

HB

393

Revision Date: February 13, 1998 Correction Dept. Affected: Revenue
 Title: Develop Stranded Gas Resources BRU: Administration and Support
 Component: Commissioner's Office
 Sponsor: Rules
 Requestor: (H) O&G COMPONENT SERIAL NO. 123

Expenditures/Revenues: (Thousands of Dollars)

OPERATING EXPENDITURES	FY 99	FY 00	FY 01	FY 02	FY 03	FY 04
PERSONAL SERVICES	81.6	82.7	84.0	85.3	86.6	87.9
TRAVEL	30.0	30.0	30.0	30.0	30.0	30.0
CONTRACTUAL	375.0					
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS	5.0	5.0	5.0	5.0	5.0	5.0
TOTAL OPERATING	491.6	117.7	119.0	120.3	121.6	122.9

CAPITAL EXPENDITURES						
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CHANGE IN REVENUES ()						
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FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF	*** 191.6	117.7	119.0	120.3	121.6	122.9
1001 CBRF						
1048 University of AK receipts						
Other	300.0					
TOTAL	491.6	117.7	119.0	120.3	121.6	122.9

Estimate of any current year cost \$ _____

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS: (Attach a separate page if necessary)

*** The legislation as currently drafted allows for the \$300,000 in contractual costs to be recovered from future applicants. This bill could be modified to provide that all costs would be borne by an applicant.

See Attached

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 Agency: Revenue

Phone: 343-9242
 Date: February 13, 1998
 Date: February 13, 1998

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This bill would authorize the executive branch to negotiate a contract with sponsors of proposed projects to develop stranded gas in Alaska. The payments required by the contract would replace some or all of the state and local taxes that would otherwise pertain to major economic activity engendered by the project.

A negotiated contract would make it possible to tailor the fiscal arrangements to meet the needs of the proposed project while, at the same time, ensuring the public benefits from the project. A set of arrangements providing for contractual payments in lieu of taxes is likely to provide fiscal terms that potential investors will believe are likely to remain permanently in place over the life of the project.

Given the extended time frame to develop and market the large volumes of stranded gas, revenues expected as a result of the bill are outside the time horizon of this fiscal note.

The fiscal note breakdown is as follows:

Personal Services: \$81,600.00

Salary and benefits to fund one DOR person devoted to the gas project.

Travel: \$30,000.00

The state must continue to inform Alaska communities of and involve them in discussion of contract and project issues. Some of the issues that affect them are community impacts induced by project development, payments to municipalities in lieu of taxes, availability of gas to communities and Alaska hire and contracting. In addition, the state will propose and advocate changes to the federal tax structure to improve project economics and evaluate federal regulatory changes to allow for regulatory certainty. This line item will fund travel within Alaska, to consultants and to Washington, D. C. for these purposes.

Contractual: \$375,000.00

\$75,000.00 to fund a socioeconomic study on the impacts induced on the local communities by project development. This study is a necessary step in constructing the foundation for discussion with municipalities and negotiations with project sponsors about payments to municipalities in lieu of taxes for the costs of and impacts from additional services and construction resulting from project development.

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\$300,000 to fund contractual services and advice from experts in fiscal, regulatory, contract negotiation, legal, and financial areas. These technical and evaluative services would be necessary to the tax and regulatory work planned for the federal level; they would be required to assist the state in substantive and complex contract development and negotiation, potentially with multiple sponsors. The state does not have all of this expertise in-house. \$75,000 of these costs will be incurred in preparation for the application process regardless of whether there are applicants.

As per the proposed bill, contract applications may be made until June 30, 2004. Expenditures for contractual services, therefore, may be necessary any time between July 1, 1998 and June 30, 2004. Because there is no way of knowing now specifically when expenditures would be required, it may be beneficial to treat this \$300,000 as a continuing appropriation

The proposed legislation allows reimbursement of the state by the applicant for the expenses of an independent contractor used to assist in the evaluation of an application.

Miscellaneous: \$5000.00

To fund supplies, LNG conference participation, purchase of technical reports, etc.

0-GH2006\Q

Glover

4/1/98

CS FOR HOUSE BILL NO. 393(RES)**IN THE LEGISLATURE OF THE STATE OF ALASKA****TWENTIETH LEGISLATURE - SECOND SESSION****BY THE HOUSE RESOURCES COMMITTEE****Offered:****Referred:****Sponsor(s): HOUSE RULES COMMITTEE BY REQUEST OF THE GOVERNOR****A BILL****FOR AN ACT ENTITLED**

1 "An Act relating to contracts with the state establishing payments in lieu of
2 other taxes by a qualified sponsor or qualified sponsor group for projects to
3 develop stranded gas resources in the state; providing for the inclusion in the
4 contracts of terms making certain adjustments regarding royalty value and the
5 timing and notice of the state's right to take royalty in kind or in value from
6 projects to develop stranded gas resources in the state; relating to the effect of
7 the contracts on municipal taxation; and providing for an effective date."

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

9 * **Section 1. FINDINGS.** The legislature finds that

10 (1) a vast quantity of gas in Alaska is stranded from commercial development
11 because of the cost associated with providing access to markets for that gas; on the North
12 Slope alone, between the Colville and Canning Rivers, approximately 35 trillion cubic feet of
13 discovered gas resources are stranded in this way;

1 (2) because of the high cost of providing access to markets for North Slope
2 gas, exploration efforts there have historically focused on oil; if the infrastructure needed to
3 provide market access for North Slope gas were economically available, it is possible that new
4 gas exploration efforts would be initiated that could lead to the discovery and development
5 of significantly greater gas resources than have been discovered so far;

6 (3) maintaining production operations, whether for oil, gas, or both, enhances
7 the opportunities for oil and gas exploration and development on the North Slope;

8 (4) large areas of the state, encompassing a number of geologic provinces and
9 basins, do not have oil and gas production and still remain largely unexplored for oil and gas;
10 exploration for gas in some of these areas might be facilitated if infrastructure were
11 economically available to provide access for the gas to markets;

*12 (5) Alaskans may desire a portion of the gas from a transportation project for
13 in-state uses; however, it is unlikely that markets will develop within the state that would need
/ 14 more than a relatively small proportion of the volume of stranded gas already discovered on
*15 the North Slope; therefore, the primary need for gas infrastructure for approximately the next
16 decade will be to provide access to markets outside the state;

17 (6) currently the principal mode anticipated for stranded North Slope gas to
18 access markets outside the state (is a gas pipeline to an ice-free Alaska port where the gas
19 would be turned into liquefied natural gas and exported using specially designed marine
20 tankers; (although experimental research is being conducted on other alternative technologies
21 such as gas to liquids, this technology is not yet commercially viable; if this research results
22 in a commercially viable technology, and, after economic analysis by the state of the
23 application of this technology, it is shown that local or state tax or regulatory changes are
24 necessary to commercialize an Alaska project using this technology, then this technology may
25 be considered in regard to this legislation;)

26 (7) the size of the capital expenditure needed to get North Slope gas to market
27 by way of a liquefied natural gas project requires long-term contracts for gas on the order of
28 14,000,000 metric tons a year of liquefied natural gas; to be successful, a North Slope
29 liquefied natural gas project needs to reach this full annual volume in not more than six years
30 from the commencement of commercial operations;

31 (8) for a North Slope liquefied natural gas project to become economically

1 viable and competitive, the estimated costs of constructing such a project must be reduced
2 significantly; reducing the financial risk associated with the project would also improve the
3 project's chances of becoming economically viable and competitive;

4 (9) the state has contracted an extensive financial analysis of the
5 commercialization of North Slope gas; this analysis, performed by a recognized expert in
6 petroleum economics, Dr. Pedro Van Meurs, indicates that changes in the local, state, and
7 federal tax structure may be necessary to make commercialization of North Slope gas
8 resources economically viable;

9 (10) although the state can do little now to reduce expected construction costs,
10 the state can reduce some of the financial risk associated with a North Slope liquefied natural
11 gas project or other stranded gas development projects by specifying with as much certainty
12 as possible the state taxes and royalties that would apply to such a project throughout its life;

13 (11) the state could improve the economics and competitiveness of a stranded
14 gas development project by adjusting the timing of the state's receipt of its share of the
15 economic rent of the project; the present fiscal regime is front-end loaded, which means that
16 the state and local governments take a significant part of their shares of the economic rent of
17 a project early in the life of the project, even before the project starts to generate an income
18 stream; the state and local governments could improve the economics of a stranded gas
19 development project by taking more of their shares of the economic rent of a project later in
20 the life of the project;

21 (12) the state's present fiscal regime, as it would apply to a stranded gas
22 development project, is also regressive to the extent that it is insensitive to changes in the
23 profitability of the project, so that, in times of low profitability, the state and local
24 governments would take an excessive amount of the economic rent of the project, and, in
25 times of high profitability, they would take an inadequate amount of the economic rent of a
26 project; the state and local governments could improve the economics of a stranded gas
27 development project by making the overall fiscal system less regressive and more responsive
28 to the relative profitability of a project;

29 (13) establishing a fiscal regime applicable to a specific stranded gas
30 development project under a long-term contract with the state, where payments would be made
31 in lieu of other taxes, would

1 (A) enable the state to create a fiscal regime that is less front-end
2 loaded and less regressive for a project without rewriting the tax laws for gas already
3 being developed and produced;

4 (B) enable the state to customize the timing and burden of its fiscal
5 regime to fit the economic circumstances of a particular stranded gas develop.nent
6 project;

7 (C) reduce the financial risk of the project by reducing uncertainty
8 about the fiscal terms applicable to the project;

9 (14) authorizing the state, through the executive branch, to develop a contract
10 establishing the fiscal regime that would apply to a qualified stranded gas development project
11 if it were built will result in contracts that are an exercise of the legislature's taxing power
12 that is consistent with art. IX, sec. 1, Constitution of the State of Alaska;

13 (15) authorizing the state, through the executive branch, to develop a contract
14 establishing a fiscal regime that reduces the risks and improves the economics of a stranded
15 gas development project will result in contracts that are an exercise of the legislature's power
16 under art. IX, sec. 4, Constitution of the State of Alaska, to create tax exemptions by general
17 law and is consistent with the legislature's responsibility under art. VIII, sec. 2, of the
18 Constitution of the State of Alaska, to provide for the utilization, development, and
19 conservation of all natural resources belonging to the state for the maximum benefit of its
20 people;

21 (16) stranded gas development projects are a matter of statewide interest
22 because they are an important potential source of revenue to the state, job opportunities for
23 the people of the state, and gas for use by communities throughout the state;

24 (17) to the extent permissible under the Constitution of the United States and
25 the Constitution of the State of Alaska, the legislature intends that state residents and
26 businesses share in and not be excluded from the opportunities stemming from the
27 development of the state's gas resources; and

28 (18) good faith efforts by qualified sponsors, qualified sponsor groups, and
29 contractors of qualified sponsors and qualified sponsor groups that enter into a contract with
30 the state developed under this Act to undertake voluntary actions to provide employment
31 opportunities for Alaska residents and opportunities for Alaska businesses are in the long-term

1 interests of the state.

2 * **Sec. 2. INTENT.** (a) The legislature intends that contracts developed under this Act
3 provide stable fiscal terms that encourage the development of stranded gas projects that
4 otherwise might not be developed under the prevailing tax and royalty regime. The legislature
5 further intends that any fiscal term agreed to in a contract developed under this Act in lieu of
6 other taxes will fully and fairly compensate the people of the state for the severance,
7 production, and sale of natural resources belonging to the people of the state, for the negative
8 effects and the risks that a project may impose on the state, and for the value of the
9 infrastructure that may be provided by the state to a project, including all the advantages of
10 civilized society that may be provided by the state to the sponsors of a project.

11 (b) The legislature intends that, in order to provide the stable fiscal terms that will
12 encourage development of stranded gas projects, any contract developed under this Act will
13 express whether the state intends to be bound to the full extent allowed by the Constitution
14 of the State of Alaska; however, the legislature further intends that the terms of a contract
15 developed under this Act will not be binding on or enforceable against the state or the other
16 parties to the contract unless the governor is authorized to execute the contract by the
17 legislature.

18 (c) The legislature intends that a qualified sponsor or qualified sponsor group or a
19 contractor of a qualified sponsor or qualified sponsor group that enters into a contract
20 developed under this Act relating to a stranded gas project will, with respect to the project,
21 voluntarily

22 (1) undertake reasonable measures to hire Alaska residents to perform work
23 that they are qualified to perform on a competitive basis;

24 (2) assist Alaska residents who are capable of being qualified and who make
25 a good faith effort to obtain the requisite training required for employment; and

26 (3) use reasonable efforts to contract with qualified Alaska businesses when
27 their performance is competitive with regard to price, quality, and availability.

28 * **Sec. 3.** AS 43 is amended by adding a new chapter to read:

29 **Chapter 82. Development of Alaska Stranded Gas.**

30 **Article 1. Contracts for Payments in Lieu of Other Taxes.**

31 **Sec. 43.82.010. Purpose.** The purpose of this chapter is to

1 (1) encourage new investment to develop the state's stranded gas
2 resources by authorizing establishment of fiscal terms related to that new investment
3 without significantly altering tax and royalty methodologies and rates on existing oil
4 and gas infrastructure and production;

5 (2) allow the fiscal terms applicable to a qualified sponsor or the
6 members of a qualified sponsor group, with respect to a qualified project, to be tailored
7 to the particular economic conditions of the project and to establish those fiscal terms
8 in advance with as much certainty as the Constitution of the State of Alaska allows;
9 and

10 (3) maximize the benefit to the people of the state of the development
11 of the state's stranded gas resources.

12 **Sec. 43.82.020. Contracts for payments in lieu of other taxes and for**
13 **royalty adjustments.** The commissioner may, under this chapter, negotiate terms for
14 inclusion in a proposed contract with a qualified sponsor or qualified sponsor group
15 providing for

16 (1) periodic payment in lieu of one or more taxes that otherwise would
17 be imposed by the state or a municipality on the qualified sponsor or members of the
18 qualified sponsor group as a consequence of the sponsor's or group's participation in
19 an approved qualified project under this chapter; and

20 (2) certain adjustments regarding royalty under AS 43.82.220.

21 **Article 2. Qualification and Application Procedures.**

22 **Sec. 43.82.100. Qualified project.** Based on information available to the
23 commissioner, the commissioner may determine that a proposal for new investment is
24 a qualified project under this chapter only if the project

25 (1) would produce at least 500,000,000,000 cubic feet of stranded gas
26 within 20 years from the commencement of commercial operations; and

27 (2) is capable, subject to applicable commercial regulation and technical
28 and economic considerations, of making gas available to meet the reasonably
29 foreseeable demand in this state for gas within the economic proximity of the project.

30 **Sec. 43.82.110. Qualified sponsor or qualified sponsor group.** The
31 commissioner may determine that a person or group is a qualified sponsor or qualified

1 sponsor group if the person or a member of the group

2 (1) intends to own an equity interest in a qualified project, intends to
3 commit gas that it owns to a qualified project, or holds the permits that the department
4 determines are essential to construct and operate a qualified project; and

5 (2) meets one or more of the following criteria:

6 (A) owns a working interest in at least 10 percent of the
7 stranded gas proposed to be developed by a qualified project;

8 (B) has the right to purchase at least 10 percent of the stranded
9 gas proposed to be developed by a qualified project;

10 (C) has the right to acquire, control, or market at least 10
11 percent of the stranded gas proposed to be developed by a qualified project;

12 (D) has a net worth equal to at least 33 percent of the estimated
13 cost of constructing a qualified project;

14 (E) has an unused line of credit equal to at least 25 percent of
15 the estimated cost of constructing a qualified project.

16 **Sec. 43.82.120. Applications.** (a) A qualified sponsor or qualified sponsor
17 group may submit to the department an application for development of a contract
18 under AS 43.82.020 evidencing that the requirements of AS 43.82.100 and 43.82.110
19 are met. The application must be submitted in the manner and form and contain the
20 information required by the department.

21 (b) Along with an application submitted under (a) of this section, an applicant
22 shall submit a proposed project plan for a qualified project that contains the following
23 information based on the information known to the applicant at the time of
24 application:

25 (1) a description of the work accomplished as of the date of the
26 application to further the project;

27 (2) a schedule of proposed development activity leading to the
28 projected commencement of commercial operations of the project;

29 (3) a description of the development activity proposed to be
30 accomplished under the proposed project plan;

31 (4) a description of each lease or property that the applicant believes

1 to contain the stranded gas that would be developed if the project was built;

2 (5) a description of the methods and terms under which the applicant
3 is prepared to make gas available to meet the reasonably foreseeable demand in this
4 state for gas within the economic proximity of the project during the term of the
5 proposed contract, including proposed pipeline transportation and expansion rules if
6 pipeline transportation is a part of the proposed project;

7 (6) a detailed description of options to mitigate the increased demand
8 for public services and other negative effects caused by the project;

9 (7) a detailed description of options for the safe management and
10 operation of the project once it is constructed;

11 (8) other information that the commissioner of revenue, in consultation
12 with the commissioner of natural resources, considers necessary to make a
13 determination that

14 (A) the work accomplished as of the date of application, the
15 schedule of proposed development activity, and the development activity
16 proposed to be accomplished under the proposed project plan reflect a proposal
17 for diligent development on the part of the applicant;

18 (B) the proposed project plan does not materially conflict with
19 the obligations of a lessee to the state under a lease or under a pool, unit, or
20 other agreement with the state; and

21 (C) the proposed project plan describes satisfactory methods and
22 terms for accommodating reasonably foreseeable demand for gas in this state
23 within the economic proximity of the project during the term of the proposed
24 contract.

25 (c) The requirements of (b) of this section do not diminish the obligations of
26 a qualified sponsor or member of a qualified sponsor group to the state or restrict the
27 authority of the commissioner of revenue or the commissioner of natural resources
28 under any other law or agreement relating to a plan of development for a lease, pool,
29 or unit.

30 **Sec. 43.82.130. Qualified project plan.** A proposed project plan submitted
31 under AS 43.82.120 may be approved as a qualified project plan under AS 43.82.140

1 if the proposed project plan

2 (1) reflects a proposal for diligent development of the project on the
3 part of the applicant;

4 (2) does not materially conflict with the obligations of a lessee to the
5 state under a lease or under a pool, unit, or other agreement with the state; and

6 (3) describes satisfactory methods and terms for making gas available
7 to meet the reasonably foreseeable demand in this state for gas within the economic
8 proximity of the project during the term of the proposed contract.

9 **Sec. 43.82.140. Review of applications and determination of qualifications.**

10 (a) The commissioner shall review an application submitted under AS 43.82.120 to
11 determine whether the provisions of AS 43.82.100 concerning a qualified project and
12 AS 43.82.110 concerning a qualified sponsor or qualified sponsor group have been
13 met. The commissioner may approve an application only if those provisions have been
14 met.

15 (b) If the commissioner approves an application under (a) of this section, the
16 commissioner and the commissioner of natural resources shall review the proposed
17 project plan submitted with the application to determine whether the provisions of
18 AS 43.82.130 have been met. The commissioner may approve the proposed project
19 plan as a qualified project plan only if the commissioner of natural resources concurs
20 in the approval.

21 (c) The commissioner shall send to the applicant written notice of and the
22 reasons for the determinations made under (a) and (b) of this section.

23 **Sec. 43.82.150. Actions challenging determinations on applications.** (a)
24 Only an applicant under AS 43.82.120 who is aggrieved by a determination of the
25 commissioner of revenue or the commissioner of natural resources under AS 43.82.140
26 may seek judicial review of the determination.

27 (b) The only grounds for judicial review of a determination made under
28 AS 43.82.140 are

29 (1) failure to follow the qualification and application procedures set out
30 in AS 43.82.100 - 43.82.180; or

31 (2) abuse of discretion that is so capricious, arbitrary, or confiscatory

1 as to constitute a denial of due process.

2 **Sec. 43.82.160. Multiple applications for similar or competing qualified**
3 **projects.** Nothing in this chapter prohibits different qualified sponsors or different
4 qualified sponsor groups from submitting applications under AS 43.82.120 relating to
5 similar or competing qualified projects or prohibits the commissioner of revenue or the
6 commissioner of natural resources from reviewing and approving applications and
7 proposed project plans under AS 43.82.140 relating to similar or competing qualified
8 projects.

9 **Sec. 43.82.170. Application deadline.** The commissioner of revenue or the
10 commissioner of natural resources may not act on an application for a contract
11 submitted under AS 43.82.120 unless the application is received by the Department of
12 Revenue no later than June 30, 2001.

13 **Sec. 43.82.180. Withdrawal of applications.** Subject to the terms of a
14 reimbursement agreement under AS 43.82.240 or other agreement with the Department
15 of Revenue, the Department of Natural Resources, the commissioner of revenue, or the
16 commissioner of natural resources affecting the withdrawal of an application, a
17 qualified sponsor or qualified sponsor group may withdraw an application submitted
18 under AS 43.82.120 at any time before the date that the commissioner of revenue
19 submits a contract to the governor under AS 43.82.430 without further obligation under
20 this chapter.

21 **Article 3. Contract Development.**

22 **Sec. 43.82.200. Contract development.** If the commissioner approves an
23 application and proposed project plan under AS 43.82.140, the commissioner may
24 develop a contract that may include

25 (1) terms concerning periodic payment in lieu of one or more taxes as
26 provided in AS 43.82.210;

27 (2) terms developed under AS 43.82.220 relating to

28 (A) timing and notice of the state's right to take royalty in kind
29 or in value; and

30 (B) royalty value;

31 (3) terms regarding the hiring of Alaska residents and contracting with

1 Alaska businesses under AS 43.82.230;

2 (4) terms regarding periodic payment to, or an equity or other interest
3 in a project for, municipalities under AS 43.82.500;

4 (5) terms regarding arbitration or alternative dispute resolution
5 procedures;

6 (6) terms and conditions for administrative termination of a contract
7 under AS 43.82.445; and

8 (7) other terms or conditions that are

9 (A) necessary to further the purposes of this chapter; or

10 (B) in the best interests of the state.

11 **Sec. 43.82.210. Contract terms relating to payment in lieu of one or more**
12 **taxes.** (a) If the commissioner approves an application and proposed project plan
13 under AS 43.82.140, the commissioner may develop proposed terms for inclusion in
14 a contract under AS 43.82.020 for periodic payment in lieu of one or more of the
15 following taxes that otherwise would be imposed by the state or a municipality on the
16 qualified sponsor or member of a qualified sponsor group as a consequence of
17 participating in an approved qualified project:

18 (1) oil and gas production taxes and oil surcharges under AS 43.55;

19 (2) oil and gas exploration, production, and pipeline transportation
20 property taxes under AS 43.56;

21 (3) oil and gas conservation tax under AS 43.57;

22 (4) Alaska net income tax under AS 43.20;

23 (5) municipal sales and use tax under AS 29.45.650 - 29.45.710;

24 (6) municipal property tax under AS 29.45.010 - 29.45.250 or
25 29.45.550 - 29.45.600;

26 (7) municipal special assessments under AS 29.46;

27 (8) a comparable tax or levy imposed by the state or a municipality
28 after the effective date of this section;

29 (9) other state or municipal taxes or categories of taxes identified by
30 the commissioner.

31 (b) If the commissioner chooses to develop proposed terms under (a) of this

1 section, the commissioner shall, if practicable and consistent with the long-term fiscal
2 interests of the state, develop the terms in a manner that attempts to balance the
3 following principles:

4 (1) the terms should, in conjunction with other factors such as cost
5 reduction of the project, cost overrun risk reduction of the project, increased fiscal
6 certainty, and successful marketing, improve the competitiveness of the approved
7 qualified project in relation to other development efforts aimed at supplying the same
8 market;

9 (2) the terms should accommodate the interests of the state, affected
10 municipalities, and the project sponsors under a wide range of economic conditions,
11 potential project structures, and marketing arrangements;

12 (3) the state's and affected municipalities' combined share of the
13 economic rent of the approved qualified project under the contract should be relatively
14 progressive; that is, the state's and affected municipalities' combined annual share of
15 the economic rent of the approved qualified project generally should not increase when
16 there are decreases in project profitability, or decrease when there are increases in
17 project profitability;

18 (4) the state's and affected municipalities' combined share of the
19 economic rent of the approved qualified project under the contract should be relatively
20 lower in the earlier years than in the later years of the approved qualified project;

21 (5) the terms should allow the project sponsors to retain a share of the
22 economic rent of the approved qualified project that is sufficient to compensate the
23 sponsors for risks under a range of economic circumstances;

24 (6) the terms should provide the state and affected municipalities with
25 a significant share of the economic rent of the approved qualified project, when
26 discounted to present value, under favorable price and cost conditions;

27 (7) the method for calculating the periodic payment in lieu of certain
28 taxes under the contract should be clear and unambiguous; and

29 (8) while cost calculations for the approved qualified project under the
30 contract should be based on amounts that closely approximate actual costs, agreed-
31 upon formulas reflecting reasonable economic assumptions should be used if possible

1 to promote administrative certainty and efficiency.

2 (c) Except as provided in (b) of this section, the commissioner's discretion
3 under this section in developing proposed terms for a contract under AS 43.82.020 is
4 not limited to consideration of the economic rent of the approved qualified project.

