

ALASKA LEGISLATURE SPECIAL COMMITTEE / SUBJECT FILE 86/2

499 SCOMM15: HOUSE/SEN. SP. COMM. SALE ROYALTY GAS 1977-78 499

No. 22868

Judge Litt said the staff's alternative must be rejected because he does not believe its pessimistic outlook for Canadian gas imports will be fulfilled. Without this occurring, he said, there would be no true saving to consumers. Recent reports issued by the Canadian government contain a considerably more favorable appraisal of its ability to continue exports at present levels. Any curtailments which might occur in the late 1970's or early 1980's should prove temporary, he said, in light of frontier gas which may become available then.

The existence of a nationwide gas shortage is uncontested, Judge Litt said, with the nine interstate pipelines comprising the Arctic Gas group projecting their total supplies will fall short of requirements by 26 percent in 1985. These companies, which marketed about a third of total gas production in the lower 48 in 1975, sell in a substantial majority of the lower 48 states but principally California, Ohio, Michigan, Illinois, Minnesota, New York and Pennsylvania. Without both Alaskan gas and other gas supplies, their 1985 requirements in priorities 1 and 2 cannot be met, Judge Litt said.

While Canada's National Energy Board is considering the proposals, Judge Litt said there is much dispute on political issues such as whether the NEB will act impartially in a timely fashion for U.S. interests, and whether it will allow U.S. and Canadian Mackenzie Delta gas to be transported through the same system.

These political considerations are principally the prerogative of the President, Judge Litt emphasized; the FPC does not make foreign policy for the U.S. However, he said he must assume that the decision to be made by the Canadian government will be made by rational men viewing the pros and cons of the proposals on a wide range of criteria, just as it is assumed rational men here will make the decision.

Given the present state of world energy resources, he stated, it can be assumed that more rapid development of known and substantial resources is as important to Canada

(over)

No. 22868

as to the U.S., and that a time frame for delivering known supplies late into the 1980's is not likely to be a winning position.

Judge Litt agreed with Arctic Gas' contention that a joint project through Canada is not dependent on a U.S. - Canadian treaty. The normal and long-standing relationship of almost 200 years between the two countries is more than a sufficient basis for assuming stability and rational treatment of a mutually beneficial business enterprise. "Even if it is assumed that a Canadian government would come to power predisposed to act unreasonably, such imprudence could be countered with equally unsavory activities on the part of the U.S.," Judge Litt said.

The overwhelming benefit to Alaska will be royalty gas payments and severance taxes. Any of the proposals would net the state a minimum \$135.5 million a year, totalling several billion dollars over the next several decades. The bottom line for the state's development is how it spends those billions, Judge Litt said. Those policies will determine the ultimate socio-economic effect of the project.

There was consensus by the Commission staff, the most populous consuming states which took an active interest, and an array of pipelines and distributors serving huge sections of the country that Arctic Gas' proposal would serve their best interests. However, El Paso's proposal is viable and, if Arctic Gas is unable to accept a certificate, El Paso's proposal, with modifications, would also meet the public convenience and necessity, Judge Litt said. The chief problem with the El Paso project is its lack of flexibility and credibility as presented, he continued. It would need at least 9 cryogenic ships, rather than 8, to provide reliable transportation; five rather than four liquefied natural gas storage tanks, and seven, not six, liquefaction trains at Gravina Point in Alaska. While El Paso proposed locating its California terminal at Point Conception, Judge Litt said all the evidence points to Oxnard as the preferred location.

El Paso, primarily through its lawyers, "has made a silk purse out of a sow's ear," Judge Litt said. It has done
(continued)

No. 22868

little intermediate design work and its design, while impressive on paper, has no particular backup by core samples or even general site-specific work anywhere along its actual route.

As to Alcan, Judge Litt said the record does not support even the possibility that a certificate could be granted it. Its design is clearly neither efficient nor economic since the pipeline is undersized. Its 3-year phased-in construction schedule is not credible, he said, and judging from the FPC staff's evaluation, the proposed summer construction cannot be accomplished without unacceptable environmental impact, primarily degradation of ice-rich permafrost.

All the major participants in this mammoth undertaking, "in the vernacular, 'have their hand out,'" Judge Litt said. They all want top dollar, creating serious questions of marketability and in turn, financeability. Alaska may again seek to increase its severance tax on hydrocarbons from 4 to 10 percent; the pipelines want consumer guarantees to repay their equity investment but still seek a rate of return of from 15 to 17 percent; the producers' failure to sign sales contracts indicates where their concern lies.

Only a limitation on the field price of the gas to reflect its intrinsic market value and a reduction on investment returns to reflect limitations on risk can bring these projects "in from the cold," Judge Litt concluded. A field price of \$1.00 per thousand cubic feet is about the upper limit, he said; a field price established by contract or otherwise at a level much higher will sink the project, because the delivered cost of the gas would be so high the high-priority consumers which constitute the market would turn to other energy supplies.

The financial plan prepared by Arctic Gas does not outstrip the capacity of any of these markets and is generally feasible, Judge Litt found. He concluded, however, that the magnitude of the capital investment is such that the gas transmission company sponsors cannot provide the institutional lenders with the security necessary to warrant financing. There must be reliance upon both the consumer and the taxpayer to guarantee that the project will be

(over)

No. 22868

completed and that debt service will be secure during any sustained outages.

Legislation to perfect tracking of rates to the consumer level and to approve U.S. Treasury participation is necessary if the project is to be built, Judge Litt concluded. He made the following recommendations: consumer participation in guarantees on capital costs, but only for the debt service; the equity holder should accept the usual risk of equity investment; and the federal government should entertain an insurance or completion guarantee arrangement to facilitate raising project debt capital at a more reasonable cost.

-FPC-

For further information
call 275-4006 (Area Code 202)

DC-E

Sunday, January 30, 1977.)

STATE OF CALIFORNIA—THE RESOURCES AGENCY

EDMUND G. BROWN JR., Governor

ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

1111 HOWE AVENUE
SACRAMENTO, CALIFORNIA 95825
(916) 322-3690

exhibit # 21 (f)



January 31, 1977

The Honorable John Rader
Senate President
Alaska State Legislature
Pouch V
Juneau, Alaska 99811

Dear Senator Rader:

Your letter to Tony Kline, the Governor's Legal Secretary, has been forwarded to me for comment. I urge the Alaskan State Legislature not to approve the gas royalty sales agreements between the State of Alaska and three firms. California cannot afford to rely on liquefied natural gas (LNG) and the El Paso project for over 90% of the State's gas supply. LNG delivery technology is proven for small scale deliveries but not for the large scale (greater than 3.2 bcf/day) deliveries proposed for California.

If the one LNG terminal California is likely to approve were to be temporarily closed down due to an equipment malfunction, trestle damage, or earthquake, the State of California could face major disruptions in its gas supply delivery system. The potential disruptions are described in the Resource Planning Associates study being sent under separate cover.

For this and other reasons, California supports an overland gas pipeline delivery system for North Slope Natural gas with a direct delivery system to the West Coast. A copy of the Energy Commission policy resolution and PUC brief will also be sent under separate cover.

There is also strong evidence to suggest that an overland pipeline system would yield much lower transportation costs to the consumers, and hence, much higher natural gas royalties for the State of Alaska and higher wellhead values for North Slope producers.

We, therefore, urge you to consider the value of the higher wellhead price to the state against the value of a liquefaction terminal.

California officials are sensitive to Alaska's wish to provide its citizens with jobs and economic development opportunities. Arrangements of the overland pipeline proposals could be established that would not deprive Southern Alaska from supplies of natural gas. The Alcan Highway proposal

AGO 560339 +

The Honorable John Rader
January 31, 1977
Page 2

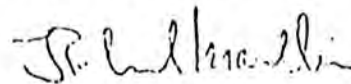
will deliver gas to Southern parts of Alaska and could provide the same volume of gas and development opportunities as El Paso's proposal. Arctic Gas's proposal could also be permitted in a manner to insure deliveries of gas to South Alaska in quantities sufficient for economic development. This could be accomplished by requiring that North Slope gas producers purchase or exchange South Alaskan natural gas which would remain in South Alaska in exchange for North Slope royalty gas. The resultant transportation costs savings would benefit all parties.

There is one other important factor the Alaskan Legislature should consider before approving the proposed royalty sales agreements. The California Legislature may consider the establishment of a California State gas purchasing authority which would enable California to purchase Alaska's royalty gas directly without Federal Power Commission (FPC) approval or price regulation. The possibilities of Alaska benefitting from this arrangement (through higher royalties), and of California establishing such an authority significantly diminish as the State of Alaska and other North Slope producers sign these "open ended/unknown price" contracts.

The energy futures of the State of California and Alaska are intimately tied to one another, with regard to oil as well as gas. We are grateful for the opportunity to respond to your inquiry and look forward to a spirit of continuing cooperation.

Please enter the Mailgram and materials being sent under separate cover into the official records of your proceedings.

Sincerely yours,



RICHARD L. MAULLIN
Chairman

cc: Governor Jay Hammond
Mr. Guy Martin
Mr. Tony Kline
Mr. Robert Batimovich
Mr. Arlon Tussing

STATE OF CALIFORNIA

State Energy Resources
Conservation and Development Commission

RESOLUTION

WHEREAS the California Public Utilities Commission has been directed by recent state legislation (SB 2008) to "represent the united interests" of (state agencies) in federal regulatory energy proceedings and to consult with state agencies, specifically the ERCDC (Section 5401 of the Public Utilities Code); and

WHEREAS the ERCDC staff has prepared or in preparation comprehensive reports designed to identify emerging trends related to energy supply, demand, and conservation and public health and safety factors pursuant to Section 25309 (the Warren-Alquist Act) "to provide the basis for state policy and actions in relation thereto"; and

WHEREAS ERCDC staff has acquired and analyzed information in order to ascertain future energy problems and uncertainties including:

- (a) The production of Alaskan North Slope oil and its projected use in the State;
- (b) Impacts of petroleum price increases and projected conservation measures on the demand for energy and indirect effects on the need for offshore oil development and Alaskan oil delivery into the State;
- (c) Potential shipments of Alaskan oil through the State;
- (d) The impact on the State of national energy policies.
including Project Independence and its successors;
- (e) Implications of natural gas decision making for California
in accordance with Section 25005.5 of the Public Resources Code (SB 1479); and

WHEREAS the CPUC, in consultation with the Governor's Office of Planning and Research and ERCDC staff, has established procedures for consultation with other state agencies in federal energy proceedings; and

WHEREAS the CPUC will file a final brief in the El Paso Alaska case by November 30, 1976, which will set forth a statement of policy, based upon the record before the FPC, of other state agencies (CPUC telegram, October 28, 1976);

THEREFORE BE IT RESOLVED that the General Counsel's Office, in coordination with the Executive Director and Commission staff, shall recommend to the Commission appropriate responses to CPUC's request for assistance and to have evidence, expert witness(es), and statements of policy prepared when appropriate for the following federal regulatory energy proceedings (described in depth in attachments) pursuant to the ERCDC's consultation responsibilities according to the provisions of SB 2008:

1. El Paso Alaska Company, FPC Docket No. CP75-96, et al.;
2. Pacific Indonesia LNG Company, FPC Docket No. CP75-160, et al.;
3. El Paso Natural Gas Company, FPC Docket No. CP75-362;
4. Proposed Rulemaking for Approved States' Coastal Zone Management Program, FPC Docket No. RM76-38;
5. Request for Rulemaking on LNG Site Selection Criteria, FPC Docket No. RM76-13;
6. Pacific Alaska LNG Company, FPC Docket No. CP75-140;

BE IT FURTHER RESOLVED that all statements of policy representing the position of the Energy Resources Conservation and Development Commission in any of the above federal energy regulatory proceedings be submitted on the Energy Commission's consent calendar and approved before they shall be officially represented as a Commission position;

BE IT FURTHER RESOLVED that the Energy Commission makes the following Alaskan North Slope natural gas policy findings, and respectfully requests the California Public Utilities Commission to include these findings and the attached policy statement in its final brief in the El Paso/Alaska case and consider them in the development and approval of CPUC's own final arguments:

- 1) That California will require at least one liquefied natural gas (LNG) regasification marine terminal in the early 1980's;
- 2) "Until the risks inherent in liquefied natural gas terminal operations can be sufficiently identified and overcome and such terminals are found to be consistent with the health and safety of nearby human populations, terminals shall be built only at sites remote from human population concentrations. Other unrelated development in the vicinity of a liquefied natural gas terminal site which is remote from human population concentrations shall be prohibited. At such time as liquefied natural gas marine terminal operations are found consistent with public safety, terminal ties only in developed or industrialized port areas may be approved." (California Public Resources Code, Section 30261(b).)

- 3) That given the current state of knowledge concerning LNG safety, the proposed Oxnard and Los Angeles LNG terminal sites should not, at the present time, be considered "remote from human populations concentrations";
- 4) That the State of California has a law and a process (the California Coastal Act, SB 1277) for resolving LNG-related land use, environmental, and safety questions and for issuing coastal permits for LNG terminals;
- 5) That it would be inappropriate for California to advocate a specific remote site (on or offshore) until such time as the state has completed its environmental impact, supply contingency, and seismic and LNG safety studies;
- 6) That certification of an overland natural gas pipeline system is in California's and the national interest, in part because diversification of supply sources minimizes risks and enhances the reliability of energy delivery systems; and
- 7) That, however, if the Federal Power Commission should approve the El Paso Alaska proposal and must, therefore, select one of the three proposed California sites in the El Paso/Alaska proceeding, it should tentatively approve a site subject to:
 - a. Permit approval by the State Coastal Commission and review by the State Seismic Safety Commission;

- b. Strict permit conditions which prohibit unrelated secondary (or induced) industrial and residential development adjacent to the site or within a "fire hazard" radius of the site; and
- c. Completion and evaluation, including public hearings of the expanded alternate site analysis for the Point Conception EIR.

THEREFORE BE IT RESOLVED that the Energy Resources Conservation and Development Commission finds that an overland pipeline delivery system for natural gas from Alaska's North Slope including a western leg for direct delivery to California should be selected by the Federal Power Commission which most closely incorporates the following characteristics:

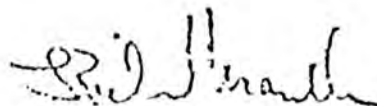
- 1) Earliest possible completion date; ?
- 2) Lowest cost of service; *Arctic?*
- 3) Least environmental impact particularly including impact *Alaska* on sensitive wildlife areas;
- 4) Provides access to the largest deliverable natural gas *Arctic* supplies;
- 5) Relies on proven pipeline construction techniques; *Alaska*
- 6) Maximizes the use of existing rights-of-way; *Alaska*
- 7) Provides an acceptable financing plan requiring the least possible governmental subsidies; *Arctic*
- 8) Provides the most direct delivery system for California;
- 9) Enjoys the committed support of both the United States and Canadian governments; ?
- 10) Provides the greatest incentives for maintaining continued access to Canadian gas already contracted with California consumers.

WHEREAS the final decision on the choice of systems for delivering Alaskan North Slope (and Canadian) natural gas to the lower 48 states will be made by the President with Congressional concurrence in the second half of 1977;

BE IT RESOLVED that the SERCDC directs the staff to prepare issue papers in support of hearings to be held by the CER CDC during the 1st quarter of calendar year 1977. The purpose of the hearings shall be to enable the Commission to take a definitive position in favor of one or the other of the overland gas transportation routes for North Slope gas and to communicate such findings to the President and the Congress.

Dated: November 17, 1976

STATE ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION



Richard L. Maullin
Chairman

ENERGY COMMISSION POLICY STATEMENT
EL PASO/ALASKA CASE:

The Energy Commission contends that the CPUC acted prematurely in choosing Oxnard as the preferable site for the El Paso/Alaska project for the following reasons:

1. The public safety factor regarding the proposed facilities at Point Conception, Oxnard and Los Angeles Harbor is still undetermined. The risk assessment studies prepared by Science Applications, Inc. (SAI) for all three facilities and submitted for the record by Western Terminal as Exhibits WL-51, WL-52, and WL-53 were based on preliminary data and anticipated design (Tr. 25178). The SAI studies were published in December 1975, and do not fully reflect certain critical engineering details and design progress. For example, seismic analysis for the Oxnard marine facility was completed in July 1976, and the related gimbal joint study was completed in September 1976.
2. Disagreement exists between the FPC staff and SAI regarding the behavior of LNG vapor clouds and other key risk determinants, such as marine vessel traffic. Attention is directed to a letter from the FPC staff to Western Terminal, dated October 26, 1976, in Western LNG Terminal Company, Docket No. CP75-83-2, requesting additional information as to 21 technical points relating to the SAI risk assessment studies and models and assumptions upon which those studies were based. The information requested in this letter indicates that several important areas relating to public safety remain unanswered.
3. Witnesses for Western Terminal stated that they were convinced "internally" that the proposed facilities "presented no undue hazard to the public" and that SAI's risk assessment studies were performed primarily for "defense in permit proceedings", and for the purpose of "convincing the public" (Tr. 24959). Witnesses for SAI stated that no changes in design or operations were suggested because "the risks were extremely low and therefore there was no reason to suggest any changes in the design". Western Terminal did not produce "internal" studies or documents which led them to the conviction that the facilities were acceptably safe, prior to completion of the SAI risk assessment studies. Therefore, the SAI work must be treated as an advocacy document until such time as technical review by qualified, independent peers has established its scientific validity. This review process has only just begun. SAI's conclusions and methods have not been shown to enjoy general acceptance in the scientific community, and they have not been accepted or relied upon by any identifiable authority other than Western Terminal.

