Congress. 43 USC 1651 note.

SEC. 18. Within 6 months of the date of enactment of this Act, the President shall determine what special expediting procedures are necessary to insure the equitable allocation of north slope crude oil to the Northern Tier States of Washington, Oregon, Idaho, Montana, North Dakota, Minnesota, Michigan, Wisconsin, Illinois, Indiana, and Ohio (hereinafter referred to as the "Northern Tier States") to carry out the provisions of section 410 of Public Law 93-153 and shall report his findings to the Congress. In his report, the President shall identify the specific provisions of law, which relate to any determination of a Federal officer or agency as to whether to issue or grant a certificate, permit, right-of-way, lease, or other authorization in connection with the construction of an oil delivery system serving the Northern Tier States and which the President finds would inhibit the expeditious construction of such a system in the contiguous States of the United States. In addition the President will include in his report a statement which demonstrates the impact that the delivery system will have on reducing the dependency of New England and the Middle Atlantic States on foreign oil imports. Furthermore, all Federal officers and agencies shall, prior to the submission of such report and further congressional action relating thereto, expedite to the fullest practicable extent all applications and requests for action made with respect to such an oil delivery system.

43 USC 1651 note.

ANTITRUST STUDY

Report to Congress. 15 USC 719 note.

SEC. 19. The Attorney General of the United States is authorized and directed to conduct a thorough study of the antitrust issues and problems relating to the production and transportation of Alaska natural gas and, not later than six months following the date of enactment of this Act, to complete such study and submit to the Congress a report containing his findings and recommendations with respect thereto.

EXPIRATION

15 USC 719 note.

SEC. 20. This Act shall terminate in the event that no decision of the President takes effect under section 8 of this Act, such termination to occur at the end of the last day on which a decision could be, but is not, approved under such section.

Approved October 22, 1976.

LEGISLATIVE HISTORY:

HOUSE REPORT No. 94-1658, Pt. 1 (Comm. on Interstate and Foreign Commerce).
SENATE REPORT No. 94-1020 (Comm. on Commerce and Comm. on Interior and Insular Affairs).
CONGRESSIONAL RECORD, Vol. 122 (1976):
July 1, considered and passed Senate.
Sept. 30, considered and passed House, amended.
Oct. 1, Senate agreed to House amendments.
WEEKLY COMPILATION OF PRESIDENTIAL DOCUMENTS, Vol. 12, No. 44:
Oct. 22, Presidential statement.

APPENDIX III

Title 3—

The President

REORGANIZATION PLAN NO. 1 OF 1979

Prepared by the President and transmitted to the Senate and House of Representatives in Congress assembled, April 2, 1979, pursuant to the provisions of Chapter 9 of Title 5 of the United States Code.

Office of the Federal Inspector for Construction of the Alaska Natural Gas Transportation System

Part I. Office of the Federal Inspector and Transfer of Functions

Section 101. *Establishment of the Office of Federal Inspector for the Alaska Natural Gas Transportation System*

(a) There is hereby established as an independent establishment in the executive branch, the Office of the Federal Inspector for the Alaska Natural Gas Transportation System (the "Office").

(b) The Office shall be headed by a Federal Inspector for the Alaska Natural Gas Transportation System (the "Federal Inspector") who shall be appointed by the President, by and with the advice and consent of the Senate, and shall be compensated at the rate now or hereafter prescribed by law for Level III of the Executive Schedule, and who shall serve at the pleasure of the President.

(c) Each Federal agency having statutory responsibilities over any aspect of the Alaska Natural Gas Transportation System shall appoint an Agency Authorized Officer to represent that authority on all matters pertaining to pre-construction, construction, and initial operation of the system.

Section 102. *Transfer of Functions to the Federal Inspector*

Subject to the provisions of Sections 201, 202, and 203 of this Plan, all functions insofar as they relate to enforcement of Federal statutes or regulations and to enforcement of terms, conditions, and stipulations of grants, certificates, permits and other authorizations issued by Federal agencies with respect to pre-construction, construction, and initial operation of an "approved transportation system" for transport of Canadian natural gas and "Alaskan natural gas," as such terms are defined in the Alaska Natural Gas Transportation Act of 1976 (15 U.S.C. 719 *et seq.*), hereinafter called the "Act", are hereby transferred to the Federal Inspector. This transfer shall vest in the Federal Inspector exclusive responsibility for enforcement of all Federal statutes relevant in any manner to pre-construction, construction, and initial operation. With respect to each of the statutory authorities cited below, the transferred functions include all enforcement functions of the given agencies or their officials under the statutes as may be related to the enforcement of such terms, conditions, and stipulations, including but not limited to the specific sections of the statute cited. "Enforcement", for purposes of this transfer of functions, includes monitoring and any other compliance or oversight activities reasonably related to the enforcement process. These transferred functions include:

(a) Such enforcement functions of the Administrator or other appropriate official or entity in the Environmental Protection Agency related to compliance with: national pollutant discharge elimination system permits provided for in Section 402 of the Federal Water Pollution Control Act (33 U.S.C. 1342); spill prevention, containment and countermeasure plans in Section 311 of the Federal Water Pollution Control Act (33 U.S.C. 1321); review of the Corps of Engineers' dredged and fill material permits issued under Section 404 of the

Federal Water Pollution Control Act (33 U.S.C. 1344); new source performance standards in Section 111 of the Clean Air Act, as amended by the Clean Air Act Amendments of 1977 (42 U.S.C. 7411); prevention of significant deterioration review and approval in Sections 160–169 of the Clean Air Act, as amended by the Clean Air Amendments of 1977 (42 U.S.C. 7470 *et seq.*); and the resource conservation and recovery permits issued under the Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6901 *et seq.*);

(b) Such enforcement functions of the Secretary of the Army, the Chief of Engineers, or other appropriate officer or entity in the Corps of Engineers of the United States Army related to compliance with: dredged and fill material permits issued under Section 404 of the Federal Water Pollution Control Act (33 U.S.C. 1344); and permits for structures in navigable waters, issued under Section 10 of the Rivers and Harbors Appropriation Act of 1899 (33 U.S.C. 403);