5 **Sec. 43.82.220. Contract terms relating to royalty.** (a) Notwithstanding any
6 contrary provisions of AS 38, the commissioner of natural resources, with the
7 concurrence of the commissioner of revenue and the affected parties holding a state
8 lease or unit agreement, may develop proposed terms for inclusion in a contract under
9 AS 43.82.020 that modify the timing and notice provisions of the applicable oil and
10 gas leases and unit agreements pertaining to the state's rights to receive its royalty on
11 gas in kind or in value if

12 (1) the viability of the approved qualified project depends on long-term
13 gas purchase and sale agreements;

14 (2) certainty over time regarding the quantity of royalty gas that the
15 state may be taking in kind is needed to secure the long-term purchase and sale
16 agreements;

17 (3) the specified period of the state's commitment to take its royalty
18 share in value or in kind does not exceed the term of the purchase and sale
19 agreements; and

20 (4) the modification does not impair the ability of the approved
21 qualified project or the state to meet the reasonably foreseeable demand in this state
22 for gas within economic proximity of the project during the term of the contract
23 developed under AS 43.82.020.

24 (b) Notwithstanding any contrary provisions of AS 38, the commissioner of
25 natural resources, with the concurrence of the commissioner of revenue and the
26 affected parties holding a state lease or unit agreement, may develop proposed terms
27 for inclusion in a contract under AS 43.82.020 that establish a valuation method for
28 the state's royalty share of the gas production from an approved qualified project.

29 (c) The commissioner of revenue shall include any proposed terms relating to
30 royalty developed in accordance with this section in the proposed contract under
31 AS 43.82.400.

1 (d) Nothing in this chapter permits modification of the state's rights that relate
2 to timing, notice, and rights to receive oil royalty in kind or in value under oil and gas
3 leases or unit agreements.

4 **Sec. 43.82.230. Contract terms relating to hiring of Alaska residents and**
5 **contracting with Alaska businesses.** (a) The commissioner shall include in a
6 contract under AS 43.82.020 a term requiring the qualified sponsor or qualified
7 sponsor group and contractors of the qualified sponsor or qualified sponsor group to
8 comply with all valid federal, state, and municipal laws relating to hiring Alaska
9 residents and contracting with Alaska businesses to work in the state on the approved
10 qualified project and not to discriminate against Alaska residents or Alaska businesses.
11 Within the constraints of law, the commissioner shall also include in a contract under
12 AS 43.82.020 a term that requires the qualified sponsor or qualified sponsor group and
13 contractors of the qualified sponsor or qualified sponsor group to employ Alaska
14 residents and to contract with Alaska businesses to work in the state on the approved
15 qualified project to the extent the residents and businesses are available, competitively
16 priced, and qualified.

17 (b) The commissioner shall include in a contract under AS 43.82.020 a term
18 requiring the qualified sponsor or qualified sponsor group and contractors of the
19 qualified sponsor or qualified sponsor group to

20 (1) advertise for available positions in newspapers in the location where
21 the work is to be performed and in other publications distributed throughout the state,
22 including in rural areas; and

23 (2) use Alaska job service organizations located throughout the state
24 and not just in the location where the work is to be performed in order to notify
25 Alaskans of work opportunities on the approved qualified project.

26 (c) Subject to the voluntary agreement of the qualified sponsor, the
27 commissioner may include a term in the contract providing for incentives to encourage
28 training and hiring of Alaska residents.

29 (d) This section does not create or abridge individual rights and does not create
30 a private right of action for any person.

31 (e) For purposes of this section,

- 1 (1) "Alaska business" means a firm or contractor that
2 (A) has held an Alaska business license for the preceding 12
3 months;
4 (B) maintains, and has maintained for the preceding 12 months,
5 a place of business in the state that competently and professionally deals in
6 supplies, services, or construction of the nature required for the approved
7 qualified project; and
8 (C) is
9 (i) a sole proprietorship and the proprietor is an Alaska
10 resident;
11 (ii) a partnership and more than 50 percent of the
12 partnership interest is held by Alaska residents;
13 (iii) a limited liability company and more than 50
14 percent of the membership interest is held by Alaska residents;
15 (iv) a corporation that has been incorporated in the state
16 or is authorized to do business in the state; or
17 (v) a joint venture and a majority of the venturers
18 qualify as Alaska businesses under this paragraph;
19 (2) "Alaska job service organizations" means those offices maintained
20 by the state and recommended by the Department of Labor whose functions are to aid
21 the unemployed or underemployed in finding employment;
22 (3) "Alaska resident" means a natural person who
23 (A) receives a permanent fund dividend under AS 43.23; or
* 24 (B) is registered to vote under AS 15 and qualifies for a
25 resident fishing, hunting, or trapping license under AS 16;
26 (4) "available," as applied to an Alaska resident or Alaska business,
27 means that the resident or business is available for employment at the time required
28 and is located anywhere in the state, not just in the area of the state where the work
29 is to be performed;
30 (5) "qualified," as applied to an Alaska resident or Alaska business,
31 means that the resident or business possesses the requisite education, training, skills,

1 certification, or experience to perform the work necessary for a particular position or
2 to perform a particular service.

3 **Sec. 43.82.240. Use of an independent contractor.** (a) The commissioner
4 may use an independent contractor to assist in the evaluation of an application or in
5 the development of contract terms under AS 43.82.200. The commissioner may
6 condition the development of a contract under AS 43.82.020 on an agreement by the
7 applicant to reimburse the state for the expenses of an independent contractor under
8 this section.

9 (b) An independent contractor selected under this section must sign an
10 agreement regarding confidentiality and disclosures consistent with the determinations
11 made under AS 43.82.310 before the contractor may review information that is
12 determined confidential under AS 43.82.310.

13 (c) Selection of an independent contractor under this section is not subject to
14 AS 36.30 (State Procurement Code).

15 **Sec. 43.82.250. Term of contract; effective date.** The term of a contract
16 developed under AS 43.82.020 may be for no longer than is necessary to develop the
17 stranded gas that is subject to the contract; however, the term of the contract may not
18 exceed 35 years from the commencement of commercial operations of the approved
19 qualified project.

20 **Sec. 43.82.260. Change of parties to an application or a contract;
21 assignment of interests.** (a) A qualified sponsor or member of a qualified sponsor
22 group may assign an interest in or add or withdraw a party to an application under
23 AS 43.82.120 only if the commissioner has

24 (1) made a finding that the assignment, addition, or withdrawal is
25 consistent with the requirements of AS 43.82.110; and

26 (2) given prior written approval for the assignment, addition, or
27 withdrawal.

28 (b) A contract developed under this chapter may provide for the assignment
29 to or withdrawal of a qualified sponsor or member of a qualified sponsor group.

30 (c) Upon being added to an application under this section, a party becomes a
31 qualified sponsor or a member of a qualified sponsor group, as appropriate, for the

1 relevant project.

2 (d) The commissioner may not unreasonably withhold approval under (a) of
3 this section, but may condition the approval in any way reasonably necessary to protect
4 the fiscal interests of the state and to further the purposes of this chapter.

5 (e) For purposes of this section, an assignment includes a transfer of stock or
6 a partnership interest in a manner that changes control of a qualified sponsor or
7 member of a qualified sponsor group.

8 **Sec. 43.82.270. Project plans and work commitments.** A contract under
9 AS 43.82.020 must include the qualified project plan approved under AS 43.82.140
10 and provisions for updating the plan at reasonable intervals until the commencement
11 of commercial operations of the approved qualified project. The commissioner of
12 revenue, in consultation with the commissioner of natural resources, may, as a term
13 in a contract under AS 43.82.020, include work commitments or other obligations in
14 the contract to be accomplished before the commencement of commercial operations
15 of the approved qualified project.

16 **Article 4. Requests for Information; Confidentiality;**

17 **Disclosure of Information.**

18 **Sec. 43.82.300. Requests for information.** The commissioner of revenue or
19 the commissioner of natural resources may request from an applicant information that
20 the respective commissioner determines is necessary to perform the respective
21 commissioner's responsibilities under AS 43.82.140. If the application is approved
22 under AS 43.82.140, the respective commissioner shall require the successful applicant
23 to provide financial, technical, and market information regarding the qualified project
24 that the respective commissioner determines is necessary for the purpose of developing
25 contract terms for the qualified project under AS 43.82.200. If requested information
26 is not provided, the commissioner of revenue may not continue to review the
27 application under AS 43.82.140 or develop the contract under AS 43.82.200 -
28 43.82.270, as applicable.

29 **Sec. 43.82.310. Disclosure of information; confidentiality.** (a) An applicant
30 may request confidential treatment of information that the applicant provides under
31 AS 43.82.300 by clearly identifying the information and the reasons supporting the

1 request for confidential treatment. The commissioner of revenue or the commissioner
2 of natural resources, as appropriate, shall keep the information confidential until the
3 commissioner determines whether the requirements of (b) of this section are met. If
4 the commissioner of revenue or the commissioner of natural resources has not made
5 a determination under (b) of this section within 14 days after receiving a request for
6 confidential treatment, the request is considered denied. If the appropriate
7 commissioner determines that the information does not meet the requirements of (b)
8 of this section or if the commissioner fails to make a determination within 14 days, the
9 commissioner shall return the information and any copies of it at the request of the
10 applicant. If the commissioner of revenue or the commissioner of natural resources,
11 as appropriate, returns information under this subsection, the commissioner shall cease
12 review of the application or cease contract development under AS 43.82.200 -
13 43.82.270, as appropriate, unless the commissioner determines that the returned
14 information is unnecessary to make a determination on the application or to develop
15 contract terms under AS 43.82.200 - 43.82.270.

16 (b) If requested by the applicant, information provided to the commissioner of
17 revenue or the commissioner of natural resources under AS 43.82.300 shall be kept
18 confidential if the commissioner receiving the information determines, upon an
19 adequate showing by the applicant, that the information

20 (1) is a trade secret or other proprietary research, development, or
21 commercial information that the applicant treats as confidential;
22 (2) affects the applicant's competitive position; and
23 (3) has commercial value that may be significantly diminished by
24 public disclosure or that public disclosure is not in the long-term fiscal interests of the
25 state.

26 (c) Information determined to be confidential under (b) of this section is
27 confidential under that subsection only so long as is necessary to protect the
28 competitive position of the applicant, to prevent the significant diminution of the
29 commercial value of the information, or to protect the long-term fiscal interests of the
30 state. The commissioner of revenue or the commissioner of natural resources, as
31 appropriate, may not release information that the commissioner has previously

1 determined to be confidential under (b) of this section without providing the applicant
2 notice and an opportunity to be heard.

3 (d) Notwithstanding the limitation in (c) of this section, the Department of
4 Revenue and the Department of Natural Resources may provide to one another, to the
5 Department of Law, to the legislature, and to the Office of the Governor any
6 information provided under AS 43.82.300 relevant to the implementation of this
7 chapter or to the enforcement of state or federal laws. Information that is exchanged
8 under this subsection that was determined to be confidential under (b) of this section
9 remains confidential except as provided in (c) of this section. The portions of the
10 records and files of the Department of Revenue, the Department of Natural Resources,
11 the Department of Law, the legislature, and the Office of the Governor that reflect,
12 incorporate, or analyze information that is determined to be confidential under (b) of
13 this section are not public records except as provided in (c) of this section.

14 (e) Notwithstanding the limitation in (c) of this section, information that is
15 determined to be confidential under (b) of this section shall be disclosed on request by
16 the commissioner of revenue, the commissioner of natural resources, or the attorney
17 general to a legislator; to the legislative auditor; and, as directed by the chair or vice-
18 chair of the Legislative Budget and Audit Committee, to the director of legislative
19 finance, to the permanent employees of those divisions who are responsible for
20 evaluating a contract under AS 43.82.020, and to agents or contractors of the
21 legislative auditor or the director of legislative finance who are engaged to evaluate
22 a contract under AS 43.82.020. Information that is determined to be confidential under
23 (b) of this section may also be disclosed by the commissioner of revenue or the
24 commissioner of natural resources to an independent contractor under AS 43.82.240
25 or to a municipal advisory group established under AS 43.82.510. Before confidential
26 information is disclosed under this subsection, the person receiving the information
27 must sign an appropriate confidentiality agreement.

28 (f) If the commissioner of revenue chooses to develop a contract under
29 AS 43.82.020, the portions of the records and files of the Department of Revenue, the
30 Department of Natural Resources, the Department of Law, and a municipal advisory
31 group established under AS 43.82.510 that reflect, incorporate, or analyze information

1 that is relevant to the development of the position or strategy of the commissioner of
2 revenue, the commissioner of natural resources, or the attorney general with respect
3 to a particular provision that may be incorporated into the contract are not public
4 records until the commissioner of revenue gives public notice under AS 43.82.410 of
5 the commissioner's preliminary findings and determination under AS 43.82.400.
6 Nothing in this subsection

7 (1) makes a record or file of the Department of Revenue, the
8 Department of Natural Resources, or the Department of Law a public record that
9 otherwise would not be a public record under AS 09.25.100 - 09.25.220;

10 (2) affects the confidentiality provisions of (a) - (e) of this section; or

11 (3) abridges a privilege recognized under the laws of this state, whether
12 at common law or by statute or by court rule.

13 **Article 5. Contract Review, Approval, and Termination.**

14 **Sec. 43.82.400. Preliminary findings and determination regarding the**
15 **contract.** (a) If the commissioner develops a proposed contract under AS 43.82.200 -
16 43.82.270, the commissioner shall

17 (1) make preliminary findings and a determination that the proposed
18 contract terms are in the long-term fiscal interests of the state and further the purposes
19 of this chapter; and

20 (2) prepare a proposed contract that includes those terms and shall
21 submit the contract to the governor.

22 (b) To make the preliminary findings and determination required by (a)(1) of
23 this section, the commissioner shall compare the projected public revenue anticipated
24 from the approved qualified project with the estimated operating and capital costs of
25 the additional state and municipal services anticipated to arise from the construction
26 and operation of the approved qualified project. The commissioner shall address the
27 reasonably foreseeable effects of the proposed contract on the public revenue.

28 (c) In conjunction with the making of preliminary findings and determination
29 required by (a)(1) of this section, the commissioner shall describe the principal factors,
30 including the projected price of gas, projected production rate or volume of gas, and
31 projected recovery, development, construction, and operating costs, upon which the

1 determination made under (a)(1) of this section is based. If the commissioner has
2 previously submitted a proposed contract to the governor, the commissioner shall
3 describe any material differences between the terms of the currently proposed contract
4 and the previously proposed contract.

5 **Sec. 43.82.410. Notice and comment regarding the contract.** The
6 commissioner shall

7 (1) give reasonable public notice of the preliminary findings and
8 determination made under AS 43.82.400;

9 (2) make copies of the proposed contract, the commissioner's
10 preliminary findings and determination, and, to the extent the information is not
11 required to be kept confidential under AS 43.82.310, the supporting financial,
12 technical, and market data, including the work papers, analyses, and recommendations
13 of any independent contractors used under AS 43.82.240 available to the public and
14 to

15 (A) the presiding officer of each house of the legislature;

16 (B) the chairs of the finance and resources committees of the
17 legislature; and

18 (C) the chairs of the special committees on oil and gas, if any,
19 of the legislature;

20 (3) offer to appear before the Legislative Budget and Audit Committee
21 to provide the committee a review of the commissioner's preliminary findings and
22 determination, the proposed contract, and the supporting financial, technical, and
23 market data; if the Legislative Budget and Audit Committee accepts the commissioner's
24 offer, the committee shall give notice of the committee's meeting to the public and all
25 members of the legislature; if the financial, technical, and market data that is to be
26 provided must be kept confidential under AS 43.82.310, the commissioner may not
27 release the confidential information during a public portion of a committee meeting;
28 and

29 (4) establish a period of at least 30 days for the public and members
30 of the legislature to comment on the proposed contract and the preliminary findings
31 and determination made under AS 43.82.400.

1 **Sec. 43.82.420. Coordination of public and legislative review.** To the extent
2 practicable, the commissioner shall coordinate the public comment opportunity
3 provided under AS 43.82.410(4) with a review by the Legislative Budget and Audit
4 Committee under AS 43.82.410(3).

5 **Sec. 43.82.430. Final findings, determination, and proposed amendments;**
6 **execution of the contract.** (a) Within 30 days after the close of the public comment
7 period under AS 43.82.410(4), the commissioner of revenue shall

8 (1) prepare a summary of the public comments received in response to
9 the proposed contract and the preliminary findings and determination;

10 (2) after consultation with the commissioner of natural resources, if
11 appropriate, and with the pertinent municipal advisory group established under
12 AS 43.82.510, prepare a list of proposed amendments, if any, to the proposed contract
13 that the commissioner of revenue determines are necessary to respond to public
14 comments;

15 (3) make final findings and a determination as to whether the proposed
16 contract and any proposed amendments prepared under (2) of this subsection meet the
17 requirements and purposes of this chapter.

18 (b) After considering the material described in (a) of this section and securing
19 the agreement of the other parties to the proposed contract regarding any proposed
20 amendments prepared under (a) of this section, if the commissioner determines that the
21 contract is in the long-term fiscal interests of the state, the commissioner shall submit
22 the contract to the governor.

23 (c) The commissioner's final findings and determination under (a) of this
24 section are final agency decisions under this chapter.

25 **Sec. 43.82.435. Legislative authorization.** The governor may transmit a
26 contract developed under this chapter to the legislature together with a request for
27 authorization to execute the contract. A contract developed under this chapter is not
28 binding upon or enforceable against the state or other parties to the contract unless the
29 governor is authorized to execute the contract by law. The state and the other parties
30 to the contract may execute the contract within 60 days after the effective date of the
31 law authorizing the contract.

1 **Sec. 43.82.440. Judicial review.** A person may not bring an action
2 challenging the constitutionality of a law authorizing a contract enacted under
3 AS 43.82.435 or the enforceability of a contract executed under a law authorizing a
4 contract enacted under AS 43.82.435 unless the action is commenced within 120 days
5 after the date that the contract was executed by the state and the other parties to the
6 contract.

7 **Sec. 43.82.445. Administrative termination of a contract.** (a) The
8 commissioner shall include terms in a contract developed under AS 43.82.020 that
9 provide for administrative termination of a party's rights under the procedures and
10 conditions set out in this section if the party has

11 (1) ceased to meet the requirements of AS 43.82.110 as a qualified
12 sponsor or qualified sponsor group;

13 (2) intentionally or fraudulently misrepresented, in whole or in part,
14 material facts or circumstances upon which the contract was made;

15 (3) failed to comply with a condition or material term of the contract
16 or a provision of this chapter; or

17 (4) failed to comply with the approved qualified project plan or any
18 updated project plan.

19 (b) Before administrative termination of a contract under this section, the
20 commissioner shall give notice to the parties of the commissioner's intent to terminate
21 the contract and an opportunity to be heard. The commissioner may also provide the
22 parties an opportunity to cure any deficiency that is the basis for the termination if the
23 commissioner determines that curing the deficiency is appropriate under the
24 circumstances.

25 (c) Notwithstanding (a) and (b) of this section, the commissioner may not
26 administratively terminate a contract after the party has committed full project funding
27 except as provided in (e) of this section.

28 (d) A party to a contract who is affected by the commissioner's action to
29 terminate under (a) of this section may file an appeal with the superior court under the
30 Alaska Rules of Appellate Procedure.

31 (e) The commissioner may provide terms and conditions in a contract

1 developed under AS 43.82.020 upon which a party's rights under the contract may be
2 administratively terminated after the party commits full project funding.

3 **Article 6. Municipal Participation.**

4 **Sec. 43.82.500. Obligation to share payments with municipalities.** If the
5 commissioner develops a contract under AS 43.82.020 that includes terms that exempt
6 a party to the contract, and the property, gas, products, and activities associated with
7 the approved qualified project that is subject to the contract, from a municipal tax or
8 assessment in accordance with AS 29.45.810 or AS 29.46.010(b), or AS 43.82.200 and
9 43.82.210, the commissioner shall include a term in the contract that the party pay a
10 portion of the periodic payments due under the contract to the revenue-affected
11 municipality.

12 **Sec. 43.82.505. Payments to economically affected municipalities.** If the
13 commissioner executes a contract under AS 43.82.020 that will produce one or more
14 economically affected municipalities, the commissioner shall include a term in the
15 contract that provides for a portion of the periodic payments to the economically
16 affected municipalities under the principles in AS 43.82.520.

17 **Sec. 43.82.510. Municipal advisory group.** (a) If the commissioner approves
18 an application and proposed project plan under AS 43.82.140 and decides to develop
19 a contract under AS 43.82.020 and 43.82.200, the commissioner shall notify each
20 revenue-affected municipality and economically affected municipality.

21 (b) The mayor of a municipality notified by the commissioner under (a) of this
22 section may appoint one representative to a municipal advisory group in relation to the
23 application.

24 (c) Each municipal advisory group serves until a final action is taken on the
25 application for which the group was appointed.

26 (d) Each municipal advisory group shall elect a chair.

27 **Sec. 43.82.520. Duties of the commissioner of revenue in relation to**
28 **municipal participation.** (a) The commissioner shall meet with each municipal
29 advisory group periodically to report on the development of the contract provisions that
30 affect the municipalities.

31 (b) In developing a contract under AS 43.82.200 - 43.82.270, the commissioner

1 shall ensure that each revenue-affected municipality and economically affected
2 municipality receives a fair and reasonable share of the payments provided under
3 AS 43.82.210 in accordance with the following principles:

4 (1) the share of the payments to revenue-affected municipalities should
5 be given priority over payments to economically affected municipalities with due
6 regard to the anticipated size of the tax base that the contract would exempt from
7 municipal taxation by revenue-affected municipalities;

8 (2) the share of the payments to municipalities should be determined
9 with due regard to the anticipated economic and social burdens that would be imposed
10 on the municipality by construction and operation of the project;

11 (3) the respective shares of the total payments to the state and to
12 municipalities should be fixed in a manner to ensure that their respective interests are
13 aligned;

14 (4) to the extent practicable, the periodic amounts paid to each of the
15 municipalities should be stable and predictable; and

16 (5) to the extent practicable, the provisions for sharing payments with
17 municipalities should be consistent with the principles established in AS 43.82.210(b).

18 (c) In establishing the municipal shares under (b) of this section, the
19 commissioner shall consult with the pertinent municipal advisory group.

20 **Article 7. Miscellaneous Provisions.**

21 **Sec. 43.82.600. Governing law.** If a provision of this chapter conflicts with
22 another provision of state or municipal law, the provision of this chapter governs.

23 **Sec. 43.82.610. Regulations.** The commissioner of revenue, the commissioner
24 of natural resources, and the commissioner of labor may adopt regulations to carry out
25 their respective duties under this chapter.

26 **Sec. 43.82.620. Procedures for collection of amounts due; security.** (a)
27 The commissioner may adopt procedures for the collection of amounts due the state
28 under a contract developed under AS 43.82.020, including the collection of interest and
29 penalties.

30 (b) The commissioner may require a party to a contract developed under
31 AS 43.82.020 to provide security sufficient to guarantee amounts due under the

1 contract.

2 **Sec. 43.82.630. Reports and audits.** The commissioner may require periodic
3 reports from and may at reasonable intervals conduct audits and inspect the books of
4 a party that has entered into a contract developed under AS 43.82.020 to ensure
5 compliance with the provisions of this chapter and the regulations adopted under this
6 chapter and of the terms of the contract.

7 **Sec. 43.82.640. Annual report of the commissioner of labor.** On an annual
8 basis, the commissioner of labor shall prepare and present to the legislature a
9 comprehensive report on each party to a contract with the state developed under
10 AS 43.82.020, and its contractors, regarding the state residency of the employees
11 working in this state on the approved qualified project that is subject to the contract.
12 The commissioner of labor shall use state databases, including data from the quarterly
13 reports by a party to the contract developed under AS 43.82.020 and its contractors for
14 unemployment insurance purposes, to determine state residency of employees regarding
15 compliance with AS 43.82.230.



16 **Article 8. General Provisions.**

17 **Sec. 43.82.900. Definitions.** In this chapter, unless the context requires
18 otherwise,

19 (1) "affected municipality" means an economically affected
20 municipality or a revenue-affected municipality;

21 (2) "commencement of commercial operations" means the start of
22 regular deliveries of marketable products from an approved qualified project;

23 (3) "cubic foot of gas" means the quantity of gas contained in a volume
24 of one cubic foot at a standard temperature of 60 degrees Fahrenheit and a standard
25 absolute pressure of 14.65 pounds per square inch;

26 (4) "economically affected municipality" means a municipality the
27 commissioner of revenue determines will be reasonably required to provide additional
28 public services under the terms proposed in an application approved under
29 AS 43.82.140(a); the commissioner may consider historical data from construction of
30 the Trans Alaska Pipeline System, and information submitted by a municipality in
31 making the determination;

1 (5) "economic proximity" means the distance within which a person
2 may be willing to design, construct, and operate a gas line to provide service to a local
3 consumer;

4 (6) "economic rent" means the estimated total gross revenue less
5 estimated total costs for a qualified project over the term of a contract under
6 AS 43.82.020, measured in undiscounted nominal dollars; for purposes of this
7 paragraph, total costs do not include a rate of return on capital, financing costs, or any
8 payments to governments;

9 (7) "full project funding" means full approval by a party to a contract
10 under AS 43.82.020 for the expenditure of the capital necessary for construction and
11 operation of the approved qualified project that is subject to the contract;

12 (8) "gas" has the meaning given in AS 43.55.900;

13 (9) "group" means two or more persons;

14 (10) "lease or property" has the meaning given in AS 43.55.900;

15 (11) "periodic payment" means payment made in lieu of one or more
16 other taxes under a contract under AS 43.82.020;

17 (12) "revenue-affected municipality" means a municipality that the
18 commissioner of revenue reliably expects will be restricted from imposing a tax, or a
19 portion of a tax, as a result of implementation of a contract developed under this
20 chapter;

21 (13) "stranded gas" means gas that is not being marketed due to
22 prevailing costs or price conditions as determined by an economic analysis by the
23 commissioner for a particular project.

24 **Sec. 43.82.990. Short title.** This chapter may be cited as the Alaska Stranded
25 Gas Development Act.