4. Contingency planning appears woefully inadequate to assure public safety in the event of a major safety incident, however unlikely.
5. Pre-permitting safety review must be regarded as preliminary and inconclusive. For example, the review conducted for the FPC by the National Bureau of Standards was only a preliminary step; many critical issues were not and could not be addressed because of the preliminary status of engineering work. Other problem areas were identified but, based on information and belief, responses were left open-ended. It has not been adequately established that safety monitoring in the post-permitting phase, from final design through construction and operation, will be adequately provided for. The recently enacted California Coastal Act (California Public Resources Code, Section 30000, et seq.) will require positive findings that any LNG facility proposed for siting in a populated area is consistent with public safety. The California Coastal Commission intends to exercise this responsibility.
6. Additional studies are being conducted within California, regarding all three of the proposed sites for LNG regasification facilities. A preference for any site would be premature, until these studies are completed. For example, the City of Oxnard recently issued a Draft Environmental Impact Report (EIR) regarding Western Terminal's proposed facility at Oxnard. The first public hearing regarding the Draft EIR was held on November 4, 1976. A Final EIR for the project is required by the California Environmental Quality Act (California Public Resources Code, Section 21000, et seq.) prior to the issuance of any local or state permits. Also, from a public policy point of view, completion of the State EIR process appears indispensable to a decision as to the acceptability of Oxnard as a site for a LNG regasification facility.

At this point, it should be noted that in preparing its Draft EIR, the City of Oxnard had an independent safety study performed. It refused to rely on the SAI risk assessment study to establish the safety of the proposed facility at Oxnard. Based on information and belief, a Final EIR for the Oxnard facility will be certified in March or April, 1977. The Final EIR for the Oxnard facilities will be submitted to the FPC as soon as it has been certified.

The preparation of an EIR for the proposed Point Conception site has recently begun. The reason for the delay has been Western Terminal's failure to file the necessary applications with the County of Santa Barbara until just recently. As stated above, with respect to the Oxnard EIR, completion of the State EIR process is indispensable to a decision regarding the acceptability of Point Conception as a site for a LNG regasification facility.

By Order dated May 19, 1976, the Federal Power Commission denied petitions by the CPUC and the County of Santa Barbara for local hearings regarding the proposed LNG facilities at Los Angeles Harbor, Oxnard and Point Conception. At the same time, it has granted requests for local hearings at other sites in the lower 48 states, e.g., Everett, Massachusetts. After the Commission has denied the requests of state and local agencies for local hearings in California, it would be premature for California to endorse any site until the various State EIR processes have been completed. After the Oxnard and Point Conception EIRs have been subject to local public hearings and local exposure, there will be a better indication as to which site, if any is more acceptable for a LNG facility. Also, until the Oxnard and Point Conception EIRs have had such local exposure, it seems premature to argue, as the CPUC did, that the possibility of injunctive action is more likely at Point Conception than at the other for proposed locations.

The issue of seismic safety is presently under detailed technical review by the California Seismic Safety Commission (Seismic Safety Commission). The Seismic Safety Commission expects to issue an official report regarding each of three proposed sites by the end of 1976.1/ Design data presented to this Commission in the El Paso/Alaska, Pacific Indonesia and Pacific Alaska proceedings has been preliminary in many respects. For example, important studies relating to the design of the trestle at Oxnard were only completed in September 1976. These studies have not been submitted for the record in either the El Paso/Alaska or Pacific Indonesia proceedings. Until the Seismic Safety Commission has completed its study as to the proposed sites at Point Conception, Oxnard and Los Angeles Harbor, judgment as to the seismic issues should be reserved.

The Energy Commission is preparing a study relating to the issues of reliability of the proposed LNG regasification facilities. The study will be completed by the end of 1976 and will be available for presentation in the Pacific Indonesia and/or Pacific Alaska proceedings.

1/ It should also be noted that the U.S. Navy, acting through its Naval Facilities Engineering Command, has actively participated in technical discussions relating to seismic issues with respect to both the Los Angeles Harbor and Oxnard sites. Based on information and belief, the Navy has intervened in the Pacific Indonesia and Pacific Alaska proceedings because of the proximity of major naval facilities to both Oxnard and Los Angeles Harbor. In its recent comments on the Draft EIS for the Pacific Alaska project, the Navy agreed with the Commission Staff's conclusion that "The LNG terminal facilities should not be constructed at the proposed Los Angeles site in view of the seismic problem, the shipping congestion in Los Angeles Harbor and the resulting threat to a highly populated area."

4. Contingency planning appears woefully inadequate to assure public safety in the event of a major safety incident, however unlikely.
5. Pre-permitting safety review must be regarded as preliminary and inconclusive. For example, the review conducted for the FPC by the National Bureau of Standards was only a preliminary step; many critical issues were not and could not be addressed because of the preliminary status of engineering work. Other problem areas were identified but, based on information and belief, responses were left open-ended. It has not been adequately established that safety monitoring in the post-permitting phase, from final design through construction and operation, will be adequately provided for. The recently enacted California Coastal Act (California Public Resources Code, Section 30000, et seq.) will require positive findings that any LNG facility proposed for siting in a populated area is consistent with public safety. The California Coastal Commission intends to exercise this responsibility.
6. Additional studies are being conducted within California, regarding all three of the proposed sites for LNG regasification facilities. A preference for any site would be premature, until these studies are completed. For example, the City of Oxnard recently issued a Draft Environmental Impact Report (EIR) regarding Western Terminal's proposed facility at Oxnard. The first public hearing regarding the Draft EIR was held on November 4, 1976. A Final EIR for the project is required by the California Environmental Quality Act (California Public Resources Code, Section 21000, et seq.) prior to the issuance of any local or state permits. Also, from a public policy point of view, completion of the State EIR process appears indispensable to a decision as to the acceptability of Oxnard as a site for a LNG regasification facility.

At this point, it should be noted that in preparing its Draft EIR, the City of Oxnard had an independent safety study performed. It refused to rely on the SAI risk assessment study to establish the safety of the proposed facility at Oxnard. Based on information and belief, a Final EIR for the Oxnard facility will be certified in March or April, 1977. The Final EIR for the Oxnard facilities will be submitted to the FPC as soon as it has been certified.

The preparation of an EIR for the proposed Point Conception site has recently begun. The reason for the delay has been Western Terminal's failure to file the necessary applications with the County of Santa Barbara until just recently. As stated above, with respect to the Oxnard EIR, completion of the State EIR process is indispensable to a decision regarding the acceptability of Point Conception as a site for a LNG regasification facility.

State of Mississippi



Evelyn Gandy
Lieutenant Governor

Jackson
February 3, 1977

The Honorable Lowell Thomas, Jr.
Lieutenant Governor
State of Alaska
Pouch "AA"
Juneau, Alaska 99811

Dear Governor Thomas:

Our growing concern about the severe shortage of natural gas has been greatly increased as a result of the unprecedented cold weather we have experienced this winter. We believe that positive action must be taken if this situation is to be improved and serious consideration must be given to ways by which adequate gas supplies will be available to our people.

The above situation brings to our attention the proposal by your State to sell a portion of its royalty natural gas to Southern Natural Gas Company which delivers a substantial amount of natural gas for use by the consumers in Mississippi. This additional supply for use in our area would mean much in helping Mississippi avoid a more serious and acute shortage of natural gas in future years.

The accelerated development and transportation of the natural gas from the Prudhoe Bay Field of Alaska to the lower forty-eight states appears to be absolutely necessary, and I hope Alaska's proposal to sell a portion of its royalty natural gas to Southern Natural Gas Company will be given serious and favorable consideration.

With kindest regards and best wishes, I am

Sincerely yours,

Evelyn Gandy

Evelyn Gandy
Lieutenant Governor

EG/nl

RECEIVED
FEB 10 1977
Lieutenant Governor

AGO 560352



STATE OF ALABAMA

JEFF BEASLEY
LIEUTENANT GOVERNOR
MONTGOMERY
36130

TELEPHONE
AREA CODE 205
832-3492
832-3493

January 14, 1977

RECEIVED

JAN 14 1977

Honorable Lowell Thomas, Jr.
Lieutenant Governor
State of Alaska
Pouch "AA" State Capitol Building
Juneau, Alaska 99811

Dear Lowell:

Since the recent announcement by the State of Alaska to sell its surplus royalty natural gas for distribution to the lower 48 states, I have met with officials of Southern Natural Gas Company to discuss this matter. I was pleased to learn of this large new supply source of natural gas that will be available for delivery within the next several years to our part of the nation. This additional gas will be most important to our residential, commercial, and industrial sectors.

As we now find ourselves in the midst of an ominous and deepening natural gas shortage in the lower 48, I am firmly convinced that we must recognize the seriousness of its impact upon the nation's economy as well as to the health and comfort of millions of our citizens. It is incumbent upon all of us in government that we recognize this and act affirmatively to insure that our consumers will have the reassurance of adequate natural gas supplies.

Our nation should not have to depend on imported oil. It stands to reason that the greater the proportion of our total energy supply that domestic natural gas makes up, the lesser the proportion imported oil will make and, therefore, the lesser OPEC leverage on our foreign policy.

AGD 560353

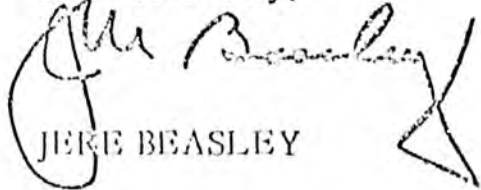
Honorable Lowell Thomas, Jr.
January 14, 1977
Page 2

Expeditious development of the domestic natural gas reserves of Alaska for transportation to the lower 48 states appears to be our best hope if we are to attain a timely degree of self-sufficiency in our energy needs. Accordingly, I endorse your state's proposal to sell a portion of Alaska's surplus royalty natural gas to Southern Natural Gas Company, the major supplier of natural gas to Alabama.

Our state will support efforts to obtain these new gas supplies for our area of the nation. If we in Alabama can be of assistance as this matter receives further consideration, please let me know.

With best personal regards, I am

Most sincerely,


JERE BEASLEY

JB:cw

Karen: - Copies to Senate Pres. and
House Speaker - L.T.R.
sent 2/7/77 KJW



STATE OF ALABAMA
HOUSE OF REPRESENTATIVES

MONTGOMERY
36104

JOHN W. PEMBERTON
CLERK

To F. B. 202

February 1, 1977

Honorable Lieutenant Governor
Honorable Speaker of the House
The Legislature of the State of Alaska
Juneau, Alaska 99801

Gentlemen:

On February 1, 1977, H. J. R. 5, which was introduced in the House of Representatives by the Speaker Pro Tem, the Honorable Bobby Tom Crowe, was passed without any controversy. The resolution was passed by the Senate with no descension and subsequently signed by the Governor of the State of Alabama. When the Governor signed the resolution, the office of the Secretary of State had closed for the day and as a result there was no act number given to the H. J. R. The office of the Secretary of State will be open at 8:00 a.m. on Wednesday, February 2, 1977 at which time H. J. R. 5 will be given an act of number 1 of the 1977 legislature.

The legislature is very much concerned about the events occurring in the State of Alabama and are very hopeful that the resolution passed by them will be of some assistance whereby the Legislature of the great State of Alaska will help us in the problem that confronts us with regards to a shortage of natural gas.

RECEIVED

FEB 7

Montgomery, Ala.

JWP/csf

RECEIVED

FEB

Montgomery, Ala.

Very truly yours,

John W. Pemberton

RECEIVED

FEB 7 1977

Montgomery, Alabama

AGO 560355

House of Representatives



MONTGOMERY, ALABAMA

Resolution

H.J.R. 5

By Mr. Crowe

WHEREAS, the lower 48 United States are experiencing a dire need for natural gas, the impact of which is causing serious economic and citizen hardships; and

WHEREAS, the vast discovery of natural gas in the Prudhoe Bay Field on the North Slope of Alaska will offer a new supply source that could improve the requirements of our residential, commercial and industrial sectors; and

WHEREAS, Southern Natural Gas Company, the major supplier of natural gas to the State of Alabama, has negotiated a contract with the State of Alaska for the purchase of a significant quantity of the royalty natural gas from Alaska; and

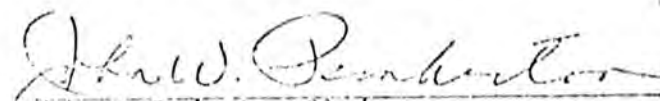
WHEREAS, under the terms of the contract between Southern Natural Gas Company and the State of Alaska, approximately 650 billion cubic feet of natural gas would be delivered to our area of the country over a period of twenty years; and

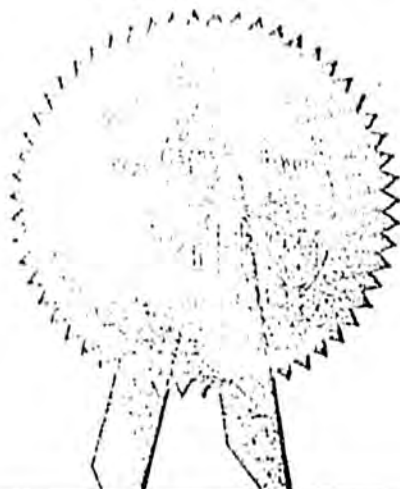
WHEREAS, this contract must be approved by the Legislature of the State of Alaska; now therefore

BE IT RESOLVED BY THE LEGISLATURE OF ALABAMA, BOTH HOUSES THEREOF CONCURRING, That the State of Alabama urges the Legislature of our sister state, the State of Alaska, to lend its approval to this contract and to take the necessary steps to the end that the contract will be ratified and the natural gas can be expeditiously transported for use by our citizens and industries.

BE IT FURTHER RESOLVED, That copies of this resolution be forwarded by the Clerk of the House to the Governor and Lieutenant Governor of the State of Alaska, to the Congressional Delegation from the State of Alaska and to the Congressional Delegation from the State of Alabama.

I hereby certify that the above resolution was adopted by the Legislature of Alabama on this the 1st day of February, 1977.


John W. Pemberton, Clerk



TELEGRAM

BOA ALASKA COMMUNICATIONS, INC.

PHONE: 586-6440

JUNEAU, ALASKA 99801

Anch.
Exhibit #37

02015 ANCHORAGE ALASKA 45 02-29 1107A AST

PMS SENATOR JOHN RADER

JUN 534

PLEASE MAKE THE FOLLOWING PART OF THE RECORD.

ANCHORAGE ASSEMBLY BY UNANIMOUS VOTE URGES FAVORABLE

CONSIDERATION OF HCR 11, 12, 13 (SCR 3, 4, 5)

APPROVING SALE OF ALASKA SURPLUS ROYALTY GAS TO TENECO

ALASKA, INC. SOUTHERN NATURAL GAS CO. AND EL PASO NATURAL
GAS CO.

DAVE ROSE CHAIRMAN

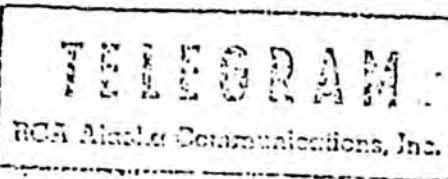
1977 FEB 9 PM 1 53



AGO 560357

exhibit 27

JAN 77 2:59



#

02048 TDA VALDEZ ALASKA 20 01-24 150P AST

PMS OMAR 278-9615

BOX-516

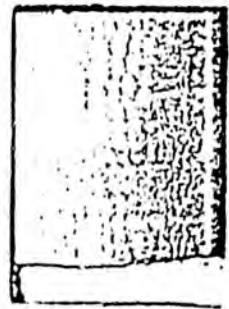
2119

630 W. 4th St 200

ANCH 995-1001

(THE CITY OF VALDEZ) URGES PROMPT APPROVAL OF THE ROYALTY
GAS CONTRACT TO ASSURE SUCCESS OF THE TRANSALASKA GAS
PIPELINE.

LYNN CHRYSTAL MAYOR OF VALDEZ



CITY OF CORDOVA

Phone: (907) 424-3237
or 424-3238

Box 1210

Reply to:

CORDOVA, ALASKA 99574

"The Friendly City"

February 10, 1977

Senator John Rader
Pouch V
Juneau, Alaska

Dear Senator Rader:

With the F.P.C. deadline for its recommendation on the Gas Pipeline set for May 1977, it is important for Alaska to speak with a unified voice for an all-American route.

Your timely approval of the proposed gas royalty contracts, after due consideration, will enhance this effort by allying us with influential parties Outside.

We urge your approval.