(c) Such enforcement functions of the Secretary or other appropriate officer or entity in the Department of Transportation related to compliance with: the Natural Gas Pipeline Safety Act of 1968, as amended (49 U.S.C. 1671, *et seq.*) and the gas pipeline safety regulations issued thereunder; the Federal Aviation Act of 1958, as amended (49 U.S.C. 1301, *et seq.*) and authorizations and regulations issued thereunder; and permits for bridges across navigable waters, issued under Section 9 of the Rivers and Harbors Appropriation Act of 1899 (33 U.S.C. 401);

(d) Such enforcement functions of the Secretary or other appropriate officer or entity in the Department of Energy and such enforcement functions of the Commission, Commissioners, or other appropriate officer or entity in the Federal Energy Regulatory Commission related to compliance with: the certificates of public convenience and necessity, issued under Section 7 of the Natural Gas Act, as amended (15 U.S.C. 717f); and authorizations for importation of natural gas from Alberta as predeliveries of Alaskan gas issued under Section 3 of the Natural Gas Act, as amended (15 U.S.C. 717b);

(e) Such enforcement functions of the Secretary or other appropriate officer or entity in the Department of the Interior related to compliance with: grants of rights-of-way and temporary use permits for Federal land, issued under Section 28 of the Mineral Leasing Act of 1920 (30 U.S.C. 185); land use permits for temporary use of public lands and other associated land uses, issued under Sections 302, 501, and 503–511 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1732, 1761, and 1763–1771); materials sales contracts under the Materials Act of 1947 (30 U.S.C. 601–603); rights-of-way across Indian lands, issued under the Rights of Way Through Indian Lands Act (25 U.S.C. 321, *et seq.*); removal permits issued under the Materials Act of 1947 (30 U.S.C. 601–603); approval to cross national wildlife refuges, National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd–668jj) and the Upper Mississippi River Wildlife and Fish Refuge Act (16 U.S.C. 721–731); wildlife consultation in the Fish and Wildlife Coordination Act (16 U.S.C. 661 *et seq.*); protection of certain birds in the Migratory Bird Treaty Act (16 U.S.C. 703 *et seq.*); Bald and Golden Eagles Protection Act (16 U.S.C. 668–668d); review of Corps of Engineers dredged and fill material permits issued under Section 404 of the Federal Water Pollution Control Act (33 U.S.C. 1344); rights-of-way across recreation lands issued under the Land and Water Conservation Fund Act of 1965, as amended (16 U.S.C. 4601–4–4601–11); historic preservation under the National Historic Preservation Act of 1966 as amended (16 U.S.C. 470–470f); permits issued under the Antiquities Act of 1906 (16 U.S.C. 432, 433); and system activities requiring coordination and approval under general authorities of the National Trails System Act, as amended (16 U.S.C. 1241–1249), the Wilderness Act, as amended (16 U.S.C. 1131–1136), the Wild and Scenic Rivers Act, as amended (16 U.S.C. 1271–1287), the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*), the Act of April 27, 1935 (prevention of soil erosion) (16 U.S.C. 590a–f), and an Act to Provide for the Preservation of Historical and Archeological Data, as amended (16 U.S.C. 469–469c);

(f) Such enforcement functions of the Secretary or other appropriate officer or entity in the Department of Agriculture, insofar as they involve lands and programs under the jurisdiction of that Department, related to compliance with: associated land use permits authorized for and in conjunction with grants of rights-of-way across Federal lands issued under Section 28 of the Mineral Leasing Act of 1920 (30 U.S.C. 185); land use permits for other associated land uses issued under Sections 501 and 503–511 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1761, 1763–1771), under the Organic Administration Act of June 4, 1897, as amended (16 U.S.C. 473, 474–482, 551), and under Title III of the Bankhead-Jones Farm Tenant Act of 1937, as amended (7 U.S.C. 1010–1012); removal of materials under the Materials Act of 1947 (30 U.S.C. 601–603) and objects of antiquity under the Antiquities Act of 1906 (16 U.S.C. 432, 433); construction and utilization of national forest roads under the Roads and Trails System Act of 1964 (16 U.S.C. 532–538); and system activities requiring coordination and approval under general authorities of the National Forest Management Act of 1976 (16 U.S.C. 1600 *et seq.*); the Multiple Use-Sustained-Yield Act of 1960 (16 U.S.C. 528–531); the Forest and Rangelands Renewable Resources Planning Act of 1974 (16 U.S.C. 1601–1610); the National Trails System Act, as amended (16 U.S.C. 1241–1249); the Wilderness Act, as amended (16 U.S.C. 1131–1136); the Wild and Scenic Rivers Act, as amended (16 U.S.C. 1271–1287); the Land and Water Conservation Fund Act of 1965, as amended (16 U.S.C. 460 *et seq.*); the Federal Water Pollution Control Act of 1972 (33 U.S.C. 1151 *et seq.*); the Fish and Wildlife Coordination Act and Fish and Game Sanctuaries Act (16 U.S.C. 661 *et seq.* and 694, 694a–b, respectively); the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470–470f); an Act to Provide for the Preservation of Historical and Archeological Data, as amended (16 U.S.C. 469–469c); the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*); the Watershed Protection and Flood Prevention Act, as amended (16 U.S.C. 1001 *et seq.*); the Soil and Water Conservation Act of 1977 (16 U.S.C. 2001 *et seq.*); and the Act of April 27, 1935 (prevention of soil erosion) (16 U.S.C. 590a–f);

(g) Such enforcement functions of the Secretary or other appropriate officer or entity in the Department of the Treasury related to compliance with permits for interstate transport of explosives and compliance with regulations for the storage of explosives, Title XI of the Organized Crime Control Act of 1970 (18 U.S.C. 841–848);

(h) (1) The enforcement functions authorized by, and supplemental enforcement authority created by the Act (15 U.S.C. 719 *et seq.*);

(2) All functions assigned to the person or board to be appointed by the President under Section 7(a)(5) of the Act (15 U.S.C. 719e); and

(3) Pursuant to Section 7(a)(6) of the Act (15 U.S.C. 719e), enforcement of the terms and conditions described in Section 5 of the *Decision and Report to the Congress on the Alaska Natural Gas Transportation System*, as approved by the Congress pursuant to Public Law 95–158 (91 Stat. 1268), November 2, 1977, (hereinafter the "*Decision*").