26 * **Sec. 4.** AS 29.10.200 is amended by adding new paragraphs to read:

27 (54) AS 29.45.810 (exemption from municipal taxation);

28 (55) AS 29.46.010(b) (exemption from municipal assessment).

29 * **Sec. 5.** AS 29.45 is amended by adding a new section to read:

30 **Sec. 29.45.810. Exemption from municipal taxation.** (a) A party to a
31 contract approved by the legislature as a result of submission of a proposed contract

1 developed under AS 43.82 or as a result of acts by the legislature in implementing the
2 purposes of AS 43.82, and the property, gas, products, and activities associated with
3 the approved qualified project that is subject to the contract, are exempt, as specified
4 in the contract, from all taxes identified in the contract that would be levied and
5 collected by a municipality under state law as a consequence of the participation by
6 the party in the approved qualified project.

7 (b) This section applies to home rule and general law municipalities.

8 * Sec. 6. AS 29.46.010 is amended by adding a new subsection to read:

9 (b) Notwithstanding (a) of this section, a party to a contract approved by the
10 legislature as a result of submission of a proposed contract developed under AS 43.82
11 or as a result of acts by the legislature in implementing the purposes of AS 43.82, is
12 exempt, as specified in the contract, from assessment under this chapter against real
13 property associated with the approved qualified project that is subject to the contract.

14 * Sec. 7. AS 36.30.850(b) is amended by adding a new paragraph to read:

15 (38) contracts between the commissioner of revenue and an independent
16 contractor under AS 43.82.240.

17 * Sec. 8. AS 43.20.072 is amended by adding a new subsection to read:

18 (h) A taxpayer that has signed a contract approved by the legislature as a result
19 of submission of a proposed contract developed under AS 43.82 or as a result of acts
20 by the legislature in implementing the purposes of AS 43.82, providing for payments
21 in lieu of the tax under this chapter and that has nexus with the state solely as the
22 result of the taxpayer's participation in the approved qualified project that is subject
23 to the contract or would not, but for such participation, be engaged in the production
24 of oil or gas from a lease or property in this state or engaged in the transportation of
25 oil or gas by pipeline in this state, is not required to file a return under this section
26 unless required to do so by the contract.

27 * Sec. 9. AS 43.20.073 is amended by adding a new subsection to read:

28 (h) A corporation that has signed a contract approved by the legislature as a
29 result of submission of a proposed contract developed under AS 43.82 or as a result
30 of acts by the legislature in implementing the purposes of AS 43.82, providing for
31 payments in lieu of the tax under this chapter and that has nexus with the state solely

1 as the result of the corporation's participation in the approved qualified project that is
2 subject to the contract is not required to file a return under this section unless required
3 to do so by the contract.

4 * **Sec. 10. SEVERABILITY.** Under AS 01.10.030, if any provision of this Act, or the
5 application of a provision of this Act to any person or circumstance, is held invalid, the
6 remainder of this Act and the application to other persons or circumstances is not affected.

7 * **Sec. 11.** This Act takes effect immediately under AS 01.10.070(c).

AMENDMENT

OFFERED IN THE HOUSE

TO: CSHB 393(O&G), Draft Version

"L"

1 Page 2, line 19, following "tankers":

2 Insert "although experimental research is being conducted on other
3 alternative technologies such as gas to liquids, this technology is not yet
4 commercially viable; if this research results in a commercially viable technology,
5 and, after economic analysis by the state of the application of this technology, it is
6 shown that local or state tax or regulatory changes are necessary to commercialize
7 an Alaska project using this technology, then this technology may be considered in
8 regard to this legislation."

is the process balanced -

0-GH2006\B
Cook/Glover
3/11/98

CS FOR HOUSE BILL NO. 393(O&G)

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWENTIETH LEGISLATURE - SECOND SESSION

BY THE HOUSE SPECIAL COMMITTEE ON OIL AND GAS

Offered:
Referred:

Sponsor(s): HOUSE RULES COMMITTEE BY REQUEST OF THE GOVERNOR

A BILL

FOR AN ACT ENTITLED

1 "An Act relating to contracts with the state establishing payments in lieu of
2 other taxes by a qualified sponsor or qualified sponsor group for projects to
3 develop stranded gas resources in the state; providing for the inclusion in the
4 contracts of terms making certain adjustments regarding royalty value and the
5 timing and notice of the state's right to take royalty in kind or in value from
6 projects to develop stranded gas resources in the state; relating to the effect of
7 the contracts on municipal taxation; and providing for an effective date."

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

9 * Section 1. FINDINGS. The legislature finds that

10 (1) a vast quantity of gas in Alaska is stranded from commercial development
11 because of the cost associated with providing access to markets for that gas; on the North
12 Slope alone, between the Colville and Canning Rivers, approximately 35 trillion cubic feet of
13 discovered gas resources are stranded in this way;

1 (2) because of the high cost of providing access to markets for North Slope
2 gas, exploration efforts there have historically focused on oil; if the infrastructure needed to
3 provide market access for North Slope gas were economically available, it is possible that new
4 gas exploration efforts would be initiated that could lead to the discovery and development
5 of significantly greater gas resources than have been discovered so far;

6 (3) maintaining production operations, whether for oil, gas, or both, enhances
7 the opportunities for oil and gas exploration and development on the North Slope;

8 ~~(4) in the Cook Inlet area, which is Alaska's other currently producing oil and~~
9 ~~gas area, oil and gas exploration and development activities have also historically focused~~
10 ~~more on oil than gas, although there has been a relatively greater degree of exploration for and~~
11 ~~commercial development of gas in the Cook Inlet area than on the North Slope;~~

12 ⁴(5) large areas of the state, encompassing a number of geologic provinces and
13 basins, do not have oil and gas production and still remain largely unexplored for oil and gas;
14 exploration for gas in some of these areas might be facilitated if infrastructure were
15 economically available to provide access for the gas to markets;

16 ⁵(6) it is unlikely that markets will develop within the state that would need
17 more than a relatively small proportion of the volume of stranded gas already discovered on
18 the North Slope; therefore, the primary need for gas infrastructure for at least the next decade
19 will be to provide access to markets outside the state;

20 ⁶(7) currently the principal mode anticipated for stranded North Slope gas to
21 access markets outside the state is a gas pipeline to an ice-free Alaska port where the gas
22 would be turned into liquefied natural gas and exported using specially designed marine
23 tankers; ~~although experimental research is being conducted on other alternative technologies~~
24 ~~such as gas to liquids, this technology is not yet commercially viable; if this research results~~
25 ~~in a commercially viable technology, and, after economic analysis by the state of the~~
26 ~~application of this technology, it is shown that local or state tax or regulatory changes are~~
27 ~~necessary to commercialize an Alaska project using this technology, then this technology may~~
28 ~~be considered in regard to this legislation;~~

29 ⁷(8) the size of the capital expenditure needed to get North Slope gas to market
30 by way of a liquefied natural gas project requires long-term contracts for gas on the order of
31 14,000,000 metric tons a year of liquefied natural gas; to be successful, a North Slope

1 liquefied natural gas project needs to reach this full annual volume in not more than six years
2 from the commencement of commercial operations;

3 ⁸
(9) for a North Slope liquefied natural gas project to become economically
4 viable and competitive, the estimated costs of constructing such a project must be reduced
5 significantly; reducing the financial risk associated with the project would also improve the
6 project's chances of becoming economically viable and competitive;

7 ⁹
(10) the state has contracted an extensive financial analysis of the
8 commercialization of North Slope gas; this analysis, performed by a recognized expert in
9 petroleum economics, Dr. Pedro Van Meurs, indicates that changes in the local, state, and
10 federal tax structure may be necessary to make commercialization of North Slope gas
11 resources economically viable;

12 ¹⁰
(11) although the state can do little now to reduce expected construction costs,
13 the state can reduce some of the financial risk associated with a North Slope liquefied natural
14 gas project or other stranded gas development projects by specifying with as much certainty
15 as possible the state taxes and royalties that would apply to such a project throughout its life;

16 ¹¹
(12) the state could improve the economics and competitiveness of a stranded
17 gas development project by adjusting the timing of the state's receipt of its share of the
18 economic rent of the project; the present fiscal regime is front-end loaded, which means that
19 the state and local governments take a significant part of their shares of the economic rent of
20 a project early in the life of the project, even before the project starts to generate an income
21 stream; the state and local governments could improve the economics of a stranded gas
22 development project by taking more of their shares of the economic rent of a project later in
23 the life of the project;

24 ¹²
(13) the state's present fiscal regime, as it would apply to a stranded gas
25 development project, is also regressive to the extent that it is insensitive to changes in the
26 profitability of the project, so that, in times of low profitability, the state and local
27 governments would take an excessive amount of the economic rent of the project, and, in
28 times of high profitability, they would take an inadequate amount of the economic rent of a
29 project; the state and local governments could improve the economics of a stranded gas
30 development project by making the overall fiscal system less regressive and more responsive
31 to the relative profitability of a project;

1 ¹³
 2 (14) establishing a fiscal regime applicable to a specific stranded gas
 3 development project under a long-term contract with the state, where payments would be made
 4 in lieu of other taxes, would

5 (A) enable the state to create a fiscal regime that is less front-end
 6 loaded and less regressive for a project without rewriting the tax laws for gas already
 7 being developed and produced;

8 (B) enable the state to customize the timing and burden of its fiscal
 9 regime to fit the economic circumstances of a particular stranded gas development
 10 project;

11 (C) reduce the financial risk of the project by reducing uncertainty
 12 about the fiscal terms applicable to the project;

13 ¹⁴
 14 (15) authorizing the state, through the executive branch, to ~~enter into~~ ^{DEVELOP} a contract
 15 establishing the fiscal regime that would apply to a qualified stranded gas development project
 16 if it were built ~~is an~~ ^{WILL RESULT IN CONTRACTS THAT ARE AN} exercise of the legislature's taxing power that is consistent with art. IX,
 17 sec. 1, Constitution of the State of Alaska;

18 ¹⁵
 19 (16) authorizing the state, through the executive branch, to ~~enter into~~ ^{DEVELOP} a contract
 20 establishing a fiscal regime that reduces the risks and improves the economics of a stranded
 21 gas development project ~~is an~~ ^{WILL RESULT IN CONTRACTS THAT ARE} exercise of the legislature's power under art. IX, sec. 4,
 22 Constitution of the State of Alaska, to create tax exemptions by general law and is consistent
 23 with the legislature's responsibility under art. VIII, sec. 2, of the Constitution of the State of
 24 Alaska, to provide for the utilization, development, and conservation of all natural resources
 25 belonging to the state for the maximum benefit of its people;

26 ¹⁶
 27 (17) stranded gas development projects are a matter of statewide interest
 28 because they are an important potential source of revenue to the state, job opportunities for
 29 the people of the state, and gas for use by communities throughout the state;

30 ¹⁷
 31 (18) to the extent permissible under the Constitution of the United States and
 the Constitution of the State of Alaska, the legislature intends that state residents and
 businesses share in and not be excluded from the opportunities stemming from the
 development of the state's gas resources; and

¹⁸
 good faith efforts by qualified sponsors, qualified sponsor groups, and
 contractors of qualified sponsors and qualified sponsor groups that enter into a contract with

1 ^{DEVELOPED} the state^y under this Act to undertake voluntary actions to provide employment opportunities
 2 for Alaska residents and opportunities for Alaska businesses are in the long-term interests of
 3 the state.

4 * Sec. 2. INTENT. (a) The legislature intends that contracts entered^{DEVELOPED} into under this Act
 5 provide stable fiscal terms that encourage the development of stranded gas projects that
 6 otherwise might not be developed under the prevailing tax and royalty regime. The legislature
 7 further intends that any fiscal terms agreed to in a contract^{DEVELOPED} under this Act in lieu of other
 8 taxes will fully and fairly compensate the people of the state for the severance, production,
 9 and sale of natural resources belonging to the people of the state, for the negative effects and
 10 the risks that a project may impose on the state, and for the value of the infrastructure that
 11 may be provided by the state to a project, including all the advantages of civilized society that
 12 may be provided by the state to the sponsors of a project.

13 (b) The legislature intends that, in order to provide the stable fiscal terms that will
 14 encourage development of stranded gas projects, any contract negotiat^{DEVELOPED}ed under this Act will
 15 express whether the state intends to be bound to the full extent allowed by the Constitution
 16 of the State of Alaska; however, the legislature further intends that the terms of a contract
 17 ^{DEVELOPED} negotiat~~ed~~ed under this Act will not be binding on or enforceable against the state or the other
 18 parties to the contract unless the ^{GOVERNOR} ~~commissioner~~ of revenue is authorized to execute the contract
 19 by the legislature. ~~as provided in this Act.~~

20 (c) The legislature intends that a qualified sponsor or qualified sponsor group or a
 21 contractor of a qualified sponsor or qualified sponsor group that enters into a contract^{DEVELOPED UNDER THIS ACT} relating
 22 to a stranded gas project ~~under this Act~~ will, with respect to the project, voluntarily

- 23 (1) undertake reasonable measures to hire Alaska residents to perform wo.
- 24 that they are qualified to perform on a competitive basis;
- 25 (2) assist Alaska residents who are capable of being qualified and who make
- 26 a good faith effort to obtain the requisite training required for employment; and
- 27 (3) use reasonable efforts to contract with qualified Alaska businesses when
- 28 their performance is competitive with regard to price, quality, and availability.

29 * Sec. 3. AS 43 is amended by adding a new chapter to read:

30 **Chapter 82. Development of Alaska Stranded Gas.**
 31 **Article 1. Contracts for Payments in Lieu of Other Taxes.**

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Sec. 43.82.010. Purpose. The purpose of this chapter is to

(1) encourage new investment to develop the state's stranded gas resources by authorizing establishment of fiscal terms related to that new investment without significantly altering tax and royalty methodologies and rates on existing oil and gas infrastructure and production;

(2) allow the fiscal terms applicable to a qualified sponsor or the members of a qualified sponsor group, with respect to a qualified project, to be tailored to the particular economic conditions of the project and to establish those fiscal terms in advance with as much certainty as the Constitution of the State of Alaska allows; and

(3) maximize the benefit to the people of the state of the development of the state's stranded gas resources.

Sec. 43.82.020. Contracts for payments in lieu of other taxes and for royalty adjustments. The commissioner may, under this chapter, ^{NEGOTIATE TERMS FOR INCLUSION IN A PROPOSAL} ~~enter into a contract~~ with a qualified sponsor or qualified sponsor group providing for

(1) periodic payment in lieu of one or more taxes that otherwise would be imposed by the state or a municipality on the qualified sponsor or members of the qualified sponsor group as a consequence of the sponsor's or group's participation in an approved qualified project under this chapter; and

(2) certain adjustments regarding royalty under AS 43.82.220.

Article 2. Qualification and Application Procedures.

Sec. 43.82.100. Qualified project. Based on information available to the commissioner, the commissioner may determine that a proposal for new investment is a qualified project under this chapter only if the project

(1) would produce at least 500,000,000,000 cubic feet of stranded gas within 20 years from the commencement of commercial operations; and

(2) is capable, subject to applicable commercial regulation and technical and economic considerations, of making gas available to meet the reasonably foreseeable demand in this state for gas within the economic proximity of the project.

Sec. 43.82.110. Qualified sponsor or qualified sponsor group. The commissioner may determine that a person or group is a qualified sponsor or qualified

1 sponsor group if the person or a member of the group

2 (1) intends to own an equity interest in a qualified project or to commit
3 gas that it owns to a qualified project; and

4 (2) meets one or more of the following criteria:

5 (A) owns a working interest in at least 10 percent of the
6 stranded gas proposed to be developed by a qualified project;

7 (B) has the right to purchase at least 10 percent of the stranded
8 gas proposed to be developed by a qualified project;

9 (C) has the right to acquire, control, or market at least 10
10 percent of the stranded gas proposed to be developed by a qualified project;

11 (D) holds the permits that the department determines are
12 essential to construct and operate a qualified project;

13 (E) has a net worth equal to at least 33 percent of the estimated
14 cost of constructing a qualified project;

15 (F) has an unused line of credit equal to at least 25 percent of
16 the estimated cost of constructing a qualified project.

17 **Sec. 43.82.120. Applications.** (a) A qualified sponsor or qualified sponsor
18 group may submit to the department an application for ^{DEVELOPMENT OF} a contract under AS 43.82.020
19 evidencing that the requirements of AS 43.82.100 and 43.82.110 are met. The
20 application must be submitted in the manner and form and contain the information
21 required by the department.

22 (b) Along with an application submitted under (a) of this section, an applicant
23 shall submit a proposed project plan for a qualified project that contains the following
24 information based on the information known to the applicant at the time of
25 application:

26 (1) a description of the work accomplished as of the date of the
27 application to further the project;

28 (2) a schedule of proposed development activity leading to the
29 projected commencement of commercial operations of the project;

30 (3) a description of the development activity proposed to be
31 accomplished under the proposed project plan;

1 (4) a description of each lease or property that the applicant believes
2 to contain the stranded gas that would be developed if the project was built;

3 (5) a description of the methods and terms under which the applicant
4 is prepared to make gas available to meet the reasonably foreseeable demand in this
5 state for gas within the economic proximity of the project during the term of the
6 proposed contract, including proposed pipeline transportation and expansion rules if
7 pipeline transportation is a part of the proposed project;

8 ~~DETAILED DESCRIPTION OF OPTIONS~~
(6) a ~~plan~~ to mitigate the increased demand for public services and
9 other negative effects caused by the project;

10 ~~DETAILED DESCRIPTION OF OPTIONS~~
(7) a ~~plan~~ for the safe management and operation of the project once
11 it is constructed;

12 (8) other information that the commissioner of revenue, in consultation
13 with the commissioner of natural resources, considers necessary to make a
14 determination that

15 (A) the work accomplished as of the date of application, the
16 schedule of proposed development activity, and the development activity
17 proposed to be accomplished under the proposed project plan reflect a proposal
18 for diligent development on the part of the applicant;

19 (B) the proposed project plan does not materially conflict with
20 the obligations of a lessee to the state under a lease or under a pool, unit, or
21 other agreement with the state; and

22 (C) the proposed project plan describes satisfactory methods and
23 terms for accommodating reasonably foreseeable demand for gas in this state
24 within the economic proximity of the project during the term of the proposed
25 contract.

26 (c) The requirements of (b) of this section do not diminish the obligations of
27 a qualified sponsor or member of a qualified sponsor group to the state or restrict the
28 authority of the commissioner of revenue or the commissioner of natural resources
29 under any other law or agreement relating to a plan of development for a lease, pool,
30 or unit.

31 **Sec. 43.82.130. Qualified project plan.** A proposed project plan submitted

1 under AS 43.82.120 may be approved as a qualified project plan under AS 43.82.140
2 if the proposed project plan

3 (1) reflects a proposal for diligent development of the project on the
4 part of the applicant;

5 (2) does not materially conflict with the obligations of a lessee to the
6 state under a lease or under a pool, unit, or other agreement with the state; and

7 (3) describes satisfactory methods and terms for making gas available
8 to meet the reasonably foreseeable demand in this state for gas within the economic
9 proximity of the project during the term of the proposed contract.

10 **Sec. 43.82.140. Review of applications and determination of qualifications.**

11 (a) The commissioner shall review an application submitted under AS 43.82.120 to
12 determine whether the provisions of AS 43.82.100 concerning a qualified project and
13 AS 43.82.110 concerning a qualified sponsor or qualified sponsor group have been
14 met. The commissioner may approve an application only if those provisions have been
15 met.

16 (b) If the commissioner approves an application under (a) of this section, the
17 commissioner and the commissioner of natural resources shall review the proposed
18 project plan submitted with the application to determine whether the provisions of
19 AS 43.82.130 have been met. The commissioner may approve the proposed project
20 plan as a qualified project plan only if the commissioner of natural resources concurs
21 in the approval.

22 (c) The commissioner shall send to the applicant written notice of and the
23 reasons for the determinations made under (a) and (b) of this section.

24 **Sec. 43.82.150. Actions challenging determinations on applications.** (a)
25 Only an applicant under AS 43.82.120 who is aggrieved by a determination of the
26 commissioner of revenue or the commissioner of natural resources under AS 43.82.140
27 may seek judicial review of the determination.

28 (b) The only grounds for judicial review of a determination made under
29 AS 43.82.140 are

30 (1) failure to follow the qualification and application procedures set out
31 in AS 43.82.100 - 43.82.180; or

1 (2) abuse of discretion that is so capricious, arbitrary, or confiscatory
2 as to constitute a denial of due process.

3 Sec. 43.82.160. Multiple applications for similar or competing qualified
4 projects. Nothing in this chapter prohibits different qualified sponsors or different
5 qualified sponsor groups from submitting applications under AS 43.82.120 relating to
6 similar or competing qualified projects or prohibits the commissioner of revenue or the
7 commissioner of natural resources from reviewing and approving applications and
8 proposed project plans under AS 43.82.140 relating to similar or competing qualified
9 projects.

10 Sec. 43.82.170. Application deadline. The commissioner of revenue or the
11 commissioner of natural resources may not act on an application for a contract
12 submitted under AS 43.82.120 unless the application is received by the Department of
13 Revenue no later than June 30, 2001.

14 Sec. 43.82.180. Withdrawal of applications. Subject to the terms of a
15 reimbursement agreement under AS 43.82.240 or other agreement with the Department
16 of Revenue, the Department of Natural Resources, the commissioner of revenue, or the
17 commissioner of natural resources affecting the withdrawal of an application, a
18 qualified sponsor or qualified sponsor group may withdraw an application submitted
19 under AS 43.82.120 at any time before the date that the commissioner of revenue
20 ^{SUBMITS A CONTRACT TO THE GOVERNOR} enters into a contract under AS 43.82.430 without further obligation under this chapter.

21 Article 3. Contract Development.

22 Sec. 43.82.200. Contract development. If the commissioner approves an
23 application and proposed project plan under AS 43.82.140, the commissioner may
24 develop a contract under ~~AS 43.82.020~~ that may include

25 (1) terms concerning periodic payment in lieu of one or more taxes as
26 provided in AS 43.82.210;

27 (2) terms developed under AS 43.82.220 relating to

28 (A) timing and notice of the state's right to take royalty in kind
29 or in value; ~~AND~~

30 (B) royalty value,

31 (3) terms regarding the hiring of Alaska residents and contracting with

1 Alaska businesses under AS 43.82.230:

2 (4) terms regarding periodic payment to, or an equity or other interest
3 in a project for, municipalities under AS 43.82.500;

4 (5) terms regarding arbitration or alternative dispute resolution
5 procedures:

6 (6) terms and conditions for administrative termination of a contract
7 under AS 43.82.445; and

8 (7) other terms or conditions that are

9 (A) necessary to further the purposes of this chapter; or

10 (B) in the best interests of the state.

11 **Sec. 43.82.210. Contract terms relating to payment in lieu of one or more**
12 **taxes.** (a) If the commissioner approves an application and proposed project plan
13 under AS 43.82.140, the commissioner may develop proposed terms for inclusion in
14 a contract under AS 43.82.020 for periodic payment in lieu of one or more of the
15 following taxes that otherwise would be imposed by the state or a municipality on the
16 qualified sponsor or member of a qualified sponsor group as a consequence of
17 participating in an approved qualified project:

18 (1) oil and gas production taxes and oil surcharges under AS 43.55;

19 (2) oil and gas exploration, production, and pipeline transportation
20 property taxes under AS 43.56;

21 (3) oil and gas conservation tax under AS 43.57;

22 (4) Alaska net income tax under AS 43.20;

23 (5) municipal sales and use tax under AS 29.45.650 - 29.45.710;

24 (6) municipal property tax under AS 29.45.010 - 29.45.250 or
25 29.45.550 - 29.45.600;

26 (7) municipal special assessments under AS 29.46;

27 (8) a comparable tax or levy imposed by the state or a municipality
28 after the effective date of this section;

29 (9) other state or municipal taxes or categories of taxes identified by
30 the commissioner.

31 (b) If the commissioner chooses to develop proposed terms under (a) of this

1 section, the commissioner shall, if practicable and consistent with the long-term fiscal
2 interests of the state, develop the terms in a manner that attempts to balance the
3 following principles:

4 (1) the terms should, in conjunction with other factors such as cost
5 reduction of the project, cost overrun risk reduction of the project, increased fiscal
6 certainty, and successful marketing, improve the competitiveness of the approved
7 qualified project in relation to other development efforts aimed at supplying the same
8 market;

9 (2) the terms should accommodate the interests of the state, affected
10 municipalities, and the project sponsors under a wide range of economic conditions,
11 potential project structures, and marketing arrangements;

12 (3) the state's and affected municipalities' combined share of the
13 economic rent of the approved qualified project under the contract should be relatively
14 progressive; that is, the state's and affected municipalities' combined annual share of
15 the economic rent of the approved qualified project generally should not increase when
16 there are decreases in project profitability, or decrease when there are increases in
17 project profitability;

18 (4) the state's and affected municipalities' combined share of the
19 economic rent of the approved qualified project under the contract should be relatively
20 lower in the earlier years than in the later years of the approved qualified project;

21 (5) the terms should allow the project sponsors to retain a share of the
22 economic rent of the approved qualified project that is sufficient to compensate the
23 sponsors for risks under a range of economic circumstances;

24 (6) the terms should provide the state and affected municipalities with
25 a significant share of the economic rent of the approved qualified project, when
26 discounted to present value, under favorable price and cost conditions;

27 (7) the method for calculating the periodic payment in lieu of certain
28 taxes under the contract should be clear and unambiguous; and

29 (8) while cost calculations for the approved qualified project under the
30 contract should be based on amounts that closely approximate actual costs, agreed-
31 upon formulas reflecting reasonable economic assumptions should be used if possible

1 to promote administrative certainty and efficiency.