Sincerely,

Axel Bud Janson
Axel (Bud) Janson
Vice-Mayor

scomm

#15:2a

House
Committee
Minutes
1/27/77

HOUSE SPECIAL COMMITTEE
ON THE
SALE OF ROYALTY GAS

Committee Meeting - 1/27/77

HOUSE SPECIAL COMMITTEE
ON THE SALE OF ROYALTY GAS

REPRESENTATIVE CLARK GRUENING:

We will come to order. This is going to be rather informal. This is the first meeting of the House Special Committee to Consider the Sale of Royalty Gas. We have with us tonight Commissioner Guy Martin, who, I think, has been following us longer than anybody, in this room anyway. He is eminently involved in negotiations and what it is to sell this natural resource. With him is Easy Gilbreth who is now head of a new division called the Division of Minerals and Energy Management. And he still has his fingers in the Division of Oil and Gas and knows a lot about the technical aspects of extracting gas and moving it. We also have Fred Boness who is with the Attorney General's office and, as I understand it, is the resident legal expert on the sale of royalty gas and oil.

I think the committee will have some questions, particularly of you first, but we have just received... First let me preface this, that we have lost one of our experts in the House, Willard Bowman, who initially started the interest of the Legislature in this area with his proposal bill which became law. That created the joint gas pipeline committee. With the exception of myself, I don't think any of these committee members have served on that committee although I think they have followed the issue, so tonight I want to cover some of the basics so that we're, maybe, better prepared for the hearings that start on the 31st.

The resolutions just arrived from the Governor and he mentions in them that he wants prompt action on them and that they were introduced on the House side later to expedite the action. Can you tell us, Commissioner Martin, what in particular would require us to speed it up? Is there anything we should know in terms of time limitations and such? It may be our first consideration.

MARTIN: Well, first, Mr. Chairman, I'd say, first of all, I think we've tried to make it clear, when asking for prompt action, that we don't want that in any way to suggest that you ought to act any more quickly than you think you ought to responsibly, pursuant to your responsibilities under the Statute. So we put the matter before the legislature very early in the session. I think either the first or second day, all the materials were delivered and, hopefully, a lot of it was in your hands by various means before the session started. I don't think we mean to at all, pressure the legislature to act more quickly than they think they have to look at these things closely.

In terms of the need to act on them as quickly as reasonably possible in that constraint. I think it is a series of factors. Let me just put it very bluntly -- the train is leaving the station on the decision on the gasline in Washington. And the timing of the Federal decision is underway now. Now whether that decision is made for practical purposes, in June or July, or September, or at the end of this year, is something that, quite frankly, I don't know. But there is going to be a critical time when the Federal decision comes together and it's going to be a combination of factors that has to do with the ability of the Canadians to really show us whether they have any capability at all, or any willingness to agree to a pipeline through their country. And it is going to have to do with the agency reports, the FPC report followed by the Federal agency reports, and then by the emerging position of the Carter Administration. I don't think we really know when that will be. But we know, now, with some certainty, it will be during 1977. My own view -- I think I can say that I have some acquaintance with what is going on in Washington -- is that it will be earlier, rather than later in 1977 that most of the key decisions are at least forming in a way that will limit Alaska's alternatives.

My major concern is this: That these contracts -- and we can argue endlessly whether they come in response to legislative initiatives last year, public initiatives, or whether they are an immaculate conception of the Administration, which the legislature has just discovered for the first time. But the point is that these things are here, really I think, as a function of the cumulative desire to see this alternative developed. And that's what we've done. So long as it's proposed, and before the legislature, but undecided upon one way or the other, Alaska is in a kind of a limbo with regard to the Federal decision. Our position is clear. We have a strong position of advocacy in favor of the Trans-Alaska route in Washington at the FPC. And the Administration is going to advocate that route so long as our analysis holds up and there is no contrary assertion by the legislature or the Alaska public.

But these contracts are looked upon as something as a watershed, I think, for the pipeline decision. If they are pending for a long period of time, to some extent, I think that immobilization, the perception of Alaska's position back East, they are waiting to see how we are going to decide. So I think our preference is the Administration -- is to get a decision on it. Is this alternative something we want to do -- get going on it. Assert ourselves in the fight. Essentially bring on

board a full measure of the support of these buyers and their constituencies in the United States. Is it something we don't want to do because the contracts are a bad idea. Because the terms of the contracts are offensive or there is something in the policy that we don't want to do, or don't really want to do them because we now have changed our minds and want to support another route. Any of those decisions, in my view, would be preferable to a lengthy period of indecision while the proposal was before us. And so that, I guess, is the summary of our position.

GRUENING: Okay. Maybe I will be more specific. If there is a need to get into more information, to hold further hearings, do you see any -- In other words, the session could go 90 days and at the end of 90 days, is there anything that is crucial, of crucial importance that we, say within 90 days from now as opposed to something that is going to happen after that 90 day period, later this summer. When you say, "they", these contracts are going to have some affect on "they". I'm trying to determine who "they" might be, and are those persons more likely to be affected later in the year or is it something that requires prompt action?

MARTIN: Clark, that judgement, like a great deal have to do with these contracts, I think has to be made by what I call accumulative subjective judgement. My own view is that every day is important. I was, as you know, the State's representative in Washington during the oil line debate, and you simply can't afford to lose very many days if your position is clear during the decision making process. I honestly can't tell you what days will be the critical days. But I can tell you that if our position is to support the Trans-Alaska pipeline, the gasline route, and our decision is that these contracts are a good idea, the best possible situation would be to have decision right now and start immediately. If there is legitimate doubt, and that is borne out by legislative investigation, we should take whatever time it takes to get there. I know what you are looking for. You are looking for guidelines. Is there something that happens in April or March or June that's very important that you're going to be up against. And the answer is -- I don't think you can go by those guidelines. I think you should ask a lot of people that question and get their view. I think you should start with the delegation in Washington. But I will give you my own views -- that I think the decision ought to be made as soon as possible, one way or the other.

GRUENING: Representative Cotten?

COTTEN: Okay. I have a quick question. It came to my mind that we've got kind of an odd situation here. But if it is the legislature's final decision, as it will be, is it going to bind the Administration's decision? Are you going to do whatever we decide is best, as far as legislation?

MARTIN: Sure. The royalty statute really gives the legislature really two options at this point. That is to approve or disapprove the lease contracts. The way the procedure works: they are put together by the administration; they are approved or disapproved by the Royalty Board; and they must be then approved by the legislature before they are valid.

COTTEN: It is a statutory requirement?

MARTIN: Statutory requirement. If they're disapproved, what I would hope is that the legislature speaks with a very clear voice and a unified voice. Not a series of individuals all indicating what their problems are, but a clear, unified voice as to what the problem is. And then the Administration will undoubtedly seek to be responsive to that. If it is approval, of course we will be guided by that. If it is disapproval, and spoken with a clear voice, we'll have to do whatever is possible to accommodate that. If the disapproval is clearly stated and it has to do with an individual term in the contract, we would then have to go back, renegotiate that term, resubmit it to the Royalty Board, and bring it back to the legislature again. And that's simply a statutory imperative in this case. And that's a -- I suppose it could be done expeditiously but it's probably a one month process, depending on what term it is and what the negotiations are. There are some terms that have been suggested for renegotiation that, in my view, simply could not be renegotiated. Others could be but would take time. Others would probably be reasonable.

GRUENING: Representative Chatterton?

CHATTERTON: Thank you, Mr. Chairman. Commissioner, I have just, hurriedly, scanned Public Law 94.586. In trying to help you answer a target date when something must be finalized, and knowing, I guess, by law we cannot lobby the Federal Power Commission -- it's against our statutes -- they've got up until May 1, 1977 before they put it before the President, is that right? And that would be the earliest date that we could start lobbying actions?

MARTIN: Well, that would be a very late date as a matter of fact. Because one of the things that would be most important to influence in that decision would be the Federal agencies

which are preparing the recommendations that go to the President. There is a number of targets that Alaska's going to have to look toward. And Congress is the last of them. The most important early target will be the various agencies that will be making recommendations, the Department of Interior, FEA, Transportation, etc. And quite frankly, because many believe, and I subscribe to this view, that ultimately I doubt if the President will send a recommendation to Congress on this issue, that he doesn't know the answer to. I don't think the President would be in the position of sending a recommendation up there wondering what will happen. So I think that our influence is going to be best utilized at the time that they are making the administrative legislative accommodations.

GRUENING: Commissioner, will there be any holding back by these agencies until the FPC makes a decision?

MARTIN: No. So far as I know we are still very early, just in the first week or so of the new Administration, but my information and my belief is that the agencies are going to go all out to try to deal with this issue. The FPC decision is going to be influential, but let me say that my expectation with regard to that decision is that it will be extremely lengthy, it will be a decision which is filled with a number of conditions and a number of conditional statements, and a number of maybe's, in the sense that it will give a number of conditions that must be met for one not to be satisfactory or another. And the agencies will have guides from the FPC but a lot of clear field for themselves to investigate.

GRUENING: Representative Chatterton?

CHATTERTON: Thank you, Mr. Chairman. Commissioner, Guy, help me here. The reason why I ask this question. Now I am looking for when (quote unquote) your lobbying effort wants to start. Actually, these other agencies of the government can only give testimony to the Federal Power Commission, isn't that correct? They can't...

MARTIN: The Federal Power Commission procedure is effectively over with one exception. The decision on it is going to be rendered probably on the first of next month. And following that there will be a brief period during which briefs will be filed and that will terminate at least the hearing at the Administrative Law Judge's part of the proceeding. How the commission acts, the full commission acts pursuant to that is still an open question. And there are a number of theoris as to what they will do. Whether or not they will engage a whole commission proceeding. Whether or not they will defer to the Judge's decision. Whether or not they simply won't render a

decision at all and will wait the direction pursuant to that. They are all open possibilities. So I just don't think you can emphasize enough -- and you don't have to have a position on the route to say this -- that Alaska ought to be in the game, pretty fully armed on one side or the other at the earliest possible time. And if what you are looking for from me is some way to tell you how much latitude you have in terms of time, the answer is it would be better if it were done today. I'm saying that the legislature ought to take the full amount of time it needs to responsibly deal with the issue. But you can't carve out a period time and say, "this is a safe time to deal with it." We ought to be going now.

GRUENING: Any questions on timing? Just one on the FPC role. Commissioner, do you think the State is losing any flexibility by not waiting to see what the decision from the FPC is. Or is that decision so insignificant in the total process that it really doesn't make any difference?

MARTIN: No. The Attorney General, in his transmittal letter of our gasline task force to the Governor, made it very clear and with my concurrence, that there were a series of extremely important facts, or actions, or mileposts, that had to be acknowledged. One of them is going to be the decision of the Administrative Law Judge. Now, that is an important decision. Before the passage of the procedure bill in Congress last session, it would have been a crucial decision. But with the passage of that bill, it has significantly diminished in importance compared to the findings of the agencies and the Presidential finding and the Congressional action.

GRUENING: Could I ask you how the procedural act -- you're referring to the Alaska Natural Gas Transportation Act? How does that lessen the importance?

MARTIN: Basically, under the standard procedure that they use in a situation like this -- the Hearing Judge's opinion would simply refer directly to the Federal Power Commission, the five member commission, and they would then make a decision on it and that would be it. The proceeding would basically be over at that point. Under this circumstance they have done what they did, really, in the oil line situation, and expanded it to make it a full blown national decision involving both the President and Congress, which would not be required by ordinary law. So I would say that the FPC decision and the Hearing Judge's opinion becomes one of many factors, nevertheless an important one, but one of many factors that will influence this, whereas before, it would have been probably the major background factor.

GRUENING: Any questions on that? Will the FPC actually, if this contract is concluded, finally approved before their decision, will they make any certification or approval, or take any note of it? Will they officially take any action to certify or approve or otherwise pass judgement on this contract?

MARTIN: Let me make sure that... Clark, what will happen is that they have two roles under the new bill. First will be, produced the Administrative Law Judge's opinion, next week. Then the FPC will take some action on that, which will be one of many inputs into the national decision process that the President and Congress will make. It will be one of many. Then at the end of the entire process, when the decision has been made by Congress ratifying the President's recommendation, the FPC will come back again at the end and effectively "rubber stamp" the decision by issuing a formal certification. But that will be an administerial act.

GRUENING: Will that administerial act have -- this should maybe be addressed to Fred -- have any legal affect in terms of, say, strengthening our ability to take back gas later, or is that covered in some other aspect?

MARTIN: Yes. I'm not sure we're going to that question, Clark, but our ability to take back would have to be approved beyond any appealable state at the federal level for these contracts to ever be valid. Let me give you a case in point: We could conceivably enter into these contracts and gain the support of the buyers, proceed into the fight, and win the fight, and upon winning the fight for the route that we wanted, achieve the route that we wanted, and if the contracts were not ultimately approved, the take off provision, the ability for the State to take back, if they were not approved and we could not have that take back, the contracts would still be void. So that we could conceivably get it both ways in that situation, although you can tell whether or not that is going to happen. But these contracts will not bind us unless the take back provision is ultimately validated by the Federal approvals.

GRUENING: Commissioner, if the Section 13(b) of the Transportation Act is repealed, as we've heard rumored, would that void the contract?

MARTIN: Not necessarily. Let me talk about that for a second. The best way to look at it, Mr. Chairman, is to go back to the situation that existed before 13(b) was in effect. Under that situation, we would have had to have either gone to the FPC for approval of the take back provision

directly. And this was one of the main reasons, quite frankly, that I was very luke warm about these contracts for a long period of time because I felt that the chances of the FPC approving that take back provision, without a Congressional action, was just extraordinarily slim. So I thought there was something illusory and unrealistic about these contracts. Nevertheless, let's say we had a slim chance of getting them approved by the FPC but they would have had to have been approved there in order for the provision to be valid. Once Section 13(b) was passed, which was something we pursued fairly diligently. It gave a Congressional mandate that such provisions be approved by the FPC. Now, if 13(b) survives we should be in good shape. If 13(b) doesn't survive, we are back where we were before. We still have a slim chance of them being approved but still no risk of loss of the gas if they are not approved because the contracts would fail of their own terms if they are not.

GRUENING: So, if I understand what you are saying then. They are not void, per se, if this is repealed, even before, let's say, approval of a route.

MARTIN: Because we would still be able to pursue the approval of that term that we would have pursued before, and that is direct approval of the FPC, without the Congressional mandate.

GRUENING: But your reading of the contract is that if this should occur then anything less than a clear declaration by the FPC that we had full rights of take back, under the contract, would void the contract.

MARTIN: Yes. That is my reading. And I think you probably ought to follow up that line of inquiry with the buyers as well.

GRUENING: We will. Are there any questions, now that we are just touching on this special provision? I would just like to read into the record the Section 13(b) that we are referring to. It seems remarkable for legislation because it is so clear. It says, "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 sale of royalty gas so provide, to withdraw such gas from 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 rates charged for transportation." It seems to me an unusual provision. Is there any other state in the Union that has anything equivalent to it?

MARTIN: It is unprecedented. Mr. Chairman? May I make just a short comment on that. There is a lot of speculation about whether or not an attempt will be made to overturn that. Let me put myself on the record on that by saying that it is just very unclear whether that will be the case. I don't doubt that an attempt will be made. There is just no doubt in my mind that individual Congressmen have made it clear that they are going to do that. John Dingell of Michigan said, "I'm going to try to get rid of that." I don't want to sell the committee or the legislature on the idea that they should act in fear of that repeal. I do think, however, that when people talk about what we get with this contract in addition to what we think is a good price provision for the gas and whatever support people believe will come as a result of it, we also get probably our best attempt to deal, or to take advantage of that at this time. And I will tell you just very briefly why.

What we are really doing -- and I think this has been misconstrued a great deal -- is we're telling people, by this contract, in the lower 48, how it is, the terms by which our royalty gas might be made available to them. And we are telling them which system for that to be in, and we are telling them what kind of notice they would get if we were going to take it back. We are being reasonably honest with the people, given the fact that we do want to retain the right to take it back. Really, when you are sitting in Cleveland, Ohio, tonight and you don't have any gas or your thermometer is at 62°, or the gas company can't supply you gas, and you hear the State of Alaska wants the right to take all its gas back to make plastic, it is a difficult case to make. But the only way that you can make it reasonably, is to say, "Alaska has aspirations like any other state and we would like to try to fulfill those aspirations with our share of our natural resources." So what we have done is laid out for them the terms on which we want to do that, without simply being arbitrary and saying, "We want it all and we're going to take it all." We've said, "We will sell it and commit it to these companies in these states, but under these terms -- to take it back at a later time on fair notice." And I think that is the essence of that provision that can be attractive to Congress. And I think can serve as a positive argument that Stevens and Gravel and Young can make, that we've made an attempt to tell them how we've taken advantage of this thing.

GRUENING: Representative Parr?