Part II. Other Provisions

Section 201. *Executive Policy Board*

The Executive Policy Board for the Alaska Natural Gas Transportation System, hereinafter the "Executive Policy Board", which shall be established by executive order, shall advise the Federal Inspector on the performance of the Inspector's functions. All other functions assigned, or which could be assigned pursuant to the *Decision*, to the Executive Policy Board are hereby transferred to the Federal Inspector.

Section 202. *Federal Inspector and Agency Authorized Officers*

(a) The Agency Authorized Officers shall be detailed to and located within the Office. The Federal Inspector shall delegate to each Agency Authorized Officer the authority to enforce the terms, conditions, and stipulations of each

grant, permit, or other authorization issued by the Federal agency which appointed the Agency Authorized Officer. In the exercise of these enforcement functions, the Agency Authorized Officers shall be subject to the supervision and direction of the Federal Inspector, whose decision on enforcement matters shall constitute "action" for purposes of Section 10 of the Act (15 U.S.C. 719h).

(b) The Federal Inspector shall be responsible for coordinating the expeditious discharge of nonenforcement activities by Federal agencies and coordinating the compliance by all the Federal agencies with Section 9 of the Act (15 U.S.C. 719g). Such coordination shall include requiring submission of scheduling plans for all permits, certificates, grants or other necessary authorizations, and coordinating scheduling of system-related agency activities. Such coordination may include serving as the "one window" point for filing for and issuance of all necessary permits, certificates, grants or other authorizations, and, consistent with law, Federal government requests for data or information related to any application for a permit, certificate, grant or other authorization. Upon agreement between the Federal Inspector and the head of any agency, that agency may delegate to the Federal Inspector any statutory function vested in such agency related to the functions of the Federal Inspector.

(c) The Federal Inspector and Agency Authorized Officers in implementing the enforcement authorities herein transferred shall carry out the enforcement policies and procedures established by the Federal agencies which nominally administer these authorities, except where the Federal Inspector determines that such policies and procedures would require action inconsistent with Section 9 of the Act (15 U.S.C. 719g).

(d) Under the authority of Section 15 of the Act (15 U.S.C. 719m), the Federal Inspector will undertake to obtain appropriations for all aspects of the Federal Inspector's operations. Such undertaking shall include appropriations for all of the functions specified in the Act and in the general terms and conditions of the *Decision* as well as for the enforcement activities of the Federal Inspector. The Federal Inspector will consult with the various Federal agencies as to resource requirements for enforcing their respective permits and other authorizations in preparing a unified budget for the Office. The budget shall be reviewed by the Executive Policy Board.

Section 203. *Subsequent Transfer Provision*

(a) Effective upon the first anniversary of the date of initial operation of the Alaska Natural Gas Transportation System, the functions transferred by Section 102 of this Plan shall be transferred to the agency which performed the functions on the date prior to date the provisions of Section 102 of this Plan were made effective pursuant to Section 205 of this Plan.

(b) Upon the issuance of the final determination order by the Director of the Office of Management and Budget for the transfers provided for by subsection (a) of this section, the Office and the position of Federal Inspector shall, effective on the date of that order, stand abolished.

Section 204. *Incidental Transfers*

So much of the personnel, property, records and unexpended balances of appropriations, allocations and other funds employed, used, held, available, or to be made available in connection with the functions transferred under this Plan, as the Director of the Office of Management and Budget shall determine, shall be transferred to the appropriate agency or component at such time or times as the Director of the Office of Management and Budget shall provide, except that no such unexpended balances transferred shall be used for purposes other than those for which the appropriation was originally made. The Director of the Office of Management and Budget shall provide for the terminating of the affairs of the Office and the Federal Inspector upon their abolition pursuant to this Plan and for such further measures and dispositions as such Director deems necessary to effectuate the purposes of this Plan.

Section 205. *Effective Date*

This Plan shall become effective at such time or times as the President shall specify, but not sooner than the earliest time allowable under Section 906 of Title 5 of the United States Code, except that the provisions of Section 203 shall occur as provided by the terms of that Section.

[FR Doc. 79-18507
Filed 6-11-79; 11:31 am]
Billing code 3195-01-M

LEGISLATIVE HISTORY:

WEEKLY COMPILATION OF PRESIDENTIAL DOCUMENTS:

Vol. 15, No. 14: Apr. 2, Presidential message transmitting Reorganization Plan No. 1 of 1979 to Congress. (Also printed as House Document No. 83.)

HOUSE REPORT No. 96-222 accompanying H. Res. 199 (Comm. on Government Operations).

SENATE REPORT No. 96-191 accompanying S. Res. 126 (Comm. on Governmental Affairs).

CONGRESSIONAL RECORD, Vol. 125 (1979):

Apr. 3,	H. Res. 199,	resolution of disapproval, introduced in House and referred to Committee on Government Operations.
Apr. 4,	S. Res. 126,	resolution of disapproval, introduced in Senate and referred to Committee on Governmental Affairs.
May 23,	S. Res. 126,	rejected by Senate.
May 31,	H. Res. 199,	rejected by House.

APPENDIX IV

Title 3—

The President

Executive Order 12142 of June 21, 1979

The Alaska Natural Gas Transportation System

By the authority vested in me as President by the Constitution and laws of the United States of America, including Section 301 of Title 3 of the United States Code and Sections 201 and 205 of Reorganization Plan No. 1 of 1979, it is hereby ordered as follows:

1-101. Reorganization Plan No. 1 of 1979, not having been disapproved by Congress (S. Res. 126, 125 Cong. Rec. S 6563-64 (May 23, 1979); H. Res. 199, 125 Cong. Rec. H 3950-51 (May 31, 1979)), shall be effective on July 1, 1979.