2 (c) Except as provided in (b) of this section, the commissioner's discretion
3 under this section in developing proposed terms for a contract under AS 43.82.020 is
4 not limited to consideration of the economic rent of the approved qualified project.

5 **Sec. 43.82.220. Contract terms relating to royalty.** (a) Notwithstanding any
6 contrary provisions of AS 38, the commissioner of natural resources, with the
7 concurrence of the commissioner of revenue and the affected parties holding a state
8 lease or unit agreement, may develop proposed terms for inclusion in a contract under
9 AS 43.82.020 that modify the timing and notice provisions of the applicable oil and
10 gas leases and unit agreements pertaining to the state's rights to receive its royalty^{ON GAS} in
11 kind or in value, if

12 (1) the viability of the approved qualified project depends on long-term
13 gas purchase and sale agreements;

14 (2) certainty over time regarding the quantity of royalty gas that the
15 state may be taking in kind is needed to secure the long-term purchase and sale
16 agreements;

17 (3) the specified period of the state's commitment to take its royalty
18 share in value or in kind does not exceed the term of the purchase and sale
19 agreements; and

20 (4) the modification does not impair the ability of the approved
21 qualified project to meet the reasonably foreseeable demand in this state for gas within
22 economic proximity of the project during the term of the contract ^{DEVELOPED} ~~entered into~~ under
23 AS 43.82.020.

24 (b) Notwithstanding any contrary provisions of AS 38, the commissioner of
25 natural resources, with the concurrence of the commissioner of revenue and the
26 affected parties holding a state lease or unit agreement, may develop proposed terms
27 for inclusion in a contract under AS 43.82.020 that establish a valuation method for
28 the state's royalty share of the gas production from an approved qualified project.

29 (c) The commissioner of revenue shall include any proposed terms relating to
30 royalty developed in accordance with this section in the proposed contract under
31 AS 43.82.400.

INSERT (see following page)

INSERT D:

(d) Nothing in this chapter permits modification of the state's rights that relate to timing, notice, and rights to receive oil royalty in kind or in value under oil and gas leases or unit agreements.

1 **Sec. 43.82.230. Contract terms relating to hiring of Alaska residents and**
2 **contracting with Alaska businesses.** (a) The commissioner shall include in a
3 contract under AS 43.82.020 a term requiring the qualified sponsor or qualified
4 sponsor group and contractors of the qualified sponsor or qualified sponsor group to
5 comply with all valid federal, state, and municipal laws relating to hiring Alaska
6 residents and contracting with Alaska businesses to work in the state on the approved
7 qualified project and not to discriminate against Alaska residents or Alaska businesses.
8 Within the constraints of law, the commissioner shall also include in a contract under
9 AS 43.82.020 a term that requires the qualified sponsor or qualified sponsor group and
10 contractors of the qualified sponsor or qualified sponsor group to employ Alaska
11 residents and to contract with Alaska businesses to work in the state on the approved
12 qualified project to the extent the residents and businesses are available, competitively
13 priced, and qualified.

14 (b) The commissioner shall include in a contract under AS 43.82.020 a term
15 requiring the qualified sponsor or qualified sponsor group and contractors of the
16 qualified sponsor or qualified sponsor group to

17 (1) advertise for available positions in newspapers in the location where
18 the work is to be performed and in other publications distributed throughout the state,
19 including in rural areas; and

20 (2) use Alaska job service organizations located throughout the state
21 and not just in the location where the work is to be performed in order to notify
22 Alaskans of work opportunities on the approved qualified project.

23 (c) Subject to the voluntary agreement of the qualified sponsor, the
24 commissioner may include a term in the contract providing for incentives to encourage
25 training and hiring of Alaska residents.

26 (d) This section does not create or abridge individual rights and does not create
27 a private right of action for any person.

28 (e) For purposes of this section,

29 (1) "Alaska business" means a firm or contractor that

30 (A) has held an Alaska business license for the preceding 12
31 months;

1 (B) maintains, and has maintained for the preceding 12 months,
2 a place of business in the state that competently and professionally deals in
3 supplies, services, or construction of the nature required for the approved
4 qualified project; and

5 (C) is

6 (i) a sole proprietorship and the proprietor is an Alaska
7 resident;

8 (ii) a partnership and more than 50 percent of the
9 partnership interest is held by Alaska residents;

10 (iii) a limited liability company and more than 50
11 percent of the membership interest is held by Alaska residents;

12 (iv) a corporation that has been incorporated in the state
13 or is authorized to do business in the state; or

14 (v) a joint venture and a majority of the venturers
15 qualify as Alaska businesses under this paragraph;

16 (2) "Alaska job service organizations" means those offices maintained
17 by the state and recommended by the Department of Labor whose functions are to aid
18 the unemployed or underemployed in finding employment;

19 (3) "Alaska resident" means a natural person who

20 (A) receives a permanent fund dividend under AS 43.23; or

21 (B) has a current Alaska

22 (i) voter registration card; and

23 (ii) resident fishing, hunting, or trapping license under
24 AS 16;

25 (4) "available," as applied to an Alaska resident or Alaska business,
26 means that the resident or business is available for employment at the time required
27 and is located anywhere in the state, not just in the area of the state where the work
28 is to be performed;

29 (5) "qualified," as applied to an Alaska resident or Alaska business,
30 means that the resident or business possesses the requisite education, training, skills,
31 certification, or experience to perform the work necessary for a particular position or

1 to perform a particular service.

2 **Sec. 43.82.240. Use of an independent contractor.** (a) The commissioner
3 may use an independent contractor to assist in the evaluation of an application or in
4 the development of contract terms under AS 43.82.200. The commissioner may
5 condition the development of a contract under AS 43.82.020 on an agreement by the
6 applicant to reimburse the state for the expenses of an independent contractor under
7 this section.

8 (b) An independent contractor selected under this section must sign an
9 agreement regarding confidentiality and disclosures consistent with the determinations
10 made under AS 43.82.310 before the contractor may review information that is
11 determined confidential under AS 43.82.310.

12 (c) Selection of an independent contractor under this section is not subject to
13 AS 36.30 (State Procurement Code).

14 **Sec. 43.82.250. Term of contract; effective date.** (a) ^{THE TERM OF A CONTRACT DEVELOPED} A contract under
15 AS 43.82.020 may be entered ^{FOR} into for a term no longer than is necessary to develop
16 the stranded gas that is subject to the contract; however, the term of the contract may
17 not exceed 35 years from the commencement of commercial operations of the
18 approved qualified project.

19 ~~(b) The effective date of a contract under AS 43.82.020 is the date the~~
20 ~~commissioner executes the contract unless another date is set out in the contract. The~~
21 ~~commissioner may condition the effective date of a contract under AS 43.82.020 on~~
22 ~~the enactment of a federal law that improves the economic feasibility or~~
23 ~~competitiveness of stranded gas projects in the state.~~

24 **Sec. 43.82.260. Change of parties to an application or a contract;**
25 **assignment of interests.** (a) A qualified sponsor or member of a qualified sponsor
26 group may assign an interest in or add or withdraw a party to an application under
27 AS 43.82.120 ~~or a contract under AS 43.82.020~~ only if the commissioner has

28 (1) made a finding that the assignment, addition, or withdrawal is
29 consistent with the requirements of AS 43.82.110; and

30 (2) given prior written approval for the assignment, addition, or
31 withdrawal.

(b) A contract developed under this chapter may provide for the assignment to or withdrawal of a
qualified sponsor or member of a qualified sponsor group.

1 ^c
 2 (~~b~~) Upon being added to an application ~~or contract~~ under this section, a party
 3 becomes a qualified sponsor or a member of a qualified sponsor group, as appropriate,
 4 for the relevant project.

5 ^d
 6 (~~a~~) The commissioner may not unreasonably withhold approval under (a) of
 7 this section, but may condition the approval in any way reasonably necessary to protect
 8 the fiscal interests of the state and to further the purposes of this chapter.

9 ^e
 10 (~~a~~) For purposes of this section, an assignment includes a transfer of stock or
 11 a partnership interest in a manner that changes control of a qualified sponsor or
 12 member of a qualified sponsor group.

13 **Sec. 43.82.270. Project plans and work commitments.** A contract under
 14 AS 43.82.020 must include the qualified project plan approved under AS 43.82.140
 15 and provisions for updating the plan at reasonable intervals until the commencement
 16 of commercial operations of the approved qualified project. The commissioner of
 17 revenue, in consultation with the commissioner of natural resources, may, as a
 18 ~~condition~~ ^{TERM IN} of a contract under AS 43.82.020, include work commitments or other
 19 obligations in the contract to be accomplished before the commencement of
 20 commercial operations of the approved qualified project.

21 **Article 4. Requests for Information; Confidentiality;**
 22 **Disclosure of Information.**

23 **Sec. 43.82.300. Requests for information.** The commissioner of revenue or
 24 the commissioner of natural resources may request from an applicant information that
 25 the respective commissioner determines is necessary to perform the respective
 26 commissioner's responsibilities under AS 43.82.140. If the application is approved
 27 under AS 43.82.140, the respective commissioner shall require the successful applicant
 28 to provide financial, technical, and market information regarding the qualified project
 29 that the respective commissioner determines is necessary for the purpose of developing
 30 contract terms for the qualified project under AS 43.82.200. If requested information
 31 is not provided, the commissioner of revenue may not continue to review the
 32 application under AS 43.82.140 or develop the contract under AS 43.82.200 -
 33 43.82.270, as applicable.

34 **Sec. 43.82.310. Disclosure of information; confidentiality.** (a) An applicant

1 may request confidential treatment of information that the applicant provides under
 2 AS 43.82.300 by clearly identifying the information and the reasons supporting the
 3 request for confidential treatment. The commissioner of revenue or the commissioner
 4 of natural resources, as appropriate, shall keep the information confidential until the
 5 commissioner determines whether the requirements of (b) of this section are met. If
 6 the commissioner of revenue or the commissioner of natural resources has not made
 7 a determination under (b) of this section within 14 days after receiving a request for
 8 confidential treatment, the request is considered denied. If the appropriate
 9 commissioner determines that the information does not meet the requirements of (b)
 10 of this section or if the commissioner fails to make a determination within 14 days, the
 11 commissioner shall return the information and any copies of it at the request of the
 12 applicant. If the commissioner of revenue or the commissioner of natural resources,
 13 as appropriate, returns information under this subsection, the commissioner shall cease
 14 review of the application or cease contract development under AS 43.82.200 -
 15 43.82.270, as appropriate, unless the commissioner determines that the returned
 16 information is unnecessary to make a determination on the application or to develop
 17 contract terms under AS 43.82.200 - 43.82.270.

18 (b) If requested by the applicant, information provided to the commissioner of
 19 revenue or the commissioner of natural resources under AS 43.82.300 shall be kept
 20 confidential if the commissioner receiving the information determines, upon an
 21 adequate showing by the applicant, that the information

22 (1) is a trade secret or other proprietary research, development, or
 23 commercial information that the applicant treats as confidential;

24 (2) affects the applicant's competitive position; and

25 (3) has commercial value that may be significantly diminished by
 26 public disclosure. OR PUBLIC DISCLOSURE IS NOT IN THE LONG-TERM
 27 FISCAL INTERESTS OF THE STATE

28 (c) Information determined to be confidential under (b) of this section is
 29 confidential under that subsection only so long as is necessary to protect the
 30 competitive position of the applicant and to prevent the significant diminution of the
 31 commercial value of the information, OR TO PROTECT THE LONG-TERM FISCAL INTERESTS
 The commissioner of revenue or the
 commissioner of natural resources, as appropriate, may not release information that the

1 commissioner has previously determined to be confidential under (b) of this section
2 without providing the applicant notice and an opportunity to be heard.

3 (d) Notwithstanding the limitation in (c) of this section, the Department of
4 Revenue and the Department of Natural Resources may provide to one another, to the
5 Department of Law,^{TO THE LEGISLATURE} and to the Office of the Governor any information provided under
6 AS 43.82.300 relevant to the implementation of this chapter or to the enforcement of
7 state or federal laws. Information that is exchanged under this subsection that was
8 determined to be confidential under (b) of this section remains confidential except as
9 provided in (c) of this section. The portions of the records and files of the Department
10 of Revenue, the Department of Natural Resources, the Department of Law,^{THE LEGISLATURE} and the
11 Office of the Governor that reflect, incorporate, or analyze information that is
12 determined to be confidential under (b) of this section are not public records except
13 as provided in (c) of this section.

14 (e) Notwithstanding the limitation in (c) of this section, information that is
15 determined to be confidential under (b) of this section^{SHALL BE DISCLOSED ON REQUEST} ~~may be disclosed~~ by the
16 commissioner of revenue, the commissioner of natural resources, or the attorney
17 general to a legislator; to the legislative auditor; and, as directed by the chair or vice-
18 chair of the Legislative Budget and Audit Committee, to the director of legislative
19 finance, to the permanent employees of those divisions who are responsible for
20 evaluating a contract under AS 43.82.020, and to agents or contractors of the
21 legislative auditor or the director of legislative finance who are engaged to evaluate
22 a contract under AS 43.82.020. Information that is determined to be confidential under
23 (b) of this section may also be disclosed by the commissioner of revenue or the
24 commissioner of natural resources to an independent contractor under AS 43.82.240
25 or to a municipal advisory group established under AS 43.82.510. Before confidential
26 information is disclosed under this subsection, the person receiving the information
27 must sign an appropriate confidentiality agreement.

28 (f) If the commissioner of revenue chooses to develop a contract under
29 AS 43.82.020, the portions of the records and files of the Department of Revenue, the
30 Department of Natural Resources, the Department of Law, and a municipal advisory
31 group established under AS 43.82.510 that reflect, incorporate, or analyze information

1 that is relevant to the development of the position or strategy of the commissioner of
2 revenue, the commissioner of natural resources, or the attorney general with respect
3 to a particular provision that may be incorporated into the contract are not public
4 records until the commissioner of revenue gives public notice under AS 43.82.410 of
5 the commissioner's preliminary findings and determination under AS 43.82.400.
6 Nothing in this subsection

7 (1) makes a record or file of the Department of Revenue, the
8 Department of Natural Resources, or the Department of Law a public record that
9 otherwise would not be a public record under AS 09.25.100 - 09.25.220;

10 (2) affects the confidentiality provisions of (a) - (e) of this section; or

11 (3) abridges a privilege recognized under the laws of this state, whether
12 at common law or by statute or by court rule.

13 Article 5. Contract Review, Approval, and Termination.

14 Sec. 43.82.400. Preliminary findings and determination regarding the
15 contract. (a) If the commissioner develops a proposed contract under AS 43.82.200 -
16 43.82.270, the commissioner shall

17 (1) make preliminary findings and a determination that the proposed
18 contract terms are in the long-term fiscal interests of the state and further the purposes
19 of this chapter; and

20 (2) prepare a proposed contract that includes those terms and shall
21 ~~announce that, under AS 43.82.020, the commissioner intends to submit the contract~~
22 ~~to the legislature together with a request from the governor for authority to enter into~~
23 ~~the proposed contract under AS 43.82.435.~~

24 (b) To make the preliminary findings and determination required by (a)(1) of
25 this section, the commissioner shall compare the projected public revenue anticipated
26 from the approved qualified project with the estimated operating and capital costs of
27 the additional state and municipal services anticipated to arise from the construction
28 and operation of the approved qualified project. The commissioner shall address the
29 reasonably foreseeable effects of the proposed contract on the public revenue.

30 (c) In conjunction with the making of preliminary findings and determination
31 required by (a)(1) of this section, the commissioner shall describe the principal factors,

1 including the projected price of gas, projected production rate or volume of gas, and
 2 projected recovery, development, construction, and operating costs, upon which the
 3 determination made under (a)(1) of this section is based. If the commissioner has
 4 previously submitted ~~a contract to the legislature together with a request from the~~
^{A PROPOSED CONTRACT TO THE GOVERNOR,}
 5 ~~governor for authority to enter into the proposed contract under AS 43.82.435 or has~~
 6 ~~entered into a contract under AS 43.82.020 relating to another approved qualified~~
 7 ~~project that is similar to or would compete with the approved qualified project that is~~
 8 ~~the subject of the commissioner's preliminary findings and determination, the~~
 9 commissioner shall describe any material differences between the terms of the existing
^{CURRENTLY PROPOSED}
 10 contract and the ^{PREVIOUSLY} proposed contract.

11 **Sec. 43.82.410. Notice and comment regarding the contract.** The
 12 commissioner shall

13 (1) give reasonable public notice of the preliminary findings and
 14 determination made under AS 43.82.400;

15 (2) make copies of the proposed contract, the commissioner's
 16 preliminary findings and determination, and, to the extent the information is not
 17 required to be kept confidential under AS 43.82.310, the supporting financial,
 18 technical, and market data, including the work papers, analyses, and recommendations
 19 of any independent contractors used under AS 43.82.240 available to the public and
 20 to

21 (A) the presiding officer of each house of the legislature;

22 (B) the chairs of the finance and resources committees of the
 23 legislature; and

24 (C) the chairs of the special committees on oil and gas, if any,
 25 of the legislature;

26 (3) offer to appear before the Legislative Budget and Audit Committee
 27 to provide the committee a review of the commissioner's preliminary findings and
 28 determination, the proposed contract, and the supporting financial, technical, and
 29 market data; if the Legislative Budget and Audit Committee accepts the commissioner's
 30 offer, the committee shall give notice of the committee's meeting to the public and all
 31 members of the legislature; if the financial, technical, and market data that is to be

1 provided must be kept confidential under AS 43.82.310, the commissioner may not
2 release the confidential information during a public portion of a committee meeting;
3 and

4 (4) establish a period of at least 30 days for the public and members
5 of the legislature to comment on the proposed contract and the preliminary findings
6 and determination made under AS 43.82.400.

7 **Sec. 43.82.420. Coordination of public and legislative review.** To the extent
8 practicable, the commissioner shall coordinate the public comment opportunity
9 provided under AS 43.82.410(4) with a review by the Legislative Budget and Audit
10 Committee under AS 43.82.410(3).

11 **Sec. 43.82.430. Final findings, determination, and proposed amendments;**
12 **execution of the contract.** (a) Within 30 days after the close of the public comment
13 period under AS 43.82.410(4), the commissioner of revenue shall

14 (1) prepare a summary of the public comments received in response to
15 the proposed contract and the preliminary findings and determination;

16 (2) after consultation with the commissioner of natural resources, if
17 appropriate, and with the pertinent municipal advisory group established under
18 AS 43.82.510, prepare a list of proposed amendments, if any, to the proposed contract
19 that the commissioner of revenue determines are necessary to respond to public
20 comments;

21 (3) make final findings and a determination as to whether the proposed
22 contract and any proposed amendments prepared under (2) of this subsection meet the
23 requirements and purposes of this chapter.

24 (b) After considering the material described in (a) of this section and securing
25 the agreement of the other parties to the proposed contract regarding any proposed
26 amendments prepared under (a) of this section, if the commissioner determines that the
27 contract is in the long-term fiscal interests of the state, the commissioner shall ~~under~~
28 SUBMIT THE CONTRACT TO THE GOVERNOR ~~AS 43.82.435, submit the contract to the legislature, together with a request from the~~
29 ~~governor for authorization to execute the contract.~~

30 (c) The commissioner's final findings and determination under (a) of this
31 section ~~and decision regarding whether to execute the contract under (b) of this section~~

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are final agency decisions under this chapter.

~~Sec. 43.82.435. Legislative authorization. The commissioner may not execute a contract developed under this chapter and a contract developed under this chapter is not binding upon or enforceable against the state or other parties to the contract unless the commissioner is authorized to execute the contract by law. The state and the other parties to the contract may execute the contract within 60 days after the effective date of the law authorizing the contract.~~

THE GOVERNOR MAY TRANSMIT A

~~Sec. 43.82.440. Judicial review. A person may not bring an action challenging the constitutionality of a law authorizing a contract enacted under AS 43.82.435 or the enforceability of a contract executed under a law authorizing a contract enacted under AS 43.82.435 unless the action is commenced within 120 days after the date that the contract was executed by the state and the other parties to the contract.~~

~~Sec. 43.82.445. Administrative termination of a contract. (a) The commissioner shall include terms in a contract developed under AS 43.82.020 that provide for administrative termination of a party's rights under the procedures and conditions of this section, if the party has the procedures and conditions set out in this section are met and the party has~~

- (1) ceased to meet the requirements of AS 43.82.110 as a qualified sponsor or qualified sponsor group;
- (2) intentionally or fraudulently misrepresented, in whole or in part, material facts or circumstances upon which the contract was made;
- (3) failed to comply with a condition or material term of the contract or a provision of this chapter; or
- (4) failed to comply with the approved qualified project plan or any updated project plan.

(b) Before administrative termination of a contract under this section, the commissioner shall give notice to the parties of the commissioner's intent to terminate the contract and an opportunity to be heard. The commissioner may also provide the parties an opportunity to cure any deficiency that is the basis for the termination if the commissioner determines that curing the deficiency is appropriate under the circumstances.

(c) Notwithstanding (a) and (b) of this section, the commissioner may not

FOR THE PURPOSE OF EXECUTING THE CONTRACT.

1 administratively terminate a contract after the party has committed full project funding
2 except as provided in (e) of this section.

3 (d) A party to a contract who is affected by the commissioner's action to
4 terminate under (a) of this section may file an appeal with the superior court under the
5 Alaska Rules of Appellate Procedure.

6 (e) The commissioner may provide terms and conditions in a contract ^{DEVELOPED} ~~entered~~
7 ~~into~~ under AS 43.82.020 upon which a party's rights under the contract may be
8 administratively terminated after the party commits full project funding.

9 **Article 6. Municipal Participation.**

10 **Sec. 43.82.500. Obligation to share payments with municipalities.** If the
11 commissioner ^{DEVELOPS} ~~executes~~ a contract under AS 43.82.020 that includes terms that exempt
12 a party to the contract, and the property, gas, products, and activities associated with
13 the approved qualified project that is subject to the contract, from a municipal tax or
14 assessment in accordance with AS 29.45.810 or AS 29.46.010(b), or AS 43.82.200 and
15 43.82.210, the commissioner shall ^{INCLUDE A TERM IN} ~~require as a condition of~~ the contract that the party
16 pay a portion of the periodic payments due under the contract to the ^{REVENUE} affected
17 municipality.

18 ^{INSERT (A): (SEE FOLLOWING PAGE)}

19 **Sec. 43.82.510. Municipal advisory group.** (a) If the commissioner approves
20 an application and proposed project plan under AS 43.82.140 and decides to develop
21 a contract under AS 43.82.020 and 43.82.200, the commissioner shall notify each ^{REVENUE}
22 affected municipality ^{and ECONOMICALLY AFFECTED MUNICIPALITY} ~~and~~ ^{A MUNICIPALITY}

23 (b) The mayor of each of the affected municipalities notified by the
24 commissioner under (a) of this section may appoint one representative to a municipal
25 advisory group in relation to the application.

26 (c) Each municipal advisory group serves until a final action is taken on the
27 application for which the group was appointed.

28 (d) Each municipal advisory group shall elect a chair.

29 **Sec. 43.82.520. Duties of the commissioner of revenue in relation to**
30 **municipal participation.** (a) The commissioner shall meet with each municipal
31 advisory group periodically to report on the development of the contract provisions that
affect the municipalities.

INSERT A:

New:

Sec. 43.82.505. Payments to economically affected municipalities. If the commissioner executes a contract under AS 43.82.020 that will produce one or more economically affected municipalities, the commissioner shall include a term in the contract that provides for a portion of the periodic payments to the economically affected municipalities under the principles in AS 43.82.520.

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(b) In developing a contract under AS 43.82.200 - 43.82.270, the commissioner shall ensure that each ^{REVENUE AND ECONOMICALLY AFFECTED MUNICIPALITY} affected municipality receives a fair and reasonable share of the payments provided under AS 43.82.210 in accordance with the following principles:

to economically affected municipalities

(1) the share of the payments to ^{REVENUE AFFECTED} municipalities should be ^{given priority over payments} determined with due regard to the anticipated size of the tax base that the contract would exempt from municipal taxation ^{by REVENUE AFFECTED MUNICIPALITIES;}

(2) the share of the payments to municipalities should be determined with due regard to the anticipated economic and social burdens that would be imposed on the municipality by construction and operation of the project;

(3) the respective shares of the total payments to the state and to municipalities should be fixed in a manner to ensure that their respective interests are aligned;

(4) to the extent practicable, the periodic amounts paid to each of the ~~affected~~ municipalities should be stable and predictable; and

(5) to the extent practicable, the provisions for sharing payments with municipalities should be consistent with the principles established in AS 43.82.210(b).

(c) In establishing the municipal shares under (b) of this section, the commissioner shall consult with the pertinent municipal advisory group.

Article 7. Miscellaneous Provisions.

Sec. 43.82.600. Governing law. If a provision of this chapter conflicts with another provision of state or municipal law, the provision of this chapter governs.

Sec. 43.82.610. Regulations. The commissioner of revenue, the commissioner of natural resources, and the commissioner of labor may adopt regulations to carry out their respective duties under this chapter.

Sec. 43.82.620. Procedures for collection of amounts due; security. (a) The commissioner may adopt procedures for the collection of amounts due the state under a contract ^{DEVELOPED} ~~entered into~~ under AS 43.82.020, including the collection of interest and penalties.

(b) The commissioner may require a party to a ^{DEVELOPED} contract under AS 43.82.020 to provide security sufficient to guarantee amounts due under the contract.

Sec. 43.82.630. Reports and audits. The commissioner may require periodic

1 reports from and may at reasonable intervals conduct audits and inspect the books of
 2 a party that has entered into a contract^{DEVELOPED} under AS 43.82.020 to ensure compliance with
 3 the provisions of this chapter and the regulations adopted under this chapter and of the
 4 terms of the contract.

