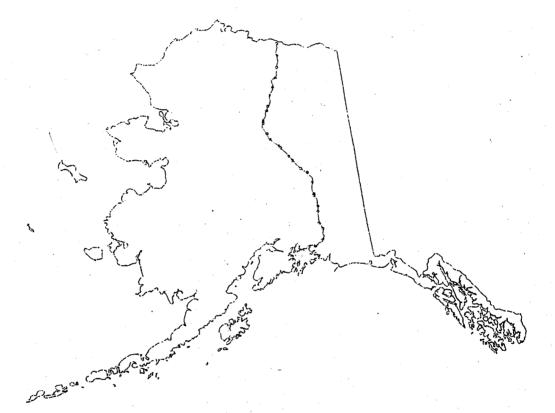
Report to the Legislature:

the North Slope to Valdez Gas Pipeline/LNG Froject



Prepared by the House Joint Resolution 54 Working Group

Representative Ramona Barnes, Chair 761 .L5 A46 1997

Report to the Legislature

The North Slope to Valdez Gas Pipeline/LNG Project

by the House Joint Resolution 54 Working Group

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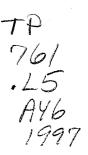
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Prepared by the House Joint Resolution 54 Working Group

Representative Ramona L. Barnes, Chair

Senator Bert Sharp Senator Jim Duncan

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Representative Gene Kubina

January, 1997

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STATE OF ALASKA THE LEGISLATURE

Report of House Joint Resolution 54 Working Group

Representative Ramona Barnes, Chair

It is the policyof the State to encourage the settlement of its land and the development of its resoures by making them available for maximum use consistent with the public interest. Constitution of the State of Alaska, Art. VIII, Section 1

The legislature shall provide for the utilization, development, and conservation of all natural resources belonging to the State, including land and waters, for the maximum benefit of the people. Constitution of the State of Alaska, Art. VIII, Section 2

Pursuant to House Joint Resolution 54, an interim legislative Working Group was formed to track progress and report on the status of a potential Alaskan Liquefied Natural Gas (LNG) project and any proposed legislative actions to the Resources Committees of the Alaska House of Representatives and the Alaska Senate.

The Working Group consisted of Representatives Ramona Barnes (Chair) and Gene Kubina and Senators Jim Duncan and Bert Sharp. Three interim legislative hearings were held by the Working Group on June 24, September 10, and December 18, 1996. A fourth hearing was held on January 22, 1997 shortly after the beginning of the 20th Legislature. The following is an executive summary of the Working Group's findings, recommendations for legislative action, a summary of each of the hearings, hearing minutes and presentation materials.

Executive Summary:

The Resource: The North Slope, including the Prudhoe Bay field contains abundant, known, natural gas resources totaling 26 trillion standard cubic feet (TCF). Additionally, the Point Thomson field contains an estimated 3 to 5 TCF, and there are perhaps 2 to 6 TCF at the Kuparuk, Lisburne, and Endicott fields, considered together. Particularly with respect to Prudhoe Bay, gas coexists and is produced with marketable liquids and, lacking a developed market for said gas, has been returned to the reservoir where it has increased long term liquids production and been stored for future gas sales.

Prudhoe Bay Natural Gas Leaseholders: Of the 26 trillion cubic feet of gas resources at Prudhoe Bay, 30% of the gas is in the oil rim and 70% is in the gas cap. The ownership breakdown is as follows: Arco-32%, Exxon-32%, BP-21%, the State of Alaska-12.5% (royalty), and other owners about 2%.

The LNG Project: The major Prudhoe Bay leaseholders, Yukon Pacific Corporation and others have pursued, at significant cost, a variety of options for future gas sales. Each option in its time, was driven by a perception of a potential market. In recent years, LNG delivered to the Far East countries of Japan, Korea, and Taiwan, has developed into an option of substantial interest. On the positive side, this market has experienced rapid growth which is expected to continue into the future. On the negative side, gas buyers have access to alternative sources of energy such as other LNG projects, other liquid fuels, coal, nuclear, and potentially gas transmission lines. Given substantial competition to supply the Far East LNG market, it is clear that prudent sponsors and investors will require any Alaskan project show economic viability with competitively, not premium priced LNG.

LNG Business Structure/Project Financing: The LNG market is a unique commodity business. There is no global spot market for LNG as there is with oil. Although the lack of a global spot market for LNG is a fact, the natural gas market makes up for this absence through the development of long-term contracts that ensure markets, supply, and a stable price. The development of an LNG project requires substantial dedicated investment for its production. transportation and use. In order for this huge investment to be viable, participants -- gas owners, facility owners, the buyers, host governments, financial institutions and others -- contractually join to form a long-term (20-30 year) business structure to ensure reliable, price competitive gas supply and realize a competitive return on investments. The participants in the LNG structure spread risk over the entire scope of the project so no single element becomes a weak link in the chain. Central to the project structure is the participants' reliance on long-term sales, purchase, transportation, tax and royalty agreements. Considering the interrelated nature of the business structure and the overall project risks, it is unlikely any significant amount of below market financing will be available from the private sector for the capital requirements of an Alaskan LNG project. However, participation by host

government-backed financial institutions of the LNG buyers may be a possibility.

The CS First Boston study provided to the committee concluded that, on the basis of certain technical, market and financial assumptions provided to it by Yukon Pacific Corporation, and assuming that certain project structure preconditions are met, a TAGS project can be financeable. Funding would probably be available from commercial bank lenders and export credit agencies on a limited recourse basis. In other words, lenders would look first to the project's cash flows for debt repayment and would only have recourse to the project sponsors in the event of project failure under certain conditions.

The project might also raise financing directly from the capital markets. The reference case economics in the study project a nominal return on investment of 11.6% and a return on equity of 16.5% based on a 75%/25% debt-to-equity split. Based on the assumptions contained in their report, CS First Boston believes the project could generate significant economic rents and thereby satisfy all stakeholders, including the State of Alaska, the North Slope leaseholders, the LNG buyers, and the TAGS project sponsors.

Most of the comments on the financial report following its publication have concentrated on what is viewed as the aggressive nature of many of the assumptions. There remains considerable uncertainty on the market's willingness to accept floor pricing and in the ability of the project to achieve the necessary cost reductions. The ramp-up schedule for example, is considered extremely aggressive by most LNG industry observers. (The major Prudhoe Bay leaseholders indicate it is unrealistic to expect them and the state to make gas available at no cost.)

LNG Facilities and Project Costs: Existing and considerable additional facilities are required for the development of Alaska's North Slope gas resources for delivery to the Far East markets. In addition to the wells, facilities exist to provide for gathering, separating, dehydration, processing and compression functions. Additional facilities required include a gas conditioning plant on the North Slope to produce pipeline quality gas while removing carbon dioxide; a gas transmission pipeline to tidewater from the conditioning plant; an LNG production plant as well as storage facilities at tidewater; a marine terminal; LNG ocean-going tankers; miscellaneous supporting infrastructure. At the present time, the estimated cost of these additional facilities is about \$15 billion, but with a range of uncertainty about the estimate.

Not included in the estimate are the significant investments required of the purchasers for special LNG receiving terminals, gas transmission and distribution systems and gas-fired electric power plants.

Due to the substantial up-front investments, an Alaskan LNG project will require a fast ramp-up to a minimum production level of about two billion cubic feet per day of gas or 14 million metric tons per year of LNG. This represents a significant share of the anticipated growth in demand in the Far East. It is believed the window of opportunity to market Alaska's gas will exist in 2005 when demand will exceed supply by an amount greater than the 14 million metric tons available from Alaska. It is considered probable if we fail to meet this window of opportunity it will be many years beyond 2005 before we will again be capable of marketing our gas. There are several other gas projects around the world gearing up to enter the market in the 2005 timeframe.

Memorandums of Understanding: The Knowles Administration is nearing finalizing these documents with the major Prudhoe Bay leaseholders. The MOU between the state and Yukon Pacific is nearing the signing phase. The memorandums provide the framework for the interactions between the Administration and these entities as joint work is pursued to advance the project. Topics covered include the fiscal system, cost estimates, marketing, fiscal certainty, the Legislature, Alaska hire, gas availability to Alaskan communities, environmental integrity, federal actions and accomplishments of all the parties to date.

The Permits: The Yukon Pacific Corporation has obtained all the major environmental and operating permits to enable the export of natural gas and the construction of an LNG plant and the natural gas pipeline, generally along the route of the existing oil pipeline from Prudhoe Bay to Valdez. YPC indicates the permits so far obtained are where necessary, flexible, and those permits which expire are renewable. A listing of the major permits obtained by YPC is included at the end of this report.

The permits include a 1988 Presidential Approval that the export of the gas is not prohibited; a project-wide Environmental Impact Statement, obtained in 1988; also in 1988 and based upon the EIS, a Federal Right-of-Way Grant was approved to allow the crossing of federal lands within the oil pipeline corridor; an Ahtna native corporation Right of Way was also granted in 1988, as part of the requirement for the federal right of way under terms of ANILCA; a Conditional Right of Way was granted by the State of Alaska, also in 1988. In addition to the already-obtained permits, YPC estimates that up to 850 additional permits would be necessary to build the pipeline, LNG plant and export LNG. For the most part, the remaining permits are not termed projectstoppers. Rather, they include such permits as food handling for the work crews, various local permits and others.

Alaska Pros and Cons: An Alaskan LNG project would have notable, qualitative positive and negative aspects relative to other potential LNG projects. On the pro side, there are known resources in a secure host country with substantial existing infrastructure. In addition, there is proximity to Pacific Rim Markets, good relations with these markets, gas and infrastructure owners with strong technical and financial resources. On the negative side, there are the cost of a new pipeline across Alaska, a very large volume of gas to place in the market quickly and the changing nature of the state's current fiscal system.

Alaska's Fiscal System: The history of the State of Alaska following the discovery of the Prudhoe Bay field contains numerous examples of changing legislation or interpretations of legislation by state agencies that resulted in unpredicted increases in state taxes on that development. This resulted in costly litigation and negotiation between the state and the leaseholders pertaining to the level of state taxes and royalty, much of which has now been resolved. Some elements within the economy have expressed fear that our past tax and spend habits will affect the taxation of future projects. For example, the state now faces declining oil revenues. A history of appropriations taking precedence over revenues has lead resource-based industries in Alaska to express fear of the development of a perceived need for additional state revenues from existing or committed projects.

Further, under the current statutes, any large project could place additional burdens on the state government for services, potentially driving further revenue-seeking efforts.

Any major new commitment like that required for Alaskan LNG sales would have to be backed by a long-term, stable and appropriate fiscal regime consistent with the long-term agreements established between LNG buyers and sellers.

The State of Alaska has enacted legislation to allow the granting of fiscal relief to attract new industry. A notable example being the Marathon/ Phillips LNG facility at Kenai. Further, other host governments of competing LNG projects have encouraged their projects with stable fiscal terms for the life of the project, fiscal relief, and direct financial participation.

State Benefits: An important benefit of an Alaskan LNG project is the employment of Alaska residents and Alaska businesses in the construction and operation of the project. Additionally, the state's projected \$200 to \$400 million annual revenue from the project is roughly equivalent to a reinstated state income tax.

Another public benefit may be providing access to natural gas for local Alaskan community use. Access for local gas has been expressed as an essential benefit in various resolutions passed by communities along the potential pipeline right of way. In addition, information only recently available suggests the current users of Cook Inlet area gas supplies may require supplemental supplies in about 2005.

State Administration: An examination by the Alaskan State Departments of Revenue and Natural Resources shows an Alaskan LNG project is not economically attractive for investment at this time and under certain assumptions. The departments suggest several requirements for the project to be more attractive for investment: increased certainty about market price and demand; definition of what is likely to be a complex business structure; substantial reduction in and narrowing of uncertainty about facility capital costs; and stable and appropriate fiscal terms from the State of Alaska.

The leaseholders plan is to focus on reflecting market needs in the design and structure of an Alaskan LNG project, continue their already substantial efforts to reduce the range of cost uncertainty, to identify further cost reduction, and develop possible project structure alternatives.

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Legislative Recommendations:

The Legislature can assist a potential LNG project by providing a stable and appropriate fiscal and regulatory environment, giving an Alaskan LNG project the best opportunity to become commercially viable. The Working Group recommends that the Legislature adopt a resolution expressing its support in the fiscal and regulatory area. The resolution should also request that the Governor identify fiscal terms and definitions which would best facilitate the advancement of an Alaskan LNG project and negotiate a contract for execution with the leaseholders of the North Slope gas reserves. The terms of the contract should guarantee the nature, degree and duration of the fiscal terms best facilitating an Alaskan LNG project. The Governor must submit the contract for execution to the Legislature for ratification, along with such enabling legislation as may be required or advisable to authorize the state to formally enter into the contract.

Also, the federal impact on the project is expected to be considerable. Therefore, the Working Group believes the resolution should also request the Administration work closely with the Alaskan Congressional Delegation and the leaseholders to identify appropriate federal initiatives which would best facilitate the advancement of an economically attractive Alaskan LNG project.

July 24, 1996, Meeting: CS First Boston, Yukon Pacific Corporation/CSX

The Working Group met on July 24, to hear a presentation from Yukon Pacific Corporation, CSX Corporation and its banking representative, CS First Boston.

Rep. Ramona Barnes (D-Anchorage) chaired the meeting, and other Working Group members present included Sen. Jim Duncan (D-Juneau) and Sen. Bert Sharp (R-Fairbanks). Other Legislators included House Speaker Gail Phillips and Rep. Mark Hanley (Co-Chairman of the House Finance Committee).,

Mr. Jeff Lowenfels (President and CEO of Yukon Pacific Corporation), Mr. Greg Weber (Treasurer of CSX Corporation), Mr. Fred Smith (Managing Director, CS First Boston), Mr. Steve Greenwald (Managing Director, CS First Boston), Mr. Stephen Sobotka (Consultant to CSX), and Mr. Bohn Crain (Assistant Treasurer, CSX) were present to testify. A copy of prepared materials is attached to this report.

Study Scope

Mr. Weber indicated the study was commissioned by CSX Corporation, parent company of Yukon Pacific Corporation. CSX engaged CS First Boston to do a report on the economics and financeability of the TAGS (Trans-Alaska Gas System) project. Mr. Weber noted that CSX has invested substantial money in the project, but before the project goes forward, it will have to be economic. In order to make this happen, it will take a number of partners in a group effort (YPC, Producers, Banks, entities involved in the transportation system, buyers, and the State of Alaska). This is CSX's only gas project.

Study Conclusions

Mr. Fred Smith stated that CS First Boston (CSFB) was asked to look at the project's financeability and develop a detailed financial plan, using various assumptions provided to CSFB that form the basis for the results. Mr. Smith indicated the study concludes that, on the basis of certain technical, market and financial assumptions, and assuming that certain project structure preconditions are met, a TAGS project can be financeable. He noted that the results of the study are only as good as the assumptions upon which the model is based.

Based upon the assumptions contained in their report, CSFB believes the project could generate significant economic rents and thereby satisfy all stakeholders, including LNG buyers, the North Slope leaseholders, and the State of Alaska, as well as the TAGS project sponsors. Mr. Smith indicated the

reference case economics in the study project a nominal return on investment of 11.6% and a return on equity of 16.5% based on a 75%/25% debt-to-equity split. Mr. Smith added that to attract investments necessary to make project viable, it must be able to achieve at least a 15% return on equity. Potential benefits from tax receipts to the State of Alaska were as much as \$7-\$12 billion over time. This did not include royalty revenue. This income would theoretically come out of the 1.5% additional return on investment over the 15%. The 1.5% would also be required to cover any return to the producers on the gas, since the assumption of the study was that the producers would not be paid for the gas. Rather, they would get their return out of the downstream LNG facilities.

Mr. Smith indicated that it was important that the project move forward. CSFB projected that significant market demand will open in 2005. On a delivered price basis, study conclusions for Alaska were essentially the same as a project in Qatar that is moving ahead (\$3.57 delivered per mmbtu). Mr. Smith reviewed market demand showing a market window. At 2005, low end demand was about 17 million metric tonnes per annum, with a high side demand of 32 million metric tonnes per annum. He stated that if another project comes in with a 15 million metric tonnes per annum project, Alaska would have to wait until 2010 until another 15 million tonnes opens up in the market. There are ample projects to take up this demand. Mr. Smith specifically discussed the Natuna project. In CSFB's opinion, the Natuna project did not have the economics to go forward.

In CSFB's opinion, it will be necessary to have certain contracts with the market for this project to move forward. A key element of the contract must include a floor on LNG prices with a guaranteed escalation. Qatargas got this kind of deal, and in CSFB's opinion, it could be achieved in Alaska if contracts were negotiated quickly. Mr. Smith thought the market may be changing in the future. Therefore, if Alaska waits 8-10 years, this kind of floor may not be achievable.

Technical Market & Financial Assumptions

Mr. Steve Greenwald reviewed the assumptions and preconditions underpinning the conclusions of the study of financeability. They provide a useful insight into the challenges facing the project.

Technical assumptions were provided by Yukon Pacific Corporation, while financial assumptions were provided by CS First Boston. Market assumptions were based on CSFB's reading of the current state of the LNG market. The key assumptions are as follows:

A floor price for delivered LNG of \$3.57 per mmbtu in 1996 escalated at 3% per annum. This assumption is based on what is reported to have been achieved by the Qatargas project with its Japanese buyers.

- A ramp-up profile with sales of 6 million tonnes per annum (mmtpa) in 2005, the first year of deliveries, building to the full plateau volume of 15 mmtpa in 2008.
- A capital cost of \$11.6 billion in 1991\$ which represents a 15% reduction from YPC's previous cost estimate. Including inflation, interest during construction, fees for financing arrangement, etc., the money of the day requirement for financing is given as \$18.4 billion.
- The North Slope gas owners (including the state via its royalty share) provide gas at zero cost.

No impact on liquids production as the result of gas offtake from reservoir.

Thirty year project life.

Debt available to the project over a term of 15 years post construction and at the rate of 8% p.a.

Project Structure Preconditions

Mr. Greenwald also indicated that there were a number of key project structure preconditions to be satisfied for the TAGS project to be financeable. These are considered to be as follows:

- A long-term sales contract at a price high enough to cover debt service obligations.
- Long-term gas supply agreements consistent with the LNG sales contracts.
- Participation by at least one major oil company or a consortium providing similar expertise.

Strong sponsor support including completion guarantees.

Strong and stable project economics.

Strong support from the state and federal governments.

A reliable cost estimate. CS First Boston anticipates that it may cost from \$200-300 million to confirm the design basis and increase confidence in the projected cost savings. This phase of work would occur prior to the main financing and would need to be funded by equity.

Mr. Greenwald stated that it will be absolutely essential to get a better handle on the capital costs of the project. Since this may cost \$200-300 million, he viewed it highly unlikely that anyone would make this kind of expenditure until they know the gas will be available for the project.

Mr. Greenwald said that financing would probably be available from commercial bank lenders and export credit agencies on a limited recourse basis, i.e., lenders would look first to the project's cash flows for debt repayment and would only have recourse to the project sponsors in the event of project failure under certain conditions. The project might also raise financing directly from the capital markets.

In summary, lenders to the project will assume only a limited amount of risk and the project will need to have strong sponsors. The initial hurdle facing the sponsors is the significant equity investment in engineering which may not be remunerated if the project does not materialize. If the project is built, the sponsors will take on risks associated with completion, cost over-runs and variations in the market place.

Financing Plan

CS First Boston estimates that \$13.5 billion of debt and \$4.9 billion of equity would be required to finance the project. They recommend that the project should try to obtain a credit rating of "A" before implementing its finance plan. If a strong rating can be obtained, it will not be necessary for the project to have all its debt financing in place prior to project sanction. Given the size of the project, CSFB recommends that it should draw on international commercial banks, export credit agencies and capital markets to raise the necessary finance.

Representative Hanley asked several questions regarding the study. Mr. Smith indicated that CSFB was hired by CSX. Mr. Smith also stated his belief that a 15% rate of return should be acceptable to the oil companies. In response to a question on oil loss, Mr. Lowenfels stated the producers had said in recent presentations that oil loss is not a problem after 2005.

Senator Sharp asked about FERC regulation. Mr. Lowenfels responded that FERC would only have jurisdiction over interstate sales. Since TAGS was for export or <u>intra</u>-state sales only, they would not have any jurisdiction. APUC would have jurisdiction over intra-state sales.

Representative Barnes stated that DOR indicated that the project participants would have to achieve a delivered price (through cost reductions, etc.) of \$3.50 to make the project economic. Since the CSFB report referred to a delivered price of \$3.57, she asked if she was correct in assuming the project was economic. Mr. Lowenfels responded that Rep. Barnes was correct with one caveat: you must rely on <u>all</u> of the assumptions provided in the report. The state relied on not only our input, but also input from the oil companies. He

said he thought the assumptions are beginning to converge, but Rep. Barnes would need to ask the state.

Mr. Sobotka stated that one of the next steps is to tie down the cost of the project. It is a big, expensive step (\$200-300M). The only way that can be taken is if it is taken by people who will have an interest in the project. The necessary step will only be taken when the gas is available.

In response to Representative Hanley's question on what role the state could play, Mr. Lowenfels stated that the state has to act like a host country. There are a number of roles the state needs to play. He said Alaska's competition was the governments of Indonesia, Qatar and Malaysia, and our state <u>has</u> to act like those governments, or better. The state must (1) act like a responsible host, (2) act as a facilitator, and (3) prepare the population for what is coming.

Representative Barnes concluded the meeting by stating that future hearings would be held to hear from the producers and the state.

September 10, 1996, Meeting: Arco, BP, Exxon

The Working Group met on September 10, 1996, to hear an update from the Alaska North Slope gas owners and Yukon Pacific Corporation.

Rep. Ramona Barnes (D-Anchorage) chaired the meeting, and other Working Group members present included Rep. Gene Kubina (D-Valdez) and Sen. Jim Duncan (D-Juneau). Other Legislators included Rep. Norm Rokeberg (Chairman of the House Oil & Gas Committee), Sen. Loren Leman (Chairman of the Senate Resources Committee), Rep. Scott Ogan (Vice-Chairman of the House Resources Committee), and Rep. Cynthia Toohey (D-Anchorage).

Mr. David Lawrence (Commercial Manager of Natural Gas, Arco Alaska, Inc.), Mr. Mark Bendersky (Commercial Manager, Gas, BP Exploration (Alaska), Inc.), and Mr. Jim Branch (Production Manager, Exxon Company, U.S.A.) testified on behalf of the major leaseholders ("leaseholders"). A copy of prepared materials is attached to this report.

Rep. Barnes indicated the Working Group would continue to push for the gas owners to form a united effort on gas with the permit holder. She also stated that the Working Group would be proposing legislation on gas during the 1997 session.

Mr. Branch covered gas ownership, an overall LNG chain description, and advantages and challenges facing a potential Alaska LNG project. Mr. Bendersky covered forward work plans, including specifics on fiscal issues, project costs, project structure and market issues. All three, including Mr. Lawrence, answered questions from Working Group members.

Of the 26 trillion cubic feet of gas resources at Prudhoe Bay, 30% of the gas is in the oil rim and 70% is in the gas cap. Considering each company's respective ownership of the oil rim and gas cap, the combined ownership breakdown is Arco-32%, Exxon-32%, BP-21%, the State of Alaska-12.5% (royalty), and other owners about 2%.

Mr. Branch said the major components of the LNG Project include the reservoir and existing production facilities, a gas conditioning plant on the North Slope to produce pipeline quality gas while appropriately handling rejected carbon dioxide, a gas transmission pipeline to tidewater from the conditioning plant, an (LNG) production plant and storage facilities at tidewater; a marine terminal, LNG ocean going tankers, and miscellaneous supporting infrastructure. The current estimated cost of these facilities is about \$15 billion, but with a range of uncertainty around this estimate. Not included in this estimate are the substantial investments required of the buyers for LNG receiving terminals, gas transmission and distribution systems, and gas fired electric power plants. Mr. Branch also said an Alaskan LNG project would have notable, qualitative pros and cons relative to other potential LNG projects. On the positive side, there are known resources; a secure host country; existing infrastructure; proximity to Pacific Rim Markets; good relations with these markets and gas and infrastructure owners with strong technical and financial resources. On the negative side, there are the cost of a new pipeline across Alaska; a large volume to place in the market very quickly; and the need for stable and appropriate fiscal terms within the state.

Mr. Bendersky said the leaseholders are focusing their parallel work efforts in four main areas: 1) securing fiscal stability and appropriate fiscal terms, 2) continuing their already substantial efforts to reduce the range of cost uncertainty and to identify further capital cost reductions, 3) evaluating possible project structure alternatives, and 4) reflecting market needs in the design and structure of an Alaskan LNG project.

The LNG market is a unique commodity business. There is no global spot market for LNG as there is with oil and hence development of an LNG project requires substantial dedicated investment for its production, transportation and use. To make this investment viable, participants such as gas owners, facility owners, the buyers, host governments, financial institutions and others contractually join to form a long-term (20-30 years) business structure to ensure reliable, price competitive gas supply and realize a competitive return on investments. The participants in the LNG structure spread risk over the entire scope of the project so that no one chain element becomes a "weak link". Central to the project structure are the participants' reliance on long-term sales, purchase, transportation, tax and royalty agreements. Considering the interrelated nature of the business structure and the overall project risks, it is unlikely that any significant amount of below market financing will be available from the private sector for the capital requirements of an Alaskan LNG project.

LNG projects typically have unique fiscal arrangements with their host governments. Mr. Bendersky said other host governments of competing LNG projects have encouraged their projects with stable fiscal terms for project life, fiscal relief, and direct financial participation. There is precedent in the State of Alaska in enacting legislation allowing the state to enter contracts granting fiscal relief to attract new industry. The Marathon/Phillips Kenai LNG project is a notable example of the State granting fiscal relief to attract new industry.

In this regard, Representative Barnes asked for specific proposals on fiscal incentives. She indicated that one Legislature can not bind another except through a contract, and encouraged the leaseholders to enter into a contractual relationship with the State of Alaska that would be ratified by the Legislature. The leaseholders indicated that they currently had no specifics, but were continuing to work with the state administration, primarily through the

Department of Revenue on exploring ways the state might assist with fiscal certainty, possible fiscal incentives, and possible participation by the state. The state has hired an outside contractor to evaluate fiscal systems of countries with competing LNG grass roots projects in order to have an objective basis for deciding what the state might consider in the fiscal area.

Mr. Bendersky said the leaseholders are currently concentrating their efforts on a southern pipeline route, adjacent to TAPS. While the current estimated cost of the project is approximately \$15 billion, the leaseholders have identified potential cost reductions of \$3 billion. Major risk expenditure by the leaseholders and other potential investors will be required to confirm these potential cost savings. Many of the identified cost savings come through the use of existing North Slope and TAPS infrastructure. An example of this was discussed regarding co-location of LNG facilities at the Valdez Marine Terminal. The leaseholders have already discussed this issue, as well as other technical issues with state and federal agencies. They plan to continue work on the technical and cost reduction issues in parallel with other activities.

The next area of focus for the leaseholders is the LNG project structure. Because the project is so large, it could have many participants such as the state, producers, buyers, trading houses, contractors/suppliers, banks/investors, permit holders, and others. Mr. Bendersky noted that each participant must bring something of value to the project. Various alternatives are currently being evaluated by the leaseholders for ANS gas project structure.

Buyers are the key to determining timing for an LNG project, "ramp-up" time, and how to place a large project like this in the market. The leaseholders have offices in the Far East and have established good relations with the market.

It was felt that to help the project move forward, good progress is necessary in the four areas of concentration : 1) securing fiscal stability and appropriate fiscal terms, 2) continuing their already substantial efforts to reduce the range of cost uncertainty and to identify further capital cost reductions, 3) evaluating possible project structure alternatives , and 4) reflecting market needs.

In addition to presentation materials, the leaseholders addressed several questions from Legislators. These included whether one company could veto or effectively veto major gas sales efforts. Mr. Jim Branch (Exxon) responded that the Prudhoe Bay unit agreement contemplated major gas sales, included provisions for it, and had no barriers to making major gas sales. Other questions were raised regarding ongoing producer disputes, including recent hearings on natural gas liquids production and the use of miscible injectant to increase oil production. In addition, potential uses for Point Thomson gas and producer priorities on other LNG projects were discussed. In response to the question concerning priorities for other projects, each of the companies indicated that they wanted all of their projects to move forward, and they were

working hard to make Alaska gas commercial. Rep. Kubina commented that he felt Alaska was at a disadvantage compared to other countries with competing projects, since other countries had greater authority than Alaska to force the producers to progress a project. Rep. Barnes also raised questions about markets in mainland China and elsewhere. These questions were addressed by Mr. Lawrence.

Mr. Jeff Lowenfels (President and CEO of Yukon Pacific Corporation) and Mr. Wayne Lewis (Vice President) testified for Yukon Pacific Corporation (YPC). Mr. Lowenfels mentioned discussions YPC had with various North Slope gas owners both in Point Thomson and in other areas, some of which included gas prospects which had been "written off." He briefly discussed the CS First Boston Study (see July 24, 1996, summary) and meetings with the state to help them understand the report.

Mr. Lowenfels also covered YPC's air permit applications and potential modifications to the pipeline right of way. YPC has spent \$1 million in connection with the Anderson Bay air permit. State and federal agencies have confirmed that the TAGS right of way can be moved closer to TAPS if it causes less environmental damage. Like Arco, Exxon, and BP, YPC was also working on cost reductions. Mr. Lowenfels also discussed new LNG technology from Air Products and potential application of a Phillips process that could reduce the number of LNG trains necessary at the Anderson Bay facility.

Mr. Lowenfels indicated YPC will continue its extensive meetings with state and federal agencies on the permitting issues. He also indicated YPC would continue to work on cost reductions and work with the state, the Committee, and Arco, Exxon, and BP to progress the project. Mr. Lewis added that YPC would be embarking on its 57th trip to the market in the next few weeks.

Rep. Gene Kubina made comments about Alaska not effectively marketing its gas because it was not singing with a unified voice. Mr. Lowenfels was asked by Rep. Kubina about the Governor's upcoming far east trip. Mr. Lowenfels indicated that YPC would be going on a trip by itself. While they have not been invited as had the leaseholders, to participate in the Governor's business meetings in Japan and Korea, they have been invited to attend the energy seminars and social receptions. He said YPC's presence would have been welcomed by the market, and its absence will be obvious. He said the message that would be received is that Alaska is "dysfunctional" in its marketing efforts.

Mr. Lowenfels also discussed the Clinton Administration's support for the project in response to a question by Rep. Toohey. He discussed meetings between Governor Knowles and President Clinton regarding gas. Mr. Lowenfels indicated not only that the Clinton Administration likes the project, but the President would be talking to the Japanese about it.