1-102. In accord with Section 201 of that Plan, there is hereby established the Executive Policy Board for the system for the transportation of Alaska natural gas ("the System") as such system is defined in the Alaska Natural Gas Transportation Act of 1976 (15 U.S.C. 719 *et seq.*).

1-103. The Board shall consist of the Secretaries of the Departments of Agriculture, Energy, Labor, Transportation, and the Interior, the Administrator of the Environmental Protection Agency, the Chief of Engineers of the United States Army, and the Chairman of the Federal Energy Regulatory Commission. Additional members may be elected to the Board by vote of a majority of the members. The Board will by majority vote elect a Chairman to serve for a one-year term.

1-104. The Board shall perform the following functions:

(a) Advise the Federal Inspector for the Alaska Natural Gas Transportation System (the "Federal Inspector") established by Reorganization Plan No. 1 of 1979, on policy issues in accord with applicable law and existing Departmental or Agency policies.

(b) Provide advice, through the Federal Inspector, to the officers representing and exercising the functions of the Federal Departments and Agencies that concern the System ("Agency Authorized Officers").

(c) Advise the Federal Inspector and the Agency Authorized Officers on matters concerning enforcement actions.

(d) At least every six months, assess the progress made and problems encountered in constructing the System and make necessary recommendations to the Federal Inspector.

1-105. The Federal Inspector shall keep the Board informed of the progress made and problems encountered in the course of construction of the System.

1-106. Whenever the Federal Inspector determines that implementation of Departmental or Agency enforcement policies and procedures would require action inconsistent with Section 9 of the Alaska Natural Gas Transportation Act of 1976, the Federal Inspector shall issue a written statement of such determination including a complete factual and legal basis for the determination. A copy of each statement shall be forwarded promptly to the Board and made available to the public by the Federal Inspector.

1-107. After written notice of a proposed enforcement action is given by the Federal Inspector, the Federal Inspector will be subject to the rules of procedure for *ex parte* contacts as reflected in the guidelines and policies of Departments and Agencies from which the specific enforcement authority is transferred.

1–108. The Federal Inspector and all employees of the Office of the Federal Inspector shall be subject to the provisions of Executive Order No. 11222, concerning standards of conduct for Federal employees. The Federal Inspector shall issue standards of conduct, pursuant to the Order, for the Office of the Federal Inspector.

1–109. To the extent permitted by law, each Department and Agency shall cooperate with and furnish necessary information and assistance to the Board in the performance of its functions.

1–110. This Order shall be effective on July 1, 1979.

Jimmy Carter

THE WHITE HOUSE,
June 21, 1979.

[FR Doc. 79–19836
Filed 6–22–79; 9:13 am]
Billing code 3195–01–M

APPENDIX V

NATURAL GAS PIPELINE FROM ALASKA

JOINT HEARINGS

BEFORE THE

SUBCOMMITTEE ON ENERGY AND POWER
COMMITTEE ON
INTERSTATE AND FOREIGN COMMERCE

AND THE

SUBCOMMITTEE ON
INDIAN AFFAIRS AND PUBLIC LANDS
COMMITTEE ON
INTERIOR AND INSULAR AFFAIRS
HOUSE OF REPRESENTATIVES

NINETY-FIFTH CONGRESS

FIRST SESSION

ON

THE PRESIDENT'S DECISION ON AN ALASKAN NATURAL GAS TRANSPORTATION SYSTEM

SEPTEMBER 22, 23, AND OCTOBER 14, 1977

* * * * *

AGREEMENT BETWEEN CANADA AND THE UNITED STATES OF AMERICA ON PRINCIPLES APPLICABLE TO A NORTHERN NATURAL GAS PIPELINE

The Government of Canada and the Government of the United States of America,

DESIRING to advance the national economic and energy interests and to maximize related industrial benefits of each country, through the construction and operation of a pipeline system to provide for the transportation of natural gas from Alaska and from Northern Canada,

Hereby agree to the following principles for the construction and operation of such a system:

1. Pipeline Route

The construction and operation of a pipeline for the transmission of Alaskan natural gas will be along the route set forth in Annex I, such pipeline being hereinafter referred to as "the Pipeline". All necessary action will be taken to authorize the construction and operation of the Pipeline in accordance with the principles set out in this Agreement.

2. Expeditious Construction; Timetable

(a) Both Governments will take measures to ensure the prompt issuance of all necessary permits, licenses, certificates, rights-of-way, leases and other authorizations required for the expeditious construction and commencement of operation of the Pipeline, with a view to commencing construction according to the following timetable:

- Alaska - January 1, 1980
- Yukon - main line pipe laying January 1, 1981
- Other construction in Canada to provide for timely completion of the Pipeline to enable initial operation by January 1, 1983

(b) All charges for such permits, licenses, certificates, rights-of-way, leases and other authorizations will be just and reasonable and apply to the Pipeline in the same non-discriminatory manner as to any other similar pipeline.

(c) Both Governments will take measures necessary to facilitate the expeditious and efficient construction of the Pipeline, consistent with the respective regulatory requirements of each country.

3. Capacity of Pipeline and Availability of Gas

(a) The initial capacity of the Pipeline will be sufficient to meet, when required, the contractual requirements of United States shippers and of Canadian shippers. It is contemplated that this capacity will be 2.4 billion ~~cubic feet per day (bcfd) for Alaska gas and 1.2 bcfd for~~ Northern Canadian gas. At such time as a lateral pipeline transmitting Northern Canadian gas, hereinafter referred to as "the Dempster Line", is to be connected to the Pipeline or at any time additional pipeline capacity is needed to meet the contractual requirements of United States or Canadian shippers, the required authorizations will be provided, subject to regulatory requirements, to expand the capacity of the Pipeline in an efficient manner to meet those contractual requirements.