5 Sec. 43.82.640. Annual report of the commissioner of labor. On an annual
 6 basis, the commissioner of labor shall prepare and present to the legislature a
 7 comprehensive report on each party to a contract with the state^{DEVELOPED} under AS 43.82.020,
 8 and its contractors, regarding the state residency of the employees working in this state
 9 on the approved qualified project that is subject to the contract. The commissioner of
 10 labor shall use state databases, including data from the quarterly reports by a party to
 11 the contract^{DEVELOPED} under AS 43.82.020 and its contractors for unemployment insurance
 12 purposes, to determine state residency of employees regarding compliance with
 13 AS 43.82.230.

14 Article 8. General Provisions.

15 Sec. 43.82.900. Definitions. In this chapter, unless the context requires
 16 otherwise,

17 (1) "affected municipality" means a municipality for which it is reliably
 18 ~~expected by the commissioner that, after the commencement of activities under~~
 19 ~~AS 43.82.200, a contract entered into under AS 43.82.020 will, under AS 43.82.210,~~
 20 ~~affect taxes that otherwise would be imposed by that municipality;~~

21 (2) "commencement of commercial operations" means the start of
 22 regular deliveries of marketable products from an approved qualified project;

23 (3) "cubic foot of gas" means the quantity of gas contained in a volume
 24 of one cubic foot at a standard temperature of 60 degrees Fahrenheit and a standard
 25 absolute pressure of 14.65 pounds per square inch;

26 (4) "economic proximity" means the ^{DISTANCE WITHIN} ~~area to which a party to a contract~~
 27 ^{MAY BE} ~~under AS 43.82.020~~ is willing to design, construct, and operate a gas line to provide
 28 service to a local consumer;

29 (5) "economic rent" means the estimated total gross revenue less
 30 estimated total costs for a qualified project over the term of a contract under
 31 AS 43.82.020, measured in undiscounted nominal dollars; for purposes of this

1 paragraph, "total costs" do not include a rate of return on capital, financing costs, or
2 any payments to governments;

~~INSERT (5): (SEE FOLLOWING PAGE)~~

3 (7)(6) "full project funding" means full approval by a party to a contract
4 under AS 43.82.020 for the expenditure of the capital necessary for construction and
5 operation of the approved qualified project that is subject to the contract;

6 (7) "gas" has the meaning given in AS 43.55.900;

7 (8) "group" means two or more persons;

8 (9) "lease or property" has the meaning given in AS 43.55.900;

9 (10) "periodic payment" means payment made in lieu of one or more
10 other taxes under a contract under AS 43.82.020;

~~INSERT (11): (SEE FOLLOWING PAGE)~~

NOT BEING MARKETED DUE TO

11 (11) "stranded gas" means gas that is ~~uneconomic or uncompetitive to~~

PREVAILING COST OR PRICE CONDITIONS

12 develop as determined by the commissioner for a particular project;

AN ECONOMIC ANALYSIS BY

13 (12) ~~"uneconomic or uncompetitive" means gas that is not being~~
14 ~~marketed due to prevailing cost or price conditions as determined by an economic~~
15 ~~analysis by the commissioner.~~

16 Sec. 43.82.990. Short title. This chapter may be cited as the Alaska Stranded
17 Gas Development Act.

18 * Sec. 4. AS 29.10.200 is amended by adding new paragraphs to read:

19 (54) AS 29.45.810 (exemption from municipal taxation);

20 (55) AS 29.46.010(b) (exemption from municipal assessment).

21 * Sec. 5. AS 29.45 is amended by adding a new section to read:

22 Sec. 29.45.810. Exemption from municipal taxation. (a) A party to a
23 approved by the legislature as a result of submission of a proposed contract developed under AS 43.82
24 contract ~~with the Commissioner of revenue under AS 43.82.020~~, and the property, gas,
25 products, and activities associated with the approved qualified project that is subject
26 to the contract, are exempt, as specified in the contract, from all taxes identified in the
27 contract that would be levied and collected by a municipality under state law as a
28 consequence of the participation by the party in the approved qualified project.

29 (b) This section applies to home rule and general law municipalities.

30 * Sec. 6. AS 29.46.010 is amended by adding a new subsection to read:

31 (b) Notwithstanding (a) of this section, a party to a contract with the
approved by the legislature as a result of submission of a proposed contract developed under AS 43.82
~~commissioner of revenue under AS 43.82.020~~ is exempt, as specified in the contract,

INSERT B:

New:

(6) "economically affected municipality" means a municipality the commissioner of revenue determines will be reasonably required to provide additional public services under the terms proposed in an application approved under AS 43.82.140(a); the commissioner may consider historical data from construction of the Trans Alaska Pipeline System, and information submitted by a municipality in making the determination;

INSERT C:

New:

(11) "revenue affected municipality" means a municipality for which it is reliably expected by the commissioner of revenue that, after the commencement of activities under AS 43.82.200, a contract entered into under AS 43.82.020 will affect taxes, under AS 43.82.210, that otherwise would be imposed by that municipality;

1 from assessment under this chapter against real property associated with the approved
2 qualified project that is subject to the contract.

3 * Sec. 7. AS 36.30.850(b) is amended by adding a new paragraph to read:

4 (38) contracts between the commissioner of revenue and an independent
5 contractor under AS 43.82.240.

6 * Sec. 8. AS 43.20.072 is amended by adding a new subsection to read:

7 (h) A taxpayer that has signed a contract ^{approved by the legislature as a result of} ~~under AS 43.82.020 with the~~
8 ~~commissioner~~ providing for payments in lieu of the tax under this chapter and that has
9 nexus with the state solely as the result of the taxpayer's participation in the approved
10 qualified project that is subject to the contract or would not, but for such participation,
11 be engaged in the production of oil or gas from a lease or property in this state or
12 engaged in the transportation of oil or gas by pipeline in this state, is not required to
13 file a return under this section unless required to do so by the contract.

14 * Sec. 9. AS 43.20.073 is amended by adding a new subsection to read:

15 (h) A corporation that has signed a contract ^{approved by the legislature as a result of submission} ~~with the commissioner under~~
16 ~~AS 43.82.020~~ providing for payments in lieu of the tax under this chapter and that has
17 nexus with the state solely as the result of the corporation's participation in the
18 approved qualified project that is subject to the contract is not required to file a return
19 under this section unless required to do so by the contract.

20 * Sec. 10. SEVERABILITY. Under AS 01.10.030, if any provision of this Act, or the
21 application of a provision of this Act to any person or circumstance, is held invalid, the
22 remainder of this Act and the application to other persons or circumstances is not affected.

23 * Sec. 11. This Act takes effect immediately under AS 01.10.070(c).

CS FOR HOUSE BILL NO. 393(O&G)

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWENTIETH LEGISLATURE - SECOND SESSION

BY THE HOUSE SPECIAL COMMITTEE ON OIL AND GAS

**Offered:
Referred:**

Sponsor(s): HOUSE RULES COMMITTEE BY REQUEST OF THE GOVERNOR

A BILL

FOR AN ACT ENTITLED

1 "An Act relating to contracts with the state establishing payments in lieu of
2 other taxes by a qualified sponsor or qualified sponsor group for projects to
3 develop stranded gas resources in the state; providing for the inclusion in the
4 contracts of terms making certain adjustments regarding royalty value and the
5 timing and notice of the state's right to take royalty in kind or in value from
6 projects to develop stranded gas resources in the state; relating to the effect of
7 the contracts on municipal taxation; and providing for an effective date."

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

9 * **Section 1. FINDINGS.** The legislature finds that

10 (1) a vast quantity of gas in Alaska is stranded from commercial development
11 because of the cost associated with providing access to markets for that gas; on the North
12 Slope alone, between the Colville and Canning Rivers, approximately 35 trillion cubic feet of
13 discovered gas resources are stranded in this way;

1 (2) because of the high cost of providing access to markets for North Slope
2 gas, exploration efforts there have historically focused on oil; if the infrastructure needed to
3 provide market access for North Slope gas were economically available, it is possible that new
4 gas exploration efforts would be initiated that could lead to the discovery and development
5 of significantly greater gas resources than have been discovered so far;

6 (3) maintaining production operations, whether for oil, gas, or both, enhances
7 the opportunities for oil and gas exploration and development on the North Slope;

8 (4) large areas of the state, encompassing a number of geologic provinces and
9 basins, do not have oil and gas production and still remain largely unexplored for oil and gas;
10 exploration for gas in some of these areas might be facilitated if infrastructure were
11 economically available to provide access for the gas to markets;

12 (5) it is unlikely that markets will develop within the state that would need
13 more than a relatively small proportion of the volume of stranded gas already discovered on
14 the North Slope; therefore, the primary need for gas infrastructure for at least the next decade
15 will be to provide access to markets outside the state;

16 (6) currently the principal mode anticipated for stranded North Slope gas to
17 access markets outside the state is a gas pipeline to an ice-free Alaska port where the gas
18 would be turned into liquefied natural gas and exported using specially designed marine
19 tankers;

20 (7) the size of the capital expenditure needed to get North Slope gas to market
21 by way of a liquefied natural gas project requires long-term contracts for gas on the order of
22 14,000,000 metric tons a year of liquefied natural gas; to be successful, a North Slope
23 liquefied natural gas project needs to reach this full annual volume in not more than six years
24 from the commencement of commercial operations;

25 (8) for a North Slope liquefied natural gas project to become economically
26 viable and competitive, the estimated costs of constructing such a project must be reduced
27 significantly; reducing the financial risk associated with the project would also improve the
28 project's chances of becoming economically viable and competitive;

29 (9) the state has contracted an extensive financial analysis of the
30 commercialization of North Slope gas; this analysis, performed by a recognized expert in
31 petroleum economics, Dr. Pedro Van Meurs, indicates that changes in the local, state, and

1 federal tax structure may be necessary to make commercialization of North Slope gas
2 resources economically viable;

3 (10) although the state can do little now to reduce expected construction costs,
4 the state can reduce some of the financial risk associated with a North Slope liquefied natural
5 gas project or other stranded gas development projects by specifying with as much certainty
6 as possible the state taxes and royalties that would apply to such a project throughout its life;

7 (11) the state could improve the economics and competitiveness of a stranded
8 gas development project by adjusting the timing of the state's receipt of its share of the
9 economic rent of the project; the present fiscal regime is front-end loaded, which means that
10 the state and local governments take a significant part of their shares of the economic rent of
11 a project early in the life of the project, even before the project starts to generate an income
12 stream; the state and local governments could improve the economics of a stranded gas
13 development project by taking more of their shares of the economic rent of a project later in
14 the life of the project;

15 (12) the state's present fiscal regime, as it would apply to a stranded gas
16 development project, is also regressive to the extent that it is insensitive to changes in the
17 profitability of the project, so that, in times of low profitability, the state and local
18 governments would take an excessive amount of the economic rent of the project, and, in
19 times of high profitability, they would take an inadequate amount of the economic rent of a
20 project; the state and local governments could improve the economics of a stranded gas
21 development project by making the overall fiscal system less regressive and more responsive
22 to the relative profitability of a project;

23 (13) establishing a fiscal regime applicable to a specific stranded gas
24 development project under a long-term contract with the state, where payments would be made
25 in lieu of other taxes, would

26 (A) enable the state to create a fiscal regime that is less front-end
27 loaded and less regressive for a project without rewriting the tax laws for gas already
28 being developed and produced;

29 (B) enable the state to customize the timing and burden of its fiscal
30 regime to fit the economic circumstances of a particular stranded gas development
31 project;

1 (C) reduce the financial risk of the project by reducing uncertainty
2 about the fiscal terms applicable to the project;

3 (14) authorizing the state, through the executive branch, to develop a contract
4 establishing the fiscal regime that would apply to a qualified stranded gas development project
5 if it were built will result in contracts that are an exercise of the legislature's taxing power
6 that is consistent with art. IX, sec. 1, Constitution of the State of Alaska;

7 (15) authorizing the state, through the executive branch, to develop a contract
8 establishing a fiscal regime that reduces the risks and improves the economics of a stranded
9 gas development project will result in contracts that are an exercise of the legislature's power
10 under art. IX, sec. 4, Constitution of the State of Alaska, to create tax exemptions by general
11 law and is consistent with the legislature's responsibility under art. VIII, sec. 2, of the
12 Constitution of the State of Alaska, to provide for the utilization, development, and
13 conservation of all natural resources belonging to the state for the maximum benefit of its
14 people;

15 (16) stranded gas development projects are a matter of statewide interest
16 because they are an important potential source of revenue to the state, job opportunities for
17 the people of the state, and gas for use by communities throughout the state;

18 (17) to the extent permissible under the Constitution of the United States and
19 the Constitution of the State of Alaska, the legislature intends that state residents and
20 businesses share in and not be excluded from the opportunities stemming from the
21 development of the state's gas resources; and

22 (18) good faith efforts by qualified sponsors, qualified sponsor groups, and
23 contractors of qualified sponsors and qualified sponsor groups that enter into a contract with
24 the state developed under this Act to undertake voluntary actions to provide employment
25 opportunities for Alaska residents and opportunities for Alaska businesses are in the long-term
26 interests of the state.

27 * Sec. 2. INTENT. (a) The legislature intends that contracts developed under this Act
28 provide stable fiscal terms that encourage the development of stranded gas projects that
29 otherwise might not be developed under the prevailing tax and royalty regime. The legislature
30 further intends that any fiscal term agreed to in a contract developed under this Act in lieu of
31 other taxes will fully and fairly compensate the people of the state for the severance,

1 production, and sale of natural resources belonging to the people of the state, for the negative
 2 effects and the risks that a project may impose on the state, and for the value of the
 3 infrastructure that may be provided by the state to a project, including all the advantages of
 4 civilized society that may be provided by the state to the sponsors of a project.

5 (b) The legislature intends that, in order to provide the stable fiscal terms that will
 6 encourage development of stranded gas projects, any contract developed under this Act will
 7 express whether the state intends to be bound to the full extent allowed by the Constitution
 8 of the State of Alaska; however, the legislature further intends that the terms of a contract
 9 developed under this Act will not be binding on or enforceable against the state or the other
 10 parties to the contract unless the governor is authorized to execute the contract by the
 11 legislature.

12 (c) The legislature intends that a qualified sponsor or qualified sponsor group or a
 13 contractor of a qualified sponsor or qualified sponsor group that enters into a contract
 14 developed under this Act relating to a stranded gas project will, with respect to the project,
 15 voluntarily

16 (1) undertake reasonable measures to hire Alaska residents to perform work
 17 that they are qualified to perform on a competitive basis;

18 (2) assist Alaska residents who are capable of being qualified and who make
 19 a good faith effort to obtain the requisite training required for employment; and

20 (3) use reasonable efforts to contract with qualified Alaska businesses when
 21 their performance is competitive with regard to price, quality, and availability.

22 * Sec. 3. AS 43 is amended by adding a new chapter to read:

23 **Chapter 82. Development of Alaska Stranded Gas.**

24 **Article 1. Contracts for Payments in Lieu of Other Taxes.**

25 **Sec. 43.82.010. Purpose.** The purpose of this chapter is to

26 (1) encourage new investment to develop the state's stranded gas
 27 resources by authorizing establishment of fiscal terms related to that new investment
 28 without significantly altering tax and royalty methodologies and rates on existing oil
 29 and gas infrastructure and production;

30 (2) allow the fiscal terms applicable to a qualified sponsor or the
 31 members of a qualified sponsor group, with respect to a qualified project, to be tailored

1 to the particular economic conditions of the project and to establish those fiscal terms
 2 in advance with as much certainty as the Constitution of the State of Alaska allows;
 3 and

4 (3) maximize the benefit to the people of the state of the development
 5 of the state's stranded gas resources.

6 **Sec. 43.82.020. Contracts for payments in lieu of other taxes and for**
 7 **royalty adjustments.** The commissioner may, under this chapter, negotiate terms for
 8 inclusion in a proposed contract with a qualified sponsor or qualified sponsor group
 9 providing for

10 (1) periodic payment in lieu of one or more taxes that otherwise would
 11 be imposed by the state or a municipality on the qualified sponsor or members of the
 12 qualified sponsor group as a consequence of the sponsor's or group's participation in
 13 an approved qualified project under this chapter; and

14 (2) certain adjustments regarding royalty under AS 43.82.220.

15 **Article 2. Qualification and Application Procedures.**

16 **Sec. 43.82.100. Qualified project.** Based on information available to the
 17 commissioner, the commissioner may determine that a proposal for new investment is
 18 a qualified project under this chapter only if the project

19 (1) would produce at least 500,000,000,000 cubic feet of stranded gas
 20 within 20 years from the commencement of commercial operations; and

21 (2) is capable, subject to applicable commercial regulation and technical
 22 and economic considerations, of making gas available to meet the reasonably
 23 foreseeable demand in this state for gas within the economic proximity of the project.

24 **Sec. 43.82.110. Qualified sponsor or qualified sponsor group.** The
 25 commissioner may determine that a person or group is a qualified sponsor or qualified
 26 sponsor group if the person or a member of the group

27 (1) intends to own an equity interest in a qualified project or to commit
 28 gas that it owns to a qualified project; and

29 (2) meets one or more of the following criteria:

30 (A) owns a working interest in at least 10 percent of the
 31 stranded gas proposed to be developed by a qualified project;

1 (B) has the right to purchase at least 10 percent of the stranded
2 gas proposed to be developed by a qualified project;

3 (C) has the right to acquire, control, or market at least 10
4 percent of the stranded gas proposed to be developed by a qualified project;

5 (D) holds the permits that the department determines are
6 essential to construct and operate a qualified project;

7 (E) has a net worth equal to at least 33 percent of the estimated
8 cost of constructing a qualified project;

9 (F) has an unused line of credit equal to at least 25 percent of
10 the estimated cost of constructing a qualified project.

11 **Sec. 43.82.120. Applications.** (a) A qualified sponsor or qualified sponsor
12 group may submit to the department an application for development of a contract
13 under AS 43.82.020 evidencing that the requirements of AS 43.82.100 and 43.82.110
14 are met. The application must be submitted in the manner and form and contain the
15 information required by the department.

16 (b) Along with an application submitted under (a) of this section, an applicant
17 shall submit a proposed project plan for a qualified project that contains the following
18 information based on the information known to the applicant at the time of
19 application:

20 (1) a description of the work accomplished as of the date of the
21 application to further the project;

22 (2) a schedule of proposed development activity leading to the
23 projected commencement of commercial operations of the project;

24 (3) a description of the development activity proposed to be
25 accomplished under the proposed project plan;

26 (4) a description of each lease or property that the applicant believes
27 to contain the stranded gas that would be developed if the project was built;

28 (5) a description of the methods and terms under which the applicant
29 is prepared to make gas available to meet the reasonably foreseeable demand in this
30 state for gas within the economic proximity of the project during the term of the
31 proposed contract, including proposed pipeline transportation and expansion rules if

1 pipeline transportation is a part of the proposed project;

2 (6) a detailed description of options to mitigate the increased demand
3 for public services and other negative effects caused by the project;

4 (7) a detailed description of options for the safe management and
5 operation of the project once it is constructed;

6 (8) other information that the commissioner of revenue, in consultation
7 with the commissioner of natural resources, considers necessary to make a
8 determination that

9 (A) the work accomplished as of the date of application, the
10 schedule of proposed development activity, and the development activity
11 proposed to be accomplished under the proposed project plan reflect a proposal
12 for diligent development on the part of the applicant;

13 (B) the proposed project plan does not materially conflict with
14 the obligations of a lessee to the state under a lease or under a pool, unit, or
15 other agreement with the state; and

16 (C) the proposed project plan describes satisfactory methods and
17 terms for accommodating reasonably foreseeable demand for gas in this state
18 within the economic proximity of the project during the term of the proposed
19 contract.

20 (c) The requirements of (b) of this section do not diminish the obligations of
21 a qualified sponsor or member of a qualified sponsor group to the state or restrict the
22 authority of the commissioner of revenue or the commissioner of natural resources
23 under any other law or agreement relating to a plan of development for a lease, pool,
24 or unit.

25 **Sec. 43.82.130. Qualified project plan.** A proposed project plan submitted
26 under AS 43.82.120 may be approved as a qualified project plan under AS 43.82.140
27 if the proposed project plan

28 (1) reflects a proposal for diligent development of the project on the
29 part of the applicant;

30 (2) does not materially conflict with the obligations of a lessee to the
31 state under a lease or under a pool, unit, or other agreement with the state; and

1 (3) describes satisfactory methods and terms for making gas available
 2 to meet the reasonably foreseeable demand in this state for gas within the economic
 3 proximity of the project during the term of the proposed contract.

4 **Sec. 43.82.140. Review of applications and determination of qualifications.**

5 (a) The commissioner shall review an application submitted under AS 43.82.120 to
 6 determine whether the provisions of AS 43.82.100 concerning a qualified project and
 7 AS 43.82.110 concerning a qualified sponsor or qualified sponsor group have been
 8 met. The commissioner may approve an application only if those provisions have been
 9 met.

10 (b) If the commissioner approves an application under (a) of this section, the
 11 commissioner and the commissioner of natural resources shall review the proposed
 12 project plan submitted with the application to determine whether the provisions of
 13 AS 43.82.130 have been met. The commissioner may approve the proposed project
 14 plan as a qualified project plan only if the commissioner of natural resources concurs
 15 in the approval.

16 (c) The commissioner shall send to the applicant written notice of and the
 17 reasons for the determinations made under (a) and (b) of this section.

18 **Sec. 43.82.150. Actions challenging determinations on applications.** (a)
 19 Only an applicant under AS 43.82.120 who is aggrieved by a determination of the
 20 commissioner of revenue or the commissioner of natural resources under AS 43.82.140
 21 may seek judicial review of the determination.

22 (b) The only grounds for judicial review of a determination made under
 23 AS 43.82.140 are

24 (1) failure to follow the qualification and application procedures set out
 25 in AS 43.82.100 - 43.82.180; or

26 (2) abuse of discretion that is so capricious, arbitrary, or confiscatory
 27 as to constitute a denial of due process.

28 **Sec. 43.82.160. Multiple applications for similar or competing qualified**
 29 **projects.** Nothing in this chapter prohibits different qualified sponsors or different
 30 qualified sponsor groups from submitting applications under AS 43.82.120 relating to
 31 similar or competing qualified projects or prohibits the commissioner of revenue or the

1 commissioner of natural resources from reviewing and approving applications and
 2 proposed project plans under AS 43.82.140 relating to similar or competing qualified
 3 projects.

4 **Sec. 43.82.170. Application deadline.** The commissioner of revenue or the
 5 commissioner of natural resources may not act on an application for a contract
 6 submitted under AS 43.82.120 unless the application is received by the Department of
 7 Revenue no later than June 30, 2001.

8 **Sec. 43.82.180. Withdrawal of applications.** Subject to the terms of a
 9 reimbursement agreement under AS 43.82.240 or other agreement with the Department
 10 of Revenue, the Department of Natural Resources, the commissioner of revenue, or the
 11 commissioner of natural resources affecting the withdrawal of an application, a
 12 qualified sponsor or qualified sponsor group may withdraw an application submitted
 13 under AS 43.82.120 at any time before the date that the commissioner of revenue
 14 submits a contract to the governor under AS 43.82.430 without further obligation under
 15 this chapter.

16 **Article 3. Contract Development.**

17 **Sec. 43.82.200. Contract development.** If the commissioner approves an
 18 application and proposed project plan under AS 43.82.140, the commissioner may
 19 develop a contract that may include

20 (1) terms concerning periodic payment in lieu of one or more taxes as
 21 provided in AS 43.82.210;

22 (2) terms developed under AS 43.82.220 relating to

23 (A) timing and notice of the state's right to take royalty in kind
 24 or in value; and

25 (B) royalty value;

26 (3) terms regarding the hiring of Alaska residents and contracting with
 27 Alaska businesses under AS 43.82.230;

28 (4) terms regarding periodic payment to, or an equity or other interest
 29 in a project for, municipalities under AS 43.82.500;

30 (5) terms regarding arbitration or alternative dispute resolution
 31 procedures;

1 (6) terms and conditions for administrative termination of a contract
2 under AS 43.82.445; and

3 (7) other terms or conditions that are

4 (A) necessary to further the purposes of this chapter; or

5 (B) in the best interests of the state.

6 **Sec. 43.82.210. Contract terms relating to payment in lieu of one or more**
7 **taxes.** (a) If the commissioner approves an application and proposed project plan
8 under AS 43.82.140, the commissioner may develop proposed terms for inclusion in
9 a contract under AS 43.82.020 for periodic payment in lieu of one or more of the
10 following taxes that otherwise would be imposed by the state or a municipality on the
11 qualified sponsor or member of a qualified sponsor group as a consequence of
12 participating in an approved qualified project:

13 (1) oil and gas production taxes and oil surcharges under AS 43.55;

14 (2) oil and gas exploration, production, and pipeline transportation
15 property taxes under AS 43.56;

16 (3) oil and gas conservation tax under AS 43.57;

17 (4) Alaska net income tax under AS 43.20;

18 (5) municipal sales and use tax under AS 29.45.650 - 29.45.710;

19 (6) municipal property tax under AS 29.45.010 - 29.45.250 or
20 29.45.550 - 29.45.600;

21 (7) municipal special assessments under AS 29.46;

22 (8) a comparable tax or levy imposed by the state or a municipality
23 after the effective date of this section;

24 (9) other state or municipal taxes or categories of taxes identified by
25 the commissioner.