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Rep. Kubina raised the issue of shared facilities at Valdez. Mr. Lowenfels discussed the siting regulations for LNG facilities. He discussed screening activities associated with the selection of the Anderson Bay site. He said Anderson Bay was the only site that met the vapor dispersion requirements in their model, though he qualified that he was not privy to oil companies' engineering data which might say facilities could meet the dispersion models. He said he was told by DOT officials during a recent visit that co-location of facilities would not be possible unless the producers could meet performance-based standards for vapor dispersion. Mr. Lowenfels clarified that he was not saying it was not possible to meet these standards, but it looked "extremely dubious" to him.

In response to questions regarding the leaseholders working with Yukon Pacific, Mr. Jim Branch indicated that Exxon was leaving all options open in hopes of developing additional cost reductions. He also mentioned that Exxon had even evaluated its proprietary gas-to-liquids conversion technology for North Slope application. He added that at this time, Exxon could most efficiently work these cost reduction options with Arco and BP since the YPC proposal was focused on a single alternative. Mr. Lawrence responded that the producers were continuing to work on the four areas of concentration. He indicated the producers did not agree that there was a market window that opens and closes. The market continues to expand. The only question is how quickly gas can be placed in the market. Mr. Bendersky agreed with responses from Messrs. Branch and Lawrence. Rep. Kubina stressed that the main reason for the resolution was to get the producers to work together with YPC. If this cannot be done at the senior levels, then it should be done at the staff engineer level.

Rep. Ramona Barnes closed by saying we have one permitted system and because the producers are not working with YPC, the Legislature believes the producers are dragging their feet. She said she would be holding another hearing in the near future, and she would be requesting a briefing from the state. She also indicated she wanted the state, the producers and YPC at the table.

December 18, 1996, Meeting: Alaska Departments of Revenue and Natural Resources, Arco, BP, Exxon and Yukon Pacific Corporation

The Working Group met to hear an update from the Alaska Departments of Revenue and Natural Resources and then response comments from the North Slope leaseholders, Arco, B-P and Exxon and Yukon Pacific Corporation.

The meeting was chaired by Rep. Barnes. Other committee members in attendance were Sen. Sharp and Rep. Kubina. Legislators and others in attendance included Sen. Leman; Rep. Ogen; Rep G. Davis; Rep Davies; Rep-Elect Hodgins; Rep. Green.

Department of Natural Resources Commissioner John Shively and Mr. Roger Marks of the Department of Revenue testified for the State. Mr. David Lawrence (ARCO); Mr. Mark Bendersky (BPX) and Ms. Beverly Mentzer (Exxon) testified for the gas owners. Mr. Jeff Lowenfels and Mr. Wayne Lewis testified for Yukon Pacific.

State Testimony

Commissioner Shively indicated in his remarks that the State has come a long way in the last year in understanding the project. They see it as a very big project but that it is economically challenging. Mr. Marks then presented a detailed review.

Major State Accomplishments: In January of 1996, the State prepared a briefing paper which overviewed the project and presented the first view of project economics. An evaluation of the incentives/disincentives for a Major Gas Sale under the Prudhoe Bay Unit Operating Agreement and 1990 Issues Resolution Agreement was completed. Pedro Van Muers was retained to evaluate the options for the State of Alaska relating to the fiscal regime for an LNG project. A Memorandum of Understanding (MOU) between the State and Exxon, ARCO and BPX and a second MOU between the State and YPC are being pursued. Finally, a financial model for evaluate sensitivities) has been developed and calibrated.

Major State Themes: Some day an LNG project will be economic, but it's going to take a great deal of work from us since it is not economic now. The MOU's will unify Alaskans with respect to project proposals. The Asian market wants the gas,

but only from a project that is commercially viable (and they want it at the lowest possible price).

Prudhoe Bay Unit Operating Agreement (PBUOA)

Incentives/Disincentives: A concern was expressed that the Oil Rim/Gas Cap working interest structure created a disincentive to major gas sales. An important point to remember is that 30% of the gas is associated with the oil rim, so the oil rim will realize significant revenue in the event of a major gas sale. There will be reduced oil recovery from a gas sale since gas pressurizes the reservoir giving it energy to produce oil. Therefore, oil loss can be a real disincentive in gas sales. The agreements provide that operating costs eventually shift to the gas owners so cost obligations remain in concert with revenues. The State study does show that if it is economic for the unit, then it is economic for each producer under a wide range of sensitivities.

Fiscal System Study: There are six objectives to this study: 1) examine the fiscal systems in competing jurisdictions; 2) examine the Alaska project under these competing systems; 3) examine the competing projects under their own fiscal systems; 4) chronicle how governments support development; 5) evaluate the appropriateness of fiscal systems for the jurisdictions where they occur and 6) propose options for Alaska.

Van Meurs Report: The report will be drafted as five volumes, with the final volume due at the end of January. The administration will be available to discuss it with the Legislature in February. However there are four tentative conclusions that are apparent at this time.

First, the project is an attractive long term, strategic investment for the producers because they own the working interest in the gas. This reflects the benefits of known resources, existing production facilities, economies of scale and deductibility of interest for any money that can be borrowed. However, in the short term the project may not be economic.

Second, fiscal certainty for a gas project like this is very important to attract investment at the \$12 to \$15 billion level. The State is still considering its position as to what form certainty can take.

Third, the modification to the state tax system that perceptibly changes project economics is delaying the imposition of the 20 mill property tax. Fourth, some federal tax changes would make a large difference, such as more rapid accelerated depreciation and/or investment tax credits. But it is a mistake to label the former as an incentive, since it would essentailly make the US competitive with other LNG provinces. For example, accelerated depreciation is similar in function to Australia's five-year capital writeoff.

Fiscal Community Discussions: The State has met with J.P. Morgan, the producers' investment brokers, Moody's project finance rating staff and Goldman Sachs & Co., investment brokers for the Ras Laffan project in Qatar. Their general conclusion is that project sponsors will need to believe that the project will yield about 14% after tax rate of return on equity funds before moving ahead and that perhaps 75% of the project capital investment can be financed at 8% with long term, secure purchase contracts with financially strong buyers.

Economic Assumptions: A cost of \$15 billion (1995 dollars) is assumed for the project. A general inflation rate of 3% is used. A sales price of \$3.50 per million BTU (1995 dollars) with no real price escalation above general inflation was used. Gas sales are assumed to begin in 2005, with rate ramping up to 14 mmtpy (1.68 bscf/d) in 2010.

Economic Results: Under the above assumptions, and using the current law tax assumption, the calculations show a Rate of Return of between 11 and 12%, which is below an attractive rate of return for investors. Sensitivities show that elimination of state taxes and royalty only raise the projects rate of return about a percentage point. A capital cost expectation of about \$13 billion is needed for the calculations to show an attractive rate of return since a \pm \$2 billion capital cost estimate change translates into about 3 percentage points change in rate of return. A price of about \$4.00 per million BTU is required for the calculations to show an attractive rate of return since a \$0.50 per million BTU price change translates into about 3 percentage points change in rate of return. By comparison, the price quoted in the State's January, 1996 report to make the project economic was \$5.00 per million BTU. The primary differences between that report and now is that 12% interest rate on debt was assumed in the earlier report.

The Yukon Pacific/First Boston analysis presented to the Committee showed a price of \$3.57 per million BTU to make the project attractive. The key differences between that analysis and the current Administration's is: no royalties; no state severance tax; no property tax during construction; faster 4 year ramp up period; 15 million tons per year rate to the market and no cost for Prudhoe Bay oil losses.

Market Outlook: Representatives from Governor Knowles Administration have met with the Japanese Ministry of International Trade and Industry (MITI), with (prospective buyers) Tokyo Electric and Tokyo Gas, and with (prospective intermediary trading companies) Mitsubishi, Nisso Iwai, Marubeni, and Sumitomo. In Korea, the Knowles Administration met with the Ministry of Foreign Affairs, with Korea Gas Company and Korea Electric Power Company, and with Hyundai. Generally speaking, the messages from these entities are the same as those documented by previous testimony from the three major Prudhoe Bay leaseholders.

Memorandum of Understanding: The Knowles Administration is nearing finalizing these documents with the major Prudhoe Bay leaseholders and with Yukon Pacific. The memorandum provides the framework for the interactions between the Administration and these entities as joint work is pursued to advance the project. Topics that are covered include the fiscal system, cost estimates, marketing, fiscal certainty, the Legislature, Alaska hire, gas availability to Alaskan communities, environmental integrity, federal actions and accomplishments of all parties to date.

Questions to the State:

(Kubina) Can the line capacity be doubled? Yes, with the addition of compressor stations.

(Kubina) What is the overall rate of return (ROR) and how does that relate to TAPs experience? The APUC determines the allowed ROR for tariff setting purposes on TAPS and under the Settlement Methodology, currently that ROR is about 6.4% on investment, real after tax. (the owners have earned more than this on their original investment). The 14% is ROR on equity and this translates to 10% on total investment, after tax.

(Kubina) What is the value of deferring property tax during construction? (?)

(Kubina) What is the value of lost oil reserves? It would be equivalent to a price increase of about \$0.32 per million BTU.

(Hodgins) What is the ROR at double the capacity? Don't have that information at this time.

(Sharp) Can APUC regulate a facility dedicated solely to export? No.

(Sharp) Can APUC regulate local gas deliveries? Yes.

(Ogen) What are the oil losses from gas sales? Amount of oil loss is function of voidage. Gas sales in 2005 means about 300 million barrel oil loss and in 2010 means about 100 million.

(Davies) What would offsetting revenue have to be to compensate for a 5 year delay in the project? Impossible to say, since the project is currently not attractive for investment, it is difficult to say that revenues would be expected in the first place.

(Barnes, et al) What is the status of the Canadian project recently reported on in the Anchorage Daily News? Status is very uncertain. We know little beyond the article, other than the gas reserves have not been dedicated. So this project may not be as far along as it the article might have implied.

(Sharp) Could the property tax be delayed such that the tax is back loaded? Yes.

(Sharp) What is the break down of the cost estimate? 10% conditioning plant; 40% pipeline; 25% liquefaction plant; 25% ships.

(Barnes) The legislature can bind a future legislature through a contract, much as was done for the tax incentives provided to the Kenai LNG plant? The administration is uncertain of this and it needs to be studied. While we can't rule out establishing tax certainty on a gas project, we can rule out any scheme that tries to control "leakage" which is increasing taxes on other assets or activities beyond gas.

(Kubina) Can trust be relied upon, since it is not possible to write everything down? Don't have a response to that.

Prudhoe Major Leaseholder Testimony

Mr. Bendersky proffered, for the record, a technical paper authored by him, entitled: <u>"LNG PROJECTS & FISCAL REGIMES</u>". Several points were made. First LNG projects are characterized by being long term, requiring similarly long term agreements. The success of these agreements are underpinned with substantial buyer/seller relationships. Second, other governments are competing for the LNG business by offering support to their particular projects. For example, the Australian project is receiving what basically amounts to an accelerated investment tax credit. Third, the pipeline is a major cost item in an Alaskan project that many competing LNG projects do not have. Therefore, reducing project facility costs is a major hurdle that must be overcome in the Alaskan project. Fourth, the Alaska fiscal regime is currently regressive. As the price of gas goes down, the state's percentage take goes up. This is an important shortfall that must be fixed. Fifth, to move ahead, four steps must be pursued: establishing workable regulatory and fiscal terms and conditions; reducing capital costs; establishing a viable, long term market; and reflecting the needs of the marketplace in the project.

(Barnes) What is BP doing to market the gas? BP is in the market every day. We have offices in various Japanese cities and in Korea. From Alaska, in the past year, BP has made four marketing trips to the Far East.

Mr. Lawrence indicated that ARCO was encouraged by the developments with the Knowles Administration and Legislature. The Van Muers study will be an important step in understanding how Alaska can establish a more competitive fiscal regime. ARCO is very encouraged by the Administration's MOU and looks forward to signing it in the near future.

(Kubina) Are the MOU's bringing the parties together? (?)

(Barnes) Is it not true that the market window that opens in 2005 closes? The information that we have suggests an increasing market and that there will always be room for an economic project.

(Kubina) How does Natuna compare with Prudhoe considering the carbon dioxide content of the gas? (?)

(Leman) Do competing projects color the way Exxon sees Alaska? No, our sole responsibility is to advance the Alaskan project. We want to commercialize all of our resources and we have established no particular priority. (Hodgins) What are the terms of typical contracts? (?) Mr. Lawrence added that there are two types of markets: the power generation and the city gas for direct use. Typically, the marketing needs to cover both of these markets.

(Sharp) What is the status of gas to liquids conversion activities? (?)

(Kubina) What about the minor interest owners? Do they represent veto authority if they do not wish to sell gas? The major leaseholders have not engaged the minority owners in a discussion yet.

(Ogan) What progress has been made in facilitating working with Yukon Pacific? Some have said that we're not singing off the same sheet of music. But if you look at the details, we are really not that far apart in project concept.

Testimony of Yukon Pacific Corporation

Yukon Pacific indicated that, based upon its marketing experience, it concurred with a projected project startup in the time period 2005 to 2009. It assumes a 4 year ramp-up for its economics.

From Yukon's perspective, the pipeline is not a problem but an opportunity. This is because of expansion capabilities after the initial design rate is met.

Yukon indicated that they have commented on the Administration's MOU and are looking forward to continued dialog on it.

Yukon Pacific's permits are flexible and can accommodate a range of options. If the pipeline needs to be moved physically closer to TAPS, it can. If the LNG terminal needs to be moved closer to the Valdez oil terminal, it can.

HJR54 GRP Meeting December 18, 1996 Anchorage, Alaska

Committee: Rep. Ramona Barnes Sen. Bert Sharp Rep. Gene Kubina Sen. Loren Leman Rep. Scott Ogan Teleconference from Fairbanks Members: Rep. John Davies Rep.-elect Mark Hodgins

REP. RAMONA BARNES: I would like to recognize Rep. Kubina, Sen. Sharp, I would also like to welcome Sen. Loren Leman and Rep.-elect Hodgins, the new to be Resources co-chair, maybe you would like to say something about resources?

SEN. LOREN LEMAN: love those resources!

REP. BARNES: I'm sure they all know you by now Rep.-elect Hodgins, anyway, today before we get started there is something I would like to say. First of all when this working group started. I'm sure that no one gave us any credibility what so ever as to getting this pipe line off the ground and getting it moving in a positive manner. I believe we've done that and at this time I would like to thank John Shively, Wil Condon from the administration, Yukon Pacific and the oil companies for coming to the tables in a positive manner and working with us. We have had testimony on two earlier occasions, one specifically that was to address the concerns of Yukon Pacific when they presented to us the Boston First proposal. We were happy to have that and we had a follow up hearing where it was to bring the producers of the oil to the table to tell us again their position. We also invited Yukon Pacific to testify again at that meeting. From those meetings, and from information that we have gotten from the Boston First report, from the producers, and from the state, we have worked... I also have a note that says Fairbanks is now on-line, both Juneau and Fairbanks are on line so welcome to the task force meeting here today. We have been working to come up with a document to introduce. A working document, and that's just what it is, a working document, to put forth to this days meeting so that people would have an opportunity to look at it. We are commanded by the HJR54 resolution to have a report to the legislative body by Feb. 1st so we have been working steadily on the document. My staff has spent a lot of time with Yukon Pacific and the representatives of the oil companies, calling them on the phone, asking questions and I know just recently they spent at least a half a day with Yukon Pacific getting information from them. So I wanted to make it very clear that we have a working document that I plan to distribute today and that working document then will be a document that we will ask for all of your thoughts and concerns prior to the time that it is made an official document and introduced before the legislative body because we would like to have as much concurrence on that working document as possible. One thing I do want to say right up front so that there is no misunderstanding: I am no bodies lackey, I am not here to serve the oil

companies or Yukon Pacific. I am here to serve the people of the State of Alaska and I have every intention of doing that and having said that I think that I should also say that I look upon this meeting as being crucial to where the State of Alaska goes in the new millennium because what happens with a resource development in this state is the future of our children. People like to talk about the PFD as being the future of our children. PF sits there and it gives everybody \$1000 a year. It does not create well paying jobs over a long term for the young people of this state. We have too many young people today that cannot get jobs in our state or have been forced to leave and find jobs elsewhere when it is our resources, in many instance, that are going out the door and not creating the jobs for the people in this state that they should. That's going to stop one way or the other. It is important that from our resources we develop not only a process for where those resources go out of the state but where there's value added in the state as with our fish, the fish processing plant that I have been working on here in Anchorage. We Alaskans must be prepared to enter the new millennium taking care of the people of this state first. That's what I'm going to try to do. I was first elected to the legislature when people had bumper stickers on their car that said "I drove Tudor Road". The first year we had any money in the capital budget, we had 44 billion dollars in request. Today, all of those needs have not been met. We are a state with immense needs, immense problems. The only way we are going to overcome them is with the resource extraction that we have in abundance but it must be made to work with people of this state, not anyone else, but the people of the state of Alaska. So with that in mind, I would like to ask if any of the other task force members have anything that they would like to say prior to the time that we start our hearing?

REP. OGAN: No Madam Chairman

REP. BARNES: Any Scott?

REP. LEMAN: I would just say what I said before that I would like to see gas flowing and I know that we heard earlier this week that 2007 would be an aggressive schedule and I would like to make it progressive but

REP. BARNES: I believe it needs to be done by 2005.

REP. LEMAN: Anyway, I'm anxious to hear.

REP. BARNES: The first presenter then here today will be Commissioners John Shivley from the Department of Natural Resources. Commissioner would you join us please, with your staff, they are welcome.

JOHN SHIVELY: Well thank you -

REP. BARNES: Commissioner Wilson Condon is also welcome to join you - or his designated representative.

JOHN SHIVELY: Madam Chairman, good to see you again.

REP. BARNES: Good to see you again as well.

JOHN SHIVELY: Madam Chairman, first of all on behalf of Commissioner Condon I'd like to apologize, he had intended to be here and lead the discussion today because he is our team leader. He is ill and in bed.

REP. BARNES: I'm ill too, that's no excuse!

JOHN SHIVELY: I'll pass that along to him. Second, I'd just like to say on behalf of the Administration, we appreciate the opportunity to be here and I would like to echo some of your comments about the need for cooperative effort between the Legislature, the Administration, the producers and Yukon Pacific and others and I think that we have moved a long way in the last year towards people understanding each others particular needs, concerns and people's different analysis of what this project is. It is a immense project, people should not underestimate the undertaking. It's also a project, you know fortunately we have some history having already built one major pipeline we can learn from that and I think we need to learn from it to address some of the issues such as how Alaskans want to be more specifically involved. But it is economically still a very challenging project and I think what Roger Marks, who works for Commissioner Condon and will make the main State presentation today, is going to go over some of the things that we see in terms of the economic challenges, most of which will not be new to you, and then what kind of progress we've made since we reported to you and working with the producers and Yukon Pacific and others and the customers to try to bring this project to commercial viability, so we appreciate being here and I'd like to turn this over to Roger if that's satisfactory.

REP. BARNES: Mr. Commissioner we very much appreciate having you here and that is satisfactory, would you please proceed.

ROGER MARKS: Thank you commissioner Shively, Madam chair, I too wish to convey Commissioner Condons' regrets for not being here today. I was in his bedroom for about 15 minutes this morning working with him on this and given the shape he's in I think it's in everyone's interest that he's not here. I'm going to be, my slides are up there on the screen to most of your back but you can follow on the hard copy I've given you.

REP. BARNES: Each time each one of you speaks, please identify yourself for the tape.

ROGER MARKS: I'm Roger Marks with the Department of Revenue. Go to the second overhead Bill. Over the past year we've been directed by Governor Knowles to basically do what it takes to get this project moving. We've had 5 major accomplishments over the last year and some are not quite in finality yet but they're close. First thing we did last January, we issued a briefing paper on how this project looked in terms of the economics and a lot of other issues and that sort of laid the foundation for what the state should be doing and the rest of our accomplishments this year. We are about to issue a paper we've done on analyzing the incentives and disincentives for a major gas sale under the Prudhoe Bay offering agreement in 1990 issues resolution agreement. We've retained the services of Dr. Pedro Van Mures to look at the states fiscal system to see what can be done to optimize it to get this project going. We're in the process of drafting memoranda of understanding between the various parties involved in this project so that certain expectations and anticipation's are made explicit and we can work together rather than in opposition to each other. Finally we have developed a financial model for evaluating the project economics to understand how this project sits in the world with other projects and just how changes to the physical system changes the economics of the project.

Three major things that have come out of this work, in our judgment, are that someday this project will be economic but it's going to take lots of work. It's not quite economic now, maybe on the verge of being economic given if certain things change, but together we believe we can help to make it economic. The main hurdle for this project is it's cost. We'll talk about that a little later and that's the main variable that has to be adjusted to make this project work. Second major thing is the Memoranda of Understanding that we are drafting and negotiating with all the parties. We unify Alaskans with respect to the project proposals and finally the Asians want the gas but only for a project that's commercially viable. The Asian consumers are just like American consumers, they want to get the gas at the lowest possible price.

Just sort of charging into things, the work we've done. The first project I've mentioned was to look at the governing contracts that rule how the Prudhoe Bay unit operates. There was concern that given the different utilization of the oil rim and the gas cap that perhaps the producers with large shares of the oil rim do not have an incentive to have a major gas sale and perhaps that was slowing this project down. We thought that was a serious concern and we studied it. What we did was study carefully the Prudhue Bay Unit offering agreement which is the main governing contract and the issues resolution agreement which monitors how gas would be allocated with a major gas sale. Three major things are important to understand about those agreements. First of all, there's a lot of gas in the oil rim. 30% of the gas in the oil rim an incentive to have a gas sale. That's a lot of gas and it's dependent on what price, it could be a lot of money.

Second, we need to recognize that gas is used now to pressurize the reservoir and when you take gas out of the reservoir, you're going to retard some of the recovery mechanism in the reservoir. Theoretically, I don't think there's too much dispute about that, it's certainly a difficult issue to quantify, we've done some research and we've attempted to quantify what that reduced oil recovery is. Again that's something that would be a disincentive for oil rim working interest owners to have a gas sale because of that reduced oil recovery. Third, and probably the most important thing to realize that is not obvious to most people, it certainly wasn't obvious to us without a careful reading of these documents, is that a big burden of operating the Prudhue Bay unit is born by the oil rim but those documents are set up so that when the fuel becomes predominantly gas oriented, that is that two main conditions 1) when the value of the gas is worth more than the value of the oil for a 12 month period and 2) when the oil rim is actually losing money because it is bearing the burden of the operating cost, the operating costs shift from the oil rim to the gas cap. That's a big big incentive for the oil rim owners to have a gas sale just to shed the burden of having those operating costs. We ran detailed economics on a myriad of scenarios with high and low operating costs, high and low gas prices, high and low oil volumes and high and low oil prices and it's our conclusion that if the sale is economic for the unit, it's economic for all the producers, be they predominately oil oriented or gas oriented. Certainly one can manufacture scenarios where there is dispirits and that is where one producer comes out ahead and one behind. We believe under most reasonable, possible scenarios that there is unified interest here. That paper, two drafts have been reviewed by both the producers and Yukon Pacific and we expect to have that out in the public by the end of January.

Next thing we did, we thought it was important to look at the fiscal system to see if it could be improved to enhance the sale. Again realizing that resources are to be used for the maximum benefit of the people of Alaska. What we did last summer was put out an RFP for a contract to look at Alaska's fiscal system and here are the things they were suppose to look at:

Look at the fiscal systems and jurisdictions that are going to compete with Alaska to sell gas to the far east.

Examine the Alaska project under these systems, in other words take Indonesia's fiscal system and model Alaska's gas project and see how it turns out.

Look at the economics of the competing projects themselves under their own fiscal system.

Chronicle how government supports development.

Evaluate the appropriateness of fiscal systems for the jurisdictions of which they occur and finally

Propose options for Alaska.

We got 5 excellent proposals in from the RFP. We awarded to Dr. Pedro VanMures of Calgary, he's a world renowned expert and published widely in fields of comparative fiscal system for both oil and gas. He is in the midst of issuing a 5 volume draft report. We have 3 of the volumes now. Our schedule is the final installment of the draft should be in by the end of the year. We're going to get comments back to him by mid January and he should have the final document by the end of January at which point we plan to have him come to Juneau to discuss his findings with the legislature and various interested public parties. Just to review some of his major and tentative conclusions at this point:

This project is an attractive long term strategic investment for the producers because they own the working interest in the gas. In the shorter term this project may not be economic. To synopses that for the economic challenge of this project the main problem is the pipeline. There are lots of other jurisdictions in the world, as you probably know, that have gas sitting at tide water and they don't need to incur the cost of an 800 mile pipeline and go through Arctic conditions and permafrost to get there so that's the main challenge that this project has. Dr. VanMures has pointed out the three main advantages the Alaska project has: 1) the facilities are in place, there's gas being produced now and in a lot of the competing jurisdictions the gas production facilities need to be put in place, 2) the sheer volume of Alaska project. The 26 trillion cubic feet that Prudhue Bay has makes it so you can reduce the per unit cost of that pipeline, 3) one advantage that the federal tax system has over other jurisdictions is the deductibility of interest. That's a big competitive advantage with other jurisdictions that have to incur debt and can't deduct the interest.

Going into his other major tentative conclusions, fiscal certainty for a proposed gas project like this is very important. This project is going to cost between maybe 12 and 15 billion dollars. Investors are going to be very weary on investing that money if tax rates could be disincreased so having a fiscal certainty is important. We've dwelled on that problem a lot over the last several months. It's our opinion that we cannot contract in tax rates, in other words we interpret the constitution as saying that one legislature cannot bind another, that's going to be something we need to think hard about. About how to guarantee fiscal certainty.

Third, the only modification to the state tax system that perceptible changes the project economics is delaying the imposition of the 20 mill property tax. Under current law, the property tax goes into place as soon as a facility is constructed and with a project like this, that could be as long as five years before it goes into service. If, you know, companies are very sensitive to the time value of money, they have a lot of opportunity costs to invest that money so paying a property tax years and years before something is revenue producing is a big drag in their economics. One has to sort of counter that, or recognize that during a construction period there's going to be some social disruption in the state that needs to be paid for and right now under Alaska system, the property tax is about the only way to pay for that expressly with the fiscal system. That's another thing that he's going to think about, how to deal with that problem.

His final other major tentative conclusion is that some federal tax changes could make a large difference. It's a mistake to label them as an incentive. His main point is that the federal tax depreciation system is a lot less competitive than other systems where you compete in jurisdictions and most jurisdictions you can deduct your capital cost over as soon as five years in places like Australia, for instance. In this country, it can take anywhere between nine and twenty years, depending on what kind of facility it is. So, Dr. VanMure said it's a mistake to label something like that as incentive, it's rather something that would simply make the U.S. more competitive. There's also some appearance Senate type measures that could be, would be real helpful from the Federal side, such as an investment tax credit.

Next overhead. Some other things we've been doing over the past year is educating ourselves, and in one area we've educated ourselves a lot because we had a long way to come, that is understand project financing. We've had detailed discussion with J. P. Morgan, who is the producers investment brokers, we talked with Mooneys project finance rating staff who rates bondings for competing LNG projects around the world and we've talked with Goldman Sax and Company, who are the investment brokers for the Rosta Font project which is a big project in the country of Catar. Right now, our best judgment, talking to a lot of people, is that a project like this would probably need about a 14% return on equity. We feel it could probably get financing at 8% given world capital structures now and we think that there would be debt available to finance up to probably 75% of the project through debt.

The other thing we've been doing is we've developed our own financial and economic model of the project. We thought this was important because it would 1) show what the economics are like and 2) it'd be a good sensitivity tool to show what happens if you change fiscal terms, how does it affect the project. Firstly I'll go over that model. Our base case, the current best estimate for the project is \$15 billion 1995 dollars. All cost inflate at 3% a year. We have set the gas price in the far east at \$3.50 per million BTU which is the unit in which gas is sold in the far east. \$3.50 in 1995 dollars which inflates 3% a year. Generally in the far east, gas prices are tied to oil prices. If one could think of this as sort of a naive assumption that oil prices and consequently gas prices are going to escalate with inflation. In the last ten years prior to 1996, oil prices and gas prices were fairly flat in nominal terms. 1996 prices have been very high and as I tell people, part of my job is to forecast oil prices and my outlook is "I don't know" so this is the naive assumption. The model is easy to change prices to see just how higher and lower forecasts of prices affect the economics.

The development schedule we put into our model, we have three trains. What a train is is sort of a LNG ship and a liquefaction facility that are sized so that they work together. Given the state of the art of how a big ship you can have and how big the trains are, we think we can get the anticipated size of the Alaska project into three trains. To build the first train, you also have to build the pipeline and the conditioning facilities on the north slope to remove CO2. We put in a 5 year construction schedule for train 1 and a three year construction schedule for trains 2 & 3. We put in a 6 year ramp up which is as each train takes 2 years to get into full production. We did that based on our judgment of how much gas we can get into the market at any one time. We're talking about a lot of gas to infiltrate the market at any one time. We thought that was a prudent schedule for a ramp up, in reality it could happen faster or slower, obviously. We have sales beginning at 2005 and with the 6 year ramp up that's a peak in the year 2010. That peak, that we're talking about is 1.9 billion CF a day going into the conditioning plant, 1.85 going into the pipeline and ultimately 1.68 billion CF a day going to the market which is 14 million tons, which is the volume most people are talking about with this project.

Next slide shows the economics. What this is, the, what this shows is the rate of return depending on different gas prices that inflate 3% a year so when we say 3.50 here, that is 3.50 in 1995 which escalates 3% a year. We show two lines here. One with the state tax system and one without, just to show what kind of hit the project takes from the state tax system. What this shows is, again our target rate return on equity is 14%, so at 14% it takes about \$4 per million BTU to break even and it compares to the current price of \$3.50. At \$3.50 the rate of return is about 11.7%. You can tell if you take the distance between those two lines and ties that to the state fiscal system, the severance tax, the production tax, the property tax, the corporate income tax, reduced the return on equity about 1 percentage point.

The next graph shows the sensitivity of rate of return, the different estimated construction cost in 1995 dollars. At the \$15 billion mark, which is the estimated cost today, again the rate of return is 11.7%. To get a 14% rate of return you need to reduce the cost down to about \$13 billion. Again, this is at a \$3.50 real price.

The next graph, just looking at what, how different people look at this project and just what sort of economics require to make it even just what other people are saying. Our briefing paper in January had \$5 a barrel as a break even price. We've educated ourselves a lot since January, particularly on the financing. What that \$5 was, was sort of a flat nominal price that didn't escalate and it's really not comparable to what we are currently saying which is \$4 escalating at 3%. The Yukon Pacific First Boston report says here \$3.68, it was actually eeking out with \$3.57 as a break even price. And the Standard and Poors, they rated the bonds for the last Rosta Font project and looked at competing projects, they say it's \$4.80 for the Alaska project.