(b) The shippers on the Pipeline will, upon demonstration that an amount of Canadian gas equal on a British Thermal Unit (BTU) replacement value basis will be made available for contemporaneous export to the United States, make available from Alaska gas transmitted through the Pipeline, gas to meet the needs of remote users in the Yukon and in the provinces through which the Pipeline passes. Such replacement gas will be treated as hydrocarbons in transit for purposes of the Agreement between the Government of Canada and the Government of the United States of America concerning Transit Pipelines, hereinafter referred to as "the Transit Pipeline Treaty". The shippers on the Pipeline will not incur any cost for provision of such Alaska gas except those capital costs arising from the following provisions:

(i) the owner of the Pipeline in the Yukon will make arrangements to provide gas to the communities of Beaver Creek, Burwash Landing, Destruction Bay, Haines Junction, Whitehorse, Teslin, Upper Liard and Watson Lake at a total cost to the owner of the Pipeline not to exceed Canadian $2.5 million;

(ii) the owner of the Pipeline in the Yukon will make arrangements to provide gas to such other remote communities in the Yukon as may request such gas within a period of two years following commencement of operation of the Pipeline at a cost to the owner not to exceed the product of Canadian $2500 and the number of customers in the communities, to a maximum total cost of Canadian $2.5 million.

4. Financing

(a) It is understood that the construction of the Pipeline will be privately financed. Both Governments recognize that the companies owning the Pipeline in each country will have to demonstrate to the satisfaction of the United States or the Canadian Government, as applicable, that protections against risks of non-completion and interruption are on a basis acceptable to that Government ~~before proof of financing is established~~ and construction allowed to begin.

(b) The two Governments recognize the importance of constructing the Pipeline in a timely way and under effective cost controls. Therefore, the return on the equity investment in the Pipeline will be based on a variable rate of return for each company owning a segment of the Pipeline, designed to provide incentives to avoid cost overruns and to minimize costs consistent with sound pipeline management. The base for the incentive program used for establishing the appropriate rate of return will be the capital costs used in measuring cost overruns as set forth in Annex III.

(c) It is understood that debt instruments issued in connection with the financing of the Pipeline in Canada will not contain any provision, apart from normal trust indenture restrictions generally applicable in the pipeline industry, which would prohibit, limit or inhibit the financing of the construction of the Dempster Line; nor will the variable rate of return provisions referred to in subparagraph (b) be continued to the detriment of financing the Dempster Line.

5. Taxation and Provincial Undertakings

(a) Both Governments reiterate their commitments as set forth in the Transit Pipeline Treaty with respect to non-discriminatory taxation, and take note of the statements issued by Governments of the Provinces of British Columbia, Alberta and Saskatchewan, attached hereto as Annex V, in which those Governments undertake to ensure adherence to the provisions of the Transit Pipeline Treaty with respect to non-interference with throughput and to non-discriminatory treatment with respect to taxes, fees or other monetary charges on either the Pipeline or throughput.

(b) With respect to the Yukon Property Tax imposed on or for the use of the Pipeline the following principles apply:

(i) The maximum level of the property tax, and other direct taxes having an incidence exclusively, or virtually exclusively, on the Pipeline, including taxes on gas used as compressor fuel, imposed by the Government of the Yukon Territory or any public authority therein on or for the use of the Pipeline, herein referred to as the Yukon Property Tax, will not exceed $30 million Canadian per year adjusted annually from 1983 by the Canadian Gross National Product price deflator as determined by Statistics Canada, hereinafter referred to as the GNP price deflator.

(ii) For the period beginning January 1, 1980, and ending on December 31 of the year in which leave to open the Pipeline is granted by the appropriate regulatory authority, the Yukon Property Tax will not exceed the following:

1980--$5 million Canadian

1981--$10 million Canadian

1982--$20 million Canadian

Any subsequent year to which this provision applies--$25 million Canadian.

(iii) The Yukon Property Tax formula described in subparagraph (b)(i) will apply from January 1 after the year in which leave to open the Pipeline is granted by the appropriate regulatory authority until the date that is the earlier of the following, hereinafter called the tax termination date:

(A) December 31, 2008, or

(B) December 31 of the year in which leave to open the Dempster Line is granted by the appropriate regulatory authority.

(iv) Subject to subparagraph (b)(iii), if for the year ending on December 31, 1987, the percentage increase of the aggregate per capita revenue derived from all property tax levied by any public authority in the Yukon Territory (excluding the Yukon Property Tax) and grants to municipalities and Local Improvement Districts from the Government of the Yukon Territory, as compared to the aggregate per capita revenue derived from such sources for 1983, is greater than the percentage increase for 1987 of the Yukon Property Tax as compared to the Yukon Property Tax for 1983, the maximum level of the Yukon Property Tax for 1987 may be increased to equal the amount it would have reached had it increased over the period at the same rate as the aggregate per capita revenue.

(v) If for any year in the period commencing January 1, 1988, and ending on the tax termination date, the annual percentage increase of the aggregate per capita revenue derived from all property tax levied by any public authority in the Yukon Territory (excluding the Yukon Property Tax) and grants to municipalities and Local Improvement Districts from the Government of the Yukon Territory as compared to the aggregate per capita revenue derived from such sources for the immediately preceding year exceeds the percentage increase for that year of the Yukon Property Tax as compared to the Yukon Property Tax for the immediately preceding year, the maximum level of the Yukon Property Tax for that year may be adjusted by the percentage increase of the aggregate per capita revenue in place of the percentage increase that otherwise might apply.

(vi) The provisions of subparagraph (b)(i) will apply to the value of the Pipeline for the capacities contemplated in this Agreement. The Yukon Property Tax will increase for the additional facilities beyond the aforesaid contemplated capacity in direct proportion to the increase in the gross asset value of the Pipeline.

(vii) In the event that between the date of this Agreement and January 1, 1983, the rate of the Alaska property tax on pipelines, taking into account the mill rate and the method of valuation, increases by a percentage greater than the cumulative percentage increase in the Canadian GNP deflator over the same period, there may be an adjustment on January 1, 1983, to the amount of $30 million Canadian described in subparagraph (b)(i) of the Yukon Property Tax to reflect this difference. In defining the Alaska property tax for purposes of this Agreement, the definition of the Yukon Property Tax will apply mutatis mutandis.