26 (b) If the commissioner chooses to develop proposed terms under (a) of this
27 section, the commissioner shall, if practicable and consistent with the long-term fiscal
28 interests of the state, develop the terms in a manner that attempts to balance the
29 following principles:

30 (1) the terms should, in conjunction with other factors such as cost
31 reduction of the project, cost overrun risk reduction of the project, increased fiscal

1 certainty, and successful marketing, improve the competitiveness of the approved
2 qualified project in relation to other development efforts aimed at supplying the same
3 market;

4 (2) the terms should accommodate the interests of the state, affected
5 municipalities, and the project sponsors under a wide range of economic conditions,
6 potential project structures, and marketing arrangements;

7 (3) the state's and affected municipalities' combined share of the
8 economic rent of the approved qualified project under the contract should be relatively
9 progressive; that is, the state's and affected municipalities' combined annual share of
10 the economic rent of the approved qualified project generally should not increase when
11 there are decreases in project profitability, or decrease when there are increases in
12 project profitability;

13 (4) the state's and affected municipalities' combined share of the
14 economic rent of the approved qualified project under the contract should be relatively
15 lower in the earlier years than in the later years of the approved qualified project;

16 (5) the terms should allow the project sponsors to retain a share of the
17 economic rent of the approved qualified project that is sufficient to compensate the
18 sponsors for risks under a range of economic circumstances;

19 (6) the terms should provide the state and affected municipalities with
20 a significant share of the economic rent of the approved qualified project, when
21 discounted to present value, under favorable price and cost conditions;

22 (7) the method for calculating the periodic payment in lieu of certain
23 taxes under the contract should be clear and unambiguous; and

24 (8) while cost calculations for the approved qualified project under the
25 contract should be based on amounts that closely approximate actual costs, agreed-
26 upon formulas reflecting reasonable economic assumptions should be used if possible
27 to promote administrative certainty and efficiency.

28 (c) Except as provided in (b) of this section, the commissioner's discretion
29 under this section in developing proposed terms for a contract under AS 43.82.020 is
30 not limited to consideration of the economic rent of the approved qualified project.

31 **Sec. 43.82.220. Contract terms relating to royalty.** (a) Notwithstanding any

1 contrary provisions of AS 38, the commissioner of natural resources, with the
2 concurrence of the commissioner of revenue and the affected parties holding a state
3 lease or unit agreement, may develop proposed terms for inclusion in a contract under
4 AS 43.82.020 that modify the timing and notice provisions of the applicable oil and
5 gas leases and unit agreements pertaining to the state's rights to receive its royalty on
6 gas in kind or in value if

7 (1) the viability of the approved qualified project depends on long-term
8 gas purchase and sale agreements;

9 (2) certainty over time regarding the quantity of royalty gas that the
10 state may be taking in kind is needed to secure the long-term purchase and sale
11 agreements;

12 (3) the specified period of the state's commitment to take its royalty
13 share in value or in kind does not exceed the term of the purchase and sale
14 agreements; and

15 (4) the modification does not impair the ability of the approved
16 qualified project or the state to meet the reasonably foreseeable demand in this state
17 for gas within economic proximity of the project during the term of the contract
18 developed under AS 43.82.020.

19 (b) Notwithstanding any contrary provisions of AS 38, the commissioner of
20 natural resources, with the concurrence of the commissioner of revenue and the
21 affected parties holding a state lease or unit agreement, may develop proposed terms
22 for inclusion in a contract under AS 43.82.020 that establish a valuation method for
23 the state's royalty share of the gas production from an approved qualified project.

24 (c) The commissioner of revenue shall include any proposed terms relating to
25 royalty developed in accordance with this section in the proposed contract under
26 AS 43.82.400.

27 (d) Nothing in this chapter permits modification of the state's rights that relate
28 to timing, notice, and rights to receive oil royalty in kind or in value under oil and gas
29 leases or unit agreements.

30 **Sec. 43.82.230. Contract terms relating to hiring of Alaska residents and**
31 **contracting with Alaska businesses.** (a) The commissioner shall include in a

1 contract under AS 43.82.020 a term requiring the qualified sponsor or qualified
2 sponsor group and contractors of the qualified sponsor or qualified sponsor group to
3 comply with all valid federal, state, and municipal laws relating to hiring Alaska
4 residents and contracting with Alaska businesses to work in the state on the approved
5 qualified project and not to discriminate against Alaska residents or Alaska businesses.
6 Within the constraints of law, the commissioner shall also include in a contract under
7 AS 43.82.020 a term that requires the qualified sponsor or qualified sponsor group and
8 contractors of the qualified sponsor or qualified sponsor group to employ Alaska
9 residents and to contract with Alaska businesses to work in the state on the approved
10 qualified project to the extent the residents and businesses are available, competitively
11 priced, and qualified.

12 (b) The commissioner shall include in a contract under AS 43.82.020 a term
13 requiring the qualified sponsor or qualified sponsor group and contractors of the
14 qualified sponsor or qualified sponsor group to

15 (1) advertise for available positions in newspapers in the location where
16 the work is to be performed and in other publications distributed throughout the state,
17 including in rural areas; and

18 (2) use Alaska job service organizations located throughout the state
19 and not just in the location where the work is to be performed in order to notify
20 Alaskans of work opportunities on the approved qualified project.

21 (c) Subject to the voluntary agreement of the qualified sponsor, the
22 commissioner may include a term in the contract providing for incentives to encourage
23 training and hiring of Alaska residents.

24 (d) This section does not create or abridge individual rights and does not create
25 a private right of action for any person.

26 (e) For purposes of this section,

27 (1) "Alaska business" means a firm or contractor that

28 (A) has held an Alaska business license for the preceding 12
29 months;

30 (B) maintains, and has maintained for the preceding 12 months,
31 a place of business in the state that competently and professionally deals in

1 supplies, services, or construction of the nature required for the approved
2 qualified project; and

3 (C) is

4 (i) a sole proprietorship and the proprietor is an Alaska
5 resident;

6 (ii) a partnership and more than 50 percent of the
7 partnership interest is held by Alaska residents;

8 (iii) a limited liability company and more than 50
9 percent of the membership interest is held by Alaska residents;

10 (iv) a corporation that has been incorporated in the state
11 or is authorized to do business in the state; or

12 (v) a joint venture and a majority of the venturers
13 qualify as Alaska businesses under this paragraph;

14 (2) "Alaska job service organizations" means those offices maintained
15 by the state and recommended by the Department of Labor whose functions are to aid
16 the unemployed or underemployed in finding employment;

17 (j) "Alaska resident" means a natural person who

18 (A) receives a permanent fund dividend under AS 43.23; or

19 (B) has a current Alaska

20 (i) voter registration card; and

21 (ii) resident fishing, hunting, or trapping license under
22 AS 16;

23 (4) "available," as applied to an Alaska resident or Alaska business,
24 means that the resident or business is available for employment at the time required
25 and is located anywhere in the state, not just in the area of the state where the work
26 is to be performed;

27 (5) "qualified," as applied to an Alaska resident or Alaska business,
28 means that the resident or business possesses the requisite education, training, skills,
29 certification, or experience to perform the work necessary for a particular position or
30 to perform a particular service.

31 **Sec. 43.82.240. Use of an independent contractor. (a) The commissioner**

1 may use an independent contractor to assist in the evaluation of an application or in
 2 the development of contract terms under AS 43.82.200. The commissioner may
 3 condition the development of a contract under AS 43.82.020 on an agreement by the
 4 applicant to reimburse the state for the expenses of an independent contractor under
 5 this section.

6 (b) An independent contractor selected under this section must sign an
 7 agreement regarding confidentiality and disclosures consistent with the determinations
 8 made under AS 43.82.310 before the contractor may review information that is
 9 determined confidential under AS 43.82.310.

10 (c) Selection of an independent contractor under this section is not subject to
 11 AS 36.30 (State Procurement Code).

12 **Sec. 43.82.250. Term of contract; effective date.** The term of a contract
 13 developed under AS 43.82.020 may be for no longer than is necessary to develop the
 14 stranded gas that is subject to the contract; however, the term of the contract may not
 15 exceed 35 years from the commencement of commercial operations of the approved
 16 qualified project.

17 **Sec. 43.82.260. Change of parties to an application or a contract;**
 18 **assignment of interests.** (a) A qualified sponsor or member of a qualified sponsor
 19 group may assign an interest in or add or withdraw a party to an application under
 20 AS 43.82.120 only if the commissioner has

21 (1) made a finding that the assignment, addition, or withdrawal is
 22 consistent with the requirements of AS 43.82.110; and

23 (2) given prior written approval for the assignment, addition, or
 24 withdrawal.

25 (b) A contract developed under this chapter may provide for the assignment
 26 to or withdrawal of a qualified sponsor or member of a qualified sponsor group.

27 (c) Upon being added to an application under this section, a party becomes a
 28 qualified sponsor or a member of a qualified sponsor group, as appropriate, for the
 29 relevant project.

30 (d) The commissioner may not unreasonably withhold approval under (a) of
 31 this section, but may condition the approval in any way reasonably necessary to protect

1 the fiscal interests of the state and to further the purposes of this chapter.

2 (e) For purposes of this section, an assignment includes a transfer of stock or
3 a partnership interest in a manner that changes control of a qualified sponsor or
4 member of a qualified sponsor group.

5 **Sec. 43.82.270. Project plans and work commitments.** A contract under
6 AS 43.82.020 must include the qualified project plan approved under AS 43.82.140
7 and provisions for updating the plan at reasonable intervals until the commencement
8 of commercial operations of the approved qualified project. The commissioner of
9 revenue, in consultation with the commissioner of natural resources, may, as a term
10 in a contract under AS 43.82.020, include work commitments or other obligations in
11 the contract to be accomplished before the commencement of commercial operations
12 of the approved qualified project.

13 **Article 4. Requests for Information; Confidentiality;**
14 **Disclosure of Information.**

15 **Sec. 43.82.300. Requests for information.** The commissioner of revenue or
16 the commissioner of natural resources may request from an applicant information that
17 the respective commissioner determines is necessary to perform the respective
18 commissioner's responsibilities under AS 43.82.140. If the application is approved
19 under AS 43.82.140, the respective commissioner shall require the successful applicant
20 to provide financial, technical, and market information regarding the qualified project
21 that the respective commissioner determines is necessary for the purpose of developing
22 contract terms for the qualified project under AS 43.82.200. If requested information
23 is not provided, the commissioner of revenue may not continue to review the
24 application under AS 43.82.140 or develop the contract under AS 43.82.200 -
25 43.82.270, as applicable.

26 **Sec. 43.82.310. Disclosure of information; confidentiality.** (a) An applicant
27 may request confidential treatment of information that the applicant provides under
28 AS 43.82.300 by clearly identifying the information and the reasons supporting the
29 request for confidential treatment. The commissioner of revenue or the commissioner
30 of natural resources, as appropriate, shall keep the information confidential until the
31 commissioner determines whether the requirements of (b) of this section are met. If

1 the commissioner of revenue or the commissioner of natural resources has not made
2 a determination under (b) of this section within 14 days after receiving a request for
3 confidential treatment, the request is considered denied. If the appropriate
4 commissioner determines that the information does not meet the requirements of (b)
5 of this section or if the commissioner fails to make a determination within 14 days, the
6 commissioner shall return the information and any copies of it at the request of the
7 applicant. If the commissioner of revenue or the commissioner of natural resources,
8 as appropriate, returns information under this subsection, the commissioner shall cease
9 review of the application or cease contract development under AS 43.82.200 -
10 43.82.270, as appropriate, unless the commissioner determines that the returned
11 information is unnecessary to make a determination on the application or to develop
12 contract terms under AS 43.82.200 - 43.82.270.

13 (b) If requested by the applicant, information provided to the commissioner of
14 revenue or the commissioner of natural resources under AS 43.82.300 shall be kept
15 confidential if the commissioner receiving the information determines, upon an
16 adequate showing by the applicant, that the information

17 (1) is a trade secret or other proprietary research, development, or
18 commercial information that the applicant treats as confidential;
19 (2) affects the applicant's competitive position; and
20 (3) has commercial value that may be significantly diminished by
21 public disclosure or that public disclosure is not in the long-term fiscal interests of the
22 state.

23 (c) Information determined to be confidential under (b) of this section is
24 confidential under that subsection only so long as is necessary to protect the
25 competitive position of the applicant, to prevent the significant diminution of the
26 commercial value of the information, or to protect the long-term fiscal interests of the
27 state. The commissioner of revenue or the commissioner of natural resources, as
28 appropriate, may not release information that the commissioner has previously
29 determined to be confidential under (b) of this section without providing the applicant
30 notice and an opportunity to be heard.

31 (d) Notwithstanding the limitation in (c) of this section, the Department of

1 Revenue and the Department of Natural Resources may provide to one another, to the
2 Department of Law, to the legislature, and to the Office of the Governor any
3 information provided under AS 43.82.300 relevant to the implementation of this
4 chapter or to the enforcement of state or federal laws. Information that is exchanged
5 under this subsection that was determined to be confidential under (b) of this section
6 remains confidential except as provided in (c) of this section. The portions of the
7 records and files of the Department of Revenue, the Department of Natural Resources,
8 the Department of Law, the legislature, and the Office of the Governor that reflect,
9 incorporate, or analyze information that is determined to be confidential under (b) of
10 this section are not public records except as provided in (c) of this section.

11 (e) Notwithstanding the limitation in (c) of this section, information that is
12 determined to be confidential under (b) of this section shall be disclosed on request by
13 the commissioner of revenue, the commissioner of natural resources, or the attorney
14 general to a legislator; to the legislative auditor; and, as directed by the chair or vice-
15 chair of the Legislative Budget and Audit Committee, to the director of legislative
16 finance, to the permanent employees of these divisions who are responsible for
17 evaluating a contract under AS 43.82.020, and to agents or contractors of the
18 legislative auditor or the director of legislative finance who are engaged to evaluate
19 a contract under AS 43.82.020. Information that is determined to be confidential under
20 (b) of this section may also be disclosed by the commissioner of revenue or the
21 commissioner of natural resources to an independent contractor under AS 43.82.240
22 or to a municipal advisory group established under AS 43.82.510. Before confidential
23 information is disclosed under this subsection, the person receiving the information
24 must sign an appropriate confidentiality agreement.

25 (f) If the commissioner of revenue chooses to develop a contract under
26 AS 43.82.020, the portions of the records and files of the Department of Revenue, the
27 Department of Natural Resources, the Department of Law, and a municipal advisory
28 group established under AS 43.82.510 that reflect, incorporate, or analyze information
29 that is relevant to the development of the position or strategy of the commissioner of
30 revenue, the commissioner of natural resources, or the attorney general with respect
31 to a particular provision that may be incorporated into the contract are not public

1 records until the commissioner of revenue gives public notice under AS 43.82.410 of
 2 the commissioner's preliminary findings and determination under AS 43.82.400.
 3 Nothing in this subsection

4 (1) makes a record or file of the Department of Revenue, the
 5 Department of Natural Resources, or the Department of Law a public record that
 6 otherwise would not be a public record under AS 09.25.100 - 09.25.220;

7 (2) affects the confidentiality provisions of (a) - (e) of this section; or

8 (3) abridges a privilege recognized under the laws of this state, whether
 9 at common law or by statute or by court rule.

10 **Article 5. Contract Review, Approval, and Termination.**

11 **Sec. 43.82.400. Preliminary findings and determination regarding the**
 12 **contract.** (a) If the commissioner develops a proposed contract under AS 43.82.200 -
 13 43.82.270, the commissioner shall

14 (1) make preliminary findings and a determination that the proposed
 15 contract terms are in the long-term fiscal interests of the state and further the purposes
 16 of this chapter; and

17 (2) prepare a proposed contract that includes those terms and shall
 18 submit the contract to the governor.

19 (b) To make the preliminary findings and determination required by (a)(1) of
 20 this section, the commissioner shall compare the projected public revenue anticipated
 21 from the approved qualified project with the estimated operating and capital costs of
 22 the additional state and municipal services anticipated to arise from the construction
 23 and operation of the approved qualified project. The commissioner shall address the
 24 reasonably foreseeable effects of the proposed contract on the public revenue.

25 (c) In conjunction with the making of preliminary findings and determination
 26 required by (a)(1) of this section, the commissioner shall describe the principal factors,
 27 including the projected price of gas, projected production rate or volume of gas, and
 28 projected recovery, development, construction, and operating costs, upon which the
 29 determination made under (a)(1) of this section is based. If the commissioner has
 30 previously submitted a proposed contract to the governor, the commissioner shall
 31 describe any material differences between the terms of the currently proposed contract

1 and the previously proposed contract.

2 **Sec. 43.82.410. Notice and comment regarding the contract.** The
3 commissioner shall

4 (1) give reasonable public notice of the preliminary findings and
5 determination made under AS 43.82.400;

6 (2) make copies of the proposed contract, the commissioner's
7 preliminary findings and determination, and, to the extent the information is not
8 required to be kept confidential under AS 43.82.310, the supporting financial,
9 technical, and market data, including the work papers, analyses, and recommendations
10 of any independent contractors used under AS 43.82.240 available to the public and
11 to

12 (A) the presiding officer of each house of the legislature;

13 (B) the chairs of the finance and resources committees of the
14 legislature; and

15 (C) the chairs of the special committees on oil and gas, if any,
16 of the legislature;

17 (3) offer to appear before the Legislative Budget and Audit Committee
18 to provide the committee a review of the commissioner's preliminary findings and
19 determination, the proposed contract, and the supporting financial, technical, and
20 market data; if the Legislative Budget and Audit Committee accepts the commissioner's
21 offer, the committee shall give notice of the committee's meeting to the public and all
22 members of the legislature; if the financial, technical, and market data that is to be
23 provided must be kept confidential under AS 43.82.310, the commissioner may not
24 release the confidential information during a public portion of a committee meeting;
25 and

26 (4) establish a period of at least 30 days for the public and members
27 of the legislature to comment on the proposed contract and the preliminary findings
28 and determination made under AS 43.82.400.

29 **Sec. 43.82.420. Coordination of public and legislative review.** To the extent
30 practicable, the commissioner shall coordinate the public comment opportunity
31 provided under AS 43.82.410(4) with a review by the Legislative Budget and Audit

1 Committee under AS 43.82.410(3).

2 **Sec. 43.82.430. Final findings, determination, and proposed amendments;**
3 **execution of the contract.** (a) Within 30 days after the close of the public comment
4 period under AS 43.82.410(4), the commissioner of revenue shall

5 (1) prepare a summary of the public comments received in response to
6 the proposed contract and the preliminary findings and determination;

7 (2) after consultation with the commissioner of natural resources, if
8 appropriate, and with the pertinent municipal advisory group established under
9 AS 43.82.510, prepare a list of proposed amendments, if any, to the proposed contract
10 that the commissioner of revenue determines are necessary to respond to public
11 comments;

12 (3) make final findings and a determination as to whether the proposed
13 contract and any proposed amendments prepared under (2) of this subsection meet the
14 requirements and purposes of this chapter.

15 (b) After considering the material described in (a) of this section and securing
16 the agreement of the other parties to the proposed contract regarding any proposed
17 amendments prepared under (a) of this section, if the commissioner determines that the
18 contract is in the long-term fiscal interests of the state, the commissioner shall submit
19 the contract to the governor.

20 (c) The commissioner's final findings and determination under (a) of this
21 section are final agency decisions under this chapter.

22 **Sec. 43.82.435. Legislative authorization.** The governor may transmit a
23 contract developed under this chapter to the legislature together with a request for
24 authorization to execute the contract. A contract developed under this chapter is not
25 binding upon or enforceable against the state or other parties to the contract unless the
26 governor is authorized to execute the contract by law. The state and the other parties
27 to the contract may execute the contract within 60 days after the effective date of the
28 law authorizing the contract.

29 **Sec. 43.82.440. Judicial review.** A person may not bring an action
30 challenging the constitutionality of a law authorizing a contract enacted under
31 AS 43.82.435 or the enforceability of a contract executed under a law authorizing a

1 contract enacted under AS 43.82.435 unless the action is commenced within 120 days
2 after the date that the contract was executed by the state and the other parties to the
3 contract.

4 **Sec. 43.82.445. Administrative termination of a contract.** (a) The
5 commissioner shall include terms in a contract developed under AS 43.82.020 that
6 provide for administrative termination of a party's rights under the procedures and
7 conditions set out in this section if the party has

8 (1) ceased to meet the requirements of AS 43.82.110 as a qualified
9 sponsor or qualified sponsor group;

10 (2) intentionally or fraudulently misrepresented, in whole or in part,
11 material facts or circumstances upon which the contract was made;

12 (3) failed to comply with a condition or material term of the contract
13 or a provision of this chapter; or

14 (4) failed to comply with the approved qualified project plan or any
15 updated project plan.

16 (b) Before administrative termination of a contract under this section, the
17 commissioner shall give notice to the parties of the commissioner's intent to terminate
18 the contract and an opportunity to be heard. The commissioner may also provide the
19 parties an opportunity to cure any deficiency that is the basis for the termination if the
20 commissioner determines that curing the deficiency is appropriate under the
21 circumstances.

22 (c) Notwithstanding (a) and (b) of this section, the commissioner may not
23 administratively terminate a contract after the party has committed full project funding
24 except as provided in (e) of this section.

25 (d) A party to a contract who is affected by the commissioner's action to
26 terminate under (a) of this section may file an appeal with the superior court under the
27 Alaska Rules of Appellate Procedure.

28 (e) The commissioner may provide terms and conditions in a contract
29 developed under AS 43.82.020 upon which a party's rights under the contract may be
30 administratively terminated after the party commits full project funding.

31 **Article 6. Municipal Participation.**

1 **Sec. 43.82.500. Obligation to share payments with municipalities.** If the
2 commissioner develops a contract under AS 43.82.020 that includes terms that exempt
3 a party to the contract, and the property, gas, products, and activities associated with
4 the approved qualified project that is subject to the contract, from a municipal tax or
5 assessment in accordance with AS 29.45.810 or AS 29.46.010(b), or AS 43.82.200 and
6 43.82.210, the commissioner shall include a term in the contract that the party pay a
7 portion of the periodic payments due under the contract to the revenue-affected
8 municipality.

9 **Sec. 43.82.505. Payments to economically affected municipalities.** If the
10 commissioner executes a contract under AS 43.82.020 that will produce one or more
11 economically affected municipalities, the commissioner shall include a term in the
12 contract that provides for a portion of the periodic payments to the economically
13 affected municipalities under the principles in AS 43.82.520.

14 **Sec. 43.82.510. Municipal advisory group.** (a) If the commissioner approves
15 an application and proposed project plan under AS 43.82.140 and decides to develop
16 a contract under AS 43.82.020 and 43.82.200, the commissioner shall notify each
17 revenue-affected municipality and economically affected municipality.

18 (b) The mayor of a municipality notified by the commissioner under (a) of this
19 section may appoint one representative to a municipal advisory group in relation to the
20 application.

21 (c) Each municipal advisory group serves until a final action is taken on the
22 application for which the group was appointed.

23 (d) Each municipal advisory group shall elect a chair.

24 **Sec. 43.82.520. Duties of the commissioner of revenue in relation to**
25 **municipal participation.** (a) The commissioner shall meet with each municipal
26 advisory group periodically to report on the development of the contract provisions that
27 affect the municipalities.

28 (b) In developing a contract under AS 43.82.200 - 43.82.270, the commissioner
29 shall ensure that each revenue-affected municipality and economically affected
30 municipality receives a fair and reasonable share of the payments provided under
31 AS 43.82.210 in accordance with the following principles:

1 (1) the share of the payments to revenue-affected municipalities should
2 be given priority over payments to economically affected municipalities with due
3 regard to the anticipated size of the tax base that the contract would exempt from
4 municipal taxation by revenue-affected municipalities;

5 (2) the share of the payments to municipalities should be determined
6 with due regard to the anticipated economic and social burdens that would be imposed
7 on the municipality by construction and operation of the project;

8 (3) the respective shares of the total payments to the state and to
9 municipalities should be fixed in a manner to ensure that their respective interests are
10 aligned;

11 (4) to the extent practicable, the periodic amounts paid to each of the
12 municipalities should be stable and predictable; and

13 (5) to the extent practicable, the provisions for sharing payments with
14 municipalities should be consistent with the principles established in AS 43.82.210(b).

15 (c) In establishing the municipal shares under (b) of this section, the
16 commissioner shall consult with the pertinent municipal advisory group.

17 **Article 7. Miscellaneous Provisions.**

18 **Sec. 43.82.600. Governing law.** If a provision of this chapter conflicts with
19 another provision of state or municipal law, the provision of this chapter governs.

20 **Sec. 43.82.610. Regulations.** The commissioner of revenue, the commissioner
21 of natural resources, and the commissioner of labor may adopt regulations to carry out
22 their respective duties under this chapter.

23 **Sec. 43.82.620. Procedures for collection of amounts due; security.** (a)
24 The commissioner may adopt procedures for the collection of amounts due the state
25 under a contract developed under AS 43.82.020, including the collection of interest and
26 penalties.

27 (b) The commissioner may require a party to a contract developed under
28 AS 43.82.020 to provide security sufficient to guarantee amounts due under the
29 contract.

30 **Sec. 43.82.630. Reports and audits.** The commissioner may require periodic
31 reports from and may at reasonable intervals conduct audits and inspect the books of

1 a party that has entered into a contract developed under AS 43.82.020 to ensure
2 compliance with the provisions of this chapter and the regulations adopted under this
3 chapter and of the terms of the contract.

4 **Sec. 43.82.640. Annual report of the commissioner of labor.** On an annual
5 basis, the commissioner of labor shall prepare and present to the legislature a
6 comprehensive report on each party to a contract with the state developed under
7 AS 43.82.020, and its contractors, regarding the state residency of the employees
8 working in this state on the approved qualified project that is subject to the contract.
9 The commissioner of labor shall use state databases, including data from the quarterly
10 reports by a party to the contract developed under AS 43.82.020 and its contractors for
11 unemployment insurance purposes, to determine state residency of employees regarding
12 compliance with AS 43.82.230.