I'd like to review some differences between our inputs and the inputs that were used in the First Boston report just to understand some differences. The First Boston report, what they looked at was how much sort of economic rent would be available at the well head. They explicitly looked at it pre-tax and pre-royalty. So, as a tool for understanding the fiscal system, their model is not really having utility for us in that regard. That model also did not have a property tax during construction. They had a 4 year ramp up vs. our 3. They had 15 million tons, we had 14. Our model has the cost of reduced oil recovery as a cost of the project and their model did not. If you make these changes in our model, the results are fairly similar. Last month the Governor took a trade mission to the Far East. He visited Japan, he visited government officials there, officials from the Department of Natural Resources and Environment and met with the Ministry of International Trade and Industry. They talked to customers, Tokyo Electric and Tokyo Gas, and the trading companies. Also a similar mission to Korea, he visited government offices there, including the Ministry of Foreign Affairs, he talked again to customers, Korea Gas and Korea Electric and the trading companies. We have not yet been directly in contact with Taiwan, we recognize that's a strong potential market, both the producers and Yukon Pacific have been in contact with Taiwan.

Finally we want to talk about the Memoranda of Understanding. What that is is a document that hopes to set out recognitions and anticipations of the parties involved, the oil producers and Yukon Pacific, to set a frame work for future discussions and joint work in attempt to harmonize the interest of the parties and enhance the probability of this project going forth. This is the year that the subject matter that is covered in this Memoranda are how to think about the fiscal system, how to think about modifying the fiscal system, the importance of nailing down a cost estimate for this project and working on cost reductions. The importance of marketing the project, the issue of fiscal certainty, the ultimate role of the legislature in determining what the fiscal system is to be. The expectations that Alaskans have that there'll be Alaska hire for this project. Again the importance of gas availability to Alaska communities in the project, the environmental integrity. Federal actions that could be done to enhance the project and finally to recognize the accomplishments of all the parties so we can work together rather than against each other in moving this project forward. Negotiations and finalizing the Memoranda have taken longer than expected and we also, in terms of the logistics of this, we believe it's important that we have one Memoranda of Understanding that all three producers sign and then a Memoranda of Understanding the Yukon Pacific signs that conform to each other. The logistics are such that it's probably harder to get the three producers to get one document that they'll agree to and so we're working with them and then we are going to work with Yukon Pacific. All four parties have seen drafts and gotten comments to us.

That's all I have prepared and I'd be happy to take questions.

SEN. KUBINA: You mention the 14 million tons a year is what your basing on, but what would the capacity of the line be? Double that or...

JOHN SHIVELY: The capacity of the line with additional compressor stations is, I think about double. The 14 million tons is considered for the break even point where the economics are something you can think about putting a project and you don't have terrific logistical problems in marketing unheard of volumes of gas in a short amount of time.

SEN. KUBINA: In the 14 you said that we needed 14% return on equity. Would you explain, I'm not exactly sure what that means. Is that just 14% on money they've invested or does that also deal with what they are guaranteed as a profit on the pipeline, that the APUC guarantees, similar to, there's a guarantee on the oil line that you would get a certain rate while they're running that line. Can you explain that a little bit?

JOHN SHIVELY: Sure, what a return on equity is, if you borrow money for a project and you pay off the debt, what's left over is a return on equity. And so in a cash flow basis, if you take a,

if you were to discount something, say take what the present value of future cash flows are worth, if you set that at 14% that means that 14%, the net present value of the project is 0, you were able to earn 14%, for your shareholders, which is what they are demanding given their opportunity cost to the capital, capital they're going to invest and what they perceive the risk to be. As far as something like APUC, APUC will determine what an appropriate rate of return is. I would hope they would pick something like 14% because I think that's the true cost of capital for the companies and, but they're an independent agency and they have their own judgments about how they would do that but they would give in terms of calculating the tariff of the project, they would give the equity owners a return on their investment given what the debt structure is.

SEN. KUBINA: The TAPS is 15%, is that right?

JOHN SHIVELY: TAPS is 6.4% real, after tax.

SEN. KUBINA: after tax?

JOHN SHIVELY: That's what they're given in the tariff. Now the TAPS owners have earned more than that over time but that's what they've been given as a return in the tariff structure.

SEN. KUBINA: Well how does that relate to 14% on equity?

JOHN SHIVELY: 14% on equity would be ...

SEN. KUBINA: Is it similar?

JOHN SHIVELY: Well they're similar, you'd have to, the 6.4% real after tax, we're talking about 14% as nominal after tax, and so it would be about, adjusting for inflation, it would be about 10% real after tax.

SEN. KUBINA: So the recommendation is really quite a bit higher return on equity for this project than the oil pipeline because it's a higher risk, is that why?

JOHN SHIVELY: I'm not exactly sure how the risk premiums for taps was structured. I could research that and let you know.

SEN. KUBINA: When they built the other pipeline, was the property tax computed in the beginning or did they have something where that was put off?

JOHN SHIVELY: I believe the property taxes paid at the beginning.

SEN. KUBINA: My last questions, is there, in your talking about how to do this, was there any discussion in your group about looking at just saying "what would it be worth to the lease holders to just sell that gas at the well head if they did not want to build this line"?

JOHN SHIVELY: We looked at if they wanted to just recover, in other words, the bare minimum they would accept would be if we were to look at just theoretically, if they just wanted to break even with their reduced oil recover, in other words cover, you know make up the reduced oil recovery on a present value basis, something like about 32 cents in MT up at the well head starting in 2005 would be about what it would take.

SEN. KUBINA: Of course they wouldn't want to just break even, they'd want to make a profit on it. Thank you.

REP. BARNES: I would also like to announce that we have with us Representative elect Mike Hodgins who will be chairing the oil and gas committee and will at some point get to inherit the work that we do. Also Representative Joe Green is on the bridge by teleconference. We have two Department of Law members in Juneau, Jack Griffin and Doug Barger and in Fairbanks we have Representative Davies.

REP. ELECT HODGINS: May I ask a question?

REP. BARNES: One moment please, yes you will be able to ask questions but first I must again see if the elected, already sitting legislators have any questions. Go ahead Rep. Hodgins.

REP.-ELECT HODGINS: When you were talking about the <u>thruplin</u> and you gave a figure for 14 million metric tons a year, what does your rate of return come to if you ramp that up to 20 million metric tons? You said the total capacity was 28.

JOHN SHIVELY: The economics of this project improve a lot at higher volumes. The challenge is marketing that much gas. Not explicitly modeled at, but we do know that the economics improves a lot at higher volumes.

REP.-ELECT HODGINS: What's going to be your capacity to process the gas if the destination is Valdez, how much to actually process physically?

JOHN SHIVELY: I'm not sure what you mean by that

REP.-ELECT HODGINS: I mean, will you be able to process 28 million metric tons per year if you can get that capacity through the pipeline?

REP. BARNES: Maybe you want to ask that to the producers.

REP.-ELECT HODGINS: Okay, okay.

JOHN SHIVELY: I believe that would not be a problem but you would have to get that from the producers.

REP. BARNES: Senator Sharp

SEN. SHARP: I asked, I think, at the initial meeting, and I don't know if you have an answer or not, do you know is there any extenuating circumstances as far as the possibility of authorization for quality at the APUC to regulate a facility entirely dedicated to export to foreign entities?

JOHN SHIVELY: It's my understanding that if that were the case than APUC and FERC don't get in the picture but if we were going to talk, if some gas is going to be delivered to Alaska communities on the line then APUC gets in the picture but FERC does not because it's just an intrastate operation.

REP. BARNES: Additional questions from the committee members? I cast off to Rep. Ogan.

REP. OGAN: Thank you Madam Chair. You mentioned our reduced oil recovery because of the use of the gas. Have there been any studies that you folks have done that point to that that will be a problem, I mean there's certainly significant amounts of gas on the North Slope and in a certain window of time frame until any gas would be used in production and is that a realistic concern?

JOHN SHIVELY: Well it is a realistic concern, the question is, I mean it's a theoretical issue and it's hard to very empirically prove what happens. There is some theoretical research on it and there's been some quantitative relationships established. They're in proprietary documents which means we can't disclose, unfortunately, but what it suggests is that the amount of oil lost is a function of what they call voidage. Voidage is when you take gas out of the reservoir, the reservoir becomes void of gas and the amount of oil you loose accumulates over time. The more years you've been taking gas out, then your oil losses creep up. On a present value basis, that's not the problem, because down the line, if something happens in the future on a present value basis, it's less of a problem. Also, the way the Prudhoe Bay reservoir works in our understanding of the literature is such that the farther out a gas sale is delayed, the less reduced oil recovery you have. Our best guess now, and it's certainly no more than a guess, is that a sale that would start in 2005 and ramps up over 6 years would result in about 300 million barrels of reduced recovery over 30 years and most of it comes at the tail end. A delay of 5 years reduces that 300 million down to 100 million.

Just as a followup. This is were Roger and I sort of disagree. He's a trained economist, I'm not trained at anything. But I don't think the government really can look at present value often as the way to value things. It's not probably an appropriate measure as it is for industry and so I would just hesitate to say that we should devalue anything as a government because of how it looks in a present value basis. Certainly the industry looks at it much differently.

REP. BARNES: Thank you Mr. Commissioner. Before we have any more questions from our members here, I will also go to Rep. Green, are you still there? How about Rep. Davies?

REP. DAVIES: I'm here.

REP. BARNES: Rep. Davies do you have any questions?

REP. DAVIES: I guess what I'd like to know, in regards to the last statement about the difference between the 5 year delay is what would be the offsetting revenue that we would expect to the State from having the gas pipeline operational?

ROGER MARKS: That would be, one assumes that if this project goes forward that it goes forward because the gas, the value of the gas you're selling, exceeds the value of the reduced oil. I would say, I mean if the project goes forward, I think, I assume we'd come out ahead. I don't see any reason why we wouldn't.

REP. BARNES: Isn't it also assumed that a window of opportunity would close for Alaska should we not get into the gas market?

ROGER MARKS: That's a tricky questions, I mean, certainly the sooner you get into the queue, the less things can happen to make the project go array. Dr. VanMures' perspective on this is that the demand in the far east is going to be escalating and continue to escalate and actually prices are going to go up and

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that's his perspective and there may be some opportunities more farther out rather than in the near term before us.

REP. BARNES: Would you tell me again where this Dr. VanMures if from?

ROGER MARKS: Dr. VanMures is from Calgary

REP. BARNES: And where is the new Canadian project that they are trying to bring on line for gas?

ROGER MARKS: Alberta and British Columbia

REP. BARNES: Rep. Kubina do you have any questions?

REP. KUBINA: Thank you, I was going to bring that question up myself. In light of that I think it certainly lets us know, one of the times we were, a couple of times we where here we had all these possible competitors. Well that little project, which was about maybe a 1/4th or less the size of this one, was never mentioned. It's never been brought up, so I think it lets us know that there are more out there than what we knew about that and there may be more all the way around the world and if we're not there, somebody's going to be there to fill a void. The trip, Commissioner you went on the trip I believe to Asia? Did you go on that trip?

JOHN SHIVELY: No I did not go on the trip

REP. KUBINA: I've heard a number of things and I wish Commissioner Condon was here so he could say first hand but, people have said it was a good trip, they had positive responses. Where

is the Administration, and you guys, let me say for the record, thank you to the Administration for doing all that you are doing on this project, but where do you think Administration now and your task force is headed because of this trip? Does it change what you're gonna do. What specifically now, maybe as the next steps, that they have given you ideas, besides other than oh it was a good trip and thank the Lord for good?

JOHN SHIVELY: Well, I think it's encouraged us, I mean that we are headed in the right direction. First of all we're getting Alaska's act together. I think at least one major customer said that pretty frankly to us, we know the gas is there, we know there's some opportunity but there really isn't a project that we can respond to as a buyer at this point. I think it gave us some encouragement there. I think clearly it reinforced what the producers and Yukon Pacific have been telling us about a potential market. I think there is some disagreement over whether or not there's a window or not a window and I would just as soon not get into that debate today. So, I think all it did was encourage us to work harder.

REP. BARNES: Senator Sharp.

SEN. SHARP: Looking back at some of the tentative conclusions, one of them was a possible malfunction of property tax so it wouldn't be imposed until after the start of the project and not during construction. Was any thought given to the fact that that 400 to 500 million dollars in lost tax revenue at that time could be back loaded into property tax to pick that up in excess of the 20 mills so that the cash flows would not be negative before they start the project up. The project liability could carry that down the road.

ROGER MARKS: Yes, one of the ideas Dr. VanMures is explicitly contemplating, that and also the possibility of an escalating royalty over time as it goes from something like 2% to 30% over the life of the project. It still sort of begs a question about what to do during, in terms of paying for the disruption that occurs during construction.

SEN. SHARP: My last question would be do you have any idea what out of the 12-15 billion, how much of it would be located, how much would be involved in the LNG facility at tide water and how much in the fuel gas processing and so forth and on the Slope before its...

ROGER MARKS: The basic split is about 10% would be conditioning on the slope, about 40% would be the pipeline, about 25% would be liquefaction facilities in Valdez and about 25% would be the ships.

SEN. SHARP: Ten up north, 25% for LNG and 40 for the pipeline and 25 for the tankers.

REP. BARNES: Rep. Gary Davis, I have noticed, is also in the back of the room. Rep. Gary Davis if you would like to join us up here at the table, please do so. So if you wish to ask questions it will be easier for me to see you. I didn't know you were hiding behind Paul back there until just a moment ago. Rep.-Elect Hodgins

REP.-ELECT HODGINS: Yes, Madam Chairman, getting back to the Canadian project. They indicated about 3 1/2 trillion CF which would be 3 1/2 million metric tons a year for 20 years through that pipeline. Are they in a process, is that their total reserves or do we know if they're in a process of ramping up to a bigger figure and do we know what their capacity is going to be?

JOHN SHIVELY: My understanding is they don't even have that gas yet. I think they can get the gas. There's certainly a lot of shut in gas in Alberta and British Columbia. I assume they could have a bigger project if they wanted but I guess they've figured out that they can make a go of the volumes they've put out.

REP. BARNES: Other committee members or guests have questions? I have one. Somewhere in your presentation, I'd have to check back through here, you talked about the tax system and one legislature not being able to bind another. Now certainly that is true, that one legislature cannot bind another legislature. If you're saying that you cannot constitutionally, I think that's what I heard you say, contract, I'd like to know what you base that on.

JOHN SHIVELY: It is our, I guess, interpretation, of the Constitution as it...

REP. BARNES: which "ours"?

JOHN SHIVELY: The State of Alaska, the Department of Law. The Department of Law did the legal research on this one.

REP. BARNES: And you're saying that all the contracts that we presently have are unconstitutional?

JOHN SHIVELY: Madam, let me try to do this. I think, the challenge here is whether or not you can do something for a single project or whether you do it generically. Our current contracts, lets say leases on the North Slope, are done under a law that applies to anybody that gets those leases. So it's a law of general applicability. So, as we look at fiscal certainty, the challenge as we see it if we want to make changes that provide long term stability, is to format it in a way that allows us to do it with this project and not potentially affect other things in the State that we don't want to affect.

REP. BARNES: The reason why I bring this question up, you are aware that the Marathons Philips Kenai LNG plant was done through contract and I believe that you can come up with a regime, a system with that type of approach over a long term that is constitutional.

JOHN SHIVELY: I think that there are some opportunities here and that the challenges have sort of been broadened a little bit by the industry who some of them would like to define fiscal stability to prevent things such as what they would call leakage, so that even if we could come up with a arrangement that would give us a fiscal stability on the gas line, they're afraid that 10 or 15 years from now legislature might say oh they got such a good deal on the gas line, we're gonna hit them over here on the oil. If we start to expand out into that kind of fiscal stability, I think we have real challenges. If we can combine it to the gas line itself, I think we have some room to operate although we have not come to a resolution of exactly what should be done and in addition it's hard to determine exactly what we can do until I think we have a better idea of the economics of the project.

REP. BARNES: Thank you, other committee members have questions? Rep. Kubina.

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> REP. KUBINA: Well just a comment, Madam Chairman, just as we discussed in the North Star proposal, you can't get everything down in writing, black and white perfectly and there has to be a little bit of trust among each other in working with things that we were asked to give trust and I'd hate to see that argument coming in to here. I'll leave it at that. It works both ways.

REP. BARNES: Rep. Kubina, I would just point out that while I do trust, I always ride herd on those I trust as well. Make sure they don't stray.

REP. KUBINA: I might ask one other thing, is there anything that we should be doing as a task force here other than what we're doing? Do you have any other advice here to us? We're trying to do everything in our power to help make this project go. Do you have any advice for us?

JOHN SHIVELY: I think you should continue to do exactly what you're doing. You're doing some of your own independent investigation. We want to share with you what we learned. This is an education process for all of us and I, the Governor considers this an opportunity to show that the Legislature and the Administration can work together. If there are things that you think we should be trying to get that we don't have, we're certainly willing to try to do that. When Mr. VanMures comes up obviously you'll want to talk to him directly and I think he can really assist you as he's assisting us.

REP. BARNES: Commissioner Shively, today I have a work draft of a resolution to present to the legislature in January. I'm going to distribute that work draft today so that I can see input from all the parties involved so any input that you would like to give us, if you would please do that I would very much appreciate it because I want this document, when we get to Juneau in January, to be a document that our oil and gas committee chairman can get behind in again to push forward with because I'm under the belief that I don't like to hear people say that it can't be done because I believe that man kind with God's help can do anything that they want to do. I believe we can build this project and I believe we can do it in my lifetime. I believe this gas can get into the market in the window of opportunity if we all get busy and work to see that it is done. Like I told the producers at the meeting that they came to, they are going to come along even if they come kicking and screaming so the draft that I will give out, I'll seek your input before we make it a final draft.

JOHN SHIVELY: Thank you Madam Chairman and we look forward to receiving that.

REP. BARNES: Any additional comments?

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REP. KUBINA: This matter of trust and exchange in the future, it's my observation there's been as much change in the hierarchy of the three major oil companies in the last eight years as there has been in the legislature. Trust has to go both ways.

REP. BARNES: Thank you very much, we would like to ask the producers if they would come up to the table now. Thank you for coming again today to share your thoughts with us. If you'll each identify yourself for the record and tell us which of the big three that you will be speaking for as you do so. You know the drill, each time you talk say it's you.

BEVERLY MENTZER: I'm Beverly Mentzer with Exxon, Houston, I'm the business Development Manager responsible for the Alaska gas commercialization.

MARK BENDERSKY: I'm Mark Bendersky with BP in Anchorage, I'm the commercial Manager for Gas.

DAVID LAWRENCE: David Lawrence from ARCO Alaska in Anchorage, Manager of Gas Commercialization and Marketing.

REP. BARNES: Do you have any papers that you wish to distribute, please do so. Are each of you working off that document or is it just BP's paper?

MARK BENDERSKY: This is just a BP paper, here's copies for the legislators.

REP. BARNES: While they're being distributed, we were pleased to learn that ARCO's new plan for the future, I'm sure BP will have something like that, no decline after 99 and that includes using the gas for it's intended purpose. Please proceed who ever wishes to go first.

MARK BENDERSKY: I didn't have a long presentation. I wanted to bring to your attention the fact that BP has presented a paper on LNG projects in fiscal regimes at a Conference sponsored by the University of Alaska Anchorage here back in May. I wanted to let you have a copy of this paper and make it part of the formal record. I could just summarize six major points about the paper. It deals with, it basically says that LNG projects are fundamentally different than oil projects, they have longer paybacks and therefore greater fiscal stability is needed to attract investors and financiers. Competing projects of other governments are negotiating specific fiscal deals for their projects. Alaska's gas project is unique because it has an up front 800 mile pipeline burden and Alaska's current fiscal regime for a project of this magnitude which is economically marginal, is somewhat regressive particularity with the ad valorem taxes and to some extent the minimum severance tax and royalty and to move this project ahead, we want to be needing to do 4 thing simultaneously. You have to make good progress on all four fronts and as we discussed this with you in the past they are: progress on fiscal terms, additional cost reduction and reduction in cost and certainty, we have to define our project structure, that is who is going to invest and what are the relationships between the parties and we have to have a market, we have to have an improved market conditions, that is who are the customers, how fast is the ramp up, all of the terms necessary to do a gas sales agreement.

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REP. BARNES: Would you identify for this committee what you as a company, BP as a company, has done and are doing, to market this gas say in the pacific rim?

MARK BENDERSKY: BP, as a company, we are currently in the market everyday selling LNG because we are producing LNG for projects in Australia and Abu Dhabi. We have offices in China, Taiwan, Japan and Korea and we have local representatives who are very familiar with the LNG industry folks over there. Here in Alaska, I'm responsible for marketing BP's share of Alaskan gas. I've made 4 trips to the market, some with ARCO and Exxon, some alone, and I've been getting a sense of the market situation in Asia as far as how they view Alaska gas, we've been updating current and prospective LNG buyers on progress and plans for the Alaska project and we have also been learning what their needs are and how, what desires they have from both a technical commercial aspect and how we can make our project more attractive to them.

REP. BARNES: Other committee members have questions? Rep. Davies, questions? I guess he left. ARCO presentation:

DAVID LAWRENCE: Madam chair, we do not have a formal presentation for today. I would like to take this opportunity though to take a few minutes just to comment on some of the work which has been presented by the Department of Revenue. I think we've been very encouraged over the last six to nine months in our working with the state representative. It has been an educational process on both sides, we have learned a lot from them and I think they have learned some thing from us and Yukon Pacific as well and I think their accomplishments do need to be recognized today.

REP. BARNES: I think you'll have to speak up a little bit, people are straining something terribly to hear you.

DAVID LAWRNECE: I think I would like to recognize their accomplishments which are significant and they are useful because they help to clarify some of the misunderstandings which might have been surrounding this project, and also to provide a good base for information for people on the project as well. I think the work that will be presented by Dr. VanMures will be a very useful addition to the database that's surrounding this project and I think we'll all be able to learn a lot from that piece of work. We, at ARCO are also very encouraged by the State's work to develop a Memorandum of Understanding which will hopefully sort out some of the relationships within the State of Alaska and relationships for our particular project. We certainly are very encouraged by progress so far on that document and look forward to signing it as soon as possible. I think the third thing I'd like to comment on is the financial model which the state has developed and again I think that is a very useful step forward in understanding the driving forces behind this project and we had the opportunity to have several discussions at the technical level with the Department of Revenue and we found those discussions to be very constructive and I think that will be a very helpful analytical tool for everybody when we start to enter the more analytical phases of the fiscal debate on the project.

REP. BARNES: Questions? Sen. Kubina.

SEN. KUBINA: Thank you Madam Chairman. Mr. Lawrence I recognize that this project would be a good one for ARCO that this is probably the largest reserves that ARCO owns there on the North Slope in gas or close to it if not the largest. So, a couple of things maybe, on the MOU's, I read them of course right after they were released and thought that they'd be signed probably the next day but obviously it's taken a little bit longer. Is there anything you can tell me about problems there or is it something that you don't want to talk about yet?

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DAVID LAWRENCE: I think that, as I said before, I think the MOU are a very significant step forward on this project. It is something which we in ARCO had in our minds perhaps as long ago as May of this year as being something which should be used for progressing the project. That is something which has just developed in our discussions with the State. We have from the outset been very keen to bring those documents to their swift conclusion. As I say, we stand ready to progress those documents as soon as possible.

SEN. KUBINA: The resolution that rated this task force, one of the main reason for it was to try to bring all parties of interest together on this subject and I guess I thought it was pretty intelligent thinking on someone the governors office to come up with two different MOU's all though I am a little bit dismayed that we still can't seem to sit down at the same table but if it takes someone in the middle like the governor to facilitate that then I hope that by the time we're down in Juneau that those things will be done so that we do have a good firm basis of what our relationship with each other is. Thank you

REP. BARNES: Any other questions? Well, let's hear from the lady at Exxon.

BEVERLY MENTZER: Thank you, Beverly Mentzer with Exxon. I'd like first of all just to share some general observations and then I came to the hearing prepared to provide an update on our activities since September which will be brief since there hasn't been as much time there, and then also share some reactions to the State's testimony earlier. Just in general I would like to say that we are very encouraged by the cooperative effort with the State. We are working on multiple facets at multiple levels in all organizations and I feel like there's a lot of progress being made there. We do agree with the State's assessment of the project, it's not currently economic, however, we are working to make it commercially viable and I intentionally changed the terminology there from economic to commercially viable to emphasis a point that we feel like is really important in looking at this project. Clearly it needs to meet economic criteria for investors but it also needs to be able to compete on a worldwide basis with other fuels from the far east and with other LNG projects. At times those may give you the same criteria, at times they may be different and we're keeping an eye on both of those to make sure we meet both of those hurdles to get into the market place.

Moving to an update on our activities, I won't be redundant with the State, we've obviously been working with them on their financial and fiscal area so I'll focus primarily on our technical work and our work with the market. In technical area, we're focusing our work on improving the technical definition of the project to reduce the cost and reduce the uncertainty associated with that cost for the areas of design, construction and operation. What we've done is formed 8 different teams within a technical organization made up of representatives of all three producer companies that are going to be working throughout the year in that effort. To give you a few examples of what those teams are and things that we're doing. One, for example, is the gas conditioning plant. What we do with C02 disposition on the Slope was an issue and a very costly one to be resolved. The pipeline and compressor team will be looking at infrastructure sharing obviously with TAPS, construction options and trenching, metallurgy to be used in the pipeline, the higher strength steels and trying to push the envelope on that. In the LNG plant and marine terminal area, we'll be looking at such things as what size modules we can use and then sea water cooling which is a big benefit for Alaska relative to other world wide projects that you could add a cool year round medium to use in the processing plant. There are obviously permitting issues surrounding that and we'll be looking into that.

In the shipping arena, we have some fleet assumptions that we've been working with right now and they've been based on single country deliveries. For this project we really need to expand that and look at multi-country deliveries and that will be our key focus into the future. Also, we continue to investigate larger size vessels. The feed back from the market is they like the size 135,000 cubic meter currently being used now but as recent as a few weeks ago I was at a conference where there was a paper presented in trying to increase the size of vessels which can certainly be done by the ship builders but the question is getting them into Tokyo Bay and what modifications might be needed to be made on the receiving end. So the industry is looking at that. We'll also be looking at regulatory environmental issues, developing cost and scheduling options and reservoir engineering support teams for these areas. Another key area is planning for conceptual engineering. What we are doing is a parallel plan in the hopes that our other efforts will be successful and so we're looking at what would be needed to proceed into the next step on conceptual engineering in regards to costs, contracting, scope, what sort of information would be needed to be provided to the contractor such that if we make the progress that we hope to in the other areas then we would be well positioned to proceed on into that next step.

A couple specific things that have happened since September, we've found that working with three companies and people spread literally around the world to get the experts we need that it's very beneficial to use work shops and get people to dedicate time to work together on issues. We had a three day technical workshop in Houston in late October with 31 participants from the companies. Obviously, there were three people there from Alaska, we also were able to pull from resources such as BPs LNG fleet manager and some of our research organizations so we were there through all of the areas and working to clearly optimize the entire project. We need to keep our kings together so that we don't suboptimize any one section. We also had an environmental workshop in November, same type of thing, pulling people together and spent some time talking the scope and strategy for completion of our environmental work and then there's the reservoir engineering workshop of the same type scheduled in January.

In the area of the market activities, you're probably aware there were two trips in September, one that BP and ARCO participated in. About 20 utility and trading companies were visited there in Japan, Korea and Taiwan and then we also had three companies accompany the governor on the Nov. trip to Japan and Korea and met with 9 different companies independently while we were there. Just to share some of our conclusions from that trip, we do see a growing demand for LNG, similar to what Roger Marks said. There is continued economic growth, there are sensitivities surrounding nuclear plants and at what phase, if they will be built in these nations, these sensitivities abound. Conference will be coming up in Kyoto in Dec. of next year on green house gases and global warming as to what sort of environmental restrictions may be put on. Some could be beneficial to LNG by reducing coal usage and they were very restrictive and it would impact all fossil fuels. The economic growth of the far eastern areas is continuing. Korea is going to be a significant contributor in that arena. Japan is very established, they certainly have growth but on a percentage basis, Korea's LNG demand may triple between now and 2010. So, we do not see a market window that opens and shuts. We see in 2005 when it begins to open, it just continues to grow over time. Obviously there are other projects out there that are competing also for that LNG demand. There are some that are in the contracting stage, some expansions that will be lower cost and we see them kind of filling that demand between now and 2005. But at that point in time, it starts opening up room for new projects and they also have declining volumes from some projects, some contracts will be expiring, that will also help in that arena. So we see the opportunity for initial sales in the 2005-2010 window most likely.

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We also heard from the market that the stability of the fiscal regime is very important to the buyers and we heard that from several companies, some of the local power companies there in addition to the trading companies. They're aware of the multiple taxes that are in Alaska, they're aware of some of the tax disputes that have gone on like with the IRS on the Kenai project. With Phillips Marathon and most of the world wide projects that they see in foreign governments have some form of fiscal certainty associated with that project and they're used to seeing that with Sultan of Oman as the royal decree that's basically issued as long as he is in power there. So their concern is if there is not some sort of formal fiscal stability that can be provided is that it would translate into higher prices to the purchasers or potentially inhibit the upstream desire to reinvest capital in later years into the projects. They're also aware of concerns about whether you could get fiscal certainty for the length of the contract or the length of the project and that's something that they would consider highly desirable. We also have the strong supply competition from LNG in other competing fuels, I mentioned a few of those things. Another area that I had not mentioned is the independent power producers we're also starting to develop in the Far East nations so that will be something we will be watching as they go through deregulation and privatization of some of the companies.

It's clearly a buyers market right now. There are a lot of projects out there. They are eager to hear from Alaska. They certainly like the diversity of supply we can provide. The Kenai project has an outstanding track record with a lot of credibility there. They're not going to be making early commitments. They're going to be watching. They have said fixed escalation clauses in contract is not something that they would view favorable and lower prices, we've seen, impress the later contracts who are not coming out with lower prices so we are starting to see the effects of that buyers market taking place. One company told us "I buy LNG from 6 sources, I know what those prices are and I want a project delivered competitive LNG within that range, being close enough is not good enough", so they are really working it closely.

I guess just in summary, I'd like to say that the market does like Alaska LNG, they are very receptive to our visits, they're very encouraging. Obviously they've heard about this project for quite a long time. There have been visits over there for many years and they are eager to see progress. They know what our benefits are, they know what our challenges are and they want to see us knock all those challenges to bring the project to commercial viability.

REP. BARNES: I think we all want to look at those challenges and see how that we may best beat them because I believe they are challenges that can be met by the people of the State. But something that you have said, you said you see a growing market, and I do too, but not so much so in the countries where the gas that we have now in the near future but I see China, a country that you did not mention as being the real growth market. Chinese have a billion 200 million people and they do have a growing economy with and old and aging power system and I think we need to devote some resources to doing what we can to look at that market as well but with all of the new projects that are coming on line in the country, I do not want any time for information to be given to this committee that would lead you to believe that because of this growing market that if we miss this window of opportunity that the next window will open for us because I don't necessarily believe that that's true. I believe that this window of opportunity is crucial for us because the other countries and the other projects that are coming on line will get into those markets and into those windows of opportunities and the door will close for us so ladies and gentlemen, I'm not going away and I'm sure you aren't either, and we're going to work to make sure that that opportunity does not close for us. I do believe that some of you have a bigger commitment to this project than others and I have the understanding that there isn't a gas club as I think it was told to us, I haven't forgotten that, some are in and some are out and I would like all of you to be in and producing Alaska's gas for the world market and we're going to continue to work to make sure that that happens. Other committee members have questions? Rep. Kubina?