PARR: You are expressing an argument. This is the fact that the contracts are a positive thing. I think that most of us have heard that these contracts are likely to expedite the deal. Those sections are in there -- are supposedly because we need this gas here. I guess in giving it to some other people is that we say that we need the gas in Alaska. We've got an Arctic climate, we have real heating problems and all sorts of things. So we need to have (indiscernible)

MARTIN: I think that... I don't accept your characterization of the motive for why it passed. The thing passed, I think somewhat along the motives that you indicate, but it is really along the motive that Alaska asked for this, that the distance problem is quite extraordinary. In other words, don't make resources leave Alaska because of the tremendous amount they have to travel and the amount to return them if we need them. The people who voted for it trust that Alaska will treat that provision reasonably. But I would think that if I were a Congressman from Ohio and I were looking at that, I would rather have the terms of that withdrawal that Alaska might make, including the one and two years notice provisions that we have. And being out front with that, I would rather have those, preferably to having that provision, 13(b), exist, kind of in a vacuum, not really knowing when it was or how it was that Alaska would exercise that. Under the terms of this contract we at least set some boundaries as to how we would exercise it and we can talk about it to individuals down there. Whereas if we didn't exercise it, it would simply exist and they would have some uncertainty as to how we would ultimately do it, and if we would have a full right to do it anyway.

GRUENING: I kind of share some of Representative Parr's questions in the sense that, aren't we telling them that what we are going to do is take 100% of the gas back if we want to? And there is no other criteria for that event? And the reason we are doing that is because you passed this amendment which allows us to do that. Doesn't that kind of challenge them, directly throw it in their faces?

MARTIN: No. I think the only answer I could make is I'm not sure what they would think if we didn't do this. If we didn't do it we would still have clear right to take the 100% back under the terms of the amendment, and to do it without any notice, one year or two years or anything else. We simply have the right to do it. So what we've done is give definition to a right that we have. And in the other case there is no definition, it simply exists without any definition.

GRUENING: Well, my point is that some Congressmen may feel that that right only exists by virtue of the amendment.

MARTIN: Certainly. I think they are correct if they say that it exists substantially because of that amendment. There is no question about it. I think they would know that one way or the other.

GRUENING: You mentioned that certain Congressmen had announced a desire to seek repeal. On what grounds?

MARTIN: They opposed it to begin with. Most of the ones who now say they will try to repeal it, were Congressmen who opposed it in the...

GRUENING: I mean, what were their grounds for opposing it?

MARTIN: Their grounds for opposing were basically that Alaska had no right to deprive the rest of the nation of this gas, whether or not it was royalty gas or not.

GRUENING: Representative Hayes?

HAYES: Just to follow up on that. If one or more Congressmen pursue that idea of rescinding that particular part of the agreement that we can withdraw our royalty gas, what is the timetable on that? How long would it take. Do you have any idea of that?

MARTIN: To repeal the amendment?

HAYES: Yes.

MARTIN: Well, it could go as quickly as it could go through Congress. There is no timetable established.

HAYES: About?

MARTIN: Oh, I'd say that it would be difficult to do something like that in any less than a month. But it could be done at a more reasonable timetable -- a couple, three months. It would depend on whether or not it was taken on as an individual issue, which is somewhat unlikely, or whether or not it would take it on as a part of the gas debate itself, and only happened at the end of the debate. My guess would be the latter would be most likely.

GRUENING: The Governor has mentioned, I think it was in his speech and correct me if I am wrong, his speech announcing the conclusion in the contracts, that one of the considerations for prompt action was that this repeal might occur. The inference being that if we approve these contracts before

repeal we would somehow be in a better position. Maybe this goes to Fred Boness as an attorney, but I'm questioning -- as a legal matter, is that true? Is there any doctrine or any precedent for being in a better position if they repeal it? After we have concluded these contracts?

MARTIN: Fred should answer that detailed part, but just let me say that just as a policy matter, that the Governor did not mean to infer that we got absolute protection by acting early. He was really speaking of the answer that I just gave you. And that is that we think that we take the best advantage of the existence of that amendment by acting on it _____. Really, with the thought that if it is challenged successfully, it's lost and we have missed the opportunity to do that. So that shows the thrust of that remark. Let me ask Fred to answer the legal aspect of it.

BONESS: No. I do not believe that it is a legal matter. The contracts passed while the statute existed -- we'd have some sort of grandfather rights if the statute were repealed.

GRUENING: Are there any question on that? Representative Cotten?

COTTEN: Can I have you clarify something? It was a question asked earlier, and now it comes back to mind. You said that some people were of the opinion that... You mentioned the word _____ in regard to the contract and the repeal and our ability to take back even if it is repealed. You said there was still a possibility. If 13(b) is repealed, you seemed to indicate that there was still a chance that we could take the gas back.

MARTIN: If 13(b) is in place, we stand an excellent chance of getting the contracts approved for the take back provisions. If 13(b) is repealed, I think it reduces the substantial chance that it will be approved to a slim chance that it will be approved at the FPC.

COTTEN: I don't mean the contracts, I mean the take back provision.

MARTIN: That's what I mean. I mean the take back provision in the contracts.

COTTEN: The FPC would still have the ability to...

MARTIN: If the legislature approved the contracts, and 13(b) were subsequently repealed, we would then attempt to get the same take back provision okayed, but we'd do it through the FPC. And we would do it without the benefit of 13(b).

COTTEN: So the FPC can do it without the statute?

MARTIN: They still could do it. And we think we have, if our argument is reasonable for keeping some of this resource in Alaska, we think it might be the case. If I could, let me elaborate on that a little bit. Let me tell you what might happen in that situation. If we go to the FPC and we say, "We want a total take back pursuant to the terms of this contract," I've always thought the chance that they would approve that are low. So this term may not survive. But putting this contract aside for a second, what is it that we might be able to slide by the FPC? What the most reasonable grounds would probably be is a provision where we maintain some kind of a right to keep resources in Alaska, gas resources in Alaska, for certain priority uses. For instance, we might be able to protect ourselves for the future for things like municipal gas supplies, domestic uses, and so on. But they would draw the line at the point that you're making maybe petrochemicals or something that would be secondary use in the lower 48.

COTTEN: In other words, they might let us keep some of it.

MARTIN: That's right. That would be our...

COTTEN: Where would that take place? At the end of the Congressional decision?

MARTIN: Well, it depends on what happens to 13(b). But it would take place at the end of the Congressional decision.

COTTEN: What happens if the FPC got in there before and had...

MARTIN: It would take place at the end.

COTTEN: So then they would be conducting more than an administrative function, is that _____?

MARTIN: Yes. But if 13(b) were in place, it would probably be administrative, if it weren't, that's right, it would be a very very difficult procedure.

GRUENING: Representative Chatterton?

CHATTERTON: Are we still on the contracts or are we ready to proceed to another question?

GRUENING: I think we will shortly, but I had one question. Representative Meekins?

MEEKINS: Commissioner, in following up what Sam talked about, I don't know the inner workings of these things but it

seems to me the FPC would be a little reluctant to grant us what the Congress, just a month before, repealed. I know they don't take direct orders from them, but it would be a pretty strong move on their part.

GRUENING: I understand that the State has intervened in a case called the Pacific Alaska LNG, and another case that involves the Public Service Commission of North Carolina and Texas, is that right? And is it one of the purposes of the intervention to establish take back rights involved in those contracts?

BONESS: Not in this contract.

GRUENING: No, I understand that. But those contracts involved.

BONESS: That's correct. Pacific Alaska LNG proceeding would involve certifications of the contracts entered into between the producers and purchasers in Southern California. One of the things we wanted to make sure of was that the producers, their purchasers, the FPC and the public in general, is put on notice that the provisions in our lease which allow us take royalty either in kind or in value. As it stands now, the producers are selling (indiscernible).

We wanted to make certain that they were aware of our recent provision in that the FPC and everybody had notice of it and that we might switch back. That no decision, particularly we are concerned by the decision that would be made on the assumption that all of the gas that is committed and then if the State took its royalty in kind, that somehow or other that would seriously affect, say the economics or viability _____. In which case you might then run into serious federal preemption type questions. We felt that if we give them notice at an early date, the chances of preemption issues being raised would be substantially minimal.

GRUENING: Representative Parr?

PARR: Yes, I guess I got lost there. Would you mind going over that in layman's terms. _____ was going to sell 8/8s of the gas they were getting out of the Prudhoe Bay area to somebody else. And we felt it necessary to go (indiscernible)

BONESS: Yes. At the time we intervened, there was a case that had been decided by the FPC and was on appeal to the Circuit Court of Appeals. In that case the FPC had held that reversionary interests, the person who leased the land to the oil companies, the land came back to the oil companies. The lease was back in the 20's. The land

come back to the owner of the land. The FPC said that even though he had not been involved in any of the sales by the oil companies, gas to purchasers in other states, even though he hadn't been involved in any of those sales, when the lease came back to him, his gas was committed to the interstate market. And he said, "Now, wait a minute. I wasn't involved in that. I want my gas. The lease is over, it is my land, and I want it." The FPC said no. He was committed. We were concerned that the same thing might happen to us if we didn't make known that our lease allowed us to take back our 8/8s and the producers, that is, our leasees, the oil companies that we issued the leases to, who are producing the gas, sold all of the gas, because at this time we were taking in value. The FPC at some later date, would say, "Now, we certified all of that gas to move in the interstate market and we are not going to let the producer comply with this lease. We are not going to let him comply with your notice."

PARR: Isn't it against the law to sell something that doesn't belong to you?

MARTIN: The confusion here is -- that may be right -- but under oil and gas leases the producers, the people who you sell your leases to, under ordinary circumstances, take the royalty 1/8 in addition to their 7/8, and sell it all and simply give you the money back. So what we are dealing with here is a circumstance where, if they do that (cough) under whatever circumstances, and then we decide that we don't want them to sell our 1/8 anymore, but we take it back and use it some other way, that we were afraid that these cases colored our right to do that. So what we are doing is intervening in every case where what we think our rights might be are colored and attempting to make our point.

GRUENING: The situation then would really describe the problem that the State would have without a Congressional take back authorization without FPC approval. In other words, we could have 8/8s of our gas if we hadn't used it in the beginning when the lease was used, chances are we would lose that 1/8. Isn't that the purpose of your intervention? Is to prevent that situation from happening?

MARTIN: Our purpose is to prevent other cases from coloring that decision. There doesn't appear to be a decision that's exactly on point, but we are intervening in all the cases that would appear to create prejudice against what we might want to do.

BONESS: Right. Our purpose for intervening in Pacific Alaska was to protect the gas that was there, involved, that was Cook Inlet gas, leases that are issued for Cook Inlet. Our purpose for intervening in the Public Service Commission of North Carolina was because that was a case which was not identical but quite similar to the situation which could exist either in Cook Inlet or which does exist on the North Slope. There, Texas is attempting to, under one of its leases, to take some gas, in kind, which in the past it had been receiving royalty payments for, and sell that to the Public Service Commission of North Carolina and transport it by contract over the pipeline that connects Texas with North Carolina. Texas is arguing that it is a state and not subject to the natural gas act. We intervened in that case because that argument will be relevant to the State of Alaska in arguing that our sale of gas is not subject to the Federal Power Commission's jurisdiction. The problem with the take back provision, and the reason why we need Section 13(b) does not come about as a result of the FPC potential power to regulate the sale of the State. Rather, it comes about by virtue of its power to regulate the pipeline, the transportation service in which the pipeline engages in. The Federal Power Commission could and has in other cases, said, "We are not going to allow you to transport that gas because we don't like what the person who wants to transport it is going to do with it." That is the reason for Section 13(b) and the take back provisions in the contracts.

GRUENING: Well, is there any practical difference -- unless you can take it out any other way than the pipeline?

BONESS: There is no practical difference. The importance of the difference is in sort of the chances of winning the case. One, I think, with respect to beating the FPC at their ability to regulate the pipeline, the chances are much weaker.

GRUENING: What I think I was aiming for, Mr. Boness, was if you get a favorable decision in the Pacific Alaska Case, will that give us some precedent in terms of Prudhoe Bay contracts. In other words, do you recall Russ Moody's advice -- earlier advice to the legislature -- prior to any amendment being passed by Congress, his suggestion, if I understand it correctly, if you have knowledge of that, is that we should sell in interstate commerce in order to get an approval of the sale by the FPC in order to establish a take back right. In other words, sell some portion of it. Is this more or less what you hope to arrive at in a favorable decision in the Pacific LNG case?

BONESS: Clark, let me say, harkening back to last year's discussion with Russ Moody. You are right. I think the answer to your question is yes. That that is what you would hope to accomplish. At that time I think we expressed the same reservations we are expressing now. And that is, he made it clear that that does not buy you protection. He made it clear, on the other hand, that that was probably the best course that he thought you could take to attempt to do that. So that what we think we've done with the royalty contracts is to combine that idea with the idea of gaining whatever additional support for the route we want, plus gaining utilization of 13(b) at an appropriate time. So we are really proceeding sort of on all three theorys. But to be perfectly honest with you, we've always had reservations about the ability of the theory that Mr. Moody advanced to help us a great deal. In other words, it is the weakest link in the things that we get. But sort of about fourth down the list. Yes. We're taking advantage of that and think that it is something worth pursuing.

GRUENING: Could we accomplish that Moody theory or the Moody -- or let's say the approval theory -- just as well with the cases that you're intervening in, by doing it in a direct sale as proposed before, in terms of the Prudhoe Bay sale. And take out of that the amendment. Do you understand the question?

BONESS: Would we benefit by simply having one of those cases win and not need to do anything ourselves?

GRUENING: Yes. I mean, do you see any added benefit, assuming there were no 13(b), of trying to make a sale?

BONESS: I understand what you are asking, Clark. I think, first of all, none of those cases are related to 13(b). None of those cases, even though they are influential, are on point with our situation. I guess our statement would be -- we really don't think we can afford to lose any of those, very many of them. But we don't think that we are the direct beneficiary of any of them winning. We would not gain certainty from victory in any of those cases. But we would gain certainly from getting our contract approved.

GRUENING: Even without 13(b)? The question is...

BONESS: If our contract were approved all the way through the FPC...

GRUENING: I guess what I'm saying is, would you recommend a gas sale of this magnitude... (end of tape)

...matter of just establishing our right to take it back.

BONESS: I wouldn't recommend it only for that purpose. I would recommend it if you could make a sale of that type that had other advantages for the state. But I didn't recommend it last year and I wouldn't recommend it now, necessarily, only for that purpose.

MARTIN: Fred makes a point that I think sort of brings out what I just said would be one of the problems. Again you go back to the fact that what the FPC regulates is the transportation. So that if you made a big sale like this based on the Moody theory which we didn't agree with, particularly, last year, every transportation arrangement that grows out of that contract would have to be approved. It may not be that everyone of them would be decided uniformly, so that you'd just have to, I guess, face the fact that you are swimming in fairly uncertain waters on a great deal of this. But I would not necessarily recommend, in fact I wouldn't recommend, a sale of this magnitude only for that purpose.

GRUENING: Representative Chatterton?

CHATTERTON: Mr. Chairman, I will make a statement, and somebody around here tell me if I am halfway right. By virtue of the State of Alaska entering into these contracts here, we have them, and they are all signed and everything is happy, we are a year from today, these contracts are in force -- we have then taken our 1/8 gas in kind -- we have opted to do that instead of taking it in value, therefore, I see no similarity between our situation a year from today, these having been signed, and the North Carolina case. Is that a factual statement?

MARTIN: The North Carolina case deals with a question of whether Texas as a state, the owner of royalty gas, must get approval of the FPC to make the sale. The Federal Power Commission -- everytime the owner of gas wishes to sell that gas in interstate commerce resale -- in other words, if he is selling to interstate pipelines, he is going to sell it to somebody else at the other end who in turn is going to sell it to somebody else, and that is the way the whole business operates. The pipeline sells to a distribution company that sells to people who consume it. So everytime you make a sale like that you have to go to the Federal Power Commission to get approval of that sale. The way the definitions are set up in the natural gas act, it appears states do not have to do that. They can sell gas without getting Federal Power Commission approval. That is what the issue is in the Texas case. If Texas wins, there will be no question but that this contract for sale, this contract does not have

to be approved insofar as the State making the sale of the gas concerned. If we lose that, this contract must be approved. If Texas loses that and we are unable to distinguish ourselves from Texas, and there are some grounds for doing so, if Texas loses and we end up in the same bag, then this contract will have to be submitted to the Federal Power Commission for approval.

PARR: Mr. Chairman. I'm just a poor old dumb country boy and I have to take this a little slow. Alright, we are contracting to -- if I hear what you just told me -- we are in the process to sign a contract to sell 1/8 of the natural gas existing in the Prudhoe Bay oil pool. There is no contract that I know of for the sale of the remaining 7/8s. Your concern is, if I am hearing you right, that if we lose this North Carlina case, why it's going to be a matter of -- the 1/8 tail does not wag the 7/8s of the dog. Is that it, as far as the FPC is concerned?

MARTIN: Okay. When you jumped from the 7/8 to the 1/8, I think you may be confusing the Pacific Alaska case...

PARR: I don't even know about it so I can't confuse it.

MARTIN: Okay. Let me come at it this way. What happened in Texas was, Texas leased the land and they discovered gas. The oil company sold all the gas...