(viii) In the event that, for any year during the period described in subparagraph (iii), the annual rate of the Alaska property tax on or for the use of the Pipeline in Alaska increases by a percentage over that imposed for the immediate preceding year that is greater than the increase in percentage of the Yukon Property Tax for the year, as adjusted, from that applied to the immediately preceding year, the Yukon Property Tax may be increased to reflect the percentage increase of the Alaska property tax.

(ix) It is understood that indirect socio-economic costs in the Yukon Territory will not be reflected in the cost of service to the United States shippers other than through the Yukon Property Tax. It is further understood that no public authority will require creation of a special fund or funds in connection with construction of the Pipeline in the Yukon, financed in a manner which is reflected in the cost of service to U.S. shippers, other than through the Yukon Property Tax. However, should public authorities in the State of Alaska require creation of a special fund or funds, financed by contributions not fully reimbursable, in connection with construction of the Pipeline in Alaska, the Governments of Canada or the Yukon Territory will have the right to take similar action.

(c) The Government of Canada will use its best endeavors to ensure that the level of any property tax imposed by the Government of the Northwest Territories on or for the use of that part of the Dempster Line that is within the Northwest Territories is reasonably comparable to the level of the property tax imposed by the Government of the Yukon Territory on or for the use of that part of the Dempster Line that is in the Yukon.

6. Tariffs and Cost Allocation

It is agreed that the following principles will apply for purposes of cost allocation used in determining the cost of service applicable to each shipper on the Pipeline in Canada:

(a) The Pipeline in Canada and the Dempster Line will be divided into zones as set forth in Annex II. Except for fuel and except for Zone 11 (the Dawson-Whitehorse portion of the Dempster Line), the cost of service to each shipper in each zone will be determined on the basis of volumes as set forth in transportation contracts. The volumes used to assign these costs will reflect the original BTU content of Alaskan gas for U.S. shippers and Northern Canadian gas for Canadian shippers, and will make allowance for the change in heat content as the result of commingling. Each shipper will provide volumes for line losses and line pack in proportion to the contracted volumes transported in the zone. Each shipper will provide fuel requirements in relation to the volume of his gas being carried and to the content of the gas as it affects fuel consumption.

(b) It is understood that, to avoid increased construction and operating costs for the transportation of Alaskan gas, the Pipeline will follow a southern route through the Yukon along the Alaska Highway rather than a northern route through Dawson City and along the Klondike Highway. In order to provide alternative benefits for the transportation of Canadian gas to replace those benefits that would have been provided by the northern route through Dawson City, U.S. shippers will participate in the cost of service in Zone 11. It is agreed that if cost overruns on construction of the Pipeline in Canada do not exceed filed costs set forth in Part D of Annex III by more than 35 percent, U.S. shippers will pay the full cost of service in Zone 11. U.S. shipper participation will decline if overruns on the Pipeline in Canada exceed 35 percent; however, at the minimum the U.S. shippers' share will be the greater of either two-thirds of the cost of service or the proportion of contracted Alaskan gas in relation to all contracted gas carried in the Pipeline. The proportion of the cost of service borne by U.S. shippers in Zone 11 will be reduced should overruns on the cost of construction in that Zone exceed 35 percent after allowance for the benefits to U.S. shippers derived from Pipeline construction cost savings in other Zones. Notwithstanding the foregoing, at the minimum, the U.S. shippers' share will be the greater of either two-thirds of the cost of service or the proportion of contracted Alaskan gas in relation to all contracted gas carried in the Pipeline. Details of this allocation of cost of service are set out in Annex III.

(c) Notwithstanding the principles in subparagraphs (a) and (b), in the event that the total volume of gas offered for shipment exceeds the efficient capacity of the Pipeline, the method of cost allocation for the cost of service for shipments of Alaskan gas (minimum entitlement 2.4 bcfd) or Northern Canadian gas (minimum entitlement 1.2 bcfd) in excess of the efficient capacity of the Pipeline will be subject to

review and subsequent agreement by both Governments; provided however that shippers of either country may transport additional volumes without such review and agreement, but subject to appropriate regulatory approval, if such transportation does not lead to a higher cost of service or share of Pipeline fuel requirements attributable to shippers of the other country.

(d) It is agreed that Zone 11 costs of service allocated to U.S. shippers will not include costs additional to those attributable to a pipe size of 42 inches. It is understood that in Zones 10 and 11 the Dempster Line will be of the same gauge and diameter and similar in other respects, subject to differences in terrain. Zone 11 costs will include only facilities installed at the date of issuance of the leave to open order, or that are added within three years thereafter.

7. Supply of Goods and Services

(a) Having regard to the objectives of this Agreement, each Government will endeavor to ensure that the supply of goods and services to the Pipeline project will be on generally competitive terms. Elements to be taken into account in weighing competitiveness will include price, reliability, servicing capacity and delivery schedules.

(b) It is understood that through the coordination procedures in paragraph 8 below, either Government may institute consultations with the other in particular cases where it may appear that the objectives of sub-paragraph (a) are not being met. Remedies to be considered would include the renegotiation of contracts or the reopening of bids.

8. Coordination and Consultation

Each Government will designate a senior official for the purpose of carrying on periodic consultations on the implementation of these principles relating to the construction and operation of the Pipeline. The designated senior officials may, in turn, designate additional representatives to carry out such consultations, which representatives, individually or as a group, may make recommendations with respect to particular disputes or other matters, and may take such other action as may be mutually agreed, for the purpose of facilitating the construction and operation of the Pipeline.

9. Regulatory Authorities: Consultation

The respective regulatory authorities of the two Governments will consult from time to time on relevant matters arising under this Agreement, particularly on the matters referred to in paragraphs 4, 5 and 6, relating to tariffs for the transportation of gas through the Pipeline.