REP. KUBINA: You mentioned that the Japanese are very aware of the tax situation and have concerns about having the long term but was that statement meant to mean that if we as a legislature or as a state, dealt with that issue sometime in the future that that moves this project along substantially?

BEVERLY MENTZER: My view of their perspectives, take this as third hand information, is that they had that on one of our hurdles to cross and if we were to overcome that hurdle, it would move along, I don't know how you would define substantially, but in their minds it would be another step towards commercial viability, it would be a risk reduction step, it would mean that our gas could be more competitive in the market and that would be viewed positively.

REP. KUBINA: Have you talked specifically prices or has your company talked specifically prices with them actually in a more specific way, more direct way, other than just the over all things. Have any of you guys? Have you companies actually said things like "you know, if we're going to build this one exactly, what would we get, where are we at"? Have you come that close or are you still tip toeing around the daisy's out there?

BEVERLY MENTZER: From our perspective we have not tried to enter into any price negotiation, clearly. Some companies are more open and more specific on what they consider acceptable than others and that's basically where we gathered that information but they said the market will determine the price, not the cost of the project.

REP. KUBINA: If I might just, almost done Madam Chairman. You mentioned the conditioning plant, the removals of CO2's. I'm far from an expert on any of this, but my understanding, your company's involved with the Natuna project also?

BEVERLY MENTZER: Correct

REP. KUBINA: And I believe our CO2's out there, this is an expensive proposition and Natuna's one of the projects that we're competing with. We have maybe what, a very small amount, 5% or something, CO2's compared to 50+% or something in the Nutuna project. So, I guess it was interesting for me that you mentioned that with my knowledge that that's a major problem with that project it makes it a \$40 billion project compared to our \$15 billion about the same amount of gas but yet it's something that your company's spending substantial dollars on trying to bring that project forward and I wouldn't have brought it up except you brought it up as that being a major challenge for our project.

BEVERLY MENTZER: Let me address that. The reason I brought it up is that Prudhoe Bay has 12% CO2 and to liquefy the gas it has to have less than 50 parts per million CO2, so it's a necessity to remove it. That's a simple process that's done many places and the issue is not that it's as much of a challenge but how do we do it as cost effectively as possible? Plus having the CO2 there, assuming it would be re-injected there are reservoir options. We might can use it to help the reservoir also so we want to do it cheap and then maybe we can get some fringe benefit from it too. Comparing it to the Natuna, Natuna's just got a world class CO2 problem, that's a different situation.

REP. KUBINA: Thank you.

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REP. BARNES: Senator Sharp.

SEN. SHARP: I have a questions that involves all three if not two of the representatives, not just to her.

REP. BARNES: Okay, does anyone have one just to Exxon?

SEN. LEMAN: Beverly I don't think you've had a chance to answer this question, at least not in front of me, you've probably answered it elsewhere. The other two gentleman have. We talked about competing projects, I'm aware of that and I'm also aware that all three of your companies have interest in competing projects and so my concern is to what extent that may color this project and I would say it's safe to say that all of us care more about the Alaska project which you probably don't find unusual. They have at least to my satisfaction, responded that whether their organization their commitment is such that they're given the charge to move ahead and make this project work. Is that the same for you and where you are within Exxon or are you, do you likewise have interest in some of these other projects and making them work would somehow influence how you look at the Alaska market?

BEVERLY MENTZER: Let me address that personally and then I'll address it from a company perspective. My sole responsibility for LNG project commercialization is Alaska. So I am not working on any other projects. We keep an eye on them just like we do other competitors. Now, Exxon Company USA's sole LNG project is also Alaska. They're reporting direct to Exxon Corporation, and Exxon Company International heads the other projects also. Even within that divided structure, which gives even more emphasis within each corporation projects, it's Exxon intention we hope that we commercialize all of our resources. We do not have a priority put on any projects worldwide. There's no queue of any sort. They all face substantial challenges with long term developments and each separate team such as our Alaska team is working to do the best they can to develop their project and we have full reign to do that within the Exxon organization.

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SEN. LEMAN: I wish you great success.

REP. BARNES: Mark?

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REP. HODGINS: Thank you Madam Speaker. Beverly, you'd talked about talking with some customers that bought from six or so different supplies. Typically, the contract terms have been 15 - 20 years, are you seeing that coming down? Are you seeing less terms? 5 year terms, 5 year contracts, or what basically are the typical contracts now?

BEVERLY MENTZER: They are still interested in very long term contracts, 20 to 30 years and the discussion regarding our project, there is a little bit of LNG being sold worldwide on the spot market, at any time there might excess capacity and no plan. That's not committed, but that's very minor.

REP. ELECT-HODGINS: And then you talked about it being a buyer's market. Do you have any projection as to when it might become more of a seller's market?

BEVERLY MENTZER: At this time I don't.

DAVID LAWRENCE: Can I also have an attempt to answer your first question about the contract terms? I think in my observations for the market, I think that the buyers are probably starting to fall into two distinct groups. One group is, shall we say, the city gas companies, the companies that who are supplying gas to residential premises, commercial premises, industrial premises through pipelines. And very few like these have less prior investment to make to meet the needs of

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DAVID LAWRENCE: (missed a bit at end of tape) There's a second group of buyers who are the large power utilities or even the newer independent power projects who, of course, have got massive investment of their own to make, and for them entering into a long term purchase contract is just important as for us entering into a long term sale contract and indeed the scale of their investments will be every bit as large in many instances and the scale of investment that we were going to make and the length of prior planning, the amount of planning that they will have to do will be on a very similar scale to this particular project as well, so I do sense at the moment, two distinct groups of buyers starting to emerge both with different characteristics in terms of how they might be contract for LNG in the future.

REP.-ELECT HODGINS: Madam Chair, can I continue please?

REP. BARNES: Yes.

REP.-ELECT HODGINS: What would you find as a breakout between those two groups? Can you give a percentage of those two as to what usage they would have?

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DAVID LAWRENCE: No, it's difficult to quantify by the breakdown. There's certainly very significant city gas usage in Japan under growing, and very significantly growing city gas usage in Korea. Some use in Taiwan, potentially huge use in China as well. It is not easy to give a direct split out. Certainly if you were interested to follow up on this, we could probably find you some more explicit information. I do sense that the power utilities may be a close target for this particular project in terms of the basic planning that they will have to do along side the planning that we will have to do.

SEN. SHARP: I say this realizing that maybe any new radical processing in the handling of natural gas, breakthroughs can have significant proprietary advantage by any particular company that might come up with it but just getting a little ripple now and then, are any of you aware of any research or the status of any research on the chemical processes that convert natural gases to shippable liquids that are easier in handling than the liquefaction process that very way may well eliminate the need for that major capital requirement. Do you know of anything going on like that that may be coming down the Pike, general trade of the industry information available?

BEVERLY MENTZER: Exxon's perspective, through Exxon's research and engineering there's been an ongoing effort for many years on gas to liquid conversion. There's a pilot plant producing 250 barrels a day in Maytown and they've been working to reduce the cost of the project and also develop a commercial scale project and there are currently discussions in progress with the other government to try to do that for a project that might produce 50-100,000 barrels a day. The synthetic hydrocarbon liquid. We keep an eye on what's going on, at times have done very rough scaling cost estimates to the North Slope to see what that might be and it does not appear to be competitive. It takes an extensive amount of processing. We estimate it would require 300 acres on the Slope for a plant the size to convert the 2 billion cubic feet of gas so we have both hurdles of commercial size, economic hurdles and costs; potentially, improvements in the future to make it more viable but at this point in time we don't see it competing with the LNG.

SEN. SHARP: That's very interesting because obviously it offers the opportunity on the offset side to utilize possible existing pipe line facilities that handle the safe transport of liquids and avoid the duplication pipeline and getting LNG, it will be interesting to watch in how this develops in the foreseeable future.

REP. BARNES: Senator Sharp, you weren't at the meeting where, I've had two in the past where Beverly was here representing Exxon, interesting conversations with Exxon on what would you do as it relates to getting the gas from the North Slope to market and one they tried their technique that would go across Western Canada. My answer to that was that we'd all like to see Western Canada opened up and perhaps that will be someday, but not for this project because there's no way to get gas to market at this time. The next one is a new process from gas regard to LNG in general, LNG projects around the world and this particular LNG project specifically. I want to go out of my way to indicate that our interface for the most part has been with Mr. Roger Marks. He has spent a considerable amount of time on this project and he has listened carefully and I believe that he has done an exceptionally good job. Obviously he has been under the direction of Commissioner Condon, Commissioner Shively and Commissioner Hinsley. They are all to be congratulated. We have been working on this project, as some of you know, for 15 years and this is the first time we have seen the legislature and the administration paying the kind of attention which this project requires and I might add, from our perspective, it's the first time that we've seen ARCO, Exxon and BP pay the kind of attention which we believe this project requires. We're extremely happy and again I think it is only because of this committee's resolution and the courage of this committee in the legislature last year in passing the resolution that led up to these very hearing. While I'm on the subject of the State of Alaska, there are just, and again I think Mr. Marks did a fabulous job presenting what the state has discussed with us and obviously with others, there are two items that I just wish to bring to your attention. We believe that this project can ramp up in four years. We have been told by the Japanese markets that they could take 9 million tons of gas between 2005 and 2009. A four year ramp up vs. a six year ramp up has a considerable impact on the economics of the project. A positive impact and I think Mr. Marks recognized that and indicated that if we could do it better than 6 years that's what we want to be shooting for. The other item, and I only do this because I have been working on this project for 15 years, and sometimes little tiny things come back and end up in the Wall Street Journal or end up in some magazine or newspaper article and are read by the Japanese and they create confusion and I know that it was an inadvertent mistake but I believe that on page 11 of the State's presentation, there's a rate of return of construction cost chart, the capital cost is in billions of dollars, not millions of dollars. I think

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REP. OGAN: I think it's important to say they're certainly good at cost cutting, we don't think they've gotten it down to 15 million dollars.

JEFF LOWENFELS: I think if everybody would just sort of make that correction and I just think that everybody is trying to get it done that low and I think that's absolutely true. Again, we congratulate the state of Alaska, they're obviously a lot smarter than we are, it's taken us 15 years to get to where we are and I think they've come to speed as this committee has come up to speed and we are all basically singing off the same sheet of music. Say again, while the chairperson was out of the room, that we think we're singing off the Alaska Flag song. This is an Alaskan project and from Yukon Pacific's prospective, we don't care what happens in the Natuna or Qatar or any other project and we don't care if they think their economics are better than our economics. We have a saying at Yukon at Pacific, "Something good comes out of anything bad" and we can make this project not only work economically and make it commercially viable or we can make it so good that we will prevent those other projects from getting into the market place until we've reached a full capacity of 25 to 28 million ton. The pipeline itself is not what I would call a problem, it's not a problem because you can fit 14 million ton into the market place and when you've hit 14 million tons, you're at a point where you've got a commercially viable project. Once that pipeline is in place, then you can expand up to the 25 or 28 million tons, the Alaska project becomes the finest LNG project any place on

earth. The economics at 16 million ton, 17 million 18, 19 million ton make this project sing the Alaska flag song all by itself. 14 million tons is doable and the pipeline is not a problem, it's actually an opportunity because once it's in place we can double the size of this project, double the income to the State of Alaska with regard to it's royalties, double the taxes to the State of Alaska in regards to the taxes on the system, double the profits perhaps to the investors, maybe not double the profits but this project works and I feel that after 15 years of working of on it enough that it's a child of mine to know that at 14 million ton the pipeline is not a problem, its not a juvenile delinquent, you know, it's a growing, thriving adult that's going to have a fabulous future and an opportunity.

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As far as our activities, we have recently commented on the MOU. We submitted the MOU, probably within about a week after we received it, to the State of Alaska and we look forward to the continuing discussions with regard to that MOU. We've also made two trips to the market since we last met. We've also continued to work on the right of way location, we continue to work on our air permits, we've continued to work, not just at work shops but every single day since we've last met. And I want to say just one thing about Yukon Pacific's permits because there have been many comments in the press about the differences between our project, which I might add is the Alaska gas project, the difference between our project and the other project as Mr. Lawrence says are really very very small. We agree with about 90 to 95% of what we've heard from ARCO in particular with regard to this project. What people need to understand is that the permits that Yukon Pacific has accumulated have a tremendous amount of flexibility. For example, we're not a 42 inch pipeline, we're a large inch diameter pipeline that can be constructed anywhere within the corridor where there is not already an existing pipeline. We have a right of way that we've laid out on a map. We've done some surveying on that right of way, we've done some geological research with regard to where it's located and given the constraints when we did that, which was that we had to stay 200 feet away from the oil pipeline, it's the best right of way you could possibly have. However, we confirmed this summer, that we could move that pipeline as close as we want to the oil pipeline as long as we can demonstrate that there's and environmental benefit to do so. That's been confirmed by the DOM and it's been confirmed by the joint pipeline office, Department of Natural Resources representatives. We have the flexibility to do what ever ARCO, Exxon, BP, the State of Alaska and Yukon Pacific finally come up with a conclusion is the proper thing to do. With regard to the LNG facility down in Valdez, we have the ability to be able to move that LNG facility because we have the export licenses. The export license is for Valdez harbor, and we also have an additional permit that's specifically for Anderson Bay within Valdez harbor but we've got the export license. And if it can regulatorily be placed at the Alyeska terminal and if it can be demonstrated, not only that you can comply with the regulations but that that is a sound and intelligent thing to do, then there can be changes. We've also been looking at a great deal of opportunity with regard to cost reductions. We agree with the State of Alaska and I think I heard some of the oil companies, I certainly have heard ARCO talk in the past about, there are larger train sizes now than when we permitted our project. We've got the flexibility to be able to use those larger train sizes. One of the reason why the Canadian projects being talked about right now is because in a sense they're taking the plans of the Atlantic LNG project, the Trinidad project, which used the Philips process and they're gonna put a one train system in using that as a bigger train. We've go the capability of putting 4.7 million ton trains into our situation. We've also got the opportunity at the Anderson Bay site to be able to expand, to be able to get up to the

20 and 25 million ton number that we're beginning to talk about. There's a tremendous amount ŝ

of flexibility with regard to the Yukon Pacific permits and no one should ever forget that. Those permits can be used to do almost anything within the corridor and anything at Valdez but it's gotta be technically sound, has to be based upon not only the regulations, the geology, the environmental considerations and these are things that we've been studying and looking at for 15 years. We are willing to lower our voice, to come better into tune, to sing in 4 part harmony. We wish to participate and to work hand in hand with ARCO, Exxon, BP and anybody else who wants to become involved in a gas pipeline project. I think we've demonstrated an extreme willingness to work with the State of Alaska and certainly with this committee and we appreciate again very very much what this committee has done because I truly do believe that this committee has created the kind of atmosphere where we can start to work together moving forward, all of the parties and it's not just Yukon Pacific. It's the State of Alaska, it's the Legislature, it's the people, Alaska Public Utilities Commission, it's the Department of Natural Resources. This project is a project that's going to require everybody to be, to change the analogy, pulling the oars together because if we don't there will be a Canadian project that slips in, there will be another project that comes forward. Every time that I pick up one of the LNG journals, I read about some other potential project or I read about one of the competitive projects which is moving just a little bit more forward than I would like them to do. Whether there's a window of opportunity or not, I don't care, I agree with what Madam Chairman said, this project is going to happen in our lifetimes, it has to and the sooner it happens the less risk we face that a Canadian project or an Australian project or any other project comes forward and takes our place in the queue. Mr. Lewis and I have told this legislature before during last session, we're in a horse race and we have to remember that and we've got to make sure we're all on the same horse and that we're riding it as hard as we possibly can. It's extremely important. Other projects around the world can also expand beyond their economic thresholds and when they do that, then we're out of the ball game as far as I'm concerned. We've gotta do this project while the risk is as low as possible and that's earlier as opposed to later. So I thank you very much, I thank Roger Marks, I thank Wilson Condon and John Shively, I think this committee and the Administration has done a fabulous job and we enjoy sitting at these hearings and actually hearing an awful lot of stuff that we've been saying for along time.

REP. BARNES: Committee members have questions of Jeff? Sen. Leman.

SEN. LEMAN: Jeff, thank you for your comments about where we're going and I think back to just a little bit more than a year ago when we have the hearings and Senate Resource committee and I think you made a lot of progress since then and thank you

REP. BARNES: Would you place those work drafts down there on the end of the table so that anybody that wants one of the working draft can pick it up because I know people are having to leave.

SEN. LEMAN: I do want to say this, you in particular praised ARCO for what some of the presentations say but I learned from them earlier this week about the most aggressive schedule that they see is starting about 2007 and I think you still are talking about 2005. Is there really a difference there and if so how do you, how do you justify that difference. Are we being

unrealistic for at least hoping that we can shoot for a schedule that's a little bit more aggressive and recognize that that could slip a little bit but instead of planning right now for later startup.

JEFF LOWENFELS: No, you are not being unrealistic, there's no question the Japanese, the Koreans and the Taiwanese have all slated the 2005 time slot is a place in the queue for somebody to take, so definitely you are not being unrealistic. Now is there a difference between 2007 and 2005? Well obviously from my perspective if you get in line in 2005 and you're not ready until 2007, the markets going to work with you, but ultimately this is a market question and the market will answer it. And the market will state when this project will come to market but I really don't think that it's that much of a difference although I certainly would like to see it happen in 2005.

REP. BARNES: Jeff, your counterpart would like to talk.

WAYNE LEWIS: I'm Wayne Lewis, Vice president. Senator Leman I would suggest that I have never heard a decent argument, even a moderately coherent argument, for why later is somehow is every bit as good as soon for the initial deliveries of LNG into those markets. The reason it's critical is there is a hundred million metric tons of potential supply we are competing with. If you add up collectively the projects in the Middle East and in the South China Seas, or the recent Canadian announcement, some combination of those potential suppliers can close, and I'm going to use Madam Chairman's term because I like it, the window of opportunity. Here is the problem. If this were a small project, I couldn't make that argument. That is if this were a three million ton project. I still think that sooner is better than later because it assures that the project gets built and that the risk profile goes straight up the farther out in time you look. But, this is a large project, it will never not be a large project. It's a 14 million ton a year project or in that area. In order for its economics to work, that means that it has a very special market need that has never occurred in the history of the LNG business. There's always been a demand but it would never allow a very large project like this which must ramp up to full production in, I'm gonna say in four years, to get into the market. That's an anomalous market situation but this project requires so I won't dispute that there will always be demand growth for LNG but I will dispute is that the particular market circumstance will evolve for this project with its particular need. As far as we know, it's a one time phenomonum and anyone who banks on the idea that no sweat, it may occur again, I don't think their analysis is very realistic.

REP. BARNES: And the reason why I used that phrase, I agree with what you said, is because of the size of this project and the market that it has to have to support it. Once the doors of parts of that market close, you'll never have enough of a window of opportunity to support 26 trillion cubic tons of gas. Rep. Kubina

REP. KUBINA: Madam Chairman, I think my way of thinking on it is I guess I'm not so concerned whether it's 2005 or 2007 when we really start delivering but I would like by the end of 1997 to have the contracts to do so that I knew we were going to do the project. And if we didn't wait until 2002 to make the contract with who we're gonna sell it to, that the problem I think we have. If we enter into an agreement with Japan, South Korea and China that we're

gonna sell, you're right, let the market set the date, but let's get the agreement to make sure it's ours and not theirs.

WAYNE LEWIS: Rep. Kubina, I agree, I didn't mean to imply that I'm so wedded to the date as to secure our place in line at the car wash. There are a number of other contenders, anyone who has ever been in our briefing room, knows how many other contenders there are and the equivalent supply, competition, volume is a 100 million metric tons out there trying to do what we're proposing to do. Much of it far less competitive frankly, then the delivered price for this project. You won't have to be ashamed of this project. We have a joke internally "even if Wayne and Jeff are stupid enough to be pursuing a numskull idea to nowhere, I promise you CSX isn't but we're not".

REP. BARNES: Any other committee members have questions? Rep. Ogan.

A MARKED STREET A STREET AND A STREET

REP. OGAN: Thank you, on that point, I've heard various approaches from the producers that there needs to be engineering studies or there needs to be feasibility studies, and these things need to happen and it's going to take several years to put all this in place to decide whether or not the project is competitive and at that point we're going to go talk, the impression I get, at least it's implied, is at that point we'll talk to buyers and at what point do you believe, it's probably a fair question for the producers too, it's critical to be negotiating this contract. Is it too preliminary to go cut the deal and then figure out how your gonna do it, we're Americans, we have some of the finest engineers in the world and the best ingenuity and that kind of thing, is that the cart before the horse or

JEFF LOWENFELS: I think it's a little bit of the cart before the horse but if I might make a slightly alternate comment, it sounds to me like there was an awful lot of reinventing the wheel going on and it's not necessary. We've done a tremendous amount of engineering and we've done a tremendous amount of environmental work and we're more than willing to throw it on the table, have it critiqued, have it looked at and have it become part of the educational process which ARCO, Exxon and BP necessarily are going through in order to determine whether they want to do the project. Why are we reinventing the wheel? Now, as far as the market timing, I think there is a little bit more work that needs to be done, but all of the trips that we've taken over the past, 8 or 9 trips now, have been negotiations with the market and all of the trips that ARCO, Exxon and BP have taken, even though you don't necessarily speak about the price, has been negotiation with the market and so I think that needs to continue. There is obviously a threshold point where you've done enough engineering to be able to bring the market in, maybe even to do some additional engineering with some constraints that obviously if you reach some proper conclusions, they're in the project and you're ready to go. Getting very close to that point and I think again going back to what Mr. Lewis points out, we gotta get in line. We don't get in line by reinventing the wheel.

REP. BARNES: We certainly hope we kept getting in line. Does anyone else have any questions? There being no other questions, we'd like to thank you for once again participating in our hearing and before Exxon and BP leave the room, I have one questions that I didn't ask before I left. Would you please come back to the table. I specifically ask the two of you

draft of a resolution. It is just that, it's stamped a work draft. The staff person on my staff that is working on this resolution, will be glad to have your input. It's Mark, you can call my office but the one thing I wish to caution you about, if you think for one minute that I'm going to put forth a draft that addresses individual needs of any one of you, whether it be one of the oil producers, or Yukon Pacific, think again, I'm not going to do it. That is not the way we work. We make recommendations to the Administration on how they should proceed to make this a viable project without taking anybody's side in it so I want that made crystal clear. Anything else to come before the committee? Again I'd like to thank the committee members and the other legislators that have come to participate in our meeting. I think this has been a learning process for all of us, its been certainly one for me and I look forward to working with all of you again on other projects and this one is not finished yet because we still have our report to finish and this resolution to finalize but I do want to thank all of you personally and publicly for participating and working with us. Thank you, we're adjourned.

January 22, 1997, Meeting: Permits-Yukon Pacific Corporation; MOU Updates-Yukon; State of Alaska; B-P; Exxon and ARCO

PROCEEDINGS

CHAIRMAN BARNES: [tape begins in mid-speech] ... to
 address the gas pipeline. I would like to introduce to you, not only the members of our gas pipeline working group, but the other members that are here. First the members of the task force: Senator Duncan, Representative Kubina, and myself,
 and Senator Sharp who is not here yet, but I'm sure will be. Also, I know all of you know Madam Speaker. Madam Speaker, we welcome you. Senator Leman, Representative Austerman, Representative Cowdery, Representative Brice,
 Representative Davies, and Senator Jerry Ward.

UNIDENTIFIED SPEAKER: [Indisc.].

8 CHAIR: Representative Ogan, Representative Hodgins back there in the corner. So as you can see we have considerable interest in the gas 9 pipeline. And before we start to take testimony, I would like to preface the 10 beginning of the testimony with a comment or two. It has been quite a learning experience, learning about gas, and when we had our first meeting, I told the oil 11 industry, the producers, that I wasn't into playing games. I don't have a lot of 12 time left in my life to play games, and I don't believe in people playing games with me. And I don't know a lot about gas. I didn't know a lot about gas when I 13 started this job, but I do know when I'm being handed a lot of bull. So we won't 14 have any of that as we conclude these hearings in the next two days, because anybody that tries is going to be told right then and there that's what they're 15 doing, because I do know when that is happening. And having said that, the first presenter here today will be Yukon Pacific who will be reviewing the permits 16 that they hold for the right-of-way for the gas pipeline. Mr. Lowenfels [ph], 17 would you please come forward, and anyone else that is with you. MR. LOWENFELS: Well, I think I can handle it myself. 18 CHAIR: [Indisc.] very good. Please proceed and identify 19 yourself for the record.

MR. LOWENFELS: For the record, my name is Jeff
 Lowenfels. I am president and CEO of Yukon Pacific Corporation. I was also
 general counsel for Yukon Pacific Corporation at the time these permits were

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obtained. Without any further delay, let me just give a quick little background as to why we went and got permits in the first place. Many of you may remember from previous testimony that Yukon Pacific Corporation was a party to a multicountry and a multi-company study. Of course the state was also a party, called the AAGS Study, the Alaska-Asia Gas System Study. That study was completed in 1986. The study concluded that the project to sell North Slope natural gas to Japan -- or excuse me -- a project to export North Slope natural gas would be economic, but that there wasn't a big enough market because the study only focused its attentions on Japan. And in 1986, Korea and Taiwan were not buyers of LNG. Yukon Pacific, based upon some trips we had taken to the marketplace and some discussions we've had with -- we've had with trading companies, was quite convinced that the market would be developing in Taiwan and would be developing in Korea, that eventually there would also be a market in Red China, People's Republic. And so we notified the participants, including the State of Alaska, and the 17 Japanese companies that were involved, and ARCO, Exxon, and BP that we had enough belief in this project to move forward. And so we picked up the AAGS Study. We told people we were going to move forward on the AAGS Study, and we invited people to join us. Well, we are here today still working on the AAGS Study. One of the things that the AAGS Study identified was the difficulty in permitting a project in Alaska. This was 1986. You know, we were going through a different period of time. There was a lot of discussions about D-2 and national conservation units, and there was a big, big, big question as to whether or not the environmental community or even the people of the state of Alaska would allow another project to be built the size of the oil pipeline. In addition at the time, Northwest Pipeline, which had a

¹⁵ In addition at the time, Northwest Pipeline, which had a franchise given to them by the federal government to take North Slope natural gas if it became available to the Lower 48 states through the Alcan Highway pipeline system, was a very active player. And so as a consequence, we felt a very strong need to demonstrate to the market that this project could be permitted, to
 ¹⁸ the federal government that this project could be permitted, and frankly, to many people here in the state of Alaska, that you could permit a large-scale project in the state.

With that in mind, the first thing that we -- we needed to take care of was a question which the Japanese continually raised, and that was you're not allowed to export oil, and we don't think you're allowed to export

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natural gas. Well, we pointed out to them that there was a provision in the Alaska Natural Gas Transportation Act, which was the act that gave the franchise to Northwest Pipeline, and we pointed out that there was a provision in there that indicated -- that -- that allowed for exports of natural gas, that there was no ban on the export of natural gas as there was with oil. The provision in the Alaska Natural Gas Transportation Act, and that's found at 15 USC 719 J, required a presidential finding that gas from Alaska could in fact be exported out of the country. And after many years, we obtained that presidential finding. In fact, we obtained it on January 13, 1988. That's called the Presidential Approval. I will give you a list in a couple of minutes of all these permits so you don't necessarily have to take note. And that was a very, very important document, because it convinced the Japanese that there wasn't an export ban on natural gas.

The next thing we needed to do obviously was to determine how much a project like this was really likely to cost. I mean, it's fine to do a 9 study. The AAGS Study was a very good study, Bechtel [ph] was a very big player 10 in the AAGS Study, but you really can't tell what a project costs until you know what the parameters are going to require of you. You know, to put the analogy of 11 a house - if you're only going to be allowed to build a one-story house, that's --12 your costs are going to be one thing. If the -- if the architectural review board allows you to build a two or three story house, well, maybe you'll have a little 13 different -- different figure. So we did enough design work to be able to not only 14 determine with better specificity what the costs of the project would be, but also to go out and get the permit so that we can in a sense conform our costs and our 15 estimates of how to operate the pipeline to the actual permit. That required two 16 rights-of-way leases. One was a federal right-of-way lease, and one was a state right-of-way lease, because the land that we were talking about traversing is half 17 owned by the state and half-owned by the federal government, about 400 miles each. The federal right-of-way requires an environmental impact statement 18 under the National Environmental Policy Act, and on June -- in June of 1988, the 19 Department of Interior, BLM as head agency, along with 21 federal and state agencies, issued a project-wide environmental impact statement for the Trans-20 Alaska Gas System. The system would take North Slope natural gas down the 21 existing right-of-way in the corridor to Valdez at Anderson Bay where it would

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be exported on LNG tankers to Japan, Korea, and Taiwan. Following that, we received a federal right-of-way based upon that federal environmental impact statement. The federal right-of-way grants Yukon Pacific the right to traverse 1 federal lands in the corridor to build a large-inch pipeline. Now, we've since amended that -- that particular right-of-way. We are entitled to build a large-inch 2 pipeline within the pipeline corridor that goes from Prudhoe Bay down to 3 Valdez. There is a tremendous amount of flexibility with regard to the exact location. We have staked a location that we think is a good location based upon 4 the parameters which were presented to us by some of the owners of the oil 5 pipeline and [indisc.] by the Northwest pipeline people, which required that we stay 200 feet away from both the Northwest right-of-way as well as the oil 6 pipeline and oil pipeline facilities. The federal right-of-way, oddly enough, 7 something that people don't realize, cannot be granted by the federal government under federal law unless you also obtain an agreement from the 8 AHTNA Native Corporation. And that has a -- it's a little arcane piece of history, 9 but in -- but in order to get a right-of-way for this pipeline project, we also were required to get an agreement with the AHTNA Corporation which owns lands 10 within the right-of-way. And on October 14, 1988, we -- we were granted by the AHTNA Corporation the right to designate and acquire any and all lands 11 necessary within the AHTNA region for the construction of this project. We 12 were also obviously interested in obtaining the terms and the conditions from -from the State government with regard to what a state right-of-way might 13 require. And so on December 10, 1988, after many, many months of work and 14 bridging off of the project environmental impact statement which we did with the federal government and the other state agencies, the state issued a 15 conditional right-of-way on December 10, 1988. So by that point in time, we had 16 received enough of a -- of the permits to understand what exactly was required in terms of preliminary design for the project, and we were able then to come up 17 with the necessary information to make an application for the export of the natural gas. That is a different license or permit, if you will, than the presidential 18 approval which is required under the Alaska Natural Gas Transportation Act. 19 This act comes from the natural gas act itself. And the federal government authorizes entities to export natural gas with a specific quantity in mind, and it 20 also authorizes the safety -- or approves the safety of the location, the suitability 21 of the location where that natural gas export will take place. It is a two-part --

two-step dance, so to speak. The first step was to receive the export license itself.
And after many, many -- well, actually basically two years of working with the
Department of Energy, having public hearings throughout the state of Alaska,
the Department of Energy Office of Fossil Energy issued an export license to
Yukon Pacific on November 16, 1989. This particular authorization limited the
ability of the federal energy regulatory commission, a sister agency within the
Department of Energy, from approving any site other than the Anderson Bay
LNG export site. We were given a process to go through during this export
authorization proceeding whereby we had to go through screening processes.
We looked at export sites, not only in Cook Inlet, Valdez, we looked at export
sites all around the state of Alaska, and the Department of Energy concluded that
the only export site suitable for the export of North Slope natural gas was
Anderson Bay in Valdez Harbor.