PARR: Yes, the landowner chose -- if I can help along here, so I am understanding and we get it across -- the landowner there chose to take his royalty share of gas in value. He already exercised his election with his lease, to take it in value. Now, I can readily see where he gave up his option there, at that point in time. I can readily see that we have elected our option to take in kind before the first cubic inch of gas is moved, is that right?

MARTIN: Okay. But the problem from the point of view of the FPC is that every sale -- it doesn't matter whether you make it on the first day that gas is produced or you wait two or three years and then take your royalty in kind. Every sale in interstate commerce for resale must be approved by the FPC. There is one exception to that which we believe exists. And that is states do not have to have their sales approved. That is what is being argued in Texas, and that is what we are arguing here.

GRUENING: I want to mention one thing that if we have any questions of Commissioner Martin -- I didn't want to keep him here too late, he has another commitment. He was gracious enough to come, even with the conflict. We will get him back again. Charley?

PARR: My question -- I thought I heard Mr. Martin or Mr. Boness say, a while ago, something that may make this whole thing about Texas academic. I believe he said that even if the case that they don't require FPC approval, that state doesn't, that the FPC still controls all the transportation mechanisms. So unless they were keeping it within Texas it wouldn't make much difference anyway. Is that correct? So if it is transferrable to our case, if we are not distinguishable, then even if we got the right that, okay, they don't control our sale but we still couldn't ship it anywhere without FPC approval. We would have to use it all in-state. So it's kind of an academic thing in a way.

MARTIN: That's right. That's the follow up statement to Representative Chatterton's statement.

PARR: Could I ask one more question? The FPC controls all the shipments in interstate commerce. That's where they would have a stranglehold on us even if they couldn't control the sales. And they also control all the shipments that go outside the country without going through another state. Suppose we were to decide to put the stuff in liquefied form and sell it to Japan. Do they have that stranglehold too?

MARTIN: Yes, they do. And there are two reasons for that. One is, that you cannot export gas from the United States without approval of the FPC. And the second is, even though the pipeline would be located all within Alaska, they still control that transportation. So even if we didn't have to get an export certificate, they could prevent you from moving it from Prudhoe Bay to...

PARR: They control intrastate pipeline and they would also export license. Is that what you are saying?

MARTIN: I am concerned by your use of the word "intrastate" pipeline.

PARR: The pipeline began in Alaska, it ends in Alaska, it is intrastate.

MARTIN: But that isn't the way the statute reads. The statute says somebody transporting gas in interstate commerce. So even though the pipeline is all located in Alaska, because the gas ends up in the lower 48, that pipeline was transporting gas.

PARR: I said it went to Japan. So you would cover that by the export license.

MARTIN: If anybody's gas goes to the lower 48, then they get control of the pipeline.

PARR: The point is, unless we used all that gas in the State of Alaska, then the Texas case, even if it is won, doesn't really mean too much to us. We could have the authority if the Texas case is won, we could sell it to anybody we wanted to...

MARTIN: Let me just say this. I don't think you can say that it doesn't mean anything to us. But it doesn't solve all our problems. It would be bad to lose it. It would be better to win it. But it certainly doesn't solve all our problems. There are other hurdles to be cleared even if we won it.

GRUENING: Representative Hayes?

HAYES: Recognizing that Commissioner Martin has to leave, I just want to make the comment that there are some questions that I wanted to ask that are not related to what we are talking about now, so I will defer to a later opportunity.

GRUENING: Well, I intend to go on unless there are more questions in this area, on the FPC.

HAYES: I just wanted to ask one question regarding what we have been discussing so far. Just a little bit of background -- since you were in the last legislature -- apparently there was legislation passed prior to now that essentially directed the Governor to enter into or to pursue selling our royalty gas. Was the thinking behind that legislation essentially what we are talking about right now? To try to preserve the right? What was the motive in asking the Governor to pursue this? To confirm our ability to sell it or were there other motives? I'm getting the feeling so far -- up to this point you get the feeling that the only reason we have a contract before us is because we are trying to preserve the integrity of our right to sell our royalty gas. Is that a true statement? Is that what this was all about before? Is that what we're...

GRUENING: I can't speak for the other 59 members. There was an appropriation of \$50,000 made to the Department of Natural Resources to negotiate a contract. But, no, in my opinion, that appropriation was not made for the sole purpose of entering a contract so we could secure before the FPC a right to take back, no. But I think there were a lot of motives for people voting for it and maybe it is appropriate now if we have questions for Commissioner Martin, to ask him. What was your understanding of what you were supposed to do with that \$50,000?

MARTIN: It's one of those provisions and it's really one of the reasons I reacted very strongly to statements where each individual legislator or administration official attempts to say what the motive was. It was a mix of motives. There is no question in my mind that many of the legislators believed that we should undertake these contracts specifically to support the Trans-Alaska pipeline. Others believed that the Moody theory was a theory worth pursuing. Others I think, believed that we should move forward and simply take our gas in kind and see what we could do with it. I think it was a mix. And what everyone has now is the freedom to deny whatever motive they may have felt or expressed at the time. But I personally think that it is undeniable that there was a very strong direction established to, (1) negotiate, (2) seek support for the gasline, and (3) see what we could do to carry out the Moody theory. The fact that Section 13(b) came along is basically an added plus which we were able to take advantage of possibly by these contracts. I think that misses the point of this whole debate though, actually, and it's one that we tried to avoid very early in the Governor's statement and my own, and simply get on with the business of trying to figure out whether these contracts make any sense to us.

GRUENING: I agree with you there. Representative Meekins?

MEEKINS: Mr. Chairman. I have one question. The language in 13(b), doesn't that -- assuming that everything works right and we prevail, our interests are prevalent in the Texas case -- that's not sufficient because we still have to get authorization for the shipment of gas in interstate commerce. But doesn't this language mandate that they allow us to do that? If we are over that hurdle of the sale and 13(b) is not repealed, then it is sort of sufficient...

MARTIN: That's right. If you assume 13(b) is there forever, then this contract may take advantage of it.

MEEKINS: And the FPC can't say anything about the sale because of Texas or other reasons.

MARTIN: That's right. 13(b) -- we agree with the Chairman. It's about as clear as you can write a provision.

GRUENING: Any other questions? Representative McKinnon?

McKINNON: When we are talking about the repeal of 13(b) -- I just ran across it in my notes -- I am wondering what percentage, assuming the contracts are approved, what portion of these companies reserves will our royalty gas represent? I realize it will be 1/8 of the gas coming out of Prudhoe. But what portion of the reserves of these companies, nation wide, will our gas represent?

MARTIN: I can't give you those figures off the top of my head. We can supply them to the committee.

McKINNON: The point I was thinking about was considering if they do represent a substantial portion of their reserves, how reasonable one and two year notice provisions are going to be seen by Chicago...

MARTIN: I do understand your question. Clearly, you could make the attempt to essentially take advantage of the terms of 13(b) as more reasonable and more reasonable. For instance, the most reasonable way to make it would be to lengthen out the notice provision to a great length, five or six years, and then allow the State take back provisions only for certain specified priority uses omitting heavy industrialization and so on in Alaska. There is no question in my mind that it would make it more attractive.

GRUENING: By reserves, I think you were referring to, Joe, the amount of gas they had committed under sales or commitment to sell.

_____: Mr. Chairman, for clarification. Joe, are you thinking of the companies who owned the 7/8s of the gas?

McKINNON: No.

MARTIN: You are asking, for instance, if Southern Natural Gas buys a quarter of our gas, how does that compare with what they had. Is that half of their gas or more? The answer in broad terms is -- in a company like Southern Natural Gas, it represents a very substantial amount of their reserves, not half by any means but in the case of both Tenneco and El Paso, it represents a much smaller percentage.

Incidentally, I might just say that I don't know if anyone here is familiar with the advance gas contract and procedures but, it was a way that people bought gas during the past few years until it was finally outlawed at the federal level. What it did was, it took to the ultimate extreme, the sort of ripping off of gas companies by the gas owners, by making them pay huge cash sums in advance of the time they got any gas. And in some extreme cases they paid in advance for gas that wasn't even produced yet and they didn't get their money back if they didn't hit gas. That's how bad it got before they struck the contracts down. So compared to some of the arrangements that have been in effect in the United States over the past years, ours is not exactly the level of reasonableness, but it is very reasonable in comparison to some of them.

GRUENING: Is that FPC decision -- I think it was an FPC decision that said no advance payments...

MARTIN: It was a federal court decision which then mandated the FPC to not allow any more advance payments.

GRUENING: Does that have any relation on the State's ability to get, say, bonus payments for gas sales in the future?

MARTIN: It precludes it at the present time.

GRUENING: Absolutely? There's no way...

MARTIN: Not absolutely. But it precludes advance contracts which would be the most likely way to get a...

BONESS: What it actually precludes is a company putting it in the rate base.

GRUENING: I understand that. But does that, as a practical matter, preclude cash bonuses. Generally, you would think if you sell something now, commit it now as opposed to the future, even though you are getting what the price is in the future, that usually, in other commodities, is worth something. But you are saying in the gas business now, that it...

MARTIN: It would be worth something, but it would be unlikely that in the event that they can't pass it through that it would be very substantial. And largely, as a practical matter, it does preclude _____.

GRUENING: Representative Parr?

PARR: Were you talking about the same thing that I've heard discussed in _____.

QUESTION: (Indiscernible)

BONESS: The Court of Appeals sent its act to the FPC to reconsider that. Said that the FPC hadn't looked at certain factors. And then they reconsidered it and decided that it was no longer allowed.

GRUENING: Representative Meekins?

MEEKINS: Commissioner, I don't know if Joe meant this, but from what I got out of what Joe asked you and what you said before -- right now, because of the cold weather and the gas shortages, there's is a lot of talk of -- and I don't think they have done it yet -- but there is a lot of talk of even violating the contracts that are already legally made. And some people have paid premium prices for gas

and their users are being supplied. In other areas the distributors have not paid those prices and therefore do not have gas available. But in order for sort of an equity where everybody has gas, there's sort of a movement to take it away from where it is already contracted to and distribute it to where it is needed. So that is just this situation now, and if we can expect, I think, in years to come, still to be those kinds of problems, I think if you extend that logic out, if they do that, set that precedent -- and then, as you indicated, it is a very tenuous and insecure situation to say, "Well, you are using our gas and we are going to take it back." And regardless of contractual provisions or anything we may think we have legally, I think those might be over-ridden. If we try to take our gas back at some future date when it is already sort of committed or at least needed in a certain area, I think it would be, just as a practical matter, it might not...

MARTIN: I can't resist a really obnoxious pun -- that the climate for what the State wants to do is very bad.

GRUENING: Representative Cotten?

COTTEN: Well, just on that point, I heard on the radio that they are asking the President to declare a national disaster area. So under that, if he does declare it, then they can _____ it I suppose something like that would have to happen before they could ever do it.

MARTIN: I don't think that is the necessary prerequisite but that is the kind of situation we'd have to be in.

GRUENING: Is it possible, Commissioner, that these companies that have these contracts -- the three contracts in question -- as soon as we approve this contract, turn around and sell that gas to another company? There is no prohibition in the contract is there, any of them, to prohibit that, is there?

MARTIN: They are under curtailment which would act as an effective prohibition against that.

GRUENING: I don't understand.

BONESS: Curtailment is where the pipeline company doesn't have enough gas to meet all the contractual obligations that have already occurred. When you hear that gas is being cut off at factories and people are getting laid off, that is the result of curtailment. There is a priority category set up in the FPC which involves a section of four categories.

GRUENING: Well what... Maybe you are getting to that, but my question really is, can't... I mean, the FPC would say they couldn't sell their gas?

BONESS: If your're a pipeline under curtailment then you can't sell gas to a new customer until you've supplied all your old customers. Which means, effectively, that this gas, the amount we are selling, isn't going to allow anybody to come out of curtailment.

GRUENING: You are assuming that these companies all have pipelines under curtailment?

BONESS: They do.

GRUENING: Then there's no way that the FPC would approve -- first of all, it wouldn't have to approve any sale if they want to make one tomorrow, for example?

RESPONSE: (Indiscernible)

GRUENING: Mr. Hayes?

HAYES: Are we going to -- are we just asking him questions from random? I don't see any particular line. Before he leaves I want to ask him a question.

GRUENING: Please, if you have any questions of Commissioner Martin, ask them now. I wanted to get into some of the technical aspects later. I don't want to go too late tonight, but as long as you're... Why don't you ask your questions?

CHATTERTON: I want to stay a little bit on the subject that we're just about to take off on, with a question if I may. That is referring back to (quote-unquote) the front end money and exploration costs, interests cost and _____ going to the rate base, and that having, FPC having seen the _____ before they change their mind. Now there is a case in point on the Arctic Slope. What is the situation... I will put it this way, I'll give you the lead anyway, and you tell me where I have been told wrong. I have been told that there is one -- because it was indirect -- one front end payment, if you like, or a loan I guess is a better term, made by Columbia Gas that still is valid. Is that correct?

RESPONSE: Yes.

CHATTERTON: That means that Columbia Gas now has the right to 52% of 7/8 of that gas, is that right?

BONESS: I can't verify that. That sounds much larger than it is.

CHATTERTON: That is my recollection... (indiscernible)

BONESS: I'd have to check that but that sounds...

CHATTERTON: _____ is still legal, whatever amount it is. It survived all this. I'm through with the question on those points. I've got three more on different subjects.

GRUENING: Okay. We will be shifting here... Senator Hayes?

HAYES: Inasmuch as I think maybe one of the three is going to be what I'm going to ask, I will defer to Chatterton to ask his three questions.

CHATTERTON: I bet it will not be one of the questions. First of all, I have read the contracts, Commissioner Guy, and I think considerable other people have read it, and I am getting a little bit of difference of opinion on this one particular subject, and I would like clarification for it. Let's say that we have gotten all through this mish-mash procedure, the all-Alaska pipeline is approved and these gas sales contracts are approved, and everything else. So let's say it is January 1, 1978 and everything has been taken care of back in Washington -- Do we have any right under this contract to terminate or back out of it? Is there any clause in the contract which permits us from then on til the end of 20 years to back out of it? Let's say we don't want to do business with them. Is there anyway we can do that?

ANSWER: (Indiscernible)

CHATTERTON: The next question that I have, real quickly, is that as I remember, and I couldn't spot it as I ran through here, but there is a little bit of dialogue on whether or not the FPC will include in the rate base the cost of cleaning the gas for transmission. Could you refresh my memory on that. What exposure do we have under that situation, and if there is cost that cannot be passed on because the FPC will not include it in the rate base?

BONESS: If it is a cost which we would not have borne had we taken in value, then our purchasers are obligated to bear that cost, even if the FPC will not allow them to put it in their rate base.

CHATTERTON: Thank you.

MARTIN: Let me just say that this term is one of probably five or six in the contract that were absolutely most hotly negotiated.

CHATTERTON: I'm sure of it. The last question, and I here again apologize, but it sticks in my mind that some while back where Statute 30.05 used to read anyway, that the State to, by law, to sell any hydrocarbons...(indiscernible) Is that still factual?

MARTIN: No sir. The royalty statute specifically provides a procedure by selling by negotiation, and quite frankly, when the legislature appropriated \$50,000 last year to negotiate, we were pretty sure they meant negotiate.

CHATTERTON: Okay. Alright. So we don't have to ever worry about it?

BONESS: Our interpretation of the word "negotiate" was to negotiate.

CHATTERTON: That's all the questions I have.

GRUENING: Do you have any questions? Representative Hayes?

HAYES: We're talking about -- the subject before us is the contract to sell 1/8 of our royalty gas. And going along with that we are talking about what is tied in with that is selection of a gas line route. And the public is generally projecting that such and such a pipeline route is _____. We could be under construction by 1978-80-85, whatever, but sometime in the near future. And the thing that I would like to get clear in my own mind before I can really get into it -- you know, I have to clear that up before I can get to the merits of the contract -- is, has the State determined beyond a reasonable doubt that it is in the State's best interests to sell our royalty gas or allow the other 7/8 to flow south, in consideration of the other resources?

MARTIN: Do you mean as opposed to preventing the flowing somehow?

HAYES: Yes.

MARTIN: I think the answer to that might -- I think later this evening Mr. Gilbreth probably will touch on that -- basically the answer is a combination of things. But our powers to prevent it from flowing are not complete. In fact, maybe saying it the other way, they're limited. The conservation statute, which will certainly be a controlling factor in this situation, it will control possibly and probably over our desire to do other things. It is a fairly definitive statute and it will be a controlling statute. That would certainly enable us to do that, if it is consistent with the purposes of the conservation statute and the way that those statutes have been interpreted by legal cases. Other than that, we effectively, have sold the gas pursuant to the leases

that we held, and the owners of that gas have certain rights with respect to it, including the right to attempt to build a pipeline to move it. And our rights to negate that contract, or say that we don't want it moved now, are limited by that prior commitment that we made. So to some extent, the State's determination is limited and within those constraints, yes, we think that this is the best approach.

HAYES: Well, I have been under the impression, perhaps erroneously, that the State had absolute power to determine when gas would flow, so that if we needed it _____, reinjection in that field or adjacent fields...