13 **Article 8. General Provisions.**

14 **Sec. 43.82.900. Definitions.** In this chapter, unless the context requires
15 otherwise,

16 (1) "affected municipality" means an economically affected
17 municipality or a revenue-affected municipality;

18 (2) "commencement of commercial operations" means the start of
19 regular deliveries of marketable products from an approved qualified project;

20 (3) "cubic foot of gas" means the quantity of gas contained in a volume
21 of one cubic foot at a standard temperature of 60 degrees Fahrenheit and a standard
22 absolute pressure of 14.65 pounds per square inch;

23 (4) "economically affected municipality" means a municipality the
24 commissioner of revenue determines will be reasonably required to provide additional
25 public services under the terms proposed in an application approved under
26 AS 43.82.140(a); the commissioner may consider historical data from construction of
27 the Trans Alaska Pipeline System, and information submitted by a municipality in
28 making the determination;

29 (5) "economic proximity" means the distance within which a person
30 may be willing to design, construct, and operate a gas line to provide service to a local
31 consumer;

1 (6) "economic rent" means the estimated total gross revenue less
 2 estimated total costs for a qualified project over the term of a contract under
 3 AS 43.82.020, measured in undiscounted nominal dollars; for purposes of this
 4 paragraph, total costs do not include a rate of return on capital, financing costs, or any
 5 payments to governments;

6 (7) "full project funding" means full approval by a party to a contract
 7 under AS 43.82.020 for the expenditure of the capital necessary for construction and
 8 operation of the approved qualified project that is subject to the contract;

9 (8) "gas" has the meaning given in AS 43.55.900;

10 (9) "group" means two or more persons;

11 (10) "lease or property" has the meaning given in AS 43.55.900;

12 (11) "periodic payment" means payment made in lieu of one or more
 13 other taxes under a contract under AS 43.82.020;

14 (12) "revenue-affected municipality" means a municipality that the
 15 commissioner of revenue reliably expects will be restricted from imposing a tax, or a
 16 portion of a tax, as a result of implementation of a contract developed under this
 17 chapter;

18 (13) "stranded gas" means gas that is not being marketed due to
 19 prevailing costs or price conditions as determined by an economic analysis by the
 20 commissioner for a particular project.

21 **Sec. 43.82.990. Short title.** This chapter may be cited as the Alaska Stranded
 22 Gas Development Act.

23 * **Sec. 4.** AS 29.10.200 is amended by adding new paragraphs to read:

24 (54) AS 29.45.810 (exemption from municipal taxation);

25 (55) AS 29.46.010(b) (exemption from municipal assessment).

26 * **Sec. 5.** AS 29.45 is amended by adding a new section to read:

27 **Sec. 29.45.810. Exemption from municipal taxation.** (a) A party to a
 28 contract approved by the legislature as a result of submission of a proposed contract
 29 developed under AS 43.82, and the property, gas, products, and activities associated
 30 with the approved qualified project that is subject to the contract, are exempt, as
 31 specified in the contract, from all taxes identified in the contract that would be levied

1 and collected by a municipality under state law as a consequence of the participation
2 by the party in the approved qualified project.

3 (b) This section applies to home rule and general law municipalities.

4 * **Sec. 6.** AS 29.46.010 is amended by adding a new subsection to read:

5 (b) Notwithstanding (a) of this section, a party to a contract approved by the
6 legislature as a result of submission of a proposed contract developed under AS 43.82
7 is exempt, as specified in the contract, from assessment under this chapter against real
8 property associated with the approved qualified project that is subject to the contract.

9 * **Sec. 7.** AS 36.30.850(b) is amended by adding a new paragraph to read:

10 (38) contracts between the commissioner of revenue and an independent
11 contractor under AS 43.82.240.

12 * **Sec. 8.** AS 43.20.072 is amended by adding a new subsection to read:

13 (h) A taxpayer that has signed a contract approved by the legislature as a result
14 of submission of a proposed contract developed under AS 43.82 providing for
15 payments in lieu of the tax under this chapter and that has nexus with the state solely
16 as the result of the taxpayer's participation in the approved qualified project that is
17 subject to the contract or would not, but for such participation, be engaged in the
18 production of oil or gas from a lease or property in this state or engaged in the
19 transportation of oil or gas by pipeline in this state, is not required to file a return
20 under this section unless required to do so by the contract.

21 * **Sec. 9.** AS 43.20.073 is amended by adding a new subsection to read:

22 (h) A corporation that has signed a contract approved by the legislature as a
23 result of submission of a proposed contract developed under AS 43.82 providing for
24 payments in lieu of the tax under this chapter and that has nexus with the state solely
25 as the result of the corporation's participation in the approved qualified project that is
26 subject to the contract is not required to file a return under this section unless required
27 to do so by the contract.

28 * **Sec. 10. SEVERABILITY.** Under AS 01.10.030, if any provision of this Act, or the
29 application of a provision of this Act to any person or circumstance, is held invalid, the
30 remainder of this Act and the application to other persons or circumstances is not affected.

31 * **Sec. 11.** This Act takes effect immediately under AS 01.10.070(c).

Alaska State Legislature

House Resources Committee

Co-Chair Scott Ogan
(907) 465-3715
FAX (907) 465-3265
Capitol Building, Room 124
Juneau, Alaska 99801



Co-Chair Bill Hudson
(907) 465-6820
FAX (907) 465-2273
Committee Meetings
T/Th 1 - 4 p.m.

Vice Chair: Beverly Masck.

Representatives Ramona Barnes, Fred Dyson, Joe Green, Reggie Joule, Irene Nicholia, William Williams

MEMORANDUM

TO: House Resources Committee Members

FROM: Representative Scott Ogan,
Co-Chairman House Resources Committee

RE: CSHB 393 (RES)
Summary of Changes

DATE: March 31, 1998

Page 7, line 2:

Permit possession was previously included in the list of criteria a qualified sponsor or qualified sponsor group must have one or more of. The new language states that to be a qualified sponsor or qualified sponsor group, the applicant must hold the necessary permits determined by the department.

Page 15, line 23:

Defines Alaska resident as a person who is qualified to register to vote in the State of Alaska and qualifies for a resident license under AS 16. *see new amendment

Page 26, lines 15-18:

This change allows the Legislature to negotiate its own contracts with a qualified sponsor or qualified sponsor group. A qualified sponsor or qualified sponsor group will have the option of applying through the legislature as well as the executive branch.

15T

0-GH2006P.1
Glover
3/30/98

A M E N D M E N T

OFFERED IN THE HOUSE

TO: CSHB 393(RES), Draft Version "P"

- 1 Page 15, line 23:
- 2 Delete "qualified to register to vote in this state"
- 3 Insert "registered to vote under AS 15"

LEGAL SERVICES

DIVISION OF LEGAL AND RESEARCH SERVICES
LEGISLATIVE AFFAIRS AGENCY
STATE OF ALASKA

(907) 465-3867 or 465-2450
FAX (907) 465-2029
Mail Stop 3101

130 Seward Street, Suite 409
Juneau, Alaska 99801-2105

MEMORANDUM

March 30, 1998

SUBJECT: Alaska Stranded Gas Act (CSHB 393(RES))

TO: Representative Scott Ogan
Attn: David Stancliff

FROM: Richard A. Glover *RAG*
Legislative Counsel

Enclosed is the CS you requested.

AS 43.82.220 limits the scope of this bill to gas royalties only. A specific statement regarding this appears in AS 43.82.220(d), prohibiting modification of oil royalty under the provisions of the bill.

I would also like to bring to your attention that the bill as introduced does not seem to comply with Art. IX, sec. 1 of the state constitution which states:

The power of taxation shall never be surrendered. This power shall not be suspended or contracted away, except as provided in this article.

Under AS 43.82.210 of the bill, or as negotiated by the legislature as contemplated by the new AS 43.82.650, a contract may contain terms that substitute periodic payments in lieu of taxes. These contract terms will, I suppose, be expected to prevent the state from later changing the law and imposing those taxes as a result of the federal and state prohibitions on the impairment of contracts. (Art. I, sec. 15, Constitution of the State of Alaska) The problem is that this is exactly the kind of contract that is prohibited under Art. IX, sec. 1. While the state may certainly provide for a tax exemption, I do not think it is possible for the state to give up its power to repeal the exemption and impose the tax in the future. Any contract that has that effect will probably be void as against public policy.

If I may be of further assistance, please advise.

RAG:jdr:glc
98-202.jdr

Enclosure

LEGAL SERVICES

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130 Seward Street, Suite 409
Juneau, Alaska 99801-2105

MEMORANDUM

March 30, 1998

SUBJECT: Sectional Summary of Alaska Stranded Gas Act. (HB 393(O&G))

TO: Representative Ramona Barnes
Attn: Eleanor

FROM: Richard A. Glover *RA G*
Legislative Counsel

You have requested a sectional summary of the above-described bill.

As a preliminary matter, note that a sectional summary of a bill should not be considered an authoritative interpretation of the bill and the bill itself is the best statement of its contents. If you would like an interpretation of the bill as it may apply to a particular set of circumstances, please advise.

Section 1 of the bill states legislative findings.

Section 2 of the bill states legislative intent.

Section 3 of the bill inserts a new chapter into title 43 of the Alaska Statutes for the development of contracts for the development of gas resources in the state. A brief description of the sections in the new AS 43.82 are as follows:

AS 43.82.010 Purpose.

This section states the purpose of the chapter.

AS 43.82.020. Contracts for payments in lieu of other taxes and for royalty adjustments.

This section specifies that the commissioner of the department of revenue may negotiate contracts that provide for periodic payments instead of taxes, and reductions in royalty payments under existing leases with qualified persons. Contracts that contain such terms may violate art. I, sec. 15, or art. IX, sec. 1, Constitution of the State of Alaska, or both. Failure to comply with the terms of such contracts may violate the contracts clause of the U.S. Constitution.

Representative Ramona Barnes

March 30, 1998

Page 2

AS 43.82.100. Qualified project.

This section specifies the criteria that a proposed project must meet to be considered a qualified project. The criteria are in terms of a projected quantity of gas to be produced and the objective need of the state for the gas.

AS 43.82.110. Qualified sponsor or qualified sponsor group.

This section specifies which persons may negotiate with the commissioner to develop a proposed contract for the development of state gas resources. The sponsor or sponsor group must have ownership interest in the gas to be developed, or intend to acquire an ownership in the gas in the future. The sponsor or sponsor group must also meet financial resources criteria.

AS 43.82.120. Applications.

This section describes the process that a qualified sponsor or sponsor group must complete in submitting a proposed project plan for consideration by the commissioner of revenue as a first step to developing a contract for the development of gas resources. The sponsor or sponsor group must demonstrate that the gas resources to be developed meet the required criteria, and that the sponsor or sponsor group meets the criteria for qualification. Specific provisions are listed that must be contained in a proposed project plan.

AS 43.82.130. Qualified project plan.

This section describes the evaluation criteria to be used to determine if a proposed project plan may be approved as a qualified project plan.

AS 43.82.140. Review of applications and determination of qualifications.

This section specifies that the commissioner of revenue reviews an application for determination of qualifications of the sponsor or sponsor group and the qualification of the proposed project. The proposed project plan is reviewed by the commissioner of revenue and commissioner of natural resources. The commissioner of revenue approves a plan only if the commissioner of natural resources concurs with the approval. Written notice of the determinations is to be sent to the applicants.

AS 43.82.150. Actions challenging determinations on applications.

This section restricts the grounds for judicial review of determinations made on applications by a sponsor or sponsor group. The section may be inoperative as violative of constitutional guarantees, such as equal protection under the law.

AS 43.82.160. Multiple applications for similar or competing qualified projects.

Specifies that sponsors or sponsor groups may submit multiple competing or similar applications, and approval may be granted to any such applications.

AS 43.82.170. Application deadline.

States that applications are due no later than June 30, 2001.

AS 43.82.180. Withdrawal of applications.

States that applications may be freely withdrawn without further obligation of a party, if withdrawn prior to the submission of a contract to the governor.

AS 43.82.200. Contract development.

This section generally specifies the terms that may be included in a proposed contract.

AS 43.82.210. Contract terms relating to payment in lieu of one or more taxes.

This section lists certain taxes that may be waived by the proposed contract, and replaced with periodic payments. General principles for negotiating the terms are provided in subsection (b).

AS 43.82.220. Contract terms relating to royalty.

This section provides for the inclusion of terms in a proposed contract that modify royalty rights with respect to the state's right to receive royalty on gas. The terms may also specify the means for determining royalty value.

AS 43.82.230. Contract terms relating to hiring of Alaska residents and contracting with Alaska businesses.

This section requires a term in a proposed contract that requires a sponsor, sponsor group, and their contractors to comply with anti-discrimination laws regarding local hire. The contract must also contain a term requiring employment of Alaska workers and businesses to the maximum extent permitted by law. The proposed contract is to require local advertisement of employment opportunities. Alaska residents and businesses are defined.

It is unlikely local hire preference terms will be required, as they are generally disfavored by the courts as an abridgment of the privileges and immunities clause of the U.S. Constitution.

AS 43.82.240. Use of an independent contractor.

This section allows the commissioner of revenue to employ an independent contractor to assist in evaluating proposed contracts. The commissioner may require a promise of reimbursement from an applicant for the cost of employment of the contractor as a condition of considering an application. A contractor must sign a confidentiality agreement.

AS 43.82.250. Term of contract; effective date.

This section specifies the maximum term of the proposed contract.

AS 43.82.260. Change of parties to an application or a contract; assignment of interests.

This section provides for the alienation of an interest in an application, and for inclusion of terms in a proposed contract that provide for alienation of interests in the contract.

Representative Ramona Barnes

March 30, 1998

Page 4

AS 43.82.270. Project plans and work commitments.

This section requires terms in a proposed contract that incorporate the approved project plan, and for periodic review of the plan at reasonable intervals. Terms requiring work commitments or other obligations may be included in the proposed contract.

AS 43.82.300. Requests for information.

This section specifies that submission of financial, technical and market information regarding the project upon request by the commissioner of revenue is a condition of continued review of an application for approval as a qualified project.

AS 43.82.310. Disclosure of information; confidentiality.

This section allows applicants for a qualified project to request confidential treatment of information submitted in response to a request by the state. The conditions for treating the information as confidential is specified.

AS 43.82.400. Preliminary findings and determination regarding the contract.

This section requires that the commissioner of revenue prepare a preliminary findings for a proposed contract that the contract is in the long term fiscal interests of the state, and that the contract furthers the purposes of the chapter. If a contract is prepared, the commissioner must transmit it to the governor. The commissioner must describe the effects of the contract in a preliminary findings report. Material differences from a previously proposed contract must be described in the findings.

AS 43.82.410. Notice and comment regarding the contract.

The commissioner is to give reasonable public notice of the preliminary findings regarding the proposed contract, and a comment process, with provisions for the confidentiality of certain information, is to be provided. The commissioner is to report the proposed contract and supporting information to the legislature and certain bodies within the legislature, and to offer to appear before the legislature.

AS 43.82.420. Coordination of public and legislative review.

The public and legislative review of the proposed contract is to be coordinated to the extent practicable.

AS 43.82.435. Legislative authorization.

This section allows the governor to transmit a proposed contract to the legislature to seek approval to execute it. A contract developed under the chapter is not binding until authorized by law.

AS 43.82.440. Judicial review.

This section forecloses certain judicial remedies regarding the contracts developed under this chapter unless brought within 120 days after the date the contract was executed.

AS 43.82.445. Administrative termination of a contract.

This section requires terms in a contract that allow for termination of the state's obligations under the contract if certain conditions are met. The terms are to provide due process prior to terminating the contract. Limitations to the power to terminate are made upon full funding by a party in default. An appeals provision is specified.

AS 43.82.500-505. Obligation to share payments with municipalities; payments to economically affected municipalities.

The proposed contracts must provide for payments to certain affected municipalities.

AS 43.82.510. Municipal advisory group.

Municipal advisory groups are established.

AS 43.82.520. Duties of the commissioner of revenue in relation to municipal participation.

This section describes the duties of the municipal advisory groups and the duties of the commissioner of revenue in consulting with the groups.

AS 43.82.600. Governing law.

AS 43.82 is given precedent over conflicting statutes or ordinances.

AS 43.82.610. Regulations.

The commissioners of revenue, natural resources, and labor are given regulatory powers to carry out the provisions of the chapter.

AS 43.82.620. Procedures for collection of amounts due; security.

This section allows the commissioner of revenue to establish procedures for the collection of amounts due under a contract developed under the chapter and subsequently executed, and to require a party to an executed contract to provide reasonable security for those amounts.

AS 43.82.630. Reports and audits.

This section allows the commissioner of revenue to require periodic inspection of the records of a party to a contract developed under the chapter and subsequently executed.

AS 43.82.640. Annual report of the commissioner of labor.

This section requires an annual report to the legislature by the commissioner of labor on the status of the state residency of the employees working on a project under a contract developed under AS 43.82 and subsequently executed.

AS 43.82.900. Definitions.

Provides definitions of certain terms used in AS 43.82.

Representative Ramona Barnes

March 30, 1998

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AS 43.82.990. Short title.

AS 43.82 may be cited as the Alaska Stranded Gas Development Act.

Section 4 of the bill makes technical amendments to AS 29.10.200 to allow for contractual exemptions from certain taxes.

Section 5 of the bill makes technical amendments to AS 29.45 to allow for contractual exemptions from certain taxes.

Section 6 of the bill makes technical amendments to AS 29.46.010 to allow for contractual exemptions from certain taxes.

Section 7 of the bill makes technical amendments to AS 36.30.850(b) to allow for contractual exemptions from certain provisions of the state procurement code.

Section 8 of the bill amends AS 43.20.072 to exempt certain taxpayers from filing a state income tax return.

Section 9 of the bill amends AS 43.20.073 to exempt certain corporations from filing a state income tax return.

Section 10 of the bill provides for severability of the Act.

Section 11 of the bill provides for an immediate effective date.

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Glover
3/30/98

CS FOR HOUSE BILL NO. 393(RES)

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWENTIETH LEGISLATURE - SECOND SESSION

BY THE HOUSE RESOURCES COMMITTEE

**Offered:
Referred:**

Sponsor(s): HOUSE RULES COMMITTEE BY REQUEST OF THE GOVERNOR

A BILL

FOR AN ACT ENTITLED

1 "An Act relating to contracts with the state establishing payments in lieu of
2 other taxes by a qualified sponsor or qualified sponsor group for projects to
3 develop stranded gas resources in the state; providing for the inclusion in the
4 contracts of terms making certain adjustments regarding royalty value and the
5 timing and notice of the state's right to take royalty in kind or in value from
6 projects to develop stranded gas resources in the state; relating to the effect of
7 the contracts on municipal taxation; and providing for an effective date."

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

9 * Section 1. FINDINGS. The legislature finds that

10 (1) a vast quantity of gas in Alaska is stranded from commercial development
11 because of the cost associated with providing access to markets for that gas; on the North
12 Slope alone, between the Colville and Canning Rivers, approximately 35 trillion cubic feet of
13 discovered gas resources are stranded in this way;

1 (2) because of the high cost of providing access to markets for North Slope
2 gas, exploration efforts there have historically focused on oil; if the infrastructure needed to
3 provide market access for North Slope gas were economically available, it is possible that new
4 gas exploration efforts would be initiated that could lead to the discovery and development
5 of significantly greater gas resources than have been discovered so far;

6 (3) maintaining production operations, whether for oil, gas, or both, enhances
7 the opportunities for oil and gas exploration and development on the North Slope;

8 (4) large areas of the state, encompassing a number of geologic provinces and
9 basins, do not have oil and gas production and still remain largely unexplored for oil and gas;
10 exploration for gas in some of these areas might be facilitated if infrastructure were
11 economically available to provide access for the gas to markets;

→ 12 (5) it is unlikely that markets will develop within the state that would need
13 more than a relatively small proportion of the volume of stranded gas already discovered on
14 the North Slope; therefore, the primary need for gas infrastructure for ~~at least~~ the next decade
15 will be to provide access to markets outside the state;

16 (6) currently the principal mode anticipated for stranded North Slope gas to
17 access markets outside the state is a gas pipeline to an ice-free Alaska port where the gas
18 would be turned into liquefied natural gas and exported using specially designed marine
19 tankers; although experimental research is being conducted on other alternative technologies
20 such as gas to liquids, this technology is not yet commercially viable; if this research results
21 in a commercially viable technology, and, after economic analysis by the state of the
22 application of this technology, it is shown that local or state tax or regulatory changes are
23 necessary to commercialize an Alaska project using this technology, then this technology may
24 be considered in regard to this legislation;

25 (7) the size of the capital expenditure needed to get North Slope gas to market
26 by way of a liquefied natural gas project requires long-term contracts for gas on the order of
27 14,000,000 metric tons a year of liquefied natural gas; to be successful, a North Slope
28 liquefied natural gas project needs to reach this full annual volume in not more than six years
29 from the commencement of commercial operations;

30 (8) for a North Slope liquefied natural gas project to become economically
31 viable and competitive, the estimated costs of constructing such a project must be reduced

1 significantly; reducing the financial risk associated with the project would also improve the
2 project's chances of becoming economically viable and competitive;

3 (9) the state has contracted an extensive financial analysis of the
4 commercialization of North Slope gas; this analysis, performed by a recognized expert in
5 petroleum economics, Dr. Pedro Van Meurs, indicates that changes in the local, state, and
6 federal tax structure may be necessary to make commercialization of North Slope gas
7 resources economically viable;

8 (10) although the state can do little now to reduce expected construction costs,
9 the state can reduce some of the financial risk associated with a North Slope liquefied natural
10 gas project or other stranded gas development projects by specifying with as much certainty
11 as possible the state taxes and royalties that would apply to such a project throughout its life;

12 (11) the state could improve the economics and competitiveness of a stranded
13 gas development project by adjusting the timing of the state's receipt of its share of the
14 economic rent of the project; the present fiscal regime is front-end loaded, which means that
15 the state and local governments take a significant part of their shares of the economic rent of
16 a project early in the life of the project, even before the project starts to generate an income
17 stream; the state and local governments could improve the economics of a stranded gas
18 development project by taking more of their shares of the economic rent of a project later in
19 the life of the project;

20 (12) the state's present fiscal regime, as it would apply to a stranded gas
21 development project, is also regressive to the extent that it is insensitive to changes in the
22 profitability of the project, so that, in times of low profitability, the state and local
23 governments would take an excessive amount of the economic rent of the project, and, in
24 times of high profitability, they would take an inadequate amount of the economic rent of a
25 project; the state and local governments could improve the economics of a stranded gas
26 development project by making the overall fiscal system less regressive and more responsive
27 to the relative profitability of a project;

28 (13) establishing a fiscal regime applicable to a specific stranded gas
29 development project under a long-term contract with the state, where payments would be made
30 in lieu of other taxes, would

31 (A) enable the state to create a fiscal regime that is less front-end

1 loaded and less regressive for a project without rewriting the tax laws for gas already
2 being developed and produced;

3 (B) enable the state to customize the timing and burden of its fiscal
4 regime to fit the economic circumstances of a particular stranded gas development
5 project;

6 (C) reduce the financial risk of the project by reducing uncertainty
7 about the fiscal terms applicable to the project;

8 (14) authorizing the state, through the executive branch, to develop a contract
9 establishing the fiscal regime that would apply to a qualified stranded gas development project
10 if it were built will result in contracts that are an exercise of the legislature's taxing power
11 that is consistent with art. IX, sec. 1, Constitution of the State of Alaska;

12 (15) authorizing the state, through the executive branch, to develop a contract
13 establishing a fiscal regime that reduces the risks and improves the economics of a stranded
14 gas development project will result in contracts that are an exercise of the legislature's power
15 under art. IX, sec. 4, Constitution of the State of Alaska, to create tax exemptions by general
16 law and is consistent with the legislature's responsibility under art. VIII, sec. 2, of the
17 Constitution of the State of Alaska, to provide for the utilization, development, and
18 conservation of all natural resources belonging to the state for the maximum benefit of its
19 people;

20 (16) stranded gas development projects are a matter of statewide interest
21 because they are an important potential source of revenue to the state, job opportunities for
22 the people of the state, and gas for use by communities throughout the state;

23 (17) to the extent permissible under the Constitution of the United States and
24 the Constitution of the State of Alaska, the legislature intends that state residents and
25 businesses share in and not be excluded from the opportunities stemming from the
26 development of the state's gas resources; and

27 (18) good faith efforts by qualified sponsors, qualified sponsor groups, and
28 contractors of qualified sponsors and qualified sponsor groups that enter into a contract with
29 the state developed under this Act to undertake voluntary actions to provide employment
30 opportunities for Alaska residents and opportunities for Alaska businesses are in the long-term
31 interests of the state.

1 * **Sec. 2. INTENT.** (a) The legislature intends that contracts developed under this Act
2 provide stable fiscal terms that encourage the development of stranded gas projects that
3 otherwise might not be developed under the prevailing tax and royalty regime. The legislature
4 further intends that any fiscal term agreed to in a contract developed under this Act in lieu of
5 other taxes will fully and fairly compensate the people of the state for the severance,
6 production, and sale of natural resources belonging to the people of the state, for the negative
7 effects and the risks that a project may impose on the state, and for the value of the
8 infrastructure that may be provided by the state to a project, including all the advantages of
9 civilized society that may be provided by the state to the sponsors of a project.

10 (b) The legislature intends that, in order to provide the stable fiscal terms that will
11 encourage development of stranded gas projects, any contract developed under this Act will
12 express whether the state intends to be bound to the full extent allowed by the Constitution
13 of the State of Alaska; however, the legislature further intends that the terms of a contract
14 developed under this Act will not be binding on or enforceable against the state or the other
15 parties to the contract unless the governor is authorized to execute the contract by the
16 legislature.