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There were a series of protests by Northwest Pipeline and its 9 partners over this particular authorization for the export of natural gas which is known as the Order 350 Authorization. Those entities challenged the export 10 license. It went back in front of the Department of Energy and -- on appeal, and the project -- Yukon Pacific's project tags again received confirmation of the 11 original authorization. During that particular period of time, the Exxon Valdez 12 accident occurred, and as a result the Department of Energy concluded that an environmental supplement or an environmental assessment should be 13 conducted of the safety of the shipping aspects of an LNG project. We concluded, 14 given the public's opinion at the time, particularly the opinion in the Lower 48 states because I think Alaskans really understood what happened with regard to 15 the Exxon Valdez accident, that it was an accident, et cetera, but people in the 16 Lower 48 states, and quite frankly we were very, very concerned about some of the environmental groups in the Lower 48 states, I don't think -- we didn't think 17 that they would be satisfied with a mere environmental assessment. And so we 18 asked and in fact received a full blown environmental impact statement for just the Anderson Bay site itself. So we have two environmental impact statements. 19 That was issued in March of 1995, and in May of 1995, the Federal Energy Regulatory Commission approved the Anderson Bay site as the site for the 20 export of North Slope natural gas. Finally, we submitted last - I want to say April 21 - a permit known as the PSD permit, the Prevention of Significant Deterioration.

It's an air permit. It's extremely important that a large project like -- like this reserve a place in the air shed in Valdez. We all know that there's been a number of -- of incidents and questions about the air quality in Valdez, et cetera, and so we thought that this was a very, very important permit.

Now, throughout this permit process, we were continually 4 queried by the Japanese and then the Koreans and then Taiwanese with regard to 5 the ability to be able to put these permits together. And I can tell you that we were not the only ones breathing a sigh of relief when the last of these major 6 permits came forward. The Japanese and the Koreans and the Taiwanese were 7 extremely happy to see that in fact you can permit this project for export of natural gas to their countries in this state. And not only that you can do it, but 8 that it's been done. Now, I don't want to go through all of the legal intricacies of each particular permit. Some of them are very exclusive to Yukon Pacific. Some 9 of them are not. But I will say this about every one of these permits: they're 10 flexible. They contain the flexibility or give Yukon Pacific the flexibility to be able to put a pipeline in a different configuration, a different size and a different 11 location. It gives the ability of Yukon Pacific to do all sorts of things that we've 12 heard suggested by some of the parties that are studying in theory alternative projects. So these are very, very important permits; they are very, very flexible; 13 and that raises, of course, the final question that people ask: well, don't they 14 expire? Some of these permits do expire. Some of them don't expire. Some of these permits like the federal right-of-way don't expire until 2017 for example. 15 The Exxon -- the authorization for the export site is a license and it is renewable 16 every three years until construction begins. So yes, some of these things do expire. But that's not -- that's not the way we look at it. They're renewable. The 17 state's conditional right-of-way lease is renewable almost by operation of law. If you're not violating any law within the right-of-way, it's renewable, period. And 18 I know that there's been a lot of emphasis by some individuals and some 19 companies that these permits are no good because they expire, and that is simply not the way to be looking at these permits, nor is it necessarily true. These 20 permits provide an opportunity for the state of Alaska and any entity that wishes 21 to become part of a natural gas export project the ability to do it. We have taken

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permitting off of the critical path chart for an export project in the state of Alaska. And whether Yukon Pacific is involved in the project or not, these are the permits which I firmly believe will be used to do this permit. They cannot 1 necessarily be duplicated. There has been a change in the system with regard to doing tiered permits, and I might also add that many of these permits were 2 obtained before the Exxon Valdez accident. So we feel very, very confident about 3 these permits. We've spent a tremendous amount of time on these permits. I think I've told some of you in [indisc.] sobs that I've worked on this project for 15 4 years. This is 12 years worth of my life reduced to a five- or ten-minute 5 discussion. I could clearly go on for days about any individual nuance in any individual permit we have here. But I don't think that's necessary. What is 6 important is to know that these permits are in place, that they're flexible, that all 7 of the comments that we've heard with regard to doing this project with shared facilities by the oil companies can be done using these permits including, if you 8 can change the regulations, putting this export facility at the Alyeska terminal, although frankly I don't think you can change those regulations. So we have the 9 permits. They're alive; they will stay alive; and they have the flexibility and the 10 capability of being able to meet everybody's needs and desires with regard to this project. There are some 850 additional permits to obtain, but they're not deal 11 killer permits. These are things like river crossings, sanitation permits, boiler 12 permits, you know, the -- they're very important permits; don't get me wrong. But the way this was structured under a tiered permitting system which doesn't 13 exist and is not available anymore in this state, we have the concurrence of the 14 state and federal agencies that those permits are do-able under a worst case scenario. So we're very proud of what we've done. It's taken us a very, very 15 long time. There were many, many people in Japan and Korea and Taiwan who 16 didn't think it was possible. They are now convinced because we have the permits in hand. I might add we had a couple of secondary goals which are very 17 important to keep in mind. The first was not to have Congress involved. This is 18 none of Congress's business. This is Alaska's gas, Alaska's lands, and -- and frankly, we didn't feel that it was necessary to have thousands of hearings and 19 contested hearings and whatnot in front of the Congress of the United States dealing with an Alaskan issue. So we structured this so that you did not need to 20 go to the federal government, Congress, in order to get any of these permits. 21 We're in place now, and we need nothing else from the federal government in

terms of an act of Congress or in terms of a major permit for this project. And finally, we didn't want to spend \$500 million not to do a project, which is what Northwest Pipeline -- they spent a tremendous amount of money working on a 1 project that didn't get off the ground. And we didn't think that that was prudent. So we did this in the most prudent fashion that we possibly could. 2 That's why we went after these particular ten items, and that's -- that's -- that's 3 what we've done. Now we are continuing to work on the permits. We have now heard from the oil companies, we've now heard from Alyeska that it is 4 possible to get closer than 200 feet. So we are going to be amending our permits 5 to enable us to do that where it makes sense to do so. And we're in the process of putting that -- that -- that work together. We're also able to now work on 6 improving the system that we've put together. There've been a lot of 7 technological advances over the years. For example, if you talk about these LNG trains at the terminal site down in Valdez. Well, when we started this project, 8 3.5 million tons was a gigantic LNG train, was not state of the art necessarily and 9 it was something a little bit radical. The Japanese weren't all that comfortable. Today we're talking about 4.7 million tons per train. So now we can have one 10 less train. The steel that is now available to make pipe has improved. So now we're adjusting the hydraulics of the system, the pressure of the system. 11 There've been any number of things that have gone on that have enable us to 12 continue to work on these permits and improve them and make them better. Again, I will pass out a list. I'll be happy to answer questions about these 13 permits. I have copies of the permits here if you want to see them. Suffice to say 14 they themselves are a pile about this high, but for each one of those permits there's a roomful of application documents back in Yukon Pacific's office. 15 CHAIR: Jeff, I don't think that it would be necessary to pile 16 them up there, but I think you've described it adequately. And we will now go first to questions from our task force members and then other members of the 17 legislature. And while the testimony was taking place Representative Dyson has joined us. Also Representative Hodgins, would you please come up here and 18 join us at the table? 19 **REPRESENTATIVE HODGINS:** [Indisc.]? CHAIR: Yes, there is now. When Our other task force 20 member comes, we'll do something else with him.

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UNIDENTIFIED SPEAKER: Committee members have

[indisc.].

	[indisc.].
1	REPRESENTATIVE KUBINA: Jeff, how many more
1	permits are needed major permits that would take major [indisc.]?
2	MR. LOWENFELS: None.
_	REPRESENTATIVE KUBINA: There are, I assume, a
3	number of smaller type permits that will be needed for
4	MR. LOWENFELS: There's only about 850 additional
<u>_</u>	smaller type permits, yes. But deal killing permits, none.
5	REPRESENTATIVE KUBINA: None. You talked about
6	you've had discussions recently with Alyeska about
	MR. LOWENFELS: No, I I hope I didn't mislead the
7	committee. What we're what we're reading in the press is a lot of discussion
8	about shared facilities. And in our discussions with individuals that talk about
	shared facilities, it's very clear that they're talking about being closer than 200 feet
9	using the same work bed for example in the right-of-way. In some places that
10	makes sense. In many places, it doesn't. Where it does make sense, we'll go
	ahead and now make that amendment. We're not allowed to be that close prior
11	to these discussions. They've been public discussions, not discussions [indisc.].
12	REPRESENTATIVE KUBINA: One of the purposes of the original resolution that set up this task force was to try to get people together,
	talking together, rather than talking through different people. Has that, in your
13	mind, process happened at all? Is there any better communication going or are
14	we still a long ways or
	MR. LOWENFELS: Well, I think perhaps the best the
15	most polite way to answer that question is that from our perspective the most
16	important thing on our critical path is in fact reaching an agreement with the
17	producers to move forward on this project. I don't think it's constructive to, you
	know, start any fights or anything. We are some of the producers have been
18	more forthcoming in discussing things with us than others. And we are
19	certainly open and encourage all of the producers to come forward, and we'd be
	more than happy to talk about our permits and strategies and everything else.
20	But I think you've identified the most important next thing that Yukon Pacific
21	needs to do.

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REPRESENTATIVE KUBINA: And have you felt

comfortable with the communication with the administration and people involved there [indisc.]?

¹ MR. LOWENFELS: Well, I -- I -- I felt very, very comfortable ² about our communications with Department of Revenue, which is really our ³ primary source of communication. They've been very responsive, and I think ³ they have recognized that maybe -- maybe Yukon Pacific might actually have ⁴ something to contribute to the project.

CHAIR: Representative Kubina, does that conclude your questions? REPRESENTATIVE KUBINA: [No audible response.] CHAIR: Senator Leman. SENATOR LEMAN: I'd just like to follow up on that ... CHAIR: Please do.

SENATOR LEMAN: ... and Jeff's response. I read --

⁹ probably shouldn't have, the Anchorage Daily News article, and it quoted you as saying in your discussions with the department that you differed on one of the variables, I think the ramp-up time, they had used six years as one of their inputs
 ¹⁰ and you had suggested four would have been [indisc.] you may be content with your discussions with them, but you -- I don't know if you were embracing necessarily all of the inputs to that model.

MR. LOWENFELS: No. No, we are not embracing all the 13 inputs to the model, but again, I -- I -- I think that article, and if you're referring 14 to the article that was in this morning's newspaper, I was a little concerned about that article because it looks to me like somebody's trying to, you know, create a 15 friction situation between Department of Revenue, for example, and Yukon 16 Pacific Corporation, and I don't think that's really necessarily so. We have had a very long talk with Pedro van Meurs. Roger Marks was in the conversation, and 17 it was very clear to us, after the conversation was over, was that Pedro was 18 receptive to the suggestions that we were making, that there were some changes that needed to be made to the report, and he was in the process of making those 19 changes. The article was based upon a draft report which we know was being changed, because some of the assumptions were being adjusted. And so -- it's 20 sort of unfortunate in a sense. Now, with regard to the difference in ramp-up

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	times the state's MOII with Vuken Pacific Corneration sets out as a notential a
	times, the state's MOU with Yukon Pacific Corporation sets out as a potential a six-year ramp-up.
	CHAIR: Excuse me. Let's don't do ramp-up right at the
1	moment.
2	MR. LOWENFELS: Okay.
3	CHAIR: Let's dispense with the permits, and then we will
5	go to the Memorandums of Understanding.
4	MR. LOWENFELS: Okay.
	CHAIR: If that's okay with everyone.
5	MR. LOWENFELS: Fine. Okay.
6	CHAIR: Because we need to keep people's thought process
	on one thing at a time. Madam Speaker.
7	MR. LOWENFELS: Mine mine included, Madam
8	Chairman.
	REPRESENTATIVE PHILLIPS: My question was going to be
9	following up Senator Leman's, not on a permit, so I'll wait.
10	CHAIR: Okay. Anyone else have questions on the permits?
	REPRESENTATIVE KUBINA: Well, I have one more
11	question.
12	CHAIR: Representative Kubina.
12	REPRESENTATIVE KUBINA: Was you or your company
13	the one that leaked that report?
	REPRESENTATIVE PHILLIPS: That was the question I was
14	going to ask him. I was holding it.
15	REPRESENTATIVE KUBINA: Well, I'm real concerned
	because because I haven't seen the report, and it bothers me, Madam
16	Chairman, when somebody in government or business is leaking it and we don't
17	get to see it.
	CHAIR: Well, we'll take that up with Mr. Condon and Mr.
18	Shively when our two fine commissioners when they [indisc.].
19	UNIDENTIFIED SPEAKER: Who pushed the wheelbarrow,
	huh? I heard it's a long report.
20	CHAIR: Representative Austerman.
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REPRESENTATIVE AUSTERMAN: Yeah. You indicated that you have 850 permits still to go and that's not a big problem, but to me 850 permits in anything you do is a big problem.

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MR. LOENFELDS: Sure.

REPRESENTATIVE AUSTERMAN: What kind of a time frame is that basically if you were to start today on 850 permits to ...

MR. LOWENFELS: Well, oddly enough, these -- these are
permits which are pretty perfunctory, and because of the spade work that we've done with regard to the other permits, most of the information for those permits
is easily obtainable. I don't think it's going to take more than a year or two to get those permits. Again, for example, in order to have a camp - we'll have several up and down the right-of-way - you've got to have eating facilities. Well, the
eating facilities have to make -- meet the sanitation standards. So the permits are really -- it's a scary number, and maybe it's because I deal in permits all the time and have been for 25 years. It's not difficult to get a sanitary facility, you know,

for eating and then -- and you get the permit based on that. So these are really a different kind of permit than a right-of-way permit or an air permit. These are much more lower level. I don't want to denegrade the necessity to have them,
 but it's not -- we don't view this as a very difficult [indisc.] at all.

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UNIDENTIFIED SPEAKER: So a year to a year and a half? MR. LOWENFELS: Yeah.

CHAIR: Additional questions on the permits? [Indisc.]. REPRESENTATIVE HODGINS: Thank you, Madam Chairman. You had said that you could change the location in your permitting,

you were fairly flexible. Is there going to be much of a problem in making some trunk lines that might possibly go into Fairbanks or Anchorage?

¹⁶ MR. LOWENFELS: No. In fact, we are required under state ¹⁷ law and under federal law to be a common carrier. And we're required under ¹⁸ state law to provide TAPS connections or connection points up and down the ¹⁸ right-of-way for local communities at local community expense. We would be ¹⁹ ecstatic to be able to sell gas through that system that didn't have to have the ¹⁹ additional cost of liquification and shipping in ships. It adds to the baseload of ²⁰ the project. It makes ramp-up easier. And so the answer to your question is, yes, ²¹ 'cause there's been an expression of interest, and frankly we're planning on

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	putting a tap in at Glennallen because there's been an expression of interest. So		
	those are those are two very easy and do-able things.		
	REPRESENTATIVE HODGINS: Thank you, Madam		
1	Chairman.		
2	CHAIR: Thank you, Representative Hodgins. Senator		
2	Ward, you had questions?		
3	SENATOR WARD: Yes, I did. Can you tell me how much		
4	capital you've put into this project so far?		
_	MR. LOWENFELS: Yes. About \$100 million.		
5	SENATOR WARD: And that's over what what period of		
6	time?		
	MR. LOWENFELS: 15-year period of time.		
7	SENATOR WARD: And the so your permitting process		
8	up to this point is easily worth \$10 million and then factoring in a bunch of		
	inflation too.		
9	MR. LOWENFELS: Well, I guess for my shareholders, I		
10	should say, yes, it's easily worth that. We yeah, we think it's worth there's		
	an intrinsic value, which is you don't have to worry about permitting anymore		
11	for this project. Yes, it has a monetary value. And the AAGS Study sets out,		
12	frankly, a monetary you know, gave an assignment as to how much it would		
	cost in the opinion of the study group to get these permits. So there's an		
13	independent value independent of what we thought it might be worth, so		
14	SENATOR WARD: All right. Thank you.		
	CHAIR: Additional questions by any member of the		
15	legislature.		
16	UNIDENTIFIED SPEAKER: Madam Chair. Along those		
10	lines of putting in TAPS, do you anticipate any need for to supplement [indisc.]		
17	Cook Inlet gas demands? I mean, you spent a lot of time working on that in your		
10	former life and are pretty knowledgeable about that. Do you care to speculate on		
18	that?		
19	MR. LOWENFELS: Well, we've had discussions with		
20	several entities, some of whom have asked us to keep their identities		
20	confidential, but then if we were asked a question, we could certainly respond in the following fashion. There appears to be a series of events conspiring against		
21	the users of natural gas within the state of Alaska in the southcentral area,		
	the users of natural gas within the state of Alaska in the Southeential alea,		
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Anchorage and Kenai, that appears to necessitate additional quantities of gas coming into the area. And it appears that the only place to get the kinds of quantities with a certainty would be through a pipeline from the North Slope. North Slope gas needs to be dedicated in part to the Cook Inlet area in order to be able to meet demand in the Cook Inlet area, right about the same time we're talking about the project starting, which is 2005, starting sales, so ...

- ³ CHAIR: That concludes your questions, Representative 4 [Indisc.]?
- UNIDENTIFIED SPEAKER: Thank you, Madam Chair. ⁵ Additional questions? Representative Cowdery.

REPRESENTATIVE COWDERY: Yes. And to your knowledge what -- what in the producers if they -- to come on line, what would the time frame in your estimate take for them to acquire their permits?

MR. LOWENFELS: If the producers were to duplicate these permits?

REPRESENTATIVE COWDERY: No, no. No. If they
 decided we're going to go on this thing, is there any additional permits that they
 would need or be required, and how long will that take?

¹¹ MR. LOWENFELS: Well, they -- they would also have to get the same 850 permits. I'm assuming that we're going to do this project ¹² together so that they don't have to get these other 10.

13	REPRESENTATIVE COWDERY: I see. Thank you.
	CHAIR: Additional questions?
14	REPRESENTATIVE KUBINA: I have one point.
15	CHAIR: Representative Kubina.
	REPRESENTATIVE KUBINA: Just to clarify. My

¹⁶ impression is that your company, not just Yukon Pacific but CSX, full-heartedly
 ¹⁷ would like to be partners pursuing this, that you have not just done that as an
 ¹⁸ investment on \$100 million and trying to make a profit on that. That you want
 ¹⁸ to -- and you're doing everything you can to -- to make that go forward with you

as a partner.

MR. LOWENFELS: That is absolutely correct. We have every intention of moving this project forward as an investor. Right now we feel that we are the only investor. This was not done on speculation for speculative purposes. It's not that much fun.

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CHAIR: Representative Davies. Excuse me, Representative Kubina, does that conclude your questions?

REPRESENTATIVE KUBINA: [Indisc.].

CHAIR: Representative Davies.

REPRESENTATIVE DAVIES: Are we moving away from permits now and can we ask different questions?

CHAIR: We are -- we're going to do this sort of in two
 phases. We're going to finish the question of their permit so that it will be easier to follow in the report. And then we will go to the MOUs [indisc.] because
 Yukon Pacific is at the table. We will take up the MOUs that they've been asked to sign by the State prior to Jeff leaving the table. Then we will ask the State of Alaska through our two worthy commissioners to come forward and give
 testimony so we can have lots of fun, and then we will have each one of the oil companies come up, and we'll have more fun. So do you have questions now on the permits, Representative Davies?

[indisc.].

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CHAIR: Any additional questions on the permits? There is none at this time, so Mr. Lowenfels, if you then could ...

REPRESENTATIVE DAVIES: No. No, I don't want

MR. LOWENFELS: Um-hum.

¹² CHAIR: ... talk to the committee and to the other members
 ¹³ present about the Memorandum of Understanding that has been put forth by the State of Alaska, you have been asked to sign it, what your position is on it, and if
 ¹⁴ in fact you have signed or you are going to sign it.

MR. LOWENFELS: Okay. CHAIR: We'll take your testimony on that at this time.

¹⁶ MR. LOWENFELS: Fine. And once again for the record, I
 ¹⁷ am Jeff Lowenfels, CEO of Yukon Pacific Corporation. We have not seen
 ¹⁷ anything but an MOU for us, and it has -- the draft that you have there ...

CHAIR: That's proper. You're only you.

MR. LOWENFELS: That's -- that's right. That's right, so I can only -- I guess what I'm trying to say is I can only comment on what's in the MOU between the state and Yukon Pacific Corporation. We received a draft copy, and I think that may be the draft copy of the MOU. We immediately made some -- some suggestions and sent it back to the State of Alaska. We have since

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received back another draft, and we made a couple of slight suggestions with regard to that and had a little slight negotiation session with the Department of Revenue, and to the best of my understanding, the changes that we have agreed upon are acceptable to both parties. And if they had a clean copy, I'd sign it right now, right in front of you.

	CHAIR: Mr. Condon, do you have a clean copy?
3	MR. CONDON: [Indisc.].
4	CHAIR: Mr. Shively, do you have a clean copy?
	MR. SHIVELY: No, [indisc.].
5	CHAIR: That's too bad, because I believe in this working
6	group making history, and signing MOUs would certainly make history.
	MR. LOWENFELS: Well, I have
7	CHAIR: But I could let you have the draft then we could
8	tear off all the pages that said draft and just leave the back page.
	MR. LOWENFELS: Or I could make a special trip and come
9	back down and sign it again, but I have to say that again, and I don't mean to
10	make this a love fest, we've had nothing but cooperation from the Department
	of Revenue. They've been very, very responsive. There were things in that
11	draft we simply did not agree with, and we came up with a mechanism that
	enabled us to to put together an MOU that makes sense and that we do agree
12	with.
13	CHAIR: When can we expect that you would be signing the
	MOU?
14	MR. LOWENFELS: As soon as someone puts a clean one in
15	front of me.
	CHAIR: We'll inquire of our commissioners when that
16	will be? Committee members, I know that some of the legislators here don't
17.	have a copy of the MOU, but staff is making copies. We will provide those to
	you. But I will go through essentially what it is so that you have some idea. It
18	starts with an introduction; two, projected cost and cost reduction; three, market
19	terms, conditions and opportunities; four, the CS First Boston report and the
	State's financial model; State fiscal modifications; State fiscal stability and
20	certainty; relationship with the Alaska Legislature; hiring Alaskans;
	environmental integrity; health, safety and natural gas; availability for Alaska
21	communities; the potential effect of permitting requirements and delays; federal

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incentive studies; and limitations. All of those things are included in this document that is stamped draft in front of me, and I had understood that Yukon 1 Pacific had signed or was ready to sign, though I would very much look forward to knowing that it has been signed by you. Committee members have questions? 2 Representative Kubina. 3 REPRESENTATIVE KUBINA: If you've had, as I understand it and know, no input into the other MOU, no exchanges with either 4 the oil companies and what they're doing or a negotiation process with them. 5 MR. LOWENFELS: That's correct. REPRESENTATIVE KUBINA: And again, I'd like to maybe 6 tell you that I think that one of the main thrusts of the original resolution that 7 set up this task force was to try to get people to communicate among themselves, and if we have to do it this way, why great, we have to do it. I still wish it could 8 have been everybody getting around one big round table. And obviously that's the way it's got to end up at some point. 9 MR. LOWENFELS: Your wish and my wish are the same, 10 yes. REPRESENTATIVE KUBINA: We also might notice that it 11 was, Madam Chairman, relationship was with the Alaska Legislature. Do we 12 have an MOU with the governor? [Indisc.]. CHAIR: If we don't, we'll get one. 13 REPRESENTATIVE KUBINA: That's all, thank you. 14 CHAIR: Madam Speaker. REPRESENTATIVE PHILLIPS: Mr. Lowenfels, the copy of 15 the draft that you have and you said you wanted to make changes to, were those 16 major changes, what? Were they minor changes, what? MR. LOWENFELS: Well, I think it was just slightly a 17 change in approach. There were some assumptions which were in the draft that 18 the state made for particular reasons that are mentioned in the draft. And again, I don't want to get off balance, but there was some assumptions with regard to 19 ramp-up. We just didn't agree with them, but by the same token, we understand -- what the document says on one of the pages is that it's -- ramping it up at six --20 for a six-year period is one assumption. And if you ramp it up quicker than six 21 years, then it improves the project. But we certainly agreed with the fact that if

actions that might assist the project; the North Slope producers; major gas spill

you ramp it up quicker than six years it improves the project. We didn't want to see six years in there as an assumption, because the Japanese might read this or the Koreans or Taiwanese. And so we -- we worked with Wilson and with Tamar (di Franco, of Revenue) and Roger Marks and we figured out a way to take care of both of our concerns. And so that's ...

Those are the kinds of changes that took place. There were a couple of things that, yeah, we had some heartburn over. You know, we -- but strangely -- not strangely enough. I mean, we had heartburn over it; we expressed our heartburn and I think people understood where we were coming from. I guess we were 5 particularly rational during that particular conversation so we're pleased with the results. It's a start. 6

CHAIR: Representative Davies.

7 REPRESENTATIVE DAVIES: Thank you, [indisc.]. Since we've mentioned this now, I'd really like to get to that -- that issue. And also, in addition to the MOU, that issue is referenced in this report of the working group. I assume this is a draft report at this point. 9

CHAIR: It is a draft report. We have furnished it to most of 10 you, I guess, of a copy of what is draft prior to the time we conclude this meeting. After the conclusion of this meeting, this section of the meeting will be added to 11 that report and it will become a final report. 12

REPRESENTATIVE DAVIES: Under -- on the last page, there's a relevant sentence, which with your permission I'd like to read. 13

CHAIR: Please do.

REPRESENTATIVE DAVIES: Under "State

Administration", it says an examination by the Alaskan State Departments of 15 Revenue and Natural Resources shows that an Alaskan LNG project is not 16 economically attractive for investment at this time and under realistic

assumptions. And I would like Mr. Lowenfels to respond to that, and the issue I 17 think of ramp-up is very pertinent in whether or not that's a realistic

- 18 assumption or not. So could we talk about that, and if -- is that the only assumption that we're talking about here or is that the critical assumption? Are 19 there assumptions which you would regard as realistic at this time, that would make the project, in your estimate, feasible? 20
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MR. LOWENFELS: Well, ramp-up and for those of you who are new to this crazy lingo, the project needs to be at 14 million tons (annually) in order to be attractive economically enough for people to invest in 1 it. But you don't start out selling 14 million tons on the first day. You ramp up to that number over a period of years. The First Boston report suggests that a 2 five-year ramp-up is acceptable. Actually, we feel much more comfortable with a 3 four-year ramp-up, and in our last trip to Japan, we were assured by a number of companies in Japan who know that the four-year ramp-up is certainly do-able. 4 That's the major assumption. It is the one thing that this project is more 5 sensitive to than anything else, other than overall cost. Ramp-up. And we wouldn't do the project on your six-year ramp up. And they all want the project 6 to be done. I can't really speak for the state, but I don't think the Department of 7 Revenue or Department of Natural Resources wants the project to be done on a six-year ramp-up either. I'm not sure that they are fully convinced yet that you 8 can do it on a four-year ramp-up, but they want to try to make the project attractive enough so that is definitely possible. I -- guess where I'm coming from 9 is that -- I don't think it's fair to pick on the Department of Revenue and the 10 Department of Natural Resources, you know, or to assume that there's sort of this big fight going on between us. They have a very specific purpose in mind. 11 They've got to bring divergent interests together. And I think -- I think the 12 approach that they're taking is -- is a sound one. It's not necessarily the one we would take. I will tell you that CSX Corporation will not invest in a project that 13 takes six years. It doesn't work. The economics don't work. I will also tell you 14 that I consider myself to be one of the experts, if not the expert on putting together this LNG project with regard to Japan, Korea and Taiwan, and that the 15 experts who I rely on in Japan, Korea and Taiwan tell me that you can do this in 16 a four-year ramp-up. It's -- you know, there -- I guess the other thing that I would say, and I don't mean to be [indisc.] about this. You know, when you go to 17 finance this project, you don't go to Pedro van Meurs and Associates and ask him to pony up the money or to go gather it for you. He's an economist. And so 18 he's looking at it from a different -- through a different set of glasses. You go to 19 CS First Boston, and you ask them to put the money together. So we feel -- we do feel very strong about that ramp-up, but again, I don't think it's fair to suggest 20 that that's what either Wilson Condon or Commissioner Shively believe the 21

ramp-up is. And I think, again, you'll have to discuss that with them a little bit more in that regard.

1	CHAIR: Representative Davies.
1	REPRESENTATIVE DAVIES: Just to follow up then.
2	MR. LOWENFELS: Sure.
	REPRESENTATIVE DAVIES: Can and I don't want to put
3	words in your mouth, but can I rephrase this for you
4	MR. LOWENFELS: Sure.
5	REPRESENTATIVE DAVIES: and see if I'm
	MR. LOWENFELS: Please.
6	REPRESENTATIVE DAVIES: Would you agree that there
	are realistic assumptions at this point in time under which the project is
7	economically feasible?
8	MR. LOWENFELS: Yes. Yes, they're all realistic
	assumptions. One of them one of them is that you can do this project in a
9	ramp-up shorter than six years. That is a realistic assumption, and in fact, for
10	purposes of our project, the CSX the CS First Boston report says five years, and
	I'm here to tell you that the CEO of the company is saying four years. And so if
11	you'd like to put that in the record, and as far as I know we're the only ones who
12	are sponsoring the gas project, that's what the sponsor believes.
	REPRESENTATIVE DAVIES: Thank you.
13	CHAIR: Would you also state now for the record other
• •	things that need, in your opinion, to be done to make it economically feasible?
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15	MR. LOWENFELS: Well, I think that it that is important
	to take a look at providing the kind of stability which has been suggested by the
16	companies in order to make this an attractive investment or a safe investment.
17	This is the tax treaty or the tax contract that we discussed before. I think that's
	very, very important. That's paramount. The second thing, I think that needs to
18	be looked at and carefully because it's a complicated subject, is the question of
19	taxes during construction. If you're not making any money on a project that
	costs \$12 to \$14 billion depending on what the number is at the time, it's very
20	difficult to justify in your mind why you would be paying any taxes. Now, you
21	can have a debate as to whether you want to eliminate those taxes or whether
	you should postpone those taxes, and you know, we have that debate within our

company. Some of us feel simply postponing the taxes is sufficient, but I think that issue has to be looked at. And the reason why I'm a little sensitive about it is that it's one thing for the state to say we're going to waive some of those taxes 1 during construction. But it's another thing to so and so [Indisc.] Village, and Fairbanks, and Glennallen and Valdez. You know, they may depend on those 2 monies a lot more than the State does. And so I think you've got to work it out. 3 That's why sometimes we talk about simply deferring that tax until there is income coming in. That's -- that's a very, very important issue. There is a 4 federal tweak which I'm not really [tape ends mid-speech] ... that are 5 manufactured. In other words, if you took oil and changed it to aviation fuel, you -- it gets a better tax treatment when you export it than if you just took 6 petroleum and exported it. Well, natural gas, when it's converted to LNG is not 7 considered to be a manufactured product. If you'd make that change under the federal scheme, I think that improves the project a little bit. As far as the other 8 parameters, you know, that are -- that are discussed, some of which are obviously 9 in the headlines that you read or the contents. There's no question local hire is very, very important. I mean, I guess that these social things that are very, very 10 important that need to be done in order to assure that we have the proper political support for this project. We cannot end up in a situation where we're 11 putting pipe in the ground and a Native community comes forward and says, 12 hey, there's no Native hire or training. We cannot have a situation where labor comes forward and says the same thing. And we cannot have a situation where 13 the local communities that are being impacted feel like they're getting the wrong 14 end of a deal. So in that regard, obviously, we are having discussions with other groups. It's not a permitting discussion, but I think some of the other 15 individuals may actually testify with regards to some of these discussions. It'd be 16 more appropriate than us.