MARTIN: There is really a difference, Representative Hayes, between absolute power to determine it and the second statement you made about reinjecting it in the field, which really alludes to the conservation statute. The statutes have been upheld, in jurisdictions, have been upheld for the purpose of achieving the maximum efficient production of a very important resource, oil and gas. And the courts have allowed states to have very important powers over the production of oil and gas where it can be shown that your public objective is to ensure that you don't waste oil and gas. That you produce it in a way that maximizes the amount you produce. But where it simply -- an arbitrary judgement by the State for some other purpose, then the State's powers start being limited fairly drastically and you run into what is called interstate commerce problems. So absolute powers are pretty much intrastate.

HAYES: Well, yes. We probably would not be in a position to determine, absolutely, for a number of years. Is that right?

MARTIN: Well, this is one of the things that Mr. Gilbreth is going to talk about but let me say that the determinations under the conservation statute, which is our greatest extension of power _____, are based now on modeling, computer modeling, and we believe we will make additional decisions based on that, will be based subsequently on the early production history of the field, which will give us a better idea. And it will be adjusted from time to time during the life of the field as appropriate, based on what is happening with the reservoir.

GRUENING: Representative Meekins?

MEEKINS: On the other side of that, perhaps this is better asked of Mr. Gilbreth, but at the same time that in order to maximize the recovery of the reserve by reinjection... _____ want to reinject the gas in order to

maximize efficiency in production, and at the same time, there is some sort of a constraint, some sort of limit as to how long you can reinject, also, is there not?

MARTIN: In some cases there is. I'll let Mr. Gilbreth give more details to this but I think it is a safe conclusion now that in the case of this field we have determined that there is no practical limit to how long you could reinject, so at least the problem is not that there is some time at which you are doing damage to the reservoir by reinjecting.

MEEKINS: In other words, if there is a delay of some sort, is what I am getting at, in the building of a gas pipeline, we're not...

MARTIN: We are not doing that type of damage, at least...

GRUENING: Before Commissioner Martin leaves, I wanted to ask -- on terms of the comparative analysis and the merits of the three routes, would we be safe to assume that the administration is relying on all the information contained in the comparative analysis of November 76, that was prepared -- it was kind of a summary of November 1976 by the Pipeline Task Force.

MARTIN: I think that is right.

GRUENING: So all the information in that document is... In other words, that contains all the information that you relied upon, that there is no outside input...

MARTIN: I'm not sure that -- that is a garden path statement, Clark. I think that's true. Fred?

BONESS: I think that's a summary of all the information. We've relied upon all the evidence that the FPC... The various kinds of assessments, environmental considerations. We ran into 26 boxes of material stored over at the Historical Library.

MARTIN: The decision ultimately made by the Governor and the recommendation of the Task Force was a balance of a lot of factors and I'm not sure how you indicate how each individual made his recommendation or so on. You can regard the summary as the total -- it is certainly not the total background that the Governor had, but it is intended to be a summary of that information and I think it can be relied on for that purpose.

GRUENING: Well, in terms of the finding that the highest net economic benefit to the State was El Paso, is that all the information that you need consider on that issue, that you know of, is contained in that document?

MARTIN: I'm going to defer on the question for this reason, Mr. Chairman. Both Bob LeResche, Director of the Division of Policy and Planning and Av Gross, who is Chairman of the Pipeline Task Force, and Sterling Gallagher are going to be at the hearings on Monday to talk about just that subject. And I'm not certain the answer to that is absolutely yes. Generally speaking, it is yes. That represents the summary of the information we used.

GRUENING: These gentlemen might supplement that?

MARTIN: I'm sure they will be able to tell you if there is something that they would want to add or that they thought was particularly persuasive.

GRUENING: But you don't know of anything beyond that?

MARTIN: No. And there have been assertions of items like, for instance, the tanker subsidy idea, or something. But in the case of that one, for instance, the decision and the analysis was made absent that. In other words, that wasn't figured in the decision and then left out of the summary. It would have been an additional backup and included. It was sort of a hypothetical additional case, that wasn't put in the summary. We thought that -- in other words, we concluded that the summary justified the result even without that thing included.

CHATTERTON: Mr. Chairman, I'd like to help the Commissioner out, for his information. There was an addendum to the November 1976 report. I have it here at hand. I believe it came out quite some time after the decision was made to have the... (indiscernible)

MARTIN: It wasn't taken into consideration at the time, but when I speak of the document, I include that being in it. The Governor made it clear that our work on the thing is ongoing. For instance, we take the letter of transmittal from Attorney General Gross and both the Governor's speech and my statements have made it clear that the way our royalty statute works, you have to make certain decisions are locked in time. One would wonder what would be the political climate in the state if these contracts had not been put before the legislature on the first day and we were taking the line that you're essentially taking -- that we are just not sure, and we just want to keep looking at it for a little while. I suspect that we...

GRUENING: I don't think anyone has taken a position. We have a duty to look at the contracts. The appropriation of \$50,000 did not require us to approve the contracts. It only required negotiations and now that they are here we

look at the results of the negotiations. I don't think anyone on this committee has taken a position.

MARTIN: I'm not saying that. I don't mean to. What I am saying is that the way that the royalty statute works, it requires that at a certain point in time decisions be made and that then they be advanced through the process so that they can arrive on the legislative doorstep for approval. And it would be obviously desirable for us to be able to continue to remain flexible but we felt we had to offer the alternative. So it is a way of really addressing that question. But if additional information comes along, or for instance, additional actions like the Administrative Audit Judge's decision, we are going to consider those things and try to judge our actions pursuant to them.

GRUENING: Representative Parr?

PARR: A very simple question. Is it correct that the 7/8 of the non-royalty gas has not yet been committed? Or has it been committed _____?

MARTIN: There were attempts to commit it through advance sales contracts which were then negated by the decision that we discussed earlier in the evening.

PARR: I thought you said that you couldn't make them pay for it in advance. But you didn't say you couldn't commit it advance?

MARTIN: That was one of the terms of those advance contracts, so the contracts failed by virtue of that term being included.

PARR: It is true that there _____ against crude oil which is transferred (indiscernible)?

MARTIN: (Indiscernible)

PARR: _____ as of now the 7/8, which belongs to the producers, is not committed to any distribution companies like _____ Chemical, Southern and so forth? That is not committed to anybody at this point?

MARTIN: With the exception of the Columbia contract that he...

PARR: _____ ... that is 50... (indiscernible) (several people speaking at once)

MARTIN: Columbia, El Paso, and Tenneco are always among the top five of the gas companies.

GRUENING: Despite the fact that the contracts were negotiated, it still is a statutory requirement, isn't it, or did we find that there is a surplus before the sale is made? Is that correct?

MARTIN: Yes. We attempted to deal with the surplus question. I think we have dealt with it, in the terms of the contract. There are two ways to approach it. It would take a long time to talk about the surplus issue. I won't do that here. One way to do it is to attempt to predict what the surplus would be and then try to match what you sell against what you predict and then see if everyone agrees with your prediction. What we've done is simply provided flat out that we have a right to take back whatever we need. So we have, essentially, a legal surplus. We have a surplus which is protected by the terms of the contract rather than trying to identify it by some quantity.

GRUENING: There are no studies to your knowledge? There are studies?

MARTIN: Yes. We are going to be prepared to advance and have advanced at prior hearings before legislative committees, our work on surplus gas and what it consists of basically is projections of various low, medium and high growth scenarios that indicate what might happen. Because ultimately all surplus is, is whatever you believe will happen in the State, minus whatever we'll produce. And if you believe we will build a petrochemical plant then the surplus is one thing, if you don't, it is another.

GRUENING: Is that a completed study or one to be done?

MARTIN: It is complete. It is completed and it will be ready to be advanced. But it is one that changes constantly, Mr. Chairman, because you learn more about what the reliability of your predictions are. But it is completed and we will be prepared to advance it.

GRUENING: Is it in a form that we could look at?

MARTIN: We will submit it to the committee.

GRUENING: Okay. I think we would all like to look at that. Representative Chatterton?

CHATTERTON: Mr. Chairman, Mr. Commissioner, on the subject of surplus I have this question. First let me read from the transcript of the Royalty Oil and Gas Advisory Board Hearing. It says, "at that time you define surplus" the word surplus, or the Board did, "as the volume of gas available in excess of residential and commercial needs of the state." Now, my question is -- when we speak of surplus in the context of our contract here, is it still by that definition?

MARTIN: I would have to look at the context of the remarks, but I don't I need to to answer your question. In the terms of the contract, if this provision is approved, we have a right to take gas back for any purpose whatever. So the surplus is defined in the broadest conceivable terms. There is only one thing that is not included. And I think I can say this very thoroughly. The only thing that is not an instate use is liquefaction for export. That is the only thing that is not an instate use. So liquefaction even for transporting around the Alaska coast to another community is instate use. Anything else is instate use. So a surplus would only be that which is left over after we call it back.

Let me give you the example I gave Representative Meekins the other day in terms of what you can do with this contract. If everything is locked up, and the trans-Alaska pipelines are approved and every term in this contract is executed and we're in great shape. And that happens in the middle of 1978, and we are expecting that the first gas will flow on the first day of 1982. Using our two year notice provision, we can discover that we have a use -- now we have to have a use, we can't make one up -- but if we have a use that would be available for every cubic foot of our royalty gas on the first day that the pipeline would flow, we simply have to give two years of notice to the buyers and they would never take a cubic foot under this contract. So that the contract enables us to take every single cubic foot back with that notice and they would never take a cubic foot. On the other hand, if we never do develop the instate uses, then they would be buying pretty substantial amounts of gas simply because we don't really need what we sometimes projected.

CHATTERTON: So coming full around why our election to terminate...(end of tape)

MARTIN: ...In this case, what is surplus under this contract is determined purely by the will of the State.

CHATTERTON: And also instate use, is only determined by the will of the State?

MARTIN: By the will of the State. Let me say one quick thing about the one and two year notice provisions. The two year notice provision is the one to focus on because it is the one that gives us the total right to take back everything. We simply rewrite the contract and take it back. The one year notice provision was written because we felt that there might be some circumstances where we'd want to act on a shorter time frame. Most people conclude that one year or two years is adequate lead time for any

large scale project that would come forward. We will try to demonstrate this in the hearings but one year notice periods built on this schedule, this 25%, 50%, 75%, that curve that is drawn by that 25%, 50%, 75% thing each five years, roughly corresponds in a kind of a stair step fashion to what we would call the moderate growth expectation. It makes certain assumptions in regard to what might happen, so what we have done there is just provided a secondary take back term that roughly follows it. But it is the two year term that is really important.

CHATTERTON: Okay. This is vitally important to me Guy, and I'm serious gentlemen, if I could just hold you up for a minute. You can almost make or break me as to how I feel about this contract. So it is important to me, personally. Do I hear you right, that in effect, we only are giving a two year contract that I can give some type of a notice and two years after the giving of that notice, I can stop the flow of gas through that pipeline and convert it to an existing instate use. And you are telling me that I am sole judge of what the instate use is?

MARTIN: Not you, Representative Chatterton. That's is right. The criteria for that must be that the use exists.

CHATTERTON: If I suddenly decide, then, that I want to use that gas to maximize the recovery of black oil from reservoir X, to geographically remove it from Prudhoe Bay, that is an instate use by the definition that you are saying, and I can just quit selling gas?

MARTIN: That's right.

GRUENING: Any more questions of Commissioner Martin? Representative Meekins?

MEEKINS: Commissioner, just on the exact line of questioning, have you not pointed out that even though that's what's in the contract, there are two considerations, one being the possibility of some sort of emergency gas problem, veto of that provision if there was something going on that if we were trying to take back a large portion of our gas...

MARTIN: Yes, I doubt if it is possible. Assuming that this provision is approved and we begin to operate pursuant to it, I doubt if we can get anything that's more reliable.

MEEKINS: I understand that, but I don't understand...

MARTIN: There are imponderable problems. And you can't foreclose the possibility of a simple national emergency.

GRUENING: Representative Parr?

PARR: The term used in the contracts, meeting the intrastate industrial needs of the State of Alaska (indiscernible)

GRUENING: Are there any more questions of Commissioner Martin? I want to thank you for showing up tonight and I think we are going to have a lot more questions of you. This is just touching the surface really.

MARTIN: I appreciate it. Let me say that I think that this kind of format is exactly the way to do it. Looking at two offers, I'm perfectly willing to come in any amount of time it takes to have meetings like this, largely informal, and just do it because these are very serious and important questions. The second thing is that I have determined in talking to a number of legislators that there are a lot of misconceptions, people have firm and vivid beliefs that the contract does something that - we just want to try to show you that it doesn't or that it's different. I've had some very successful conversations with some of the people at this table and others and I'm perfectly willing to spend any amount of personal time just, policy aside, explaining what we think the thing does. Don't hesitate to call me or have other colleagues call me or just come over and talk for a while. Because it has really been useful to do it and we don't want anyone to vote based on an assumption or a...

GRUENING: Representative Parr?

PARR: Mr. Chairman, I appreciate Mr. Martin's willingness to do this, but I want to say one thing that I said to somebody who came in and told me _____. And that is a lot of these questions should be raised and answered on record at a public hearing.

GRUENING: I agree fully.

MARTIN: I would not hesitate to answer the same questions at a public hearing.

GRUENING: Thank you and I'd like to call a short recess and we will carry on with the remaining later.

(BREAK)

GRUENING: We will come to order here. Mr. Gilbreth has offered to give us a real short course in some of the technical aspects of oil and gas, particularly natural gas and maybe that will help us direct questions.

GILBRETH: Mr. Chairman, I'm sure most of these people here are not too familiar with what happens in an oil and gas field and oil and gas reservoirs. I will take just a few minutes and start in on some of the basics and work up on it.

Of course a lot of you have heard that we have a big field of crude oil. It is a large field... (end of tape)

We have other pays at Prudhoe also. The main pay that you all hear about, the big pay, is the one that contains 9+ billion barrels. That occurs around 8,000 or 9,000 feet. Then we have a shallower series of sand stones, Nika Park River Pay. They are characterized by high productive wells. They flow real easily to start with but expected to drop off very rapidly. Those go to the west of the main portion of the Prudhoe Bay field and could extend as far as 20 or 30 miles out to the west.

Lying underneath the main pay vents to the east side, we have the Lisbourn Pool. And the Lisbourn had been tested in many, many wells, but not found to be commercially productive in very many. It covers a large area and if it should ultimately be economic and give up enough oil in commercial form, it could be a sizeable field, but at this stage it doesn't look like it is a sizeable field. So what we are generally talking about is the main Prudhoe reservoir, the big reservoir. And the operators are trying to unitize the reservoir now so that, in effect, the entire reservoir will be operated by two operators on behalf of everybody else. They would operate the whole field so that you would get advantage of the economies of operation, you don't have competitive forces operating and _____. Now the operators have submitted preliminary draft agreements to us and we have gone over them and they have proposed a unit outline of what area this unit is to cover. The outline has not been or the boundary around the unit has not been decided yet. There are some wells that still fall within the confidential status under our two year confidential statute and the operators themselves are not even trading information on these. So we find ourselves in a sort of a touchy position where we can talk to one operator and we can't talk to another operator across the table because they don't want to exchange information.

So we don't know at this stage just exactly what the unit area is going to be around this unit. It will be decided sometime in the next couple, three months probably. But the gas contract had been written so that it will correspond to that area, whatever it finally turns out to be. So we're talking about gas that will fall under the ultimate unit area for the main reservoir only. I wanted to point

that out because in later testimony we will tell you that there are other reserves that are not committed to this contract and these are the reserves in some of the sands up above, reserves in other pays that are out away from the main reservoir.

In the Prudhoe Bay field, of course, we have oil and we have gas on top, and then water on the bottom. Within the oil zone, very near the bottom of the oil zone, there is a big, very heavy, oil accumulation. We loosely refer to it as a tar matt sometimes. And this can be 60 to 80 to 100 feet thick. It is fairly impervious. Now to produce oil out of the well, you have to have energy or pressure to force it into the well bore and up to the surface. And in Prudhoe Bay, because it is buried under several thousand feet of sediments, they have a weight or pressure forcing down on the oil. The reservoirs originally under a certain pressure. And the free gas then, or the gas cap which is free gas, is also under that pressure and this is around 4500 pounds, depending upon where you are in the reservoir. The oil itself, also has gas in solution within. Just like you popped the cap off a Cocoa Cola and it bubbles. The carbon dioxide comes out of solution. And we have gas in solution at Prudhoe the same way. We have free gas, solution gas, and then we have oil. And under that we have a salt water area and this underlies nearly all oil fields. I don't know of one anywhere in the world that doesn't have salt water at the base of it. The water reservoir or aquavoir if you please, as a lot of people call it, extends out over many, many miles and we have mapped it as far away as 65 miles from Prudhoe Bay.