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10. Technical Study Group on Pipe

(a) The Governments will establish a technical study group for the purpose of testing and evaluating 54-inch 1120 pounds per square inch (psi), 48-inch 1260 psi, and 48-inch 1680 psi pipe or any other combination of pressure and diameter which would achieve safety, reliability and economic efficiency for operation of the Pipeline. It is understood that the decision relating to pipeline specifications remains the responsibility of the appropriate regulatory authorities.

(b) It is agreed that the efficient pipe for the volumes contemplated (including reasonable provision for expansion), subject to appropriate regulatory authorization, will be installed from the point of interconnection of the Pipeline with the Dempster Line near Whitehorse to the point near Caroline, Alberta, where the Pipeline bifurcates into a western and an eastern leg.

11. Direct Charges by Public Authorities

(a) Consultation will take place at the request of either Government to consider direct charges by public authorities imposed on the Pipeline where there is an element of doubt as to whether such charges should be included in the cost of service.

(b) It is understood that the direct charges imposed by public authorities requiring approval by the appropriate regulatory authority for inclusion in the cost of service will be subject to all of the tests required by the appropriate legislation and will include only

(i) those charges that are considered by the regulatory authority to be just and reasonable on the basis of accepted regulatory practice, and

(ii) those charges of a nature that would normally be paid by a natural gas pipeline in Canada. Examples of such charges are listed in Annex IV.

12. Other Costs

It is understood that there will be no charges on the Pipeline having an effect on the cost of service other than those:

(i) imposed by a public authority as contemplated in this Agreement or in accordance with the Transit Pipeline Treaty, or

(ii) caused by Acts of God, other unforeseen circumstances, or

(iii) normally paid by natural gas pipelines in Canada in accordance with accepted regulatory practice.

13. Compliance with Terms and Conditions

The principles applicable directly to the construction, operation and expansion of the Pipeline will be implemented through the imposition by the two Governments of appropriate terms and conditions in the granting of required authorizations. In the event of subsequent non-fulfillment of such a term or condition by an owner of the Pipeline, or by any other private person, the two Governments will not have responsibility therefor, but will take such appropriate action as is required to cause the owner to remedy or mitigate the consequences of such non-fulfillment.

14. Legislation

The two Governments recognize that legislation will be required to implement the provisions of this Agreement. In this regard, they will expeditiously seek all required legislative authority so as to facilitate the timely and efficient construction of the Pipeline and to remove any delays or impediments thereto.

15. Entry Into Force

This Agreement will become effective upon signature and shall remain in force for a period of 35 years and thereafter until terminated upon 12 months' notice given in writing by one Government to the other, provided that those provisions of the Agreement requiring legislative action will become effective upon exchange of notification that such legislative action has been completed.

ANNEX I

The Pipeline Route

In Alaska:

The Pipeline constructed in Alaska by Alcan will commence at the discharge side of the Prudhoe Bay Field gas plant facilities. It will parallel the Alyeska oil pipeline southward on the North Slope of Alaska, cross the Brooks Range through the Atigun Pass, and continue on to Delta Junction.

At Delta Junction, the Pipeline will diverge from the Alyeska oil pipeline and follow the Alaska Highway and Haines oil products pipeline passing near the towns of Tanacross, Tok, and Northway Junction in Alaska. The Alcan facilities will connect with the proposed new facilities of Foothills Pipe Lines (South Yukon) Ltd. at the Alaska-Yukon border.

In Canada:

In Canada the Pipeline will commence at the Boundary of the State of Alaska and the Yukon Territory in the vicinity of the towns of Border City, Alaska and Boundary, Yukon. The following describes the general routing of the Pipeline in Canada:

From the Alaska-Yukon border, the Foothills Pipe Lines (South Yukon) Ltd. portion of the Pipeline will proceed in a southerly direction generally along the Alaska Highway to a point near Whitehorse, Yukon, and thence to a point on the Yukon-British Columbia border near Watson Lake, Yukon where it will join with the Foothills Pipe Lines (North B.C.) Ltd. portion of the Pipeline.

The Foothills Pipe Lines (North B.C.) Ltd. portion of the Pipeline will extend from Watson Lake in a southeasterly direction across the northeastern part of the Province of British Columbia to a point on the boundary between the Provinces of British Columbia and Alberta near Boundary Lake where it will interconnect with the Foothills Pipe Lines (Alta.) Ltd. portion of the Pipeline.

The Foothills Pipe Lines (Alta.) Ltd. portion of the Pipeline will extend from a point on the British Columbia - Alberta boundary near Boundary Lake in a southeasterly direction to Gold Creek and thence parallel to the existing right-of-way of The Alberta Gas Trunk Line Company Limited to James River near Caroline.

From James River a "western leg" will proceed in a southerly direction, generally following the existing right-of-way of The Alberta Gas Trunk Line Company Limited to a point on the Alberta-British Columbia boundary near Coleman in the Crow's Nest Pass area. At or near Coleman the Foothills Pipe Lines (Alta.) Ltd. portion of the Pipeline will interconnect with the Foothills Pipe Lines (South B.C.) Ltd. portion of the Pipeline.

The Foothills Pipe Lines (South B.C.) Ltd. portion of

the Pipeline will extend from a point on the Alberta-British Columbia boundary near Coleman in a southwesterly direction across British Columbia generally parallel to the existing pipeline facilities of Alberta Natural Gas Company Ltd. to a point on the International Boundary Line between Canada and the United States of America at or near Kingsgate in the Province of British Columbia where it will interconnect with the facilities of Pacific Gas Transmission Company.

Also, from James River, an "eastern leg" will proceed in a southeasterly direction to a point on the Alberta-Saskatchewan boundary near Empress, Alberta where it will interconnect with the Foothills Pipe Lines (Sask.) Ltd. portion of the Pipeline. The Foothills Pipe Lines (Sask.) Ltd. portion of the Pipeline will extend in a southeasterly direction across Saskatchewan to a point on the International Boundary Line between Canada and the United States of America at or near Monchy, Saskatchewan where it will interconnect with the facilities of Northern Border Pipeline Company.