CHAIR: Let me announce that the reason why Senator Sharp is not here, he is chairing a meeting in Senate Finance for Senator Pearce apparently whose child is ill, so -- I think she has a bad cold - so he's taking care of the duties up there and apologizes he's not able to be here. Additional questions from Mr. Lowenfels on the MOU? Representative Kubina. MR. LOWENFELS: Yes, sir.

REPRESENTATIVE KUBINA: I think I'll put one more out. If we're unable to go forward with the companies that have the rights to

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REPRESENTATIVE KUBINA: I think I'll put one more

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this gas right now, could you put this project together through a -- rather than them building it and being the owners of the line that you or whoever -someone else building it and paying a well head price to the lessees that own it up there?

MR. LOWENFELS: Most definitely. There are other entities that would be partners. We've talked to several of them. They're in the LNG business. There are other entities that are in the pipeline business. We've talked with them. There is a tremendous amount of interest in investing in this project.

REPRESENTATIVE KUBINA: Then a follow-up to that. In this CS First Boston report it assumes -- its assumptions are what it was working with is to assume no well head cost, but yet you're telling me that you believe there is a well head value.

MR. LOWENFELS: Absolutely. I think that's one of the 9 misunderstandings of the CS First Boston Report, and if I could answer your question by trying to explain why I think there's a misunderstanding. We felt 10 that it was very, very important to provide to the State of Alaska, the Department of Revenue in particular, a computer program, a model, a computer 11 model that they can insert on a disk into their own computers and play around 12 with some of the parameters that we play around with on a daily basis. Costs, ramp-up, taxing structures, well head price. The CS First Boston has what we call 13 a cell in there that deals with the well head price. Now the report, the written 14 report that everybody received and that everybody refers to was simply a snapshot of that model. We could have taken that snapshot using a well head 15 price of 50 cents or 20 cents or 30 cents, but we felt that that would be a disservice 16 to the discussions that we wanted to have with everybody. It was not meant to be a negotiation document with ARCO, Exxon and BP over how much that gas is 17 worth on the North Slope. It was meant to demonstrate how big the pie was, and how big the slice of the pie the State owned was, and if the State wanted to 18 fool around with a well head number to determine what its impact was on --19 what the well head number would be on the State's slice, taxing system, fiscal regime, it has the ability to do that. I will tell you that when I die they will say 20 the biggest mistake he ever made -- well, maybe not the biggest mistake, but one 21 of many big mistakes he made was -- was not including a well head price in the

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snapshot. I took the picture too early. There was one member of the family not there. And -- and that was a mistake. But the disk, which Wilson Condon has, enables him to put in a well head price. And if you look at the CS First Boston report carefully, as I know you have, there is a sensitivity measure of some well head prices. But we didn't feel that that was the place to be negotiating a price of LNG in a document that was available to the Japanese and Koreans and Taiwanese, that was not the place to determine what the well head price should be. That's something we all have to do in private as Alaskans together so that we can prepare the best possible project.

REPRESENTATIVE KUBINA: Well, and my point being, Madam Chairman ...

CHAIR: Representative Kubina.

REPRESENTATIVE KUBINA: ... that there probably is besides the alternative that I think we're coming for -- within our recommendation. If that doesn't work there probably is another alternative -other alternatives that this legislature can eventually take, but the one that we're going to end up with recommending is probably the best choice to go for now, but if it doesn't work there may be other things we can do. Thank you.

11 CHAIR: Additional questions of Mr. Lowenfels? There
 being none, Mr. Lowenfels, we would like to thank you again for working with
 this working group, providing information when you've been asked, certainly
 taking time off your schedule to always come and appear when we've got
 hearings. [Indisc.] again thank you. I'm sure you'll be around if we have
 additional questions.

MR. LOWENFELS: Yes, ma'am. Thank you. CHAIR: I would like to bring my two favorite

¹⁶ commissioners forward. Mr. Shively and Mr. Condon. Will both of you speak
 or will one of you start and the other one will speak, or how do you wish to
 ¹⁷ handle it?

¹⁸ MR. CONDON: Madam Chair, I'll start. For the record, I'm Will Condon, the Commissioner of Revenue.

CHAIR: Welcome, Mr. Condon. Welcome, Commissioner 20 Shively. Please proceed.

²¹ MR. CONDON: I'm going to start off with an apology, and that apology is for not having made available -- thank you -- copies of the draft of

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the van Meurs report. What I have here are two copies of just the narrative portions of that report. There are many volumes of different kinds of schedules and so on, and if you'd like to have that or if staff would like to look at it, but we -- we might be able to save a few trees if -- with limiting it to this. And no one leaked this material. We -- this is the kind of a document which once it comes into our hands and someone comes and asks for it, we're legally required to give it to them. And we've had a number of people who are not directly involved in this process come and ask us for copies, and we gave it to them. Certainly, we should have -- have made it available to you as well, and I apologize we did not.

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CHAIR: This time, we'll accept your apology, but let it be

MR. CONDON: Okay. Obviously, our best chance to put 7 this project together is -- is -- is to bring people together. The Administration, the Legislature, Yukon Pacific, the producers, and if we can do that, we've got a good 8 shot at being able to address the problems and to jointly do the things that are 9 going to be necessary to make this project do-able. Clearly, there are going to be possibilities for misunderstanding, and I hope that we can successfully overcome 10 them. The purpose of these Memoranda of Understanding is a mechanism to try to bring people together and get them as close as we can to a common sheet of 11 music. And I'd like to just clear up a couple of misunderstandings that exist 12 about the Memoranda of Understanding. I don't know how many of you are avid readers of the Alaska Budget Report, but ... 13

CHAIR: Excuse me just a moment, Mr. Condon. Please let the record reflect that Senator Sharp has joined us. Welcome, Senator Sharp. We're happy to have you here.

SENATOR SHARP: Sorry for being late.CHAIR: Please continue.

MR. CONDON: But anyway, in today's edition of that report, it stated that Governor Knowles in his State of The State address said, and this is a quote from the Alaska Budget Report: "The gas pipeline has moved from the impossible to the improbable to the do-able". He said he will sign an agreement with unspecified investors in coming weeks, committing them to spend money for preliminary project engineering and design. Well, that's not what the governor said, and here's what the governor really said: "Building a

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gas pipeline, to sell that world class resource is looking better than ever". In just this past year, that project has moved from the impossible to the improbable to the do-able. In coming weeks we expect to sign an agreement committing the state and the producers to work jointly to bring the gas project closer to development. As we review ways to make our gas competitive, investors must commit funds for preliminary engineering and design so early in the new century Alaska natural gas will fuel the fire in the belly of booming Asia -booming Pacific Rim countries. And what the governor clearly did not say is that we were going to have agreements now committing unspecified parties or the producers or anybody else to spend lots of money. I -- we wish that we could take these memoranda of understanding and achieve that end, but that's going to be another step down the road. Now, with respect to the Memoranda of Understanding, we hope that we'll have one joint one with the producers and a separate one with Yukon Pacific. As Yukon Pacific has told you, we have reached what I hope is a final agreement with them with respect to a Memorandum of Understanding. The Memorandum of Understanding which we believe we're going to be able to close with the producers here very soon is very similar, but somewhat different from Yukon Pacific's, and it recognizes the differences between Yukon Pacific and the producers. Obviously, Yukon Pacific doesn't 11 have gas at the present time, and the producers do. And so the things that we 12 need to talk about in the Memorandum of Understanding with respect to the producers are going to be a little bit different. In terms of where precisely we are, 13 we're -- we hope down to three areas where we are still continuing our discussions. And if the body would like me to go into the specifics of what it is we haven't yet come to final closure on, I'd be happy to do that.

CHAIR: I think we would like to have some idea, so we'll 16 know how to deal with the producers on those subjects.

MR. CONDON: If you -- as I look around, I think everybody's got a copy of the draft with the producers. And if you do, you go to 18 the second page, which is numbered one, and there's a box that's in there under 19 introduction. And we're going to talk about that box. And the language that you see in the box says the parties wish to pursue establishing a viable project to 20 produce gas from the Alaska North Slope and to transport that gas to markets in 21 the Far East -- Alaska North Slope gas project or the project and thereby realize

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value for the parties' respective interest in that gas, the parties intend to take a series of actions both separately and together to pursue the Alaska North Slope gas project. Now, Exxon would like us to add a sentence after gas and before the 1 parties. And the sentence they would like us to add there would read: "The project elements include field, pipeline, liquefaction, marine shipping 2 operations, and commercial arrangements needed to accomplish this objective. " 3 And here's the -- the discussion that has gone on with respect to that language. Exxon does not want -- wants to make sure that they do not foreclose discussion 4 at this time about the scope of the fiscal certainty that we end up trying to 5 achieve. Do we try to achieve fiscal certainty with respect to the gas from the point of production of the gas on downstream or do we look at the need for fiscal 6 certainty for the entire field, for the wells, the liquid production part of the 7 operation. And they are not at this time ready to foreclose discussion on that issue. They want to continue to talk about it. We don't think that if we need to 8 go to the liquid side of the operations in terms of extending fiscal certainty, but 9 on the other hand, if they really want to talk about it, we can't make them sign an agreement that cuts off discussion. Now, there are -- I'm sure that all the 10 producers would like to have fiscal certainty for the entire operation. There are -- it is my understanding that on the other hand, ARCO would be prepared to 11 proceed now foreclosing discussion on the liquid side of the operation. We are 12 certainly agreeable to leaving the issue open, and in doing so, we are hopeful that we can describe or use words that are somewhat different than Exxon's to 13 achieve that end. We do not want to describe the project for technical reasons to 14 include all of the facilities that are now in place. We recognize that it's going to be an integrated operation. We're happy to talk to them about the need for fiscal 15 stability with respect to the entire operation. We're skeptical but willing to 16 listen, and our recommended counter-proposal is a different sentence in the same place, and it would read: "The project will depend on the integrated 17 operation of the Prudhoe Bay field where oil, liquid hydrocarbons and gas are produced in an integrated fashion using common facilities.". There we haven't 18 defined the project to include all those facilities, but we're willing to talk to them 19 about the need for integrated operation. And that is an item that we have discussed back and forth over the last few days, and they have not had an 20 opportunity to get the kind of review done that they feel like they have to do 21

within their particular corporation to get approval for something like this. And so that is the difference there. That sentence in -- in the introduction.

1 Let's move for the next one. And that is on page 8. On page 8, you see -- well, I'm just going to read the entire first sentence of that paragraph: 2 "Where the parties conclude that a change in the project fiscal system would 3 significantly improve the viability or competitiveness of the project, be socially responsible, maximize the expected benefit of Alaska's North Slope gas resources 4 for its people and enhance the project sponsor's shareholder value, the parties 5 agree to work together in an effort to develop appropriate proposed legislation and to take other actions needed to effect such change." Our original proposal 6 had nothing where you see the [indisc.]. The "and" was between "be socially 7 responsible" and "maximize". And Exxon made a proposal to us that would have added a [indisc.] that read, "enable the project sponsors to retain at least the 8 economic benefits achievable under the existing fiscal terms." We had a long 9 discussion about -- about first of all, what it was they were trying to achieve by using this language, and second of all, whether there were some particular 10 problems with this language. And here's our understanding of what Exxon had in mind in discussing this. They want us to acknowledge that they have an 11 obligation to their shareholders not to give something away to us for the heck of 12 it. They want us to recognize that this is a situation where we're all looking for ways to end up with something that is more valuable, both to the Alaska public 13 and to the producers and to Yukon Pacific if we take that action. In other words, 14 are we in a situation where we can move from where we are and the fiscal arrangements we have so that we all end up ahead. We end up with a project 15 instead of no project. And that is certainly what we're trying to do, and it struck 16 us that -- that talking about project sponsors retaining at least the economic benefits achievable under the existing fiscal terms was subject to several different 17 readings and a lot of argument about exactly what the discounted present value of the present fiscal terms are. I mean, we weren't trying to define an algebraic 18 equation. We're trying to define -- come up with a principle of moving ahead, 19 and as a consequence in trying to meet their objective, we proposed the four that you see there, and that would be acceptable to us. 20

Finally, the last provision here is hiring Alaskans, which is on page 10. And this is an item where folks on -- within the government and

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among the companies want to make sure we say it right. And I -- and I do have to say that in talking to people within the executive branch who have responsibility and interests in maximizing Alaska hire and then dealing with the producers who want to make sure that they're not agreeing to something foolish, we've gone back and forth about the language. I hope that this particular version is something which ultimately they will find acceptable, but it is something which everyone is sensitive enough about that they want to take it back to their management and make sure that it's okay. I cannot say that we have a specific disagreement here. What we have is folks wanting to make sure that they have not agreed to something that they should not. It does track very closely the language that -- the pertinent language in the resolution that the group has put together, and frankly, that was the model that we ultimately used to try to come up with language for this provision. And that really is the sum of what I have to say in going through this in terms of pointing out where we are.

Well, I do want to say one other thing. And that is I don't know whether we've said it in a way that we should have. Obviously, in the 9 end, the policy about what our fiscal system ought to be and -- and whether there 10 are going to be any changes, what kind of mechanism should be used or shouldn't be used to provide certainty is a legislative decision, and in making --11 entering into an agreement with these people to try to work with them to bring a 12 proposal to the Alaska Legislature -- the -- I hope we said it in a -- the way we should have when we have a section in there called relationship with the Alaska 13 Legislature. I mean, you are -- you know, it's up to you. And I want to make 14 sure that we recognize that.

CHAIR: Mr. Condon -- Commissioner Condon, I would 15 like to first of all commend the two of you for the work that you have done this 16 interim, and each time I've had an opportunity to speak to the press or others, I have told everyone that both of you have been very forthcoming. You have 17 shared information with the working group, and it is my belief that you have worked with us in a positive manner. I still believe that. I was distressed when I 18 learned that this report had been given to the press and had not been given to us 19 so that we were not in a position to respond to the issues raised in the report when I was asked questions about it. However, that is behind us. We will go 20 forward. And I have a couple of questions I want to ask you about that report. 21 The question has already been raised about the ramp-up time, as you've heard

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during the testimony of Mr. Lowenfels. And my question is, the report uses a ramp-up rate for Natuna, at 3.5 million tons a year, and Alaska at 2.1 million tons a year. Since we're talking about the same market window for this gas, then why was Alaska penalized in the ramp-up equation that was put forth in this report?

MR. CONDON: I don't know the answer to that question, and I'm going to be spending a couple of days with Dr. van Meurs next week to go over this carefully, and I will discuss that with him then. Obviously -- I've talked to him, not about the specifics here, but generally. I am absolutely sure that he would not have wanted to penalize Alaska. I mean, he -- he knows we want to do this and I -- he's not inclined to try to frustrate us in some way.

CHAIR: Well, it's very unfortunate that the draft report was put out in the way it was because it was indeed very frustrating to me and to others I know because we are not using the same numbers, and when you compare -- and I won't get into these things that I see problems with the oil companies with you because it's not fair to you. You have to work with them. Me, I can slap them around. But you've got to be nice and working with them. 10 So I think the ramp-up and the difference in 2010 and 2005 is very significant. And I think the window of opportunity for us rests on those numbers, and that 11 we have to be very, very careful about things like this being let to the public. Do 12 other members of the committee -- Representative Kubina.

REPRESENTATIVE KUBINA: In my mind here, if I can get 13 them right, you might ask when you go down to have your meetings with him 14 on this report, why is it different also between 2005 and 2010? I believe there's some changes there. Why would it -- why would things change between then? 15 And another point to me is we have talked about this window of opportunity 16 quite a bit. And everybody has talked about, geez, when you've got a field that's already on line, it's much cheaper to expand that field if the gas is available than 17 to start a new one. And one reason it appears that our huge fields might be a good time for it is because there's a number of others that are declining. But if a 18 [indisc.] and several of these others do get on line, let's say 2005, and we decide 19 our time is 2010, and they are very big fields, why isn't it then much cheaper for them to add on between 2005 and 2025 because they are that big? Do you see my 20 point?

MR. CONDON: Yes.

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REPRESENTATIVE KUBINA: So I'm confused here why -why this number that I'm hearing, and I haven't read the report, and this is all some hearsay, so if you would take that maybe with you and try to get a good feel on that. I want to say that Commissioners, especially you, I think when I first talked to you two years about this, and you were quite the skeptic, and I think you have done a lot to educate yourself and to come through, defend the State's interests, and try to do what is best. I applaud you for -- you and Commission Shively for going forward here, and I think you're doing a wonderful job. Please don't let our little wise cracks sometimes take too much effect. The last thing that I still have in my mind is [indisc.] are all signed, so you get this done a month from now or whenever, week, whenever the oil companies start quibbling about the minor little parts of it. When -- what do you do then to bring them together? We still haven't got to where I think we need to be and it's [indisc.] come together, but you've got -- you got MOUs so how do you -- can you give me an idea how you're going to achieve the tactics at that point?

MR. CONDON: I think you just keep going in the direction
 that the MOUs have taken you. I have to say that I don't have a next step
 particularly in mind, but it seems to me at that point we -- we look to see
 whether there are things that we ought to do as a consequence of Dr. van Meur's
 study. I -- I think there are going to be several things that -- that the legislature
 and executive branch are going to want to look at closely. I'm sure that the
 producers and Yukon Pacific are going to want to look at them as well. In the
 process of looking at them, I hope, having to work together will take us the next

CHAIR: Commissioner Condon, one of the things that 15 troubles me greatly about the producers. We recognize that the gas is an asset of 16 the people of the State of Alaska. And that asset that belongs to the people of the State of Alaska, you look at the world and you look at a time frame and you look 17 at the map where the major companies have their holdings and other gas 18 projects and the size of those gas projects, and you know that you're sitting on 26 trillion cubic feet of gas, and that if you allow all of these other small projects to 19 get into that window of opportunity around 2005, we all know it exists. Anyone can say whatever they want to, I have independently confirmed this with the 20 Consulate General of Japan. I had lunch with him in my jogging -- or dinner 21 with him in my jogging suit the night before I left coming down here, because I

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didn't have any other clothes; the movers had them. So I have independently confirmed that this window of opportunity exists for us, not only with Japan but Taiwan. I have also discussed at length with the Consulate General of mainland China in San Francisco the use of Alaska's gas in China at some point in time. I have been very, very active, as everyone knows, looking for a market for this gas. And I believe it exists, and I believe there is a window for us, and if we allow Exxon's little projects to be scattered around here and there, or BP's little project for the [indisc.] that are competing with our projects, to get into this window of opportunity, and I know where they're at because I've got the maps and I've got all the little other LNG projects. I know where they exist. If we allow them to drag their feet and play games with us to get their gas into those windows that are now open for us, and we're sitting there with 14 trillion that we've got into a million ...

UNIDENTIFIED SPEAKER: A million metric tons.

CHAIR: A million metric tons (--actually, 14 million metric tons annually) that we've got to get into that window yearly, competing with all of these other little projects, our project will never be feasible. They know and I know it, in my lifetime. And I done told them, we're going to build this project in my lifetime because I don't have any big projects left. They're it. And one way or the other, if it means finding a tax scheme that will bring them kicking and screaming to the table, I'm looking. You may say what you want to say.

MR. CONDON: Yeah, Madam Chair, I would simply make 13 the observation that while there are these other competing projects and these 14 companies have interests in them, there is a tremendous upside potential for these companies in an Alaska project, because we don't have a 50 percent 15 production share like the Qataris, or more. I mean, the working interest share 16 for these companies is 87.5 percent. Our royalty share is 12.5 percent. So even though in some aspects of these projects the economics don't look as a -- as a -- or 17 look more attractive in some ways, this is a tremendous resource for these 18 companies, and they have a very great motive to look carefully at this and evaluate it, and it easily could turn out to be the best deal for them. And I think 19 that if we can make it the best deal for them without giving -- without sacrificing the public interest, that we ought to try and do that. We ought to try and make 20 this the one they pick. And that's what we're trying to do.

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CHAIR: Commissioner Condon, I believe you. And I share exactly the same concerns that you have just spoken to. And I know it is a tremendous resource for them. But I also know that there is something, something that I have not yet identified that keeps at least two of the producers from marching up to the table. Because every time I turn around they have got a new kink they throw into the wheel. And I'm getting a little tired of the new kink being thrown into the wheel, because I can find some myself. Madam Speaker.

REPRESENTATIVE PHILLIPS: Thank you, Madam 5 Chairman. Commissioner Condon, I want to make a statement to just put on the record, and this is no reflection against your department nor Commissioner 6 Shively's department. But I think it was in very, very poor public policy today 7 that the legislature reads in the newspaper about a state report that is not in a final -- in any means, or way, shape or form, a final report from your 8 department. I think it was extremely poor public policy that this was out when 9 there is work being done on this report and there certainly will be additional work done, I would assume and hope, before you issue a final report and your 10 recommendations from your committees. I am extremely distressed that the irresponsibility of the people that gave this report as blanket news on what was 11 going on this state. I think that is something that everybody that was associated 12 with that report going out needs to take responsibility for putting out something that was totally irresponsible. Going back to -- and again, no reflection on your 13 departments or whatever, understanding the whole issue of public documents 14 and public record, but also putting on the record that for a reporter to report something that was in draft form, was not in finalized form, and then in no way 15 has reached an agreement for the people that hired the report, I think is 16 absolutely irresponsible.

Going back to your Memorandum of Understanding. When you're talking about the three different areas where you need -- where you're still trying to work out agreements. Do you foresee that taking the corporate structures into consideration and everything, this is something that's going to take a couple weeks, going to take a month, is it going to take six months? What are you -- what are your feelings as far as time line? MR. CONDON: I'll -- I'll qualify them as feelings. I think

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REPRESENTATIVE PHILLIPS: Okay. Good. And I just wanted to say one more thing on the local hire. And that is the last sentence in the hiring provision that says parties agree that clearly defining who qualifies as Alaska resident or Alaska business will help this effort. I certainly hope that those clarifications are very, very explicit.

CHAIR: Commissioner Shively.

3 MR. SHIVELY: Madam Chair, Madam Speaker, I think both Commissioner Condon and I share your concerns about having to share a 4 document, particular one that's this sensitive at the time that we had to share it. 5 And although I was not involved in that, it's my understanding in discussing with it, we felt given the current law, that we had no choice. And so -- I mean, 6 what you called upon was the press to be responsible. I think several years ago 7 that there was a professor at the University of Alaska in Journalism who said that if we were to have a free press, then the press had to have the right to be 8 irresponsible. And we had to expect that. But this is law. It's not constitution. 9 Now if the legislature is concerned about these kinds of things, there is an opportunity for the legislature to address that issue. 10

REPRESENTATIVE PHILLIPS: Thank you very much, 11 Commissioner.

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CHAIR: And we're sure the governor wouldn't veto it. UNIDENTIFIED SPEAKER: I would give him my

13 recommendation.

CHAIR: Representative Kubina.

REPRESENTATIVE KUBINA: Okay, [indisc.] Madam Chair.
 I'd like to hit on one other thing before you. I don't know. Are you guys pretty well done? If so, I want to ...

¹⁶ MR. CONDON: I – I've a couple of other things I'd say at the end, if I remember to do it.

REPRESENTATIVE KUBINA: Well, I'll -- I'll hit this one. Public interest you talked about. And I think it's -- I thank you guys for please keeping that in your mind because obviously you are the ones that are looking out for that in your jobs as I think we are too. But I do fear sometimes that we might get to a point where we try to out-do each other. I don't want to get into some kind of a bidding war. I am reminded of a trip that some people have recently took to [Indisc.] over in Scotland, and they ...

CHAIR: Did you go? REPRESENTATIVE KUBINA: No, ma'am. CHAIR: Oh.

REPRESENTATIVE KUBINA: But members from my community did, right on the sound, and they -- and they were amazed at all the 2 things that the oil companies were actually providing to the community, like 3 almost everybody in the community that wanted a job there got a job there. And like they've got electricity provided to their community for -- per cost. It wasn't 4 given to them, but the got it. And we were comparing it to some of the things 5 that we had here. Well, the difference was we did everything we could to entice the oil companies to come and let -- I'll use Valdez -- to Valdez and bring the 6 pipeline there. And then Scotland was a nice little fishing town, I guess, and the 7 oil companies had to do everything they could to entice the people to let them be there. And so with that, I hope that one thing we don't do is trying to outbid 8 each other, whether we're at legislature with the Administration, we want to 9 make sure that the people of Alaska do receive the benefits of this, because the Chairman is right, that this is the people's resources. And the people need to 10 make sure that they get the benefits from it. I'm done.

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CHAIR: Thank you. Representative Cowdery. REPRESENTATIVE COWDERY: Yeah, earlier you

expressed that they need some support in dollars to carry this project forward.
 And it's my understanding we -- the state owns about 1/8th of the gas. Does the Administration have any idea of coming forward with how to fund this project
 to the legislature for funds to show an expression of support?

15 MR CONDON: We have not talked about that specifically yet.

REPRESENTATIVE COWDERY: But we are the owner - part of the owner [indisc.--simult. speech].

MR. CONDON: We certainly have 1/8th of the gas, and we have spoken with the -- with Yukon Pacific, with the producers and with the investment bankers that are advising Yukon Pacific on the one hand and the producers on the other, and in discussing state investment generally. What I -what I have said is I haven't built a pipeline in an LNG plant, and I'm -- you know, I would feel very uncomfortable sitting down and thinking up a proposal that I would make. But if on the other hand any of them having something they

think we should look at that would be a constructive way for us to participate, then we should look at it. I mean we might reject it out of hand, but it seems to me that in terms of coming up with ideas for ways that we might invest, we're really expecting the people who are sponsoring the project who are looking for investors, if they have a constructive way that we might invest, that they'll make the proposal to us. And that's all we've talked about.

REPRESENTATIVE COWDERY: But didn't someone say earlier about, you know, about the owners of the gas that were sent here that wanted to market it to show their expression of support by some forward funding? That's the way I understood it to be.

MR. CONDON: Well, no, I mean, the next -- we've reached a point here or we will soon where to make progress on cost reduction, to make progress on making cost estimates more certain, it's going to require the expenditure of money to do that kind of engineering and study, and it would be wonderful if the producers felt comfortable enough to spend money to do that. Frankly, in terms of the expertise I have, and I think John would say the same thing, we don't feel -- we wouldn't feel comfortable coming to you and making a 10 recommendation to put state money into engineering studies given what we understand about this. 11

REPRESENTATIVE COWDERY: I understand that there's 12 some gas pains going around with some of the producers and all, but it would seem that we should -- and I would hope that we all work forward towards a goal 13 of marketing ours and work with the tool that we have in place now to make 14 that a better tool and maybe on to the market. Thank you.

CHAIR: Other members of the legislature have questions or comments? Commissioner Shively.

MR. SHIVELY: Well, Madam Chairman, I'm perfectly willing to share the glory of all Wilson's hard works.

CHAIR: Mr. Condon, you had additional remarks? 18 MR. CONDON: Yes, just one other thing, and that is that that little study, or not so little study that we did, [indisc.] relation to the Prudhoe 19 Bay Unit operating agreement and its subsequent amendments and how they would or would not affect the incentives that producers have for gas sale is 20 finished, and we have copies of it here, and we're happy to give you as many or 21 as ... [tape ends mid-speech]

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TASK FORCE ON GAS PIPELINE MEETING - 1/22/97

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WOMAN 1: that was a -- is that with a -- if it was

REP. BARNES: And then for each of the other legislators.

MAN 1: Thanks.

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MAN 2: And Madam Chair, that -- that's all I had.

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DED BADNIEC, Mall thank your much Ma

REP. BARNES: Well thank you very much. We -- we do appreciate very much the testimony that you have given us today and the work that you have done with us during this interim. And although our working group will cease to exist when we finalize our report, we are not going away.

MAN 2: Thank you very much.

REP. BARNES: We will be here in one form or another. At this time I
would like to invite the producers to the table please. All right I would suspect at
this time you would like to do it as individual companies and I'm going to start with ARCO. Gentlemen it's a pleasure to welcome you here today on behalf of the
working group and the House and Senate. Welcome and we would like to have
you address the Memorandum of Understanding and when we can expect your
company to sign that document.

MR. FINDLING: Thank you Madam Chairman. For the record my name is 14 George Findling. I am an advisor for Government and Public Relations now with 15 the gas group for ARCO Alaska. My remarks are really quite short, Madam Chairman. Basically we support the MOU as a good framework for working with 16 the Administration in advancing the gas commercial -- the gas project 17 commercialization. We've essentially been ready to execute the MOU for some 18 time. We've been working with the Administration on minor comments in a spirit of accommodation and those have been taken care of. In looking at the final 19 -- or at the version we have today we find that acceptable and we're ready to 20 execute it. We would want to just review the final words when they're and when 21 the word "draft" is taken off and -- and essentially we're ready to execute it at that time. 22

REP. BARNES: Mr. Findling I would like to say to you that I asked you to come first because I understand that that is the case, that there has not been any foot dragging on the part of your company. I do commend you for that because I do believe this is a project that we need to work to get off the ground. I think ARCO understands that, ARCO is one company that owns the second -- let's see you and Exxon own about the same amount of gas, BP a smaller amount. So it is, I
 think, very important that you as one of the larger holders of the gas have stepped forward and I think you and your company are to be commended. Committee
 members? Representative Kubina?

REP. KUBINA: Thank you, Madam Chairman. Didn't -- wasn't there a proposal out there two percent tax break for the first to sign?

[LAUGHTER]

REP. BARNES: I remember the last meeting that I had with the president of
 ARCO. I told him I was looking at something like the Venezuela tax where every
 time there was a job created for Alaska there would be a tax break and every time
 there was a job that went out of the state there would be a tax increase.