Now to get the energy to force the oil up to the surface we have the pressure from the gas cap, the original pressure in the oil zone, and the water zone is originally under the same pressure. So something has to push fluids to the well bore, and the ease with which the fluid goes through the formation is a technical term we call permeability. And the higher the permeability, the easier it will go over to the producing well. The lower it is or the tighter it is, the greater resistance it is, the less likely you are to get good float. You'll have a horizontal characteristic in your permeability and a vertical characteristic. Obviously, from gravity forces, fluids and pressures can act down, they can also act horizontal. And our characteristics at Prudhoe are such that we have very good vertical permeability characteristics and particularly so on the gas. So that the reservoir simulation work that we have done leads us to believe that the gravity drainage system or the effectiveness to (cough) will be very effective.

And just some ball park figures -- Mr. Chairman, let me point out that any figures I throw out here tonight about recoveries and rates and so forth, are subject to later correction and refinement by Hoyle Hamilton, the Director of the Division of Oil and Gas. He is in Denver now doing simulation work to try to bring our figures up to date based on the latest plan the operators have told us about. Some of our earlier work, I'm sure, will be changed somewhat but not significantly. But we are trying to get a refined position now to try to determine what the production rates in Prudhoe are likely to be. Up until this time, we in the Department have taken a very firm stand in not committing to any production rate because we have not had enough information to tell what would be a good rate. We have had some ballpark figures based on early data but we didn't know what the operators were going to do. Now, along with the unit, the operator is required to submit a plan of operation, what he plans to do in the way of drilling additional wells, and putting in projects or increased oil recovery pools. So the operators have filed information with us, we have gone back and requested more information on a couple of occasions. We have had several meetings. We have had meetings with our engineers, with their engineers, and I will say this, that the operators have very graciously, if you please, given us proprietary data to help us in our analysis. We now have enough information that we can put into the computer and get some sort of a reasonable prediction on what probably will happen with what the operators plan.

Because of these characteristics that I mentioned, the permeability characteristics, the recovery that we anticipate based on what we see right now, without anything, would be probably in the order of 30% to 32% to 33% of the original oil that's in the reservoir. Now to give you an idea as to how this might compare in the Cook Inlet field, some of those which do not have gas caps, do not have water drive, we are looking at recoveries in the order of 14% to 16% to 18%. So without doing anything at Prudhoe Bay, we will have a fairly efficient recovery mechanism. Now this recovery is achieved by the gas pressing down or working on the oil, if you please, furnishing pressure energy there and also by the water furnishing pressure energy on the bottom side in an upward direction. Now with the good vertical communication we have, the gas cap looks like it will do an excellent job. But with the permeability that we have and the tar matt that we have, or the heavy oil zones that we have, there is quite a bit of question about how effective the existing water drive will be and how much the operators are going to have to supplement this water drive. Therein is where most of the discussions are being held now days.

Just some ballpark figures -- if we take the reservoir and produce it just as it is, we'd have in the order of 30%, 32%, 34% recovery. If the operators during the life of the field, would return all the water that is produced back into the reservoir, we could probably increase that by 2%. If the operators put in an efficient secondary recovery program, they might increase the oil recovery from 5% to 7%. So we could get up somewhere from 37% to 39% to 43% ultimate recovery out of the reservoir depending upon how its ultimately produced.

Now our latest runs, they are still analyzing them, and I talked to Mr. Hamilton by phone to see if I could get any advance information, and up to this point the only thing he can tell me is that it doesn't look like, on first analysis of what he got out, that there would be any advantage to requiring gas to be returned to the reservoir indefinitely. There is no increase recovery as a result of this. But there are other variables from there back. So that is all I can tell you about that one thing and then he will have to tell you how some of these variations work.

The water injection program could be small or it could be very large. We anticipate that it would require the injection of a very large volume of water over the life of the field. And the water, in all probability, would have to be obtained from the Arctic Ocean to furnish a volume of this kind. Tests have been run. It looks like the water is compatible with the oil at Prudhoe Bay.

The type of project that would be required would be, as you can imagine, the largest in the world. And it is not a cheap project. I haven't talked to the operators, I don't know what kind of cost they'd be looking at but I would say it would easily exceed a billion dollars. It is a large project. Something that can't be done overnight. Now the scale and direction such a project would take, would depend on how the reservoir performs under actual production operations. And all we can do right now is look at the computer output and it says, well, weighing one factor against another, this looks like it is probably the best way to go right now. But then as we get actual data from the field and feed into the program and start refining it and try to line the two up, we may get slightly different answers. So it is going to take, probably, two to three years of production operations in the field, actual operations, before you can, with any degree of accuracy, define a water injection program for that field. You can have some ideas and you can make estimates, but when you start spending money of that type, you've got to know pretty well what kind of _____. So to get water in the field, we are looking at something

that is going to take a couple of years to figure out what kind of a program we really need. And then it is going to take two or three years to design it, finance it, install it and put it into operation. So from the standpoint of water injection, we're probably looking at something four, five or six years down the road before an effective water injection program can be installed in the field. We are incorporating timing of this type into the computer program, in terms of ultimate oil recovery, to see what the effects are of delaying water injection. What could we do if we started now. And what could we do with large volumes, small volumes, and intermediate volumes, and so forth.

So about the most I could tell you in terms of rates are that the operators are planning to start out, and in the not too distant future, get up the rates in the order of 1.6 million barrels of oil a day. These, with the gas production in the field -- there would be gas available to sell as much as two billion cubic feet a day. Now we don't have a gas line. We don't have a gas line authorized. And we don't have facilities in the field to process the gas to get it in to _____. So it is going to take quite some time and as Commissioner Martin said a while ago, we are looking at least to 1982, we think, before a line could even be constructed to take the gas. So during this interim then, we have a tremendous volume of gas that is going to be produced on a daily basis that something has to be done with.

So the operators have designed an injection plant or program to return this gas to the reservoir during the interim period, until such time as they are permitted to sell gas from the reservoir. Let me reiterate again a point that Commissioner Martin made. Under AS 31, we have a waste prevention statute which says that you can't waste oil or gas in the state, and the Division of Oil and Gas Conservation has authority, under that statute, to regulate the flow of oil or gas or both for conservation purposes to achieve maximum recovery. Nothing in this contract that we know of, and we have been very particular to see that nothing _____, would interfere with that or in any way relinquish any of the State's authority to make that determination. That determination will be made exclusively under AS 31, and regardless of what this contract says, the field will be operated at the MER or most efficient rate of production. Now this contract is set up to sell any gas that is produced and sold. If the Conservation Committee permits them to produce at such rates that they could sell gas, then whatever that rate is, then we are committed that volume. If they could only sell 100 mcf a day, then that's what we sell under this contract. It is only what can be produced under this section at the MER.

GRUENING: If the committee members have any questions that they don't want to slip by, please ask them. You mentioned 1982, as the date the gas pipeline would be completed or started or what?

GILBRETH: No. That is about the earliest that we could expect any deliveries from a gas pipeline. If you go into all the approvals that are necessary, the lead times to order, the contracts that the companies have to go through, the right of ways, the clearing, the studies, and so forth, about the earliest that we can see would be 1982, to have one completed to take gas.

GRUENING: Representative Chatterton?

CHATTERTON: Thank you Mr. Chairman. So we all understand, here is the same thing. If you say that by the earliest that you can see we can start selling gas in 1982, that is based upon how long a construction period? I guess what I am asking is, how long prior to 1982 would a private enterprise have to make an economic determination and put cash on the line to start the procedure for the permits and so forth and so on in the ultimate construction of the line? How far do we back down...?

GILBRETH: I don't know just how the overall timing would fit in on that. Some conversations that I have had would indicate that -- and here Mr. Chairman, you will have to talk to maybe El -- or someone else on that but -- I am led to believe -- if the approval finally comes from the federal government late this next fall or early winter, that they would like that they could do anything would be a little later the following summer. Now, I am assuming that they are going to be able to arrange financing or anything until approval is given. And I don't know what the time is, between that point and the time they actually start construction. You know, from the standpoint of getting financing and so forth. But if you consider some reasonable time in there considering the seasonal effects and logistics and everything else, you will be coming into pretty close to 1982. Any reasonable set of suggestions you make regarding financing and ordering and starting construction and then construction time.

GRUENING: Representative Hayes?

HAYES: I understood you correctly, it is going to take a little while to determine what kind of a commitment can be made for the sale of gas?

GILBRETH: Yes, sir.

HAYES: What I don't understand is -- how can a prospective owner and constructor of a gasline get financing to start construction when he doesn't know until the time he knows what he is going to be able to get? Nobody is going to loan him the money.

GILBRETH: That is true. This is a real problem in the area. What we hope will come out of this, we hope that there will be some clear cut information what will say to us and, of course, we are going to have hearings on this and make a determination but, we are hoping that something can come out that we can say, alright, based on the best information we have -- and I am going to use two billion a day as purely an example, I don't want to write that in concrete -- but let's just say that we hope that our information will show us that if you sell 1.75 to 2.25 billion cubic feet a day, you are not really going much difference in the reservoir, at least within the experimental error or engineering error that we can see in our model, in our data, and our figures. And we will be in a position to say to the operator, if they so request, if they want to produce enough to sell 2 billion a day, say, alright, we will give you a temporary authority to produce for two years, or three years, depending receipt of reservoir data to confirm it. And the first time that we get reservoir data that says that is too high, we are going to have to cut it back. And this is going to make it rough on financing because nobody can guarantee that we are going to let them produce two billion or three billion or four billion cubic feet a day for the 15 or 20 or whatever years that they need to finance the loan.

GRUENINC: Representative Parr? And then Mr. Meekins.

PARR: (Indiscernible) ...Well, what I am leading up to Mr. Chairman, is in the contract _____ maximum use would be committed for, one trillion, 300 billion. Was that... (indiscernible)

GILBRETH: No. It is. What we are committing through all three contracts is 2.6 million. And the one you happen to be looking at is one that -- that company gets 50% of our royalty gas, so they get the maximum of 1.3 billion.

PARR: Okay, that's ... So we are actually committing everything we would reasonably expect to be produced according to (indiscernible)

GILBRETH: No, this is from the 1/8. This is not the...

PARR: I understand that. I'm sorry I _____.

GILBRETH: Okay. But the 2 billion a day is 8/8 of the gas. It is not our 1/8.

PARR: No. It is 250 million of ours.

GILBRETH: Yes. And there is also a time limit on it that's 1.6 trillion over a certain number of years. It is not the whole life of the reservoir.

MEEKINS: I have a question back on the geology. The reason it is important, I understand, is because these questions are yet to be resolved as to what kind of recovery you are going to get and how much gas we are going to need to reinject. As I understand it you have a water drive but you also have gas drive. Say that the horizontal and the vertical permeability is good, so what you are really concerned about is the water drive is really a function then of the _____ of the oil or something like that?

GILBRETH: Yes. The permeability of the reservoir and the _____ of the oil. There are a bunch of factors that go into it, but those are two of them.

MEEKINS: The question is really how much the tar matt going to impede the water drive, right? And if it impedes it a great deal then we have to reinject a lot more water in order...

GILBRETH: Our computer runs lead us to believe that the reservoir is rate sensitive, by that you can vary ultimate recovery depending upon the rate that you take it out. But they do not indicate to us that it is very rate sensitive on gas withdrawals. It is more sensitive to the amount of water to be injected, to determine the maximum efficient rate of production. Here again, Mr. Hamilton will have to give you more detail later, but we think that the rate of gas production is not nearly as critical on the ultimate recovery as the rate of water injection. And that the rate of water injection is what is going to really ultimately determine the rate of production _____. I am talking about the rate of oil production.

Now, I didn't talk about the oil and the gas as it comes out. As our oil and gas comes to the surface, of course the gas comes out of solution with the oil when you release the pressure, you get it on the surface and you have vessels there to release the pressure and the gas is taken off the top and the oil goes on the bottom. The gas that is taken off, it has a lot of other hydrocarbons in it, referred to in many cases as liquids. These gases can go through other types of containers which condensates or liquids are settled out and called condensates. These are generally fairly stable and in most cases will be put right back in with the crude stream right there and go on down and be sold as crude oil. The remaining gas that

comes off after the condensates drop out, still have liquids in them, and they are liquids that you have heard of -- propane, butane, pentane, ethane, hexane -- and the composition will depend on the separation characteristics as you go through each of these steps down the way. Initially, the plans are -- and I didn't tell you that Prudhoe Bay gas has about 10% or 12% carbon dioxide in solution with it, it is there, and it is an impurity, and it can't be burned, it is a pain in the neck. It has to be removed before it gets to your kitchen for fuel. But initially, until a pipeline and other cleaning systems are installed, the plans of the operators are to go through the separation stages, take out the impurities, and anything that is not stable and then just recompress the gases and reinject them right back down into the reservoir. This would include what we call natural gas liquids or ngl. The condensates will be taken off and sold as crude oil during the interim period. And anything that can't be dropped out.

Now, once a pipeline goes in, however, it is a little different story. The condensates will still be taken out, but there will be some additional equipment installed and as of this morning the operators have not designed the equipment and not ordered it and not installed it. It is gas conditioning equipment to take care of the natural gas liquids, or to extract these liquids out of the gas stream. Their intent at this stage is to take out as much as they can that is stable enough to go down the crude line and meet pipeline specs, and then any of the other products that come out during the stabilization and cleaning process, where they take out the carbon dioxide and the water and so forth to make it of pipeline quality. Anything that can't go down the crude stream, at least initially until there is some market for it or some need or some way to use it, will be pumped back into the reservoir. It will go into the reservoir as a liquid and will obviously revaporize. It will go in under high pressure and will be there for ultimate recovery later. But at this stage there is not a plan to take all of those liquids out and try to send them down a third pipeline or try to do something else with them. They are unstable. It is not feasible to put a lot of gas down the oil line and it is not feasible to put too many of these down the gas line. It can be done, and under the right conditions, might well be done. But I just wanted to point this out to you that the plans right now are very indefinite on what to do. Some of the operators propose to have their purchaser extract these products. Some of the others do not.

In the contract before you, provision has been made that the State will reserve the right to take those out wherever _____.

GRUENING: Mr. Parr?

PARR: Mr. Gilbreth, what is a gas cleaning plant? Now is that the first kind of thing you referred to where the condensates drop out or is that where you take out the liquids and the...

GILBRETH: This is where you would take out the liquid that won't fall out under just the ordinary means.

PARR: So you'd take out the liquids, the last one you were talking about?

GILBRETH: Yes.

PARR: I guess they are talking about the plant costing them a billion dollars in 1975 and in four to six years from the time of design and construction. And further than that, they can't even start the design until they know the characteristics of the pipeline. And further that the characteristics of the proposed Arctic, Alcan and El Paso pipelines were different. So that decision has to be made first before they can start designing the gasoline plant which is going to take them four to six years.

GILBRETH: That's right.

PARR: In general, this is a very general question because the circumstances may change it. Are the liquids as valuable as, less valuable than, more valuable than, the gas itself?

GILBRETH: It depends upon what you want?

PARR: You mentioned a lot of names a while ago. Like hexane. I've never even heard hexane. I'm not kidding.

GILBRETH: Your strain of liquids go all the way from aviation gas, automotive gas, butanes and propanes and on down to your oils and asphalts. You have got a whole ray and in some cases you can bury the recovery of them. But, generally, you get your gasolines and your naphthas, and your diesels from the oil. You get your propanes and butanes from your gas.

PARR: The propanes and butanes then are a part of this natural gas liquid that you were talking about?

GILBRETH: Right.

PARR: Okay. Presumably these are valuable because the State retained the right to receive them. If they weren't worth a thing, we wouldn't want that right. I have somebody who is supposed to know something about this subject, which I don't, and who felt this contract was very deficient because it didn't refer to residue gas. If I understood him correctly, residue gas was the gas after the liquids were taken out, and that we should have been in the contract only agreeing to sell residue gas, still the one thousand btu. Only residue gas -- it is important is it not -- why...?

GILBRETH: Okay. Let me go back just a second if I may to our original lease and Fred may have to help me here, but our original lease, we sell the right to an operator to explore for, drill for, produce, sell, and market, oil and gas produced on the property. And as a consideration for that, he gives us a 1/8 royalty when it is produced at the surface and so forth. Now our rights are to take that at the wellhead on our lease. Which can mean the hole coming out of the ground. We are talking about gas sales here that are occurring through many millions and billions of dollars worth of equipment. There is a question -- well if we don't sell our royalty gas, it goes through the separation process and the condensates are knocked out, and it goes ultimately through the conditioning plant and then the tail gas, or the output of that plant is what would be going in to the pipeline, after those liquids are knocked out. Now, there is a long step between the wellhead and wherever that point is going to be. And we don't know at this stage, where it is going to be and the operators don't know. We have written the operators to please tell us and they say, we don't even know yet where the delivery point is going to be. Whether they will deliver it to us back at the wellhead or after it goes through one of these separation facilities. We want it where it is free to us. We don't want to have to pay anything. Now if we get it, ultimately, at the wellhead and we sell it to somebody as tail gas out here, we are going to have to pay for the processing going on through all these plants. So what we did here to insure that we didn't get stuck with some of that, was to say that we're going to reserve the liquids, wherever they are taken out. If they are taken out in the field, if they are taken out at Fairbanks, or if they are taken out at Valdez or if they are taken out in California, the State of Alaska wants to reserve those liquids. And the gas purchaser is going to pay the price of taking those liquids out wherever it is. That is something that we would have gotten had we not taken it in kind. If it is something that we would have had to pay for anyhow, then that is a different story. So what I am saying is, in essence, selling the tail gas, we are not calling it tail gas. We are selling the gas and reserving the right to take the liquids out of it. Am I confusing everybody?