ANNEX II

Zones for the Pipeline and the Dempster Line in Canada

Zone 1 — Foothills Pipe Lines (South Yukon) Ltd.

Alaska Boundary to point of interconnection with the Dempster Line at or near Whitehorse.

Zone 2 — Foothills Pipe Lines (South Yukon) Ltd.

Whitehorse to Watson Lake.

Zone 3 — Foothills Pipe Lines (North B.C.) Ltd.

Watson Lake to point of interconnection with Westcoast's main pipeline near Fort Nelson.

Zone 4 — Foothills Pipe Lines (North B.C.) Ltd.

Point of interconnection with Westcoast's main pipeline near Fort Nelson to the Alberta-B.C. border.

Zone 5 — Foothills Pipe Lines (Alta.) Ltd.

Alberta-B.C. border to point of bifurcation near Caroline, Alberta.

Zone 6 — Foothills Pipe Lines (Alta.) Ltd.

Caroline, Alta. to Alberta-Saskatchewan border near Empress.

Zone 7 — Foothills Pipe Lines (Alta.) Ltd.

Caroline to Alberta-B.C. border near Coleman.

Zone 8 — Foothills Pipe Lines (South B.C.) Ltd.

Alberta-B.C. border near Coleman to B.C.-United States border near Kingsgate.

Zone 9 — Foothills Pipe Lines (Sask.) Ltd.

Alberta-Saskatchewan border near Empress to Saskatchewan-United States border near Monchy.

Zone 10 — Foothills Pipe Lines (North Yukon) Ltd.

Mackenzie Delta Gas fields in the Mackenzie Delta, N.W.T., to a point near the junction of the Klondike and Dempster Highways just west of Dawson, Yukon Territory.

Zone 11 — Foothills Pipe Lines (South Yukon) Ltd.

A point near the junction of the Klondike and Dempster Highways near Dawson to the connecting point with the Pipeline at or near Whitehorse.

ANNEX III

Cost Allocation in Zone 11

The cost of service in Zone 11 shall be allocated to United States shippers on the following basis:

(i) There will be calculated, in accordance with (iii) below, a percentage for Zones 1 - 9 in total by dividing the actual capital costs by filed capital costs and multiplying by 100. If actual capital costs are equal to or less than 135% of filed capital costs, then United States shippers will pay 100% of the cost of service in Zone 11. If actual capital costs in Zones 1 - 9 are between 135% and 145% of filed capital costs, then the percentage paid by United States shippers will be adjusted between 100% and 66 2/3% on a straight-line basis, except that in no case will the portion of cost of service paid by United States shippers be less than the proportion of the contracted volumes of Alaskan gas at the Alaska-Yukon border to the same volume of Alaskan gas plus the contracted volume of Northern Canadian gas. If the actual capital costs are equal to or exceed 145% of filed capital costs, the portion of the cost of service paid by United States shippers will be not less than 66 2/3% or the proportion as calculated above, whichever is the greater.

(ii) There will be calculated a percentage for the costoverrun on the Dawson to Whitehorse lateral (Zone 11). After determining the dollar value of the overrun, there will be deducted from it:

(a) the dollar amount by which actual capital costs in Zones 1, 7, 8 and 9 (carrying Alaskan gas only) are less than 135% of filed capital costs referred to in (iii) below;

(b) in each of Zones 2, 3, 4, 5 and 6 the dollar amount by which actual capital costs are less than 135% of filed capital costs referred to in (iii) below, multiplied by the proportion that the U.S. contracted volume bears to the total contracted volume in that Zone.

If the actual capital costs in Zone 11, after making this adjustment, are equal to or less than 135% of filed capital costs, then no adjustment is required to the percentage of the cost of service paid by United States shippers as calculated in (i) above. If, however, after making this adjustment, the actual capital cost in Zone 11 is greater than 135% of the filed capital cost, then the proportion of the cost of service paid by

United States shippers will be a fraction (not exceeding 1) of the percentage of the cost of service calculated in (i) above, where the numerator of the fraction is 135% of the filed capital cost and the denominator of the fraction is actual capital cost less the adjustments from (a) and (b) above. Notwithstanding the adjustments outlined above, in no case will the percentage of the actual cost of service borne by United States shippers be less than the greater of 66 2/3% or the proportion of the contracted volumes of Alaskan gas at the Alaska-Yukon border to the same volume of Alaskan gas plus the contracted volume of Northern Canadian gas.

(iii) The "filed capital cost" to be applied to determine cost overruns for the purpose of cost allocation in (i) and (ii) above will be:

	"Filed Capital Cost" Estimates for the Pipeline in Canada (millions of Canadian dollars)
The Pipeline in Canada (Zones 1 - 9) 1/	
48" - 1260 lb. pressure pipeline -	3,873
or 48" - 1680 lb. pressure pipeline -	4,418
or 54" - 1120 lb. pressure pipeline -	4,234

	"Filed Capital Cost" Estimates for the Pipeline in Canada (millions of Canadian dollars)
Zone 11 of the Dempster Line 2/	
30" - Section of Dempster line from Whitehorse to Dawson -	549
or 36" - Section of Dempster line from Whitehorse to Dawson -	585
or 42" - Section of Dempster line from Whitehorse to Dawson -	705

Details for Zones 1 - 9 are shown in the following table:

1/ These filed capital costs include and are based upon (a) a 1260 psi, 48-inch line from the Alaska-Yukon border to the point of possible interconnection near Whitehorse; (b) a 1260 psi, 48-inch; or 1680 psi, 48-inch; or 1120 psi, 54-inch line from the point of possible interconnection near Whitehorse to Caroline Junction; (c) a 42-inch line from Caroline Junction to the Canada-United States border near Monchy, Saskatchewan; and (d) a 36-inch line from Caroline Junction to the Canada-United States border near Kingsgate, British Colombia. These costs are escalated for a date of commencement of operations of January 1, 1983.

2/ The costs are escalated for a date of commencement of operations of January 1, 1985.