REP. KUBINA: I -- I might be a co-sponsor. George you said that you looked
 upon this MOU as a very good way to work with the Administration. Can you
 expand that statement, and I'd love to hear you say it, but you also think it's a very
 good way for your company to be involved with the permit holders also in spite
 of, get this moving forward.

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MR. FINDLING: Madam Chairman?

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REP. BARNES: Mr. Findling?

MR. FINDLING: Representative Kubina the -- we -- we -- we've been pretty 14 public about what we see needs to be done now to move this project ahead and 15 we've often said that it comes in really four areas. We want to reduce the costs because the costs are what -- reduction in costs are what are going to make this 16 project economic. We need to develop a commercial structure and -- and we've 17 talked often about developing that. We need to work in the market place and 18 we've talked about our trips to the and -- and will tomorrow talk more in your committee about marketing. And then work with the State on fiscal -- fiscal terms 19 and conditions. The -- I think Mr. Lowenfels put it well when he said he's taken 20 permits off the critical path for this project so our focus has been on -- on these 21 four work items and we see the MOU as helping us in the spirit of moving, especially on that last work item. 22

REP. KUBINA: I want to say that I think congratulate also your company in signing you to this, not just government relations but special project on the gas and working with it and I look forward to working with you all the way to the end. MR. FINDLING: Thank you.

REP. BARNES: Additional questions by other members of the legislature? 1 There being none

REP. DAVIES: Chair?

REP. BARNES: Excuse me, Representative Davies?

REP. DAVIES: Thank you. First, I'd just comment that -- you know -- the -the idea to give benefits for Alaska hire was something I proposed last year in context of the North Star project so it -- it's something we've had on the table to -to think about. The second thing though, I -- I wanted to ask -- you know -- and -and this is I don't want to hold you to the letter on this but -- but you heard Commissioner Condon describe some of the sticking points and some of their proposed language. Are you comfortable with the proposed language as -- as you heard it today?

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MR. FINDLING: I'm not sure

REP. DAVIES: Specifically, well there are three areas that -- that -- that the Commissioner talked about making it -- making some changes. The -- the first box
 on page 1 that

12 REP. BARNES: Representative Davies what I think I heard Mr. Findling say 13 was that they're comfortable with the language as it exists now.

REP. DAVIES: As it is, right. But what I want to know is -- there was --¹⁴ there was some proposed language that -- that Commissioner Condon had 15 suggested that they might be looking at and I'm just wondering if they would also 16 be comfortable with the proposed language.

MR. FINDLING: I -- Madam Chair, Representative Davies, I guess the -- the ¹⁷ best answer for that is that we do like the -- the resolution it is

18 REP. DAVIES: As it is.

19 MR. FINDLING: as it is now. We'd have to look at ARCO's (indiscernible).

REP. BARNES: Additional questions, comments? There being none, again Mr. Findling thank you very much.

22 MR. FINDLING: Thank you Madam Chair.

REP. BARNES: Well let me see. I just saw BP fall into your (indiscernible). ²³ Please identify yourself for the record. Welcome, it's nice to see you again.

MR. BENDERSKI: Thank you. Representative Barnes and members of the task force, my name is Mark Benderski, I'm the commercial manager for gas for BP Exploration Alaska. I'll keep my comments very brief. I want to also acknowledge

the very hard work this task force has done and also acknowledge the very good work that the State Administration has done. I also want to re-emphasize the four 1 steps that -- that ARCO just mentioned that we are working -- working on and 2 they are -- they are first engineering studies for cost reduction and cost -- reduction of cost uncertainty. They are further market -- you know -- embrace of the market. 3 They are further work on project structure and finally work on fes -- fiscal and 4 regulatory issues. I want to really emphasize that all four of these work areas are 5 needed to progress the project. With regard to the MOU we've been working very hard with the state on the MOU language. We've met with Commissioner 6 Condon earlier this morning, got hold of the latest draft of the MOU, I've 7 discussed this with my boss BP Ex-A President Richard Campbell. We are -- we 8 think the current language is very reasonable and Richard is planning to send this latest draft to London and we'll be getting word from them, I hopefully in short 9 order. 10

REP. BARNES: What do you mean short order?

¹¹ MR. BENDERSKI: Well I won't speak for how fast London will act but we 12 intend to bring it to their attention immediately.

13 REP. BARNES: Well I'll ask you that question again tomorrow when we have the resolution because immediately is like now.

MR. BENDERSKI: Yes, in fact I -- I understand that you'll be meeting with both Richard Campbell and John Morgan tomorrow and

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REP. BARNES: I can hardly wait.

MR. BENDERSKI: and I want you to hear it from the horse's mouth.

17 REP. BARNES: I'm very much looking forward to that and just so that 18 there is never any misunderstanding between the new incoming president of BP and the outgoing president of BP I went into my file cabinet, I retrieved that vial of 19 blood that belongs to John Morgan and I'm going to show it tomorrow to the new 20 president of BP so he won't have any doubt what happens to him in Alaska in case 21 that one doesn't live up to one's agreements. Not that you're bad or anything like that. You're basically very nice and loving people and with that in mind I'm more 22 than pleased that you saw fit to contact London and say that you're looking toward 23 signing this agreement. And I would also like to say that I would like to see, 24 especially BP, join with ARCO and be more pro-active than they have been in the past and that would just leave Exxon hanging out there by themselves. Any 25 committee members have any questions?

REP. KUBINA: I'll keep quiet this time Madam Chair.

MAN: Well I think you did fine.

REP. BARNES: There being nothing further we would love to have Exxon ² come to the table. Thank you. Don't you want to bring Mark up here with you?

MAN: He just -- he just learned that.

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REP. HODGINS: Madam Chair, I'm comfortable back here.

REP. BARNES: Well I just took you were being paid to come up here honey. Beverly, please identify yourself for the record.

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I'm Beverly Mentzer, Exxon's business development MS. MENTZER: 7 manager responsible for commercialization of the Alaska gas project. I'd like to 8 start off by thanking the working group and all the members of the legislature that have been involved and Wil Condon and the staffs from the various departments 9 within the state that have been working with us on this effort as represented by 10 the MOU although there is work going on in other areas also. I think it's an 11 excellent effort and it's helping move the project forward. In regards to the MOU I think Commissioner Condon gave a very good description of the issues that Exxon 12 has that are remaining and I thought what I might do is just add some 13 commentary to that to kind of help expand on those points. Kind of taking them 14 in the same order that Commissioner Condon did, there was a issue regarding the scope of the (indiscernible) facilities and whether the fields included thinking of 15 fiscal certainty as we continue in our discussions. And the reason we feel like 16 that's very important to the project centers around making this project be the best 17 it can against those world-wide competitors which you so accurately described, Representative Barnes. And the long-term success of an Alaska gas project is 18 dependent on the reliability and stability of the entire LNG chain from the wells to 19 the final customer. And since any chain is only as strong as its weakest link we 20 believe that discussions regarding fiscal certainty for the field should continue as we move forward. That is something that exists in many of the projects that we're 21 competing with and if we want to stay on the level playing field we need to not 22 foreclose that option. If you look at Prudhoe Bay, which is really the focus here, a 23 lot of people look at the project as what's the new investment you have to put into the project and that's the project. The project is delivering gas for 30 years after 24 you put in that new investment and when you take Prudhoe Bay as an example 25 we're going to have a field that's going to be starting off when it's close to 30 years

old and potentially needing to operate until it's 50 or 60 years old. Maintaining the economic reliability of the field and the reliability of the gas supply that needs to be 1 delivered to the Far East is very critical. In moving to the second item that 2 Commissioner Condon discussed, our views are that if the project were economic today the existing fiscal regime would determine the State's take and that under 3 the circumstances that would be fair and reasonable without any changes as we 4 look at the system today. However, the current fiscal system that is being 5 evaluated may not ideally meet the project's needs in helping it become commercially viable. So as we work with the State to develop a supportive fiscal 6 regime we want to keep the parties whole to the extent possible while developing 7 a commercially viable project. On the third item regarding the Alaska-hire 8 language, this is obviously been a very important issue to many people in the State 9 and the hiring of Alaskans is very important to Exxon as well. For the Alaska North Slope gas project to move forward and for Alaskans to derive benefits from 10 it, project must be commercially viable and able to compete with other fields and 11 potential LNG projects. So we've been working with the State to capture the 12 wording that reflects the hiring of qualified Alaska residents and businesses to participate in the cost-competitive construction and operation of the project. 13

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REP. BARNES: Well Beverly, I read the language

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MS. MENTZER: Mmm hmm.

REP. BARNES: and I cannot possibly see how you'd have any 15 problems with it. AND beyond that the next time I hear this commercially --16 commercially-viable, I may get sick because commercially-viable can mean 17 anything to anybody and it is just another way, in my opinion, of dragging your feet because I think what's really at play here where Exxon is concerned is this little 18 map. See all those little gas projects that I think stand to displace Alaska's gas in 19 the market place. And that if we don't get our feet in that door, what I choose to 20 refer to as the window of opportunity, by 2005 that in my life time, and I've already promised you in my life time one way or the other we're going to see this gas 21 pipeline, but if we don't have a market because all these other projects that 22 primarily Exxon, Exxon affiliate signs (indiscernible) LNG agreement. Same size, 23 competing with our project, all of these projects compete with Alaska and if we allow any one of you producers to sit around here and do nothing until the time 24 comes for us to get our gas into the market place it will not get there because we 25 will be displaced. You know it and I know it so I'm willing to hear you refute in any way you can that these projects exist, that these projects are projects that will displace us in the market place. I'm willing to hear your comments.

MS. MENTZER: Okay. In regards to the projects, the projects clearly exist 2 and our estimate says that looking at all the projects world-wide that are being developed there's probably about twice as much LNG being developed out there 3 that the market can absorb by 2010. So it's important for us, as you say, to be ready 4 and be there with our project. We also have to be there with the best terms to beat 5 the competition and Exxon does not prioritize projects, we're not waiting behind anybody. Each project team works independently and if you were to take that chart 6 and change every Exxon logo to a Shell logo, if that gave you any measure of 7 comfort it would just be a false security because regardless of who owns the project 8 everybody is working to bring their project forward to the market. And so it's up to us to make ours the best project that's there with the right terms at the right 9 time to get in the market. 10

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REP. BARNES: And Beverly that's what we're doing here.

MS. MENTZER: Mmm hmm.

REP. BARNES: That's why we have been working all summer to make
 sure that our project was the best project and we got into the market place ahead of
 all the others. And I know you could change it to Mobil, Chevron, or whatever,
 the gas would still exist.

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MS. MENTZER: Mmm hmm.

REP. BARNES: It's not owned by the other companies, it's owned by you, a 30 percent holding in Alaska's gas and we are going to find a way, one way or the other and I'm going to be quite blunt with you. I'm having it researched if we can take that gas away from the producers that don't -- do not come to the table. That we as a State can take back that resource that belong to the people of the State of Alaska and get it into that window of opportunity that exists for us because I know and you know the door will close. Any other committee members have anything they wish to say? Representative Kubina?

REP. KUBINA: Thank you Madam Chair. I guess I would just like to add that I think that we would all like to sort of walk -- I'm -- I'm the moderate this year. I'm bringing the minority and the majority together to maybe to help bring everybody together. We all want to walk down this path together though and we don't want a fight but you can feel some frustration coming from our side.

MS. MENTZER: Mmm hmm.

REP. KUBINA: And -- and I think a little bit of it is -- maybe dates back from '89 and the spill and still some things that maybe Exxon hasn't felt like a real partner in the State completely since then. And

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REP. BARNES: You can't accuse me of that, I've always been their friend.

REP. KUBINA: Well I -- I don't think anybody's trying to be anybody's 3 enemy here but what I'm trying to say is if you will take back to your corporate 4 office that maybe some of the frustration that you're seeing with us trying very 5 hard to make a good project become a better project, I got the sense from listening to the Commissioner and listening to you there is some mixing up of apples and 6 oranges when we're talking about the total project and mixing up maybe a little bit 7 of gas and oil and I can tell you that my discussions or comments to the 8 Commissioner about making sure that we look out for the public interest is that I don't think any of us want to give up things from one thing in order to get 9 another thing that is really unrelated. So I hope you'll take back a positive 10 message to your corporate headquarters and I think the Governor has tried to send 11 a very positive one and two years in a row now coming down and visiting with the -- the people at the highest levels to try to get a good working relationship 12 together and I think all of us at this table want one too but we just get like we want 13 to pound the table sometimes because it doesn't seem like things are going the way 14 they could that would make it be a lot better, and easier, and faster. So I'll leave 15 you to that.

MS. MENTZER: Mmm hmm. Well I can assure you I will take your message back.

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REP. BARNES: I'll take mine too.

MAN: You can play the tape from Gavel-to-Gavel and let them know.

MS. MENTZER: They will, I'm sure. But also, I'd also like to reassure you that Exxon is participating actively in all the work that's going on now, that the four areas that both George Findling and Mark Benderski identified we're equal participants in, the MOU is a frame work for long-term efforts and there is no work being delayed while the MOU negotiations have been going on, the spirit of the MOU has been in action and progressing.

REP. BARNES: We appreciate those comments but just remember commercially-viable can be interpreted by any -- by any time, any way to delay anything if you want to do it. Representative Davies? REP. DAVIES: Thank you. Well you -- you agreed that Commissioner Condon had -- had outlined substantially the -- the kind of the disagreement between you and the State of Alaska with respect to this language. Can -- can you give us any kind of time frame that we could expect these, what seem to me to be relatively minor points of disagreement, to be resolved?

MS. MENTZER: At this point I can't specify a time frame. It's dependent on future discussions both with the State and -- and within Exxon and the other
 ⁵ parties to the agreement.

6 REP. DAVIES: Could you characterize for us the level of urgency Exxon 7 feels to resolve these issues?

MS. MENTZER: We feel a great sense of urgency to resolve the issues because we feel like the issues are important to the project and will help to move the project forward.

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REP. DAVIES: Thank you.

REP. BARNES: Senator Sharp?

SEN. SHARP: I hesitate to jump into this fray since I was a little late but just commenting on the Alaska hire definition problem and quantifying it but it seemed to me any corporation that has operated in Alaska for over 20 years should pretty well understand who is an Alaskan resident and who is not an Alaskan resident. I think most of us sitting on -- at this panel knows one when we sees one and -- and I don't think there's much problem on agreeing on who that is. Obviously if they are two weeks on and two weeks off and they -- their two weeks off they continue going South past Seattle I don't consider them Alaska residents.

MS. MENTZER: Mmm hmm.

SEN. SHARP: That's one simple answer and there's many other ways to do
 it so definition there is not too difficult but I guess legally it may be if we have a fight in court which I hope we never have to do.

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REP. BARNES: Senator Sharp does that conclude your remarks? SEN. SHARP: Yes. Madam Speaker?

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REP. G. PHILLIPS: Thank you Madam Chairman. Beverly, I have one question. How many people does Exxon have working on this project to date in Alaska?

MS. MENTZER: In Alaska we have -- let me think in Alaska we have 37 total, not counting contractors we're funding. In Alaska maybe about half a dozen. REP. BARNES: Could you identify those for us please?

MS. MENTZER: The ones that came to mind were Jim Branch, Mark Boudreau, who are some of the names now -- the Danseckers [ph], who was -- can I 1 ask a question? Who was man working in Environmental?

MARK: Mike Barker.

MS. MENTZER: Mike Barker, I apologize.

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MARK: (Indiscernible).

MS. MENTZER: Mike Barker, Rob Dragnich [ph]. Did I leave anyone out? 5 And then support staff also that are involved.

REP. G. PHILLIPS: And before you can sign this memorandum of 6 agreement do all of you have to buy off on that and then do you have to send the 7 language to corporate headquarters somewhere else in the world and we have to 8 all wait for some -- a whole another staff in another location to go through all of this? 9

MS. MENTZER: Well our version of BP's London is Dallas and they have 10 been aware of the discussions going on with the MOU and yes they will have final 11 approval on the MOU.

REP. BARNES: Beverly would you tell the committee where you're from? 12 MS. MENTZER: Houston, Texas. 13

REP. BARNES: And you also tell them how much time you spend up here 14 working on this gas pipeline?

15 MS. MENTZER: I would estimate my time in Alaska has been 25 to 30 percent, my total time on the project probably 80 to 90 percent. 16

REP. BARNES: What does that mean, 80 to 90 percent, 25 to 30 percent? 17 You've been here 10 days in the last year or 2 days in the last year or?

18 MS. MENTZER: I have been traveling to Alaska late '96 approximately twice a month for basically a week. Maybe coming up Monday, going home on 19 Friday for various steering team meetings like the meetings we've had with the 20 Commissioners and working with the State. Now since the activity has been 21 initiated here within the legislature I came up Wednesday and I went home Sunday and I come back Tuesday and I go home Friday and I come back Monday 22 and then I go home Friday. So essentially

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REP. BARNES: Home is to Houston, right? MS. MENTZER: Houston. 24

REP. BARNES: So in other words you have no one in Alaska that is assigned here permanently working on this project for Exxon. And don't tell me 1 Jim Branch or Mark Boudreau because I know that's not their job.

2 MS. MENTZER: I'm Exxon's steering committee representative working in a comparable position with Mark Benderski and David Lawrence in ARCO and so 3 I have the prime responsibility to develop the commercially -- commercialization 4 of the reserves.

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REP. BARNES: But you're here very seldom.

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MS. MENTZER: Feels like a lot. My kids complain.

REP. BARNES: Representative Hodges.

REP. HODGES: Thank you Madam Chairman. Beverly I'm going to have 8 the honor of being the Oil and Gas Chairman so I'm going to be one of the committees shepherding this through the next two years and I would like to, if 9 possible, get a time line as to what Exxon believes they can do as far as making this 10 pipeline a reality and maybe we'll have committee meetings next week and maybe 11 on your return if you can give me an idea so I can relate that to the committee what we can expect in -- in realities. Thank you. 12

MS. MENTZER: Okay. In the near-term timeline as we just move forward 13 we have a four-year work outline by eight different technical teams and they will 14 continue to work through '97. In the fiscal arena we have the proposed resolution 15 that will be presented through the legislature and assuming that passes and authorizes the Governor to work on developing a fiscal contract then we see that 16 work continuing through the year and coming back possibly the next session with 17 a draft, well not a draft, the final fiscal contract for proposal to the legislature for ratification. And in the project structure arena we need to work on better defining 18 who the actual project participants will be and what the agreements might be 19 surrounding their participation in future work in the project. And in '98 we'll test 20 progress in all those areas including the market. I didn't mention it because I 21 don't see a significant hurdle there, we just will continue to monitor and make sure -- you know -- that we're meeting their needs but we'll test technical, fiscal, 22 market, and project structure and see if everything is progressing towards -- you 23 know -- a viable project.

REP. HODGES: Thank you. Can I ask for that in maybe a written form that I 24 might distribute that amongst the committee members? 25

MS. MENTZER: Mmm hmm. Yes.

REP. HODGES: And then any other hurdles you might see that -- that we need to address. 1

MS. MENTZER: Okay.

2 REP. HODGES: Thank you.

REP. BARNES: And could you also supply all of us in writing a timeline 3 when we can expect you to sign the MOU? 4

MS. MENTZER: I don't know that I can but we will continue to progress 5 the signing of the MOU.

6 REP. BARNES: I hope you're satisfied with the language that's in the MOU, you might tell that to Exxon in Houston. 7

MS. MENTZER: I will.

8 REP. BARNES: Thank you. Is there more questions or comments by committee members? There doesn't seem to be any Beverly and we -- we'll look 9 forward to your spending a little more time here with us so you don't have to 10 spend so much time on the jet and that maybe we can resolve some of these issues 11 a little faster when you get this MOU signed. Is there anyone else that would like to testify before the committee? Would you please come forward. Please identify 12 yourself for the record. 13

MS. HUFF-TUCKNESS: Thank you Madam Chair. My name is Barbara 14 Huff-Tuckness, I am the director of governmental and legislative affairs for Teamsters Local 959 and I've sat through the hearing tonight and I first of all want 15 to congratulate you, Madam Chair, and also members of your task force and those 16 legislators that worked very hard last year through this process as well as those 17 newly elected legislators that will work on -- on where to continue through this process. I spoke earlier this afternoon, Jerry Hood, secretary-treasurer of the 18 Teamsters unfortunately was delayed in Washington, D.C. He would have loved 19 to have been here and I'm sure would have enjoyed going through this particular 20 process. I felt in sitting here and listening tonight to a lot of the discussion it kind of brings back some -- some old discussions that we had last year with respect to 21 North Star and unfortunately, we're still waiting for North Star to happen and 22 we're -- we're sure that it will. One of the issues that we did have and -- and I 23 think something that has been addressed with many -- many of the members sitting here this evening is local hire, Alaskan hire and that indeed the 24 qualifications and/or the training be a major center and/or focus as members of 25 your task force and Oil and Gas and any of the other committees through the

Senate and/or the House as you're going through this particular process. We have
spent, in particular, the last 12 months expense -- extensive amount of time
working with Yukon Pacific in addressing those training needs and/or issues out
there. Teamsters represents roughly about 7,000 members across the State of
Alaska in various areas. We recognize also the need and concern to have
qualified, trained employees working through this particular project, any project of
this size. And with that we encourage the -- the time and the efforts that have
been spent with each and every one of you sitting here tonight and will do
whatever we can to continue supporting that process. Thank you.

REP. BARNES: Thank you. Committee members have any questions? Representative Hodges?

REP. HODGES: Yes Barbara, thank you for coming forward this evening.
 On the training issues, are -- are the unions going to want to conduct the training
 or are we looking for the -- the community colleges or vocational schooling to -- to
 conduct the training working -- working in concert with the unions? How do you
 foresee that?

MS. HUFF-TUCKNESS: Madam Chair, Representative Hodges, I guess I'm 12 here tonight speaking on behalf of Teamsters and we do have a training program 13 that has been up and -- and running for many years. I, although I can't speak on 14 behalf of the other unions out there, yes they also have training facilities out there and at this particular point in time at least what I understand the discussions that 15 have occurred it's a real focus on what are those needs going to be so that we can 16 over the next year or the next couple of years hopefully be up and running with --17 with whatever those efforts are. I would also assume that there would probably 18 looking at the -- the massiveness of this particular project be some joint efforts out there with -- with other organizations as well. 19

REP. HODGES: Madam Chair, if I can continue?

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REP. BARNES: Representative Hodges.

REP. HODGES: I would hope that you and I could get together before the Oil
 and Gas committee hears the -- the resolution next week and -- and discuss the training concepts that we might be able to -- to work together on and then I can
 report that to the committee and maybe the -- at a later meeting you can report to
 the committee.

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MS. HUFF-TUCKNESS: I'd be happy to do that. REP. HODGES: Thank you very much.

REP. BARNES: There's no questions or comments of Barbara? There being none, Barbara thank you very much for coming forward we do appreciate. To the 1 task force members and to those of you that are present we will take the results of 2 today's testimony and we will put a final chapter into our working draft. That working draft will become then the document that will be submitted to the 3 legislative branch on February the 1st or before if we are able to conclude it before 1 that time. Tomorrow the outgrowth of the work that we have done is HCR 1, 5 HCR 1 will be before the World Trade, State/Federal Relations Committee. I do believe that because of the interest today that instead of having it here in this 6 room we will move, if at all possible, to House Finance where we have more 7 room because there will be a -- a larger number of people, I'm certain, testifying on 8 the resolution itself. I'd like to thank all of you for participating in the hearings that we have had. We will look forward to continuing to work as individual 9 legislators and committee members and chairman to move this resolution and the 10 gas pipeline to completion to put Alaska's gas into the market by 2005. 11 **Representative Davies?**

REP. DAVIES: Thank you Madam Chair. I realize that I'm not a member of
 the committee but I would like to make two suggestions with respect to the -- the
 report as we have it in front of us.

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REP. BARNES: You're certainly welcome to make those.

REP. DAVIES: They're small and specific. On the -- on the last page again 15 the thing that I read before under State Administration, the end of the third line is 16 the word realistic, I would suggest that -- that you substitute the word certain, so it 17 would read under certain assumptions instead of under realistic assumptions. And secondly, I would suggest in the next line where it says the project would 18 become attractive to substitute be more for become so it would read for the project 19 to be more attractive. I think Madam Chair that -- that I'm concerned that if you 20 put out this statement the way it is now that it -- it would -- it puts a certain pall 21 over the project that I don't believe that we heard the Administration really believes at this time and -- and that this would be, if it were read the wrong way by 22 the wrong people it might have some harm. So I -- I would hope that you'd 23 consider that.

REP. BARNES: Thank you very much. We consider that constructive and we will certainly consider that in the context of the report part at the time deliver it. REP. DAVIES: Thank you.

REP. BARNES: Additional questions or comments? There being none, Madam Speaker I want to thank you very much because I know in your position how very busy you are, for coming and taking the time to set with us and hear this project. And again, thank you. REP. G. PHILLIPS: Certainly this is one of the most important things facing us today. REP. BARNES: Thank you very much. We're adjourned.

MEMORANDUM OF UNDERSTANDING RELATING TO THE

PROPOSED ALASKA NORTH SLOPE GAS PROJECT

AMONG THE STATE OF ALASKA, ARCO ALASKA, INC., 🔬

BP EXPLORATION (ALASKA) INC., AND EXXON COMPANY, U.S.A.

INTRODUCTION

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VII.	RELATIONSHIP WITH THE ALASKA LEGISLATURE
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MEMORANDUM OF UNDERSTANDING RELATING TO THE PROPOSED ALASKA NORTH SLOPE GAS PROJECT AMONG THE STATE OF ALASKA, ARCO ALASKA, INC., BP EXPLORATION (ALASKA) INC., AND EXXON COMPANY, U.S.A.

This is a Memorandum of Understanding (Memorandum) among the State of Alaska, acting through the executive branch of state government (State) and the three largest working interest owners in the Prudhoe Bay Unit, ARCO Alaska, Inc., BP Exploration (Alaska) Inc., and Exxon Company, U.S.A. (Producers), who are some of the potential sponsors of a North Slope gas project. (Together the State and the Producers are referred to as the Parties.)

I. INTRODUCTION

The Parties wish to pursue establishing a viable project to produce gas from the Alaska North Slope and to transport that gas to markets in the Far East ("Alaska North Slope Gas Project" or "the Project") and thereby realize value for the Parties' respective interests in that gas. The Parties mend to take a series of actions, both separately and together, to pursue the Alaska North Slope Gas Project.

In addition to potential public and private revenue, the construction and operation of the Alaska North Slope Gas Project offers the possibility of a significant number of jobs for Alaskans and natural gas for Alaskan communities.

The three Producers are pursuing their private economic interests with respect to this Project. The State is charged with pursuing and protecting the public interest and promoting the public benefits pertinent to this Project. The Parties will explore the steps they can take individually and together to harmonize the Producers' private interests and the State's public interest relating to the Project.

The Parties recognize that the State and the Producers have a contractual relationship through the lease of State lands. The Producers have the right to continue to hold their leases so long as they operate those leases prudently and produce oil and gas from them with reasonable diligence. The State believes the Producers are currently complying with these obligations.

The Parties agree that the following constitute the latest assumptions pertment to the Project:

- 1. The most recent capital cost projection (excluding interest during construction) is about \$15 billion in 1995 dollars;
- 2. The prevailing nominal market price for liquefied natural gas (LNG) delivered to Far East markets in 1995 dollars is about \$3.50 per million BTUs, and

3. The LNG product volume tentatively planned for the Project (about 14 million metric tons of LNG per year) is as follows 2-3 million metric tons of LNG during the first year of operation, increasing by 2-3 million metric tons per year until the full volume is reached in the sixth year of operation continuing at that volume for the life of the project.

The Parties believe the Project's chance of success will be enhanced if:

1. The Project can be constructed for substantially less than the projections specified above

2. The LNG from the Project can be marketed for prices substantially above the price prevailing during 1995.

3. The full volume of LNG available from the Project can be placed in the market more rapidly than in the schedule set forth above.

4. The Project is subject to an appropriate fiscal and regulatory environment that is stable and certain over a long period. The State's current fiscal system applicable to a project of this type includes a royalty interest, production tax, property tax, conservation and surcharge tax, and corporate income tax (Project State Fiscal System).

The Parties will examine whether modifications to the Project State Fiscal System might significantly improve the economic feasibility and competitiveness of the Project. The Producers represent that such modifications may be necessary to make the Project either economically feasible or competitive in the market or both. If any of these propositions is true, then modifications to the Project State Fiscal System might be necessary for the State to receive value for its interest in the North Slope gas resource.

Any changes to the Project State Fiscal System must be consistent with the public interest and the legislature's duty to provide for the use, development, and conservation of all natural resources belonging to the State for the maximum benefit of its people.

The State has retained a consultant, Pedro Van Meurs and Associates, to evaluate the Project State Fiscal System and, if appropriate, to make recommendations for possible changes in that system to enhance the possibility that the Project will be built.

The major purposes of this Memorandum are to assist (1) in evaluating the need for and, if needed, the timing of modifications to the Project State Fiscal System; (2) if appropriate, in developing proposals for modifications to the Project State Fiscal System; (3) if appropriate, in compiling the information base required for the responsible deliberation and debate that such proposed changes would occasion; (4) in setting the framework for future discussions and joint work to enhance the possibility that the Project will be built; and (5) in pursuing the best interests of the State. The major issues that may affect the Project's viability are its economic feasibility and its ability to compete with other proposed LNG projects, other non-LNG energy projects that might serve Far East markets, and other investment opportunities available to potential Project sponsors. The contributing factors include:

- 1. The projected costs of the Project and means for reducing those costs,
- 2. The market terms, conditions and opportunities available for the Project
- 3. The federal, state, and local tax and state royalty obligations of the Producers and of potential Project sponsors;
- 4. The stability and certainty of the Project State Fiscal System
- 5. The public costs and benefits of the Project: and
- 6. The legal requirements applicable to the Project, including federal, state, and local regulations, permits, and licenses.

II. PROJECTED COSTS AND COST REDUCTIONS

The Parties recognize that the current cost estimate of about \$15 billion in 1995 dollars (excluding interest during construction) is subject to a great deal of uncertainty and that the actual cost of constructing the Project might be considerably lower or higher than this estimate.

The Parties recognize that determining a reliable cost estimate will be a critical step in developing the Project. A reliable cost estimate will be essential to conclude successfully the sales contracts necessary to support the Project and attract capital investment to the Project.

The Parties recognize that the potential Project sponsors would have to spend a large sum of money to develop a reliable cost estimate and that this money would not be recouped if the

Project is not constructed. The Producers will continue their work to reduce the uncertainty in their estimates and find cost savings for the Project.