GRUENING: Mr. Chatterton?

CHATTERTON: I am going to try to help him. Very simply, his contract -- we are going _____ energy out of our 1/8. Now I can promise you that. The contract is beautiful from that standpoint. As the liquids drop out, we get 1/8 of all the liquids that drop out, wherever they drop out. We get 1/8 of all the pretty _____ units that pass from the wellhead. And we don't have to pay to get it. The processing is going to be paid for by the summation of these three companies.

GRUENING: Yes. Maybe you can help the question -- get out what you are saying -- but I'm not too sure -- if there is no use that the State has, let's say, at the wellhead for... The likelihood, is it not, that these liquids will go with the gas, wherever the gas happens to go. And if there is some market along the way that the people that are purchasing it will probably try to sell it, which point, if I understand it, we could say we want to claim it in kind at that portion. But don't we have to pay for any costs that are incidental to that?

BONESS: First of all, there are two separate provisions in the contract which I have gotten a lot of questions back that apparently confuse people about what we did reserve. Article 9, Section 9 refers to propanes, butanes, ethanes and things like that.

Gas, as it moves through the pipeline, once it goes through all the cleaning processes and separating processes that Easy has explained, it comes out of that last plant, the cleaning plant and is put into the pipeline, it will still have some propanes, butanes, ethanes, maybe a few higher but not very much beyond that.

GRUENING: Most of it will be left behind?

BONESS: Most of it will have been left behind and will either be reinjected into the reservoir, put into the oil stream...

GILBRETH: But the basic plant we are talking about is going to take out most of this in the field.

GRUENING: The reason this is going to be done is because it is not practical to ship this in the gasline?

GILBRETH: No. There are certain specs in the pipeline -- the requirements of the pipeline itself -- to transport the gas down. You are limited on the type of liquids that you can have in it. Well, you've got dew point measurements to take water and impurities out, to keep it from freezing in the line. And if you don't take these other products out, every low place you go in, in real cold

weather, why the liquids will drop out in low places. They are called the sludging of the fluid in the line and the gas and so forth. So the gas companies require that you put the gas into the line with a certain quality. And the gas conditioning plant that we are talking about that's going to take four or so years to construct, that plant will take out everything that is required to get it to pipeline quality. Most of these liquids that we are talking about will be taken out in that plant and the ones that are not stable enough to go down the oil line, if there is not a market for them, will be pumped back into the reservoir.

GRUENING: And the cost of this cleaning is borne by the people that are buying this gas, is that right?

BONESS: I would like to interject something here. Our lease says that if we take royalty in value, the lease is silent with respect to cleaning and dehydrating the gas, either oil or gas. But it says if we take royalty in kind, we agree to pay actual value or actual cost of cleaning and dehydrating the gas. There is some question as to first of all, whether that term can be in the lease at all. Whether it exceeds statutory authority of the Commissioner in terms of issuing the lease and even if it does, whether therefore it can bind us. There is also a question of what it means by actual cost. These were debated in the oil pricing case in Cook Inlet and that case was settled. We don't have a legal judgement on those. That question with respect to three of the people in the Cook Inlet case is still open. And we may get some litigation. We may get a court decision on what that means or not.

If we incur that cost solely as a result of taking in kind, and would not have incurred it had we taken in value, then our purchasers would pick up that cost. If it turns out that we must pay that cost, even if we take in value, the lease is silent in that matter, then our purchasers are not obliged to pay that cost. And the reason for it is, we didn't want to be in a position where we would have gotten less revenue by virtue of having taken in kind than we would have gotten had we taken in value.

GRUENING: In other words, the uncertainty in the lease is in the contract as well?

BONESS: That is right. There was no way to contract out uncertainly in the lease.

GRUENING: Why is that? Because they wouldn't buy it?

BONESS: They essentially did buy it. They are going to pay the costs if it would have been put upon us.

GRUENING: Well, couldn't you have stated in the contracts that they will pick it up regardless? In other words, we announce by contracting, do we not, that we are taking in kind? In other words, the contract assumes that we are taking all this in kind? Okay, can't we say that whatever costs...

BONESS: We tried that.

GRUENING: But they wouldn't buy it?

BONESS: No.

GRUENING: Okay. So we might have to end up picking up this billion dollar cleaning plant, in other words? Is that correct?

GILBRETH: The actual cost of cleaning and dehydration, if we were ultimately liable for it, we would have to pay 1/8 of that.

BONESS: Yes. The answer is if we are going to end up doing it, we are going to end up doing it whether we take it in kind or in value. The contract doesn't affect whether we have to do it. I might add that nobody believes we have to do it. It is our legal judgement and the legal judgement of other people that have looked at it, that we cannot be held liable for that. But if, indeed, we are, we are going to be whether we take in kind or in value.

GRUENING: Mr. Parr?

PARR: I don't want beat this to death... (indiscernible)

What part of the contract is it that says we get the liquids regardless of where and when they take them out and so forth?

BONESS: Both of those terms in fact say it. 4.4 says it with respect to...

PARR: 4.4 says it but 9.1 doesn't unless I read it wrong. It says the right to process the gas and have the gas processed, is not exactly the same as saying you can get it after (indiscernible)

BONESS: It means that you get the liquids. If you process the gas, once it has been delivered to the pipeline, the only thing you get by processing the gas is the liquids, is the propanes and butanes out of the gas. That is what it means to process the gas.

PARR: (Indiscernible)

BONESS: Yes.

PARR: Mr. Gilbreth never really answered my question exactly a while ago, and I guess I didn't state it clearly. I said somebody who is an employee knows something about this and he said that the contract was wrong because it say residue gas. You didn't answer that (indiscernible)

GILBRETH: I'm sorry. I don't feel that it is important because I think we have covered it in essence in the wording by saying that we have the right to take the liquids out of the gas. And that is all that happens between the time that you initially separate it and it goes to the pipeline, you take the liquids out of it. You can call it -- there would be no problem...

PARR: Residue gas, I assume, is a standard term. What does it mean?

GILBRETH: It means the gas that comes out of the gas conditioning plant. In essence. Residue gas generally is a term that is applied when you put gas into some sort of a treating plant. And it doesn't have to be a conditioning plant like we have. It is just the gas -- the residue after the treatment. It is a fairly well understood term. If you come out to any plant, you can have the residue gas.

QUESTION: (Indiscernible)

GILBRETH: In this case, yes. The gas coming out of the gas conditioning plant, the residue out of that, would be what goes into the pipeline. But the residue out of one of the other plants, the injection plant or something like that might not be the gas that goes down the pipeline.

GRUENING: Mr. Meekins?

MEEKINS: I just have a technical question, as I understand it, the names for these different things are related to the number of hydrogens associated with the carbon atoms. Is that correct? Like hexane would be six hydrogen, right? Which ones are which? Does propane mean one and butane mean two?

GILBRETH: Methane, ethane, butane, propane, penthane, exane, and haptane. Methane and ethane are your two very lightest ones. And then as you go down, they get heavier.

MEEKINS: And all those are gas, right? And then octane would be oil, right?

GILBRETH: No. Not necessarily. I don't know the real character of octane, whether it is oil...

MEEKINS: But as you get heavier then you get into...

GILBRETH: Yes. But your lightest ones are methane and ethane are what you generally run in your stoves in your house...

MEEKINS: So you've taken out the heavier ones like propane
(end of tape)

GILBRETH: ...they are taking out everything, taking out about 96% of the butane and propane. I believe it is 98% of the propanes and 96% of the butanes. And then leaving the methane and ethane. And it will depend on the design of the plant up there, whatever they take out.

GRUENING: Mr. Gilbreth. What percentage -- you say that not all the propanes and butanes will be cleaned out if this thing goes as according to plan -- what percentage will go with the gas and what percentage will be in...

GILBRETH: That is the point I just made. I don't know. It will depend on the design of plant that the operator puts in. They may take...

GRUENING: But your earlier point was that they are trying to take as much out as possible?

GILBRETH: I'm sorry. I might have misled you there. What I was saying is that they will take out as many of the heavy hydrocarbons as they can to go down the crude stream, those that are stable. And they will take out the others that will make it of pipeline quality, whatever that turns out to be. And they may have to take out 95% of all the propanes and heavier or 98% or 91%. I don't know at this stage what the design of the plant will be. But they will be taking out most of the liquids, leaving, basically, ethane and methane, and some small fractions of some liquids.

GRUENING: Now, what determines what is of pipeline quality? It depends upon pipeline design, does it not?

GILBRETH: And the quality of the gas.

GRUENING: Okay. Well, that's fixed someplace. But the pipeline...

GILBRETH: Wait a minute. Gas can be of a different quality, from everywhere, from every field...

GRUENING: But within the Prudhoe field, it is likely to be of the same quality, right?

GILBRETH: Yes.

GRUENING: Okay. The question I want to get at...

BONESS: Mr. Chairman, I think I can answer your question. Each pipeline by tariff says what the gas has to be, sets the pipeline specifications. And they will say you can have so much propane, butane, ethane in the gas. And you cannot have a higher percentage than they tell you. They will determine that by engineering characteristics.

GRUENING: Right. What is the relationship - If you examined the three proposed routes. And what can you tell us about the different characteristics in terms of gas quality that they can take. Is there a substantial difference between those three lines? I only say this...

GILBRETH: I have not examined that myself.

BONESS: I have examined it slightly, but not having Easy's background, cannot tell you very much. But I can tell you that because the El Paso and Arctic Gas pipelines are higher pressure, they are able to carry a higher percentage of propane, butane, ethane, than the Alcan, which operates at a lower pressure and therefore is not able to carry as large an amount. I believe I could supply you with the pipeline specifications that were submitted in the tariff if you are interested.

GRUENING: Yes. The question is, why the difference -- as a result of pressure? Is that...?

BONESS: Easy could explain to you, but it has to do with the dew point. If there is greater pressure the heavy hydrocarbons will not come out to form a liquid as easily as if...

_____: I understand that, but why is there pressure differences between Alcan and those...

BONESS: The Alcan proposal makes use of existing pipeline facilities in Canada, whereas the other two build all their own facilities. So, those in Canada are low pressure and they have to be compatible.

GRUENING: Mr. Chatterton?

CHATTERTON: Mr. Chairman, because this may be important in the lives of some people, I'm not too sure what is important, I would like to have Easy and I caucus but I guess we can't do that. But I have a hunch, if my memory serves me, and so I guess it is a question to Easy -- is that generally liquids will vaporize more easily at lower

pressures than at higher pressures, therefore, a lower pressure line -- and I am asking this as a question, as to whether it is right or wrong -- lower pressure lines will carry more of the heavier hydrocarbons in the gaseous stage than a higher pressure line would.

GILBRETH: As long as you have ample pressure and temperature, but...

CHATTERTON: Constant temperature, yes.

GILBRETH: But under the pressure conditions you can keep more liquids in that phase at the high pressure.

CHATTERTON: In which phase?

GILBRETH: The gaseous phase. As you flash your pressure, the liquids drop out.

GRUENING: In terms of, let's say, the tariff on the pipeline -- is the fact that it has got more liquids in it likely to result in a lower tariff? In other words, having liquids in there, is that an advantage to the pipeline owners?

GILBRETH: No. They want to keep the liquids out.

BONESS: I believe the tariff is set up on a price per mcf, so that wouldn't have any significance.

GRUENING: But don't they charge for taking the liquids through?

BONESS: No. They charge for the space in the line.

GILBRETH: They are interested in transporting mcf of gas. They don't want to transport liquids if they can keep from it.

GRUENING: Unless they own some -- have a chance to sell those liquids at the other end.

GILBRETH: Well, that could be then.

BONESS: Having the liquids in, of course, increases the btu content of the gas. And if the tariff were set up on a btu basis, that might have some effect, but I don't believe the tariffs are set up that way. There is also a minimum btu requirement in the tariff, which I believe is a thousand btu.

GRUENING: Well, in terms of the people who are buying -- or are contracting to buy this gas from us -- wouldn't they prefer to have a situation in which they could have the liquids? At least available for shipment through the line? And they could, in other words, as I understand it

under the contract, unless we chose to take them out at some point, I mean, they have the right. They pay us for it, but they have the right to sell those liquids. Right?

BONESS: Yes. If nobody takes the liquids out of the gas, the liquids will just be burned as part of the gas stream. You will have a higher btu content gas stream. If somebody choses to take the liquids out, and we don't chose... The one way that this is very likely to occur or at least could occur, is all of the different people who own the gas may get together and decide to build a processing plant and take the liquids out. They will share in the cost and share in the percentage of the liquids that come out. We elected not to do that, but if the purchasers of our gas did elect to do that, yes, then they would own the liquids.

GRUENING: Are you aware of any plans on the part of the purchasers to do that?

BONESS: No. There are no purchasers for the other 7/8, with the one exception of Columbia Gas.

GRUENING: Which constitutes over 50% of the 7/8? Right?

GILBRETH: I heard that 50% figure...

(All talking at once)

GRUENING: 37% of the 7/8. What is the percentage?

_____: May I answer for you because I was the one who made the statement. And I find that I did not know there are two participating areas. One is for crude oil and one is for natural gas. So on the basis we are now told that about 37% of 7/8 is committed. (indiscernible)

GRUENING: Well, was it Commissioner Martin's statement that that was his understanding of the amount of gas committed?

_____: I thought that Commissioner Martin said that he was aware that some had been committed but he didn't know what the percent was.

GRUENING: Any questions?

_____: I have a question, Mr. Chairman. (Indiscernible)

GRUENING: Do you have any more questions right along this line?

PARR: You were talking a while ago about, when you were going through and explaining to us _____ about the use of gas and water and so forth, furnish the pressure to get the oil out. If I understand you correctly, they use either gas or the water, obviously they prefer to use water in some cases because they can sell the gas. And they are apparently considering, not just produced water that comes out of the well, but also source water and you said the Arctic Ocean, to be specific.

GILBRETH: Yes, sir.

PARR: I assume that the Department of Environmental Conservation or somebody like that is looking at this to see if this is going to be environmentally feasible so that (indiscernible).

GILBRETH: No, it is not possible to use gas for this. It has to be water or ethane water.

PARR: (Indiscernible)

GILBRETH: No, not for the area that we are talking. I made a mistake when I said there is water in ethane. That's not quite true. But it in all likelihood will be more efficient to use some sort of a liquid mechanism.

PARR: Why is DEC looking at this business of taking that whole Arctic Ocean up there -- that ocean is very very shallow for quite a long ways out. And if they take a large volume of water out, there might be environmental considerations. Is the DEC looking at that now?

GILBRETH: I am not aware of it right now. Right now the studies under way are to see if the water could even be used. And, of course, they are obviously going to have to meet all the environmental criteria and everything else to use the kind of volumes that we are talking about here, we obviously would have to lay a source line to deep water somewhere. They couldn't do it within the island area there except in a few limited places, because of the shallow water depth and it freezes in the winter.

PARR: _____ the amount of gas that is going to be used for reinjection or something, anyway,...

GILBRETH: No. At least our tentative runs show us that recovery due to the water are almost independent of the gas part itself. The gas stands fairly well on its own and you have to put the water in to supplement the energy...

GRUENING: Mr. Hayes?

HAYES: I have a question of a non-technical nature. Maybe this should have been directed to Commissioner Martin. Does or would the FPC allow, it is on your royalty gas, or its selling gas to a purchaser, do they allow unusual restraints against getting a premium, selling the rights? If we had found a willing -- if people had been so inclined -- would it have been possible to get everything -- what we have in this contract is they are going to buy this gas at the best rates and there other considerations which support the all Alaska line. Could we have, also or instead of, got a billion dollars _____? Are these the figures? Are these the only figures around here? Is it a consideration?

GILBRETH: Let me take one shot and then let Fred take one. I know some of the discussions that were had on it. The purchasers pointed out that any payment that they made would not be recoverable through their rate structure and it would have to come out of their own back pockets. And they could pay something, but it would be relatively small because it would come out of their pocket. Fred?

BONESS: To my knowledge, there would be nothing unlawful about that.

HAYES: We do sell oil and gas leases. And we get a premium and that comes out of profits. _____ we could sell... You'd finally have something in your hands... we could have done it if we could have found somebody willing to do it?

GILBRETH: Well, you are talking about two different types of companies, now. You are talking about selling oil and gas leases. Those people are in the drilling exploration and they are not controlled, whereas the purchase is our control on their properties.

GRUENING: As I understand it though, nobody was ever asked to bid on the gas on a cash bonus or premium basis. Is that correct? To your knowledge? Either of you.

BONESS: There were some early discussions. The very early offers. These offers were made actually before the price, or advance payment ruling came down. There were offers to put up front end money. I believe all of those were withdrawn after the advance payment ruling. There was no other bidding...

GRUENING: There have been no... any bids invited?

BONESS: That is what I mean. That's right.

GRUENING: Mr. Meekins?