III. MARKET TERMS, CONDITIONS AND OPPORTUNITIES

The Parties recognize that a viable Project offers many potential benefits to buyers and governments in the Far East. These benefits may include the opportunity to:

1. Further diversify the buyers' supply portfolios with an LNG source that has stable political institutions and geopolitical characteristics different from the majority of their current sources;

2. Reduce balance of payment surpluses with the United States and gain consequent political benefits; and

3. Invest in and provide some of the important components of the Project.

The Parties recognize there are other potential projects competing for a place in the Far East markets and the possibility of ancessfully completing this Project will be increased by advancing it as far as possible in the eyes of potential LNG purchasers toward the front of the queue of potential projects. The Parties believe that reducing costs and increasing fiscal and regulatory certainty may assist in advancing this Project's place in the queue of potential projects. The Parties further recognize that torecasts of demand for natural gas and LNG in Far East markets generally show annual increases for the next twenty years. Based on these forecasts, the Parties agree that opportunities for placing LNG in Far East markets are expected to continue to grow in the twenty-first century. The Parties recognize that ultimately the market will dictate the need for and timing of the Project.

The Parties further recognize that if this project could be developed and marketed with larger product volumes, its economic feasibility would be greatly enhanced. Conversely, if this Project could be developed cost effectively with smaller product volumes its marketability, and hence its economic feasibility, would be greatly enhanced.

The Producers will make regular contact with potential LNG buyers and pertinent government officials in the Far East to apprise them of the progress of the Project. The Producers will continue to promote interest in the success of the Project.

IV. THE STATE FINANCIAL MODEL

The State has developed a financial model to use for public discussion of the Project's economic feasibility. The model is available for public inspection and is subject to modification as appropriate. The model permits the Parties and the public to analyze the effect changes in the following factors have on the economic feasibility of the Project:

- 1. State and Federal fiscal terms;
- 2. Debt-equity ratios,
- 3. Return on debt;
- 4. Return on equity,
- 5 Required project rates of return;
- 6. Capital and operating costs;
- 7. Time to place the full LNG volumes in Far Eastern markets;
- 8. Full LNG Project volume;
- 9 LNG market prices; and
- 10. Reduced oil recovery as a result of a gas sale.

V. STATE FISCAL MODIFICATIONS

The Parties recognize that changes in the Project State Fiscal System may be necessary or advisable for two reasons. First, such changes may be required to make the Project economically feasible and hence able to attract the necessary capital investments. Second, such changes may be necessary for the Project to successfully compete for a place in the market against other proposed. LNG projects or other potential energy sources for the perfinent Far East markets

The Parties will examine whether changes in the Project State Fiscal System will significantly improve the economic feasibility of the Project or significantly improve the competitiveness of the Project in its ability to secure a place in the Far East markets. The Parties recognize that an evaluation of the Project State Fiscal System in relation to the Project will be facilitated by a frank and open exchange of information.

The Parties recognize that the appropriateness of proposed changes to the Project State Fiscal System must be evaluated by examining whether the changes would be socially responsible, given the strain on public services the Project would create, by considering the non-renewable nature of the resources the Project would explait and by considering the benefits the State and its citizens would receive from the Project. The Parties recognize that any changes to the Project State Fiscal System must maximize the expected benefit of Alaska North Slope gas resources for the people of Alaska.

Where the Parties conclude that a change in the Project Fiscal System would (1) significantly improve the viability or competitiveness of the Project; (2) be socially responsible; (3) maximize the expected benefit of Alaska's North Slope gas resources for its people; and (4) enhance the Project sponsors' shareholder value, the Parties agree to work together in an effort to develop appropriate proposed legislation and to take other actions needed to effect such change. If appropriate, the State will assess the Project's socioeconomic effects on the people of the State.

Finally, the Parties agree that, where possible, modifications to the Project State Fiscal System should be able to respond to variations in the Project's profitability --- where, for example, lower energy prices (or higher costs) produce lower profits or higher energy prices (or lower costs) produce higher profits --- and to adjust the State's share in the economic benefits of the Project accordingly, while Project sponsors retain upside profit potential commensurate with the risks they are undertaking.

Possible changes to the Project State Fiscal System the Parties might consider include:

- 1. Tax and royalty offsets for early expenditures prior to Project commitment;
- 2. Accelerated capital depreciation;
- 3. Investment credits;

4 Deferrals of or reductions in royalties and certain taxes;

- 5. Recognition of losses in wellhead revenue for royalty payments by either an offset or carry forward of those losses;
- 6. Profit based taxes and royalties; and

7 Coordination of tax and royalty provisions with the Project tariff arrangements.

If the Parties agree it is necessary or appropriate, the State will work with local governments

regarding how modifications to property taxes may enhance the Project's chance of success.

VI. STATE FISCAL STABILITY AND CERTAINTY

The Parties recognize that due to the anticipated length of time between many of the Project's enormous capital expenditures and the receipt of significant Project revenues, and the Project's need for a reliable revenue stream over a long period, it is likely that potential sponsors will require assurance that the Project State Fiscal System will not change adversely over a significant part of the life of the Project. The Parties also recognize that the Constitution of the State of Alaska imposes some limits on the ability of the State to commutisel irrevocably to certain levels and kinds of taxation. The Parties agree to search for suitable measures within the pertinent Constitutional framework to achieve the fiscal stability and certainty the Project requires.

The Parties also recognize that they can increase the fiscal stability and certainty surrounding the Project by, among other things, agreeing to dispute settlement procedures and clear definitions of tax and royalty obligations, common carrier requirements, tariff methodology, and other regulatory obligations before the Project commences.

VIL RELATIONSHIP WITH THE ALASKA LEGISLATURE

Since the Alaska Legislature must determine whether to modify the Project State Fiscal System, the Parties will keep appropriate members of the Alaska Legislature informed of their respective efforts on the Project. Further, the Parties will develop and provide information to assist in the public discussion and debate occasioned by any proposed modifications to the Project State Fiscal System

By HJR 54, the Alaska Legislature established an interim working group. This group is scheduled

to report to the House and Senate Resources Committees by February 1, 1997 on the status of efforts to advance exports of Alaska North Slope gas to Far East markets. The group also is to report on any proposed legislative actions appropriate to those efforts. The executive branch and the Producers will work individually and together to ensure that the Alaska Legislature's interim working group created by HJR 54 is kept apprised of the efforts of the Parties has the information it requires to do its work, and is supported in its efforts in any other appropriate manner.

VIII. HIRING ALASKANS

The Parties recognize that an important potential benefit of the Project is the employment of Alaska residents and Alaska businesses in the construction and operation of the Project. The Parties recognize that Alaskans expect a strong "Alaska-Inte" effort for the Project. The Parties are determined to find suitable measures to successfully ensure that a maximum number of Alaska residents and Alaska-based businesses are hired to construct and operate the Project while recognizing that, in order to assist in achieving a commercially viable Project, there will be a need for competitively priced goods and services. The Parties agree that clearly defining who qualifies as an Alaska resident or Alaska business will help this effort.

IX. ENVIRONMENTAL INTEGRITY, HEALTH, SAFETY AND NATURAL GAS AVAILABILITY FOR ALASKAN COMMUNITIES

In addition to public revenue and employment within the State, other important public interests that would be affected by the Project must be considered. They include:

Protection of the environment;

- 2. Protection of the health and safety of workers and the public; and
- 3. Providing natural gas to Alaskan communities.

The Parties agree to search for suitable measures to ensure that, if the Project is constructed:

1. Its construction and operation will properly protect Alaska's environment;

2. It will be constructed and operated in a manner that properly protects the health and safety of workers and the public; and

3. Where economically, technically, and legally feasible, it will be configured and operated so that natural gas can be marketed to Alaskan communities.

X. THE POTENTIAL EFFECT OF PERMITTING REQUIREMENTS AND DELAYS

The Parties recognize that permitting requirements and delays may affect the viability of the Project. The Parties intend to search for suitable and mutually agreeable measures to aid Project viability while still protecting essential regulatory goals such as environmental quality and the health and safety of all Alaskans.

XI. FEDERAL ACTIONS THAT MIGHT ASSIST THE PROJECT

The Parties recognize that there may be some steps the Federal government could take to improve the economic feasibility and competitiveness of the Project. These steps include, for example, potential changes to federal laws and regulations relating to taxes and permitting requirements. The Parties intend to evaluate these potential changes, including federal fiscal modifications such as:

1. Investment and other tax credits;

2 Accelerated depreciation;

9. Sharing of tax revenues with the State of Alaska; and

4. Authorizing tax free bonds for the Project.

Based on these evaluations, the Parties may encourage federal policy makers and agencies to pursue selected federal changes.

XII. YUKON PACIFIC CORPORATION

Yukon Pacific Corporation (YPC) is a business unit of CSX Corporation and managing general partner for Yukon Pacific Company, L.P. Since 1983 YPC has been engaged in the preliminary design and permitting of facilities very similar to the facilities needed for the Project that is the object of this Memorandum. In carrying out this work, YPC has contacted pertinent government officials and policy makers in this country and potential LNG buvers and pertinent government officials in Asia. The Project may or may not fit closely with the rights of way, permits, approvals, and licenses that have been obtained by YPC for its proposed facilities. Nevertheless, the Producers, at an appropriate time, will evaluate YPC's existing work to determine whether there are acceptable, cost-effective means to use the work the add value to the Project; and where there are acceptable, cost-effective means to use the work, the Producers will endeavor to do so. Further, the Parties recognize that success in developing and marketing Alaska North Slope natural gas requires that interested parties emphasize the merits and benefits of any project proposed to achieve that objective

XIII. MAJOR GAS SALE INCENTIVE STUDY

The State has prepared an analysis of the relative incentives for each of the major Prudhoe Bay producers to engage in a Major Gas Sale (MGS). Each Producer has had an opportunity to review this analysis to ensure that it accurately reflects the impacts of the Prudhoe Bay Unit Operating Agreement and related amendments pertaining to an MGS. The State has concluded that the Producers among themselves have similar incentives for an MGS, and the Producers agree with this conclusion.

XIV. LIMITATIONS

The Parties intend to work together to accomplish the steps outlined in this Memorandum of Understanding. However, this document does not commit any Party to invest or participate in the Project, or create any legally enforceable rights or obligations. The Parties recognize that a future change in circumstances may alter any Party's current intentions or willingness to participate as contemplated by this Memorandum of Understanding.

MEMORANDUM OF UNDERSTANDING RELATING TO A

PROPOSED ALASKA NORTH SLOPE GAS PROJECT

BETWEEN THE STATE OF ALASKA AND

YUKON PACIFIC CORPORATION

- I. INTRODUCTION
- II. PROJECTED COSTS AND COST REDUCTIONS
- III. MARKET TERMS, CONDITIONS AND OPPORTUNITIES
- IV. THE CS FIRST BOSTON REPORT AND THE STATE FINANCIAL MODEL
- V. STATE FISCAL MODIFICATIONS
- VI. STATE FISCAL STABILITY AND CERTAINTY
- VII. RELATIONSHIP WITH THE ALASKA LEGISLATURE
- VIII. HIRING ALASKANS
- IX. ENVIRONMENTAL INTEGRITY, HEALTH, SAFETY AND NATURAL GAS
 - AVAILABILITY FOR ALASKAN COMMUNITIES
- X. THE POTENTIAL EFFECT OF PERMITTING REQUIREMENTS AND DELAYS
- XI. FEDERAL ACTIONS THAT MIGHT ASSIST THE PROJECT
- XII. THE NORTH SLOPE PRODUCERS
 - MAJOR GAS SALE INCENTIVE STUDY

LIMITATIONS

XIIL

XIV.

MEMORANDUM OF UNDERSTANDING RELATING TO A PROPOSED ALASKA NORTH SLOPE GAS PROJECT BETWEEN THE STATE OF ALASKA AND YUKON PACIFIC CORPORATION

This is a Memorandum of Understanding (Memorandum) between the State of Alaska, acting through the executive branch of state government (State) and Yukon Pacific Corporation (YPC), a business unit of CSX Corporation and managing general partner of Yukon Pacific Company, L.P. (Together the State and YPC are referred to as the Partners)

I. INTRODUCTION

The Parties wish to pursue establishing a viable project to produce gas from the Alaska North Slope and to transport that gas to markets in the Far East ("Alaska North Slope Gas Project" or "the Project"). The Parties intend to take a series of actions, both separately and together, to pursue an Alaska North Slope Gas Project

In addition to potential public and private revenue, the construction and operation of the Alaska North Slope Gas Project offers the possibility of a significant number of jobs for Alaskans and natural gas for Alaskan communities.

The State recognizes that since 1983 YPC has been engaged in preliminary design, permitting and marketing for a specific North Slope Gas Project, the Trans-Alaska Gas System (TAGS). YPC recognizes that the State, at this time, does not support a specific North Slope Gas Project, but instead must seek to realize value from the natural gas that has been discovered on the Alaska North Slope. The Parties will endeavor to find acceptable, cost-effective means by which the TAGS proposal can be coordinated with other potential Projects.

The State recognizes that YPC, with some conditions, has secured or completed the following in its efforts to promote TAGS:

- Presidential approval of gas exports as required under the Alaska Natural Gas Transportation Act;
- 2. A Project-wide Environmental Impact Statement,
- 3. A right-of-way grant for Ahtna lands;
- 4. A right-of-way grant for federal lands;
- 5. A right-of-way grant for State lands;

and

- 6. Department of Energy authorization for North Slope gas exports;
- An Environmental Impact Statement for the Anderson Bay LNG facilities and marine terminal site;
- 8. Federal Energy Regulatory Commission approval of Anderson Bay as an export site (YPC believes this is an exclusive license).
- 9. Contacts with customers, trading companies and market country governments;
- Memoranda of Intent with Korea Gas Corporation and Chinese Petroleum Corporation for purchase volumes of LNG from a North Slope Gas Project;
 A financial feasibility and financing plan with CS First Boston dated June 24, 1996;

12. The creation and funding of an environmental oversight group called the TAGS Environmental Review Committee.

YPC is pursuing its private economic interests with respect to TAGS. The State is charged with pursuing and protecting the public interest and promoting the public benefits pertinent to a North Slope Gas Project. The Parties will explore the steps they can take individually and together to harmonize YPC's private interests in TAGS and the State's public interest in a North Slope Gas Project. The Parties recognize that the State and the North Slope producers (Producers) have a contractual relationship through the lease of State lands. The Producers have the right to continue to hold their leases so long as they operate those leases prudently and produce oil and gas from them with reasonable diligence. The State believes the Producers are currently complying with these obligations.

The State believes that the following constitute the latest assumptions pertinent to the Project

The most recent capital cost projection (excluding interest during construction) is about
 \$15 billion in 1995 dollars;

2. The prevailing nominal market price for liquefied natural gas (LNG) delivered to Far East markets in 1995 dollars is about \$3.50 per million BTUs; and

3. The LNG product volume tentatively planned for the Project (about 14 million metric tons of LNG per year) is as follows: 2-3 million metric tons of LNG during the first year of operation, increasing by 2-3 million metric tons per year until the full volume is reached in the sixth year of operation, continuing at that volume for the life of the project.

YPC believes that the Project's economics should be assessed using different assumptions. Nevertheless, the Parues agree that the Project's chance of success will be enhanced if:

1. The Project can be constructed for less than the projections specified above.

2. The LNG from the Project can be marketed for prices above the price prevailing during 1995.

3. The full volume of LNG available from the Project can be placed in the market more rapidly than in the schedule set forth above.

4. The Project is subject to an appropriate fiscal and regulatory environment that is stable and certain over a long period.

The State's current fiscal system applicable to a project of this type includes a royalty interest, production tax, property tax, conservation and surcharge tax, and corporate income tax (Project State Fiscal System). Although YPC does not own North Slope gas, it may be an owner of the transportation (including ships) and liquefaction facilities needed for a North Slope Gas Project. As an owner of such facilities, YPC would contribute to the state treasury through the property tax and the corporate income tax. The portion of the Project State Fiscal System that relates to the transportation and liquefaction facilities, the so-called downstream," is referred to as the Downstream Project State Fiscal System.

The Parties will examine whether modifications to the Downstream Project State Fiscal System might significantly improve the economic feasibility and competitiveness of the Project. The Producers have represented that such modifications may be necessary to make the Project either economically feasible or competitive in the market or both. If any of these propositions is true, then modifications to the Downstream Project State Fiscal System might be necessary for the State to receive value for its interest in the North Slope gas resource.

Any changes to the Downstream Project State Fiscal System must be consistent with the public interest and the legislature's duty to provide for the use, development, and conservation of all natural resources belonging to the State for the maximum benefit of its people.

The State has retained a consultant, Pedro Van Meurs and Associates, to evaluate the Project State Fiscal System and, if appropriate, to make recommendations for possible changes in that system to enhance the possibility that the Project will be built.

The major purposes of this Memorandum are to assist (1) in pursuing the means for coordinating the TAGS proposal with other potential Projects; (2) if appropriate, in developing proposals for

modifications to the Downstream Project State Fiscal System; (3) if appropriate, in compiling the information base required for the responsible deliberation and debate that such proposed changes would occasion; (4) in setting the framework for future discussions and joint work to enhance the possibility that a Project will be built; and (5) in pursuing the best interests of the State.

The major issues that may affect the Project's viability are its economic feasibility and its ability to compete with other proposed LNG projects, other non-LNG energy projects that might serve bar East markets, and other investment opportunities available to potential Project sponsors. The contributing factors include:

- 1. The projected costs of the Project and means for reducing those costs;
- 2. The market terms, conditions and opportunities available for the Project;

3. The federal, state, and local tax and state royalty obligations of the potential Project sponsors;

4. The stability and certainty of the Project State Fiscal System;

5. The public costs and benefits of the Project; and

6. The legal requirements applicable to the Project, including federal, state, and local regulations, permits, and licenses.

II. PROJECTED COSTS AND COST REDUCTIONS

The Parties recognize that the State's current cost estimate of about \$15 billion in 1995 dollars (excluding interest during construction) is subject to a great deal of uncertainty and that the actual cost of constructing the Project might be considerably lower or higher than this estimate.

The Parties recognize that determining a reliable cost estimate will be a critical step in developing the Project. A reliable cost estimate will be essential to conclude successfully the sales contracts necessary to support the Project and attract capital investment to the Project.

The Parties recognize that the potential Project sponsors would have to spend a large sum of money to develop a reliable cost estimate and that this money would not be recouped if the Project is not constructed. YPC will continue its work to reduce the uncertainty in its estimates and find cost savings for the Project.

III. MARKET TERMS, CONDITIONS AND OPPORTUNITIES

The Parties recognize that a viable Project offers many potential benefits to buyers and governments in the Far East. These benefits may include the opportunity to:

1. Further diversify the buyers' supply portfolios with an LNG source that has stable political institutions and geopolitical characteristics different from the majority of their current sources;

2. Reduce balance of payment surpluses with the United States and gain consequent political benefits; and

3. Invest in and provide some of the important components of the Project.

The Parties recognize there are other potential projects competing for a place in the Far East markets and the possibility of successfully completing this Project will be increased by advancing it as far as possible in the eyes of potential LNG purchasers toward the front of the queue of potential projects. The Parties believe that reducing costs and increasing fiscal and regulatory certainty may assist in advancing this Project's place in the queue of potential projects. The Parties further recognize that forecasts of demand for natural gas and LNG in Far East

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markets generally show annual increases for the next twenty years. Based on these forecasts, the Parties agree that opportunities for placing LNG in Far East markets may continue to grow in the twenty-first century. The Parties recognize that ultimately the market will dictate the need for and timing of the Project.

The Parties further recognize that if this project could be developed and marketed with larger product volumes, its economic feasibility would be greatly enhanced. Conversely, if this Project could be developed cost effectively with smaller product volumes its marketability, and hence its economic feasibility, would be greatly enhanced.

YPC will continue to make regular contact with potential LNG buyers and pertinent government officials in the Far East to apprise them of the progress of the Project. YPC will continue to promote interest in the success of the Project.

IV. THE CS FIRST BOSTON REPORT AND THE STATE FINANCIAL MODEL

YPC has commissioned a report by CS First Boston addressing the Project's financial feasibility. The Parties recognize that the CS First Boston report purposely did not reflect or incorporate all elements of the current Project State Fiscal System. The CS First Boston report concludes that:

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b.

- Under current Project cost estimates and current capital market conditions, the Project will require an LNG price that escalates 3% annually, from an assumed 1996 price of \$3.57 per MMBtu, through the year 2035;
- The size and complexity of the Project will require multiple participants, and the participation of at least one major international oil company as a Project sponsor and potential operator; and

c. The participation of the Prudhoe Bay oil companies would seem to be most sensible in terms of economic and timing efficiencies.

The State has developed a financial model to use for public discussion of the Project's economic feasibility. The model is available for public inspection and is subject to modification as appropriate. The model permits the Parties and the public to analyze the effect changes in the following factors have on the economic feasibility of the Project:

- 1. State and federal fiscal terms;
- 2. Debt-equity ratios;
- 3. Return on debt;
- 4. Return on equity;
- 5. Required project rates of return;
- 6. Capital and operating costs;
- 7. Time to place the full LNG volumes in Far Eastern markets;
- 8. Full LNG Project volume;
- 9. LNG market prices; and
- 10. Probable reduced oil recovery as a result of a gas sale.

V. STATE FISCAL MODIFICATIONS

The Parties recognize that changes in the Downstream Project State Fiscal System may be necessary or advisable for two reasons. First, such changes may be required to make the Project economically feasible and hence able to attract the necessary capital investments. Second, such changes may be necessary for the Project to successfully compete for a place in the market against other proposed LNG projects or other potential energy sources for the pertinent Far East markets.

The Parties will examine whether changes in the Downstream Project State Fiscal System will significantly improve the economic feasibility of the Project or significantly improve the

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competitiveness of the Project in its ability to secure a place in the Far East markets. The Parties recognize that an evaluation of the Downstream Project State Fiscal System in relation to the Project will be facilitated by a frank and open exchange of information.

The Parties recognize that the appropriateness of proposed changes to the Downstream Project State Fiscal System must be evaluated by examining whether the changes would be socially responsible, given the strain on public services the Project would create, by considering the nonrenewable nature of the resources the Project would exploit and by considering the benefits the State and its citizens would receive from the Project. The Parties recognize that any changes to the Downstream Project State Fiscal System must maximize the expected benefit of Alaska North Slope gas resources for the people of Alaska. Where the Parties conclude that a change in the Downstream Project State Fiscal System would (1) significantly improve the viability or competitiveness of the Project; (2) be socially responsible, and (3) maximize the expected benefit of Alaska's North Slope gas resources for its people, the Parties agree to work together in an effort to develop appropriate proposed legislation and to take other actions needed to effect such change. If appropriate, the State will assess the Project's socioeconomic effects on the people of the State.

Finally, the Parties agree that, where possible, modifications to the Downstream Project State Fiscal System should be able to respond to variations in the Project's profitability -- where, for example, lower energy prices (or higher costs) produce lower profits or higher energy prices (or lower costs) produce higher profits -- and to adjust the State's share in the economic benefits of the Project accordingly, while Project sponsors retain upside profit potential commensurate with the risks they are undertaking.

Possible changes to the Downstream Project State Fiscal System the Parties might consider include:

- 1. Tax offsets for early expenditures prior to Project commitment;
- 2. Accelerated capital depreciation;
- 3. Investment credits;
- 4. Deferrals of or reductions in certain taxes;
- 5. Profit based taxes; and
- 7. Coordination of tax provisions with the Project tariff arrangements.

If the Parties agree it is necessary or appropriate, the State will work with local governments regarding how modifications to property taxes may enhance the Project's chance of success.

VI. STATE FISCAL STABILITY AND CERTAINTY

The Parties recognize that due to the anticipated length of time between many of the Project's enormous capital expenditures and the receipt of significant Project revenues, and the Project's need for a reliable revenue stream over a long period, it is likely that potential sponsors will require assurance that the Project State Fiscal System will not change adversely over a significant part of the life of the Project The Parties also recognize that the Constitution of the State of Alaska imposes some limits on the ability of the State to commit itself irrevocably to certain levels and kinds of taxation The Parties agree to search for suitable measures within the pertinent Constitutional framework to achieve the fiscal stability and certainty the Project requires.

The Parties also recognize that they can increase the fiscal stability and certainty surrounding the Project by, among other things, agreeing to dispute settlement procedures and clear definitions of tax obligations, common carrier requirements, tariff methodology, and other regulatory obligations before the Project commences.

VII. RELATIONSHIP WITH THE ALASKA LEGISLATURE

Since the Alaska Legislature must determine whether to modify the Project State Fiscal System, the Parties will keep appropriate members of the Alaska Legislature informed of their respective efforts on the Project. Further, the Parties will develop and provide information to assist in the public discussion and debate occasioned by any proposed modifications to the Project State Fiscal System.

By HJR 54, the Alaska Legislature established an interim working group. This group is scheduled to report to the House and Senate Resources Committees by February 1, 1997 on the status of efforts to advance exports of Alaska North Slope gas to Far East markets. The group also is to report on any proposed legislative actions appropriate to those efforts. The executive branch and YPC will work individually and together to ensure that the Alaska Legislature's interim working group created by HJR 54 is kept apprised of the efforts of the Parties, has the information it requires to do its work, and is supported in its efforts in any other appropriate manner.

VIII. HIRING ALASKANS

The Parties recognize that an important potential benefit of the Project is the employment of Alaska residents and Alaska businesses in the construction and operation of the Project. The Parties recognize that Alaskans expect a strong "Alaska-hire" effort for the Project. The Parties are determined to find suitable measures to successfully ensure that a maximum number of Alaska residents and Alaska-based businesses are hired to construct and operate the Project, while recognizing that, in order to assist in achieving a commercially viable Project, there will be a need for competitively priced goods and services. The Parties agree that clearly defining who qualifies as an Alaska resident or Alaska business will help this effort.

IX. ENVIRONMENTAL INTEGRITY, HEALTH, SAFETY AND NATURAL GAS AVAILABILITY FOR ALASKAN COMMUNITIES

In addition to public revenue and employment within the State, other important public interests that would be affected by the Project must be considered. They include:

- 1. Protection of the environment;
- 2. Protection of the health and safety of workers and the public, and
- 3. Providing natural gas to Alaskan communities

The Parties agree to search for suitable measures to ensure that, if the Project is constructed:

1. Its construction and operation will properly protect Alaska's environment;

2. It will be constructed and operated in a manner that properly protects the health and safety of workers and the public, and

3. Where economically and technically feasible, it will be configured and operated so that natural gas can be markered to Alaskan communities.

X. THE POTENTIAL EFFECT OF PERMITTING REQUIREMENTS AND DELAYS

The Parties recognize that permitting requirements and delays may affect the viability of the Project The Parties intend to search for suitable and mutually agreeable measures to aid Project viability while still protecting essential regulatory goals such as environmental quality and the health and safety of all Alaskans.

XI. FEDERAL ACTIONS THAT MIGHT ASSIST THE PROJECT

The Parties recognize that there may be some steps the Federal government could take to improve the economic feasibility and competitiveness of the Project. These steps include, for example, potential changes to federal laws and regulations relating to taxes and permitting requirements. The Parties intend to evaluate these potential changes, including federal fiscal modifications such as:

- 1. Investment and other tax credits;
- 2. Accelerated depreciation;
- 3. Sharing of tax revenues with the State of Alaska and
- 4. Authorizing tax free bonds for the Project,

Based on these evaluations, the Parties may encourage federal policy makers and agencies to pursue selected federal changes.

XII. THE NORTH SLOPE PRODUCERS

YPC recognizes that the State is working with the Producers to enhance the possibility that a North Slope Gas Project will be completed. These Producers jointly own ninety-five percent of the working interest in the natural gas in the main Prudhoe Bay Unit reservoir.

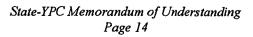
VPC recognizes that the State intends to pursue efforts to harmonize the Producers private interests and the State's public interests in a Project. The Parties recognize that success in developing and marketing Alaska North Slope natural gas requires that interested parties emphasize the merits and benefits of any project proposed to achieve that objective.

XIII. MAJOR GAS SALE INCENTIVE STUDY

The State has prepared an analysis of the relative incentives for each of the major Prudhoe Bay producers to engage in a Major Gas Sale (MGS). YPC has had an opportunity to review this analysis to ensure that it accurately reflects the agreements in the Prudhoe Bay Unit Operating Agreement and related amendments pertaining to an MGS. The State has concluded that the Producers among themselves have similar incentives for an MGS, and YPC does not materially dispute the State's conclusions.

XIV. LIMITATION

The Parties intend to work together to accomplish the steps outlined in this Memorandum of Understanding. However, this document does not commit any Party to invest or participate in the Project, or create any legally enforceable rights or obligations. The Parties recognize that a future change in circumstances may alter any Party's current intentions or willingness to participate as contemplated by this Memorandum of Understanding.



TAGS PERMITS AND AUTHORIZATIONS

Over the past twelve years YPC has secured or satisfied all of the necessary legal approvals and requirements to export North Slope natural gas to Asia. These include:

- 1. Presidential Approval: Presidential Finding Concerning Alaska Natural Gas: Removes impediment to Alaska natural gas exports required by Section 12 of the Alaska Natural Gas Transportation Act (15 U.S.C. 719j), January 13, 1988;
- 2. **Project-Wide Environmental Impact Statement¹:** Trans-Alaska Gas System Final Environmental Impact Statement, June 1988 (21 federal and State agencies);
- 3. Ahtna Right-of-Way¹: Grants to Yukon Pacific Corporation the right to designate and acquire certain rights in any and all lands acquired by or otherwise available to Ahtna under the Alaska Native Claims Settlement Act of 1971 which are reasonably necessary to construct, maintain operate or terminate the pipeline, October 14, 1988;
- 4. Federal Right-of-Way¹: Right-of-Way Grant for the Trans-Alaska Gas System from The United States of America to The Yukon Pacific Corporation, October 17, 1988;
- 5. State Right-of-Way¹: Trans-Alaska Gas System Conditional Right-of-Way Lease, December 10, 1988;
- 6. DOE's Authorization for Export of Gas¹: DOE/FE Opinion and Order No. 350, Order Granting Authorization to Export Liquefied Natural Gas From Alaska; Limiting of FERC's jurisdiction, November 16, 1989;
- 7. Confirmation of Order 350¹: DOE/FE Opinion and Order No. 350-A, Order Denying Requests for Rehearing and Modifying Prior Order for Purpose of Clarification, March 8, 1990;
- 8. Anderson Bay Final Environmental Impact Statement¹: Yukon Pacific Corporation LNG Project: Final Environmental Impact Statement, March 1995;
- 9. Order Granting NGA Section 3 Authorization for the Siting, Construction and Operation of LNG Facility: Federal Energy Regulatory Commission's approval of Anderson Bay, Port Valdez, Alaska as the Place of Export, May 22, 1995.

10. Prevention of Significant Deterioration (PSD) application in progress: Reserves critical Port Valdez airshed "space" for future LNG plant and marine terminal emmissions.¹

¹These assets are exclusive property rights of Yukon Pacific Corporation currently held through its interest in Yukon Pacific Company L.P. and represent over 12 years of effort. It is important to note that the majority of these property rights were obtained before the *Exxon Valdez* oil spill and it is highly unlikely that they could be duplicated in a reasonable period of time, if ever.

Taken together, these authorizations and agreements give YPC the exclusive right to construct TAGS and export Alaska's North Slope natural gas to Asia.