17 (c) The legislature intends that a qualified sponsor or qualified sponsor group or a
18 contractor of a qualified sponsor or qualified sponsor group that enters into a contract
19 developed under this Act relating to a stranded gas project will, with respect to the project,
20 voluntarily

21 (1) undertake reasonable measures to hire Alaska residents to perform work
22 that they are qualified to perform on a competitive basis;

23 (2) assist Alaska residents who are capable of being qualified and who make
24 a good faith effort to obtain the requisite training required for employment; and

25 (3) use reasonable efforts to contract with qualified Alaska businesses when
26 their performance is competitive with regard to price, quality, and availability.

27 * **Sec. 3.** AS 43 is amended by adding a new chapter to read:

28 **Chapter 82. Development of Alaska Stranded Gas.**

29 **Article 1. Contracts for Payments in Lieu of Other Taxes.**

30 **Sec. 43.82.010. Purpose.** The purpose of this chapter is to

31 (1) encourage new investment to develop the state's stranded gas

1 resources by authorizing establishment of fiscal terms related to that new investment
2 without significantly altering tax and royalty methodologies and rates on existing oil
3 and gas infrastructure and production;

4 (2) allow the fiscal terms applicable to a qualified sponsor or the
5 members of a qualified sponsor group, with respect to a qualified project, to be tailored
6 to the particular economic conditions of the project and to establish those fiscal terms
7 in advance with as much certainty as the Constitution of the State of Alaska allows;
8 and

9 (3) maximize the benefit to the people of the state of the development
10 of the state's stranded gas resources.

11 **Sec. 43.82.020. Contracts for payments in lieu of other taxes and for**
12 **royalty adjustments.** The commissioner may, under this chapter, negotiate terms for
13 inclusion in a proposed contract with a qualified sponsor or qualified sponsor group
14 providing for

15 (1) periodic payment in lieu of one or more taxes that otherwise would
16 be imposed by the state or a municipality on the qualified sponsor or members of the
17 qualified sponsor group as a consequence of the sponsor's or group's participation in
18 an approved qualified project under this chapter; and

19 (2) certain adjustments regarding royalty under AS 43.82.220.

20 **Article 2. Qualification and Application Procedures.**

21 **Sec. 43.82.100. Qualified project.** Based on information available to the
22 commissioner, the commissioner may determine that a proposal for new investment is
23 a qualified project under this chapter only if the project

24 (1) would produce at least 500,000,000,000 cubic feet of stranded gas
25 within 20 years from the commencement of commercial operations; and

26 (2) is capable, subject to applicable commercial regulation and technical
27 and economic considerations, of making gas available to meet the reasonably
28 foreseeable demand in this state for gas within the economic proximity of the project.

29 **Sec. 43.82.110. Qualified sponsor or qualified sponsor group.** The
30 commissioner may determine that a person or group is a qualified sponsor or qualified
31 sponsor group if the person or a member of the group

1 (1) intends to own an equity interest in a qualified project, intends to
* 2 commit gas that it owns to a qualified project, or holds the permits that the department
3 determines are essential to construct and operate a qualified project; and

4 (2) meets one or more of the following criteria:

5 (A) owns a working interest in at least 10 percent of the
6 stranded gas proposed to be developed by a qualified project;

7 (B) has the right to purchase at least 10 percent of the stranded
8 gas proposed to be developed by a qualified project;

9 (C) has the right to acquire, control, or market at least 10
10 percent of the stranded gas proposed to be developed by a qualified project;

11 (D) has a net worth equal to at least 33 percent of the estimated
12 cost of constructing a qualified project;

13 (E) has an unused line of credit equal to at least 25 percent of
14 the estimated cost of constructing a qualified project.

15 **Sec. 43.82.120. Applications.** (a) A qualified sponsor or qualified sponsor
16 group may submit to the department an application for development of a contract
17 under AS 43.82.020 evidencing that the requirements of AS 43.82.100 and 43.82.110
18 are met. The application must be submitted in the manner and form and contain the
19 information required by the department.

20 (b) Along with an application submitted under (a) of this section, an applicant
21 shall submit a proposed project plan for a qualified project that contains the following
22 information based on the information known to the applicant at the time of
23 application:

24 (1) a description of the work accomplished as of the date of the
25 application to further the project;

26 (2) a schedule of proposed development activity leading to the
27 projected commencement of commercial operations of the project;

28 (3) a description of the development activity proposed to be
29 accomplished under the proposed project plan;

30 (4) a description of each lease or property that the applicant believes
31 to contain the stranded gas that would be developed if the project was built;

1 (5) a description of the methods and terms under which the applicant
2 is prepared to make gas available to meet the reasonably foreseeable demand in this
3 state for gas within the economic proximity of the project during the term of the
4 proposed contract, including proposed pipeline transportation and expansion rules if
5 pipeline transportation is a part of the proposed project;

6 (6) a detailed description of options to mitigate the increased demand
7 for public services and other negative effects caused by the project;

8 (7) a detailed description of options for the safe management and
9 operation of the project once it is constructed;

10 (8) other information that the commissioner of revenue, in consultation
11 with the commissioner of natural resources, considers necessary to make a
12 determination that

13 (A) the work accomplished as of the date of application, the
14 schedule of proposed development activity, and the development activity
15 proposed to be accomplished under the proposed project plan reflect a proposal
16 for diligent development on the part of the applicant;

17 (B) the proposed project plan does not materially conflict with
18 the obligations of a lessee to the state under a lease or under a pool, unit, or
19 other agreement with the state; and

20 (C) the proposed project plan describes satisfactory methods and
21 terms for accommodating reasonably foreseeable demand for gas in this state
22 within the economic proximity of the project during the term of the proposed
23 contract.

24 (c) The requirements of (b) of this section do not diminish the obligations of
25 a qualified sponsor or member of a qualified sponsor group to the state or restrict the
26 authority of the commissioner of revenue or the commissioner of natural resources
27 under any other law or agreement relating to a plan of development for a lease, pool,
28 or unit.

29 **Sec. 43.82.130. Qualified project plan.** A proposed project plan submitted
30 under AS 43.82.120 may be approved as a qualified project plan under AS 43.82.140
31 if the proposed project plan

1 (1) reflects a proposal for diligent development of the project on the
2 part of the applicant,

3 (2) does not materially conflict with the obligations of a lessee to the
4 state under a lease or under a pool, unit, or other agreement with the state; and

5 (3) describes satisfactory methods and terms for making gas available
6 to meet the reasonably foreseeable demand in this state for gas within the economic
7 proximity of the project during the term of the proposed contract.

8 **Sec. 43.82.140. Review of applications and determination of qualifications.**

9 (a) The commissioner shall review an application submitted under AS 43.82.120 to
10 determine whether the provisions of AS 43.82.100 concerning a qualified project and
11 AS 43.82.110 concerning a qualified sponsor or qualified sponsor group have been
12 met. The commissioner may approve an application only if those provisions have been
13 met.

14 (b) If the commissioner approves an application under (a) of this section, the
15 commissioner and the commissioner of natural resources shall review the proposed
16 project plan submitted with the application to determine whether the provisions of
17 AS 43.82.130 have been met. The commissioner may approve the proposed project
18 plan as a qualified project plan only if the commissioner of natural resources concurs
19 in the approval.

20 (c) The commissioner shall send to the applicant written notice of and the
21 reasons for the determinations made under (a) and (b) of this section.

22 **Sec. 43.82.150. Actions challenging determinations on applications.** (a)
23 Only an applicant under AS 43.82.120 who is aggrieved by a determination of the
24 commissioner of revenue or the commissioner of natural resources under AS 43.82.140
25 may seek judicial review of the determination.

26 (b) The only grounds for judicial review of a determination made under
27 AS 43.82.140 are

28 (1) failure to follow the qualification and application procedures set out
29 in AS 43.82.100 - 43.82.180; or

30 (2) abuse of discretion that is so capricious, arbitrary, or confiscatory
31 as to constitute a denial of due process.

1 **Sec. 43.82.160. Multiple applications for similar or competing qualified**
2 **projects.** Nothing in this chapter prohibits different qualified sponsors or different
3 qualified sponsor groups from submitting applications under AS 43.82.120 relating to
4 similar or competing qualified projects or prohibits the commissioner of revenue or the
5 commissioner of natural resources from reviewing and approving applications and
6 proposed project plans under AS 43.82.140 relating to similar or competing qualified
7 projects.

8 **Sec. 43.82.170. Application deadline.** The commissioner of revenue or the
9 commissioner of natural resources may not act on an application for a contract
10 submitted under AS 43.82.120 unless the application is received by the Department of
11 Revenue no later than June 30, 2001.

12 **Sec. 43.82.180. Withdrawal of applications.** Subject to the terms of a
13 reimbursement agreement under AS 43.82.240 or other agreement with the Department
14 of Revenue, the Department of Natural Resources, the commissioner of revenue, or the
15 commissioner of natural resources affecting the withdrawal of an application, a
16 qualified sponsor or qualified sponsor group may withdraw an application submitted
17 under AS 43.82.120 at any time before the date that the commissioner of revenue
18 submits a contract to the governor under AS 43.82.430 without further obligation under
19 this chapter.

20 **Article 3. Contract Development.**

21 **Sec. 43.82.200. Contract development.** If the commissioner approves an
22 application and proposed project plan under AS 43.82.140, the commissioner may
23 develop a contract that may include

24 (1) terms concerning periodic payment in lieu of one or more taxes as
25 provided in AS 43.82.210;

26 (2) terms developed under AS 43.82.220 relating to

27 (A) timing and notice of the state's right to take royalty in kind
28 or in value; and

29 (B) royalty value;

30 (3) terms regarding the hiring of Alaska residents and contracting with
31 Alaska businesses under AS 43.82.230;

1 (4) terms regarding periodic payment to, or an equity or other interest
2 in a project for, municipalities under AS 43.82.500;

3 (5) terms regarding arbitration or alternative dispute resolution
4 procedures;

5 (6) terms and conditions for administrative termination of a contract
6 under AS 43.82.445; and

7 (7) other terms or conditions that are

8 (A) necessary to further the purposes of this chapter; or

9 (B) in the best interests of the state.

10 **Sec. 43.82.210. Contract terms relating to payment in lieu of one or more**
11 **taxes.** (a) If the commissioner approves an application and proposed project plan
12 under AS 43.82.140, the commissioner may develop proposed terms for inclusion in
13 a contract under AS 43.82.020 for periodic payment in lieu of one or more of the
14 following taxes that otherwise would be imposed by the state or a municipality on the
15 qualified sponsor or member of a qualified sponsor group as a consequence of
16 participating in an approved qualified project:

17 (1) oil and gas production taxes and oil surcharges under AS 43.55;

18 (2) oil and gas exploration, production, and pipeline transportation
19 property taxes under AS 43.56;

20 (3) oil and gas conservation tax under AS 43.57;

21 (4) Alaska net income tax under AS 43.20;

22 (5) municipal sales and use tax under AS 29.45.650 - 29.45.710;

23 (6) municipal property tax under AS 29.45.010 - 29.45.250 or
24 29.45.550 - 29.45.600;

25 (7) municipal special assessments under AS 29.46;

26 (8) a comparable tax or levy imposed by the state or a municipality
27 after the effective date of this section;

28 (9) other state or municipal taxes or categories of taxes identified by
29 the commissioner.

30 (b) If the commissioner chooses to develop proposed terms under (a) of this
31 section, the commissioner shall, if practicable and consistent with the long-term fiscal

1 interests of the state, develop the terms in a manner that attempts to balance the
2 following principles:

3 (1) the terms should, in conjunction with other factors such as cost
4 reduction of the project, cost overrun risk reduction of the project, increased fiscal
5 certainty, and successful marketing, improve the competitiveness of the approved
6 qualified project in relation to other development efforts aimed at supplying the same
7 market;

8 (2) the terms should accommodate the interests of the state, affected
9 municipalities, and the project sponsors under a wide range of economic conditions,
10 potential project structures, and marketing arrangements;

11 (3) the state's and affected municipalities' combined share of the
12 economic rent of the approved qualified project under the contract should be relatively
13 progressive; that is, the state's and affected municipalities' combined annual share of
14 the economic rent of the approved qualified project generally should not increase when
15 there are decreases in project profitability, or decrease when there are increases in
16 project profitability;

17 (4) the state's and affected municipalities' combined share of the
18 economic rent of the approved qualified project under the contract should be relatively
19 lower in the earlier years than in the later years of the approved qualified project;

20 (5) the terms should allow the project sponsors to retain a share of the
21 economic rent of the approved qualified project that is sufficient to compensate the
22 sponsors for risks under a range of economic circumstances;

23 (6) the terms should provide the state and affected municipalities with
24 a significant share of the economic rent of the approved qualified project, when
25 discounted to present value, under favorable price and cost conditions;

26 (7) the method for calculating the periodic payment in lieu of certain
27 taxes under the contract should be clear and unambiguous; and

28 (8) while cost calculations for the approved qualified project under the
29 contract should be based on amounts that closely approximate actual costs, agreed-
30 upon formulas reflecting reasonable economic assumptions should be used if possible
31 to promote administrative certainty and efficiency.

1 (c) Except as provided in (b) of this section, the commissioner's discretion
2 under this section in developing proposed terms for a contract under AS 43.82.020 is
3 not limited to consideration of the economic rent of the approved qualified project.

4 **Sec. 43.82.220. Contract terms relating to royalty.** (a) Notwithstanding any
5 contrary provisions of AS 38, the commissioner of natural resources, with the
6 concurrence of the commissioner of revenue and the affected parties holding a state
7 lease or unit agreement, may develop proposed terms for inclusion in a contract under
8 AS 43.82.020 that modify the timing and notice provisions of the applicable oil and
9 gas leases and unit agreements pertaining to the state's rights to receive its royalty on
10 gas in kind or in value if

11 (1) the viability of the approved qualified project depends on long-term
12 gas purchase and sale agreements;

13 (2) certainty over time regarding the quantity of royalty gas that the
14 state may be taking in kind is needed to secure the long-term purchase and sale
15 agreements;

16 (3) the specified period of the state's commitment to take its royalty
17 share in value or in kind does not exceed the term of the purchase and sale
18 agreements; and

19 (4) the modification does not impair the ability of the approved
20 qualified project or the state to meet the reasonably foreseeable demand in this state
21 for gas within economic proximity of the project during the term of the contract
22 developed under AS 43.82.020.

23 (b) Notwithstanding any contrary provisions of AS 38, the commissioner of
24 natural resources, with the concurrence of the commissioner of revenue and the
25 affected parties holding a state lease or unit agreement, may develop proposed terms
26 for inclusion in a contract under AS 43.82.020 that establish a valuation method for
27 the state's royalty share of the gas production from an approved qualified project.

28 (c) The commissioner of revenue shall include any proposed terms relating to
29 royalty developed in accordance with this section in the proposed contract under
30 AS 43.82.400.

31 (d) Nothing in this chapter permits modification of the state's rights that relate

1 to timing, notice, and rights to receive oil royalty in kind or in value under oil and gas
2 leases or unit agreements.

3 **Sec. 43.82.230. Contract terms relating to hiring of Alaska residents and**
4 **contracting with Alaska businesses.** (a) The commissioner shall include in a
5 contract under AS 43.82.020 a term requiring the qualified sponsor or qualified
6 sponsor group and contractors of the qualified sponsor or qualified sponsor group to
7 comply with all valid federal, state, and municipal laws relating to hiring Alaska
8 residents and contracting with Alaska businesses to work in the state on the approved
9 qualified project and not to discriminate against Alaska residents or Alaska businesses.
10 Within the constraints of law, the commissioner shall also include in a contract under
11 AS 43.82.020 a term that requires the qualified sponsor or qualified sponsor group and
12 contractors of the qualified sponsor or qualified sponsor group to employ Alaska
13 residents and to contract with Alaska businesses to work in the state on the approved
14 qualified project to the extent the residents and businesses are available, competitively
15 priced, and qualified.

16 (b) The commissioner shall include in a contract under AS 43.82.020 a term
17 requiring the qualified sponsor or qualified sponsor group and contractors of the
18 qualified sponsor or qualified sponsor group to

19 (1) advertise for available positions in newspapers in the location where
20 the work is to be performed and in other publications distributed throughout the state,
21 including in rural areas; and

22 (2) use Alaska job service organizations located throughout the state
23 and not just in the location where the work is to be performed in order to notify
24 Alaskans of work opportunities on the approved qualified project.

25 (c) Subject to the voluntary agreement of the qualified sponsor, the
26 commissioner may include a term in the contract providing for incentives to encourage
27 training and hiring of Alaska residents.

28 (d) This section does not create or abridge individual rights and does not create
29 a private right of action for any person.

30 (e) For purposes of this section,

31 (1) "Alaska business" means a firm or contractor that

1 (A) has held an Alaska business license for the preceding 12
2 months;

3 (B) maintains, and has maintained for the preceding 12 months,
4 a place of business in the state that competently and professionally deals in
5 supplies, services, or construction of the nature required for the approved
6 qualified project; and

7 (C) is

8 (i) a sole proprietorship and the proprietor is an Alaska
9 resident;

10 (ii) a partnership and more than 50 percent of the
11 partnership interest is held by Alaska residents;

12 (iii) a limited liability company and more than 50
13 percent of the membership interest is held by Alaska residents;

14 (iv) a corporation that has been incorporated in the state
15 or is authorized to do business in the state; or

16 (v) a joint venture and a majority of the venturers
17 qualify as Alaska businesses under this paragraph;

18 (2) "Alaska job service organizations" means those offices maintained
19 by the state and recommended by the Department of Labor whose functions are to aid
20 the unemployed or underemployed in finding employment;

21 (3) "Alaska resident" means a natural person who

22 (A) receives a permanent fund dividend under AS 43.23; or

* 23 (B) is qualified to register to vote in this state and qualifies for
24 a resident fishing, hunting, or trapping license under AS 16;

25 (4) "available," as applied to an Alaska resident or Alaska business,
26 means that the resident or business is available for employment at the time required
27 and is located anywhere in the state, not just in the area of the state where the work
28 is to be performed;

29 (5) "qualified," as applied to an Alaska resident or Alaska business,
30 means that the resident or business possesses the requisite education, training, skills,
31 certification, or experience to perform the work necessary for a particular position or

1 to perform a particular service.

2 **Sec. 43.82.240. Use of an independent contractor.** (a) The commissioner
3 may use an independent contractor to assist in the evaluation of an application or in
4 the development of contract terms under AS 43.82.200. The commissioner may
5 condition the development of a contract under AS 43.82.020 on an agreement by the
6 applicant to reimburse the state for the expenses of an independent contractor under
7 this section.

8 (b) An independent contractor selected under this section must sign an
9 agreement regarding confidentiality and disclosures consistent with the determinations
10 made under AS 43.82.310 before the contractor may review information that is
11 determined confidential under AS 43.82.310.

12 (c) Selection of an independent contractor under this section is not subject to
13 AS 36.30 (State Procurement Code).

14 **Sec. 43.82.250. Term of contract; effective date.** The term of a contract
15 developed under AS 43.82.020 may be for no longer than is necessary to develop the
16 stranded gas that is subject to the contract; however, the term of the contract may not
17 exceed 35 years from the commencement of commercial operations of the approved
18 qualified project.

19 **Sec. 43.82.260. Change of parties to an application or a contract;
20 assignment of interests.** (a) A qualified sponsor or member of a qualified sponsor
21 group may assign an interest in or add or withdraw a party to an application under
22 AS 43.82.120 only if the commissioner has

23 (1) made a finding that the assignment, addition, or withdrawal is
24 consistent with the requirements of AS 43.82.110; and

25 (2) given prior written approval for the assignment, addition, or
26 withdrawal.

27 (b) A contract developed under this chapter may provide for the assignment
28 to or withdrawal of a qualified sponsor or member of a qualified sponsor group.

29 (c) Upon being added to an application under this section, a party becomes a
30 qualified sponsor or a member of a qualified sponsor group, as appropriate, for the
31 relevant project.

1 (d) The commissioner may not unreasonably withhold approval under (a) of
2 this section, but may condition the approval in any way reasonably necessary to protect
3 the fiscal interests of the state and to further the purposes of this chapter.

4 (e) For purposes of this section, an assignment includes a transfer of stock or
5 a partnership interest in a manner that changes control of a qualified sponsor or
6 member of a qualified sponsor group.

7 **Sec. 43.82.270. Project plans and work commitments.** A contract under
8 AS 43.82.020 must include the qualified project plan approved under AS 43.82.140
9 and provisions for updating the plan at reasonable intervals until the commencement
10 of commercial operations of the approved qualified project. The commissioner of
11 revenue, in consultation with the commissioner of natural resources, may, as a term
12 in a contract under AS 43.82.020, include work commitments or other obligations in
13 the contract to be accomplished before the commencement of commercial operations
14 of the approved qualified project.

15 **Article 4. Requests for Information; Confidentiality;**
16 **Disclosure of Information.**

17 **Sec. 43.82.300. Requests for information.** The commissioner of revenue or
18 the commissioner of natural resources may request from an applicant information that
19 the respective commissioner determines is necessary to perform the respective
20 commissioner's responsibilities under AS 43.82.140. If the application is approved
21 under AS 43.82.140, the respective commissioner shall require the successful applicant
22 to provide financial, technical, and market information regarding the qualified project
23 that the respective commissioner determines is necessary for the purpose of developing
24 contract terms for the qualified project under AS 43.82.200. If requested information
25 is not provided, the commissioner of revenue may not continue to review the
26 application under AS 43.82.140 or develop the contract under AS 43.82.200 -
27 43.82.270, as applicable.

28 **Sec. 43.82.310. Disclosure of information; confidentiality.** (a) An applicant
29 may request confidential treatment of information that the applicant provides under
30 AS 43.82.300 by clearly identifying the information and the reasons supporting the
31 request for confidential treatment. The commissioner of revenue or the commissioner

1 of natural resources, as appropriate, shall keep the information confidential until the
2 commissioner determines whether the requirements of (b) of this section are met. If
3 the commissioner of revenue or the commissioner of natural resources has not made
4 a determination under (b) of this section within 14 days after receiving a request for
5 confidential treatment, the request is considered denied. If the appropriate
6 commissioner determines that the information does not meet the requirements of (b)
7 of this section or if the commissioner fails to make a determination within 14 days, the
8 commissioner shall return the information and any copies of it at the request of the
9 applicant. If the commissioner of revenue or the commissioner of natural resources,
10 as appropriate, returns information under this subsection, the commissioner shall cease
11 review of the application or cease contract development under AS 43.82.200 -
12 43.82.270, as appropriate, unless the commissioner determines that the returned
13 information is unnecessary to make a determination on the application or to develop
14 contract terms under AS 43.82.200 - 43.82.270.

15 (b) If requested by the applicant, information provided to the commissioner of
16 revenue or the commissioner of natural resources under AS 43.82.300 shall be kept
17 confidential if the commissioner receiving the information determines, upon an
18 adequate showing by the applicant, that the information

19 (1) is a trade secret or other proprietary research, development, or
20 commercial information that the applicant treats as confidential;

21 (2) affects the applicant's competitive position; and

22 (3) has commercial value that may be significantly diminished by
23 public disclosure or that public disclosure is not in the long-term fiscal interests of the
24 state.

25 (c) Information determined to be confidential under (b) of this section is
26 confidential under that subsection only so long as is necessary to protect the
27 competitive position of the applicant, to prevent the significant diminution of the
28 commercial value of the information, or to protect the long-term fiscal interests of the
29 state. The commissioner of revenue or the commissioner of natural resources, as
30 appropriate, may not release information that the commissioner has previously
31 determined to be confidential under (b) of this section without providing the applicant

1 notice and an opportunity to be heard.

2 (d) Notwithstanding the limitation in (c) of this section, the Department of
3 Revenue and the Department of Natural Resources may provide to one another, to the
4 Department of Law, to the legislature, and to the Office of the Governor any
5 information provided under AS 43.82.300 relevant to the implementation of this
6 chapter or to the enforcement of state or federal laws. Information that is exchanged
7 under this subsection that was determined to be confidential under (b) of this section
8 remains confidential except as provided in (c) of this section. The portions of the
9 records and files of the Department of Revenue, the Department of Natural Resources,
10 the Department of Law, the legislature, and the Office of the Governor that reflect,
11 incorporate, or analyze information that is determined to be confidential under (b) of
12 this section are not public records except as provided in (c) of this section.

13 (e) Notwithstanding the limitation in (c) of this section, information that is
14 determined to be confidential under (b) of this section shall be disclosed on request by
15 the commissioner of revenue, the commissioner of natural resources, or the attorney
16 general to a legislator; to the legislative auditor; and, as directed by the chair or vice-
17 chair of the Legislative Budget and Audit Committee, to the director of legislative
18 finance, to the permanent employees of those divisions who are responsible for
19 evaluating a contract under AS 43.82.020, and to agents or contractors of the
20 legislative auditor or the director of legislative finance who are engaged to evaluate
21 a contract under AS 43.82.020. Information that is determined to be confidential under
22 (b) of this section may also be disclosed by the commissioner of revenue or the
23 commissioner of natural resources to an independent contractor under AS 43.82.240
24 or to a municipal advisory group established under AS 43.82.510. Before confidential
25 information is disclosed under this subsection, the person receiving the information
26 must sign an appropriate confidentiality agreement.

27 (f) If the commissioner of revenue chooses to develop a contract under
28 AS 43.82.020, the portions of the records and files of the Department of Revenue, the
29 Department of Natural Resources, the Department of Law, and a municipal advisory
30 group established under AS 43.82.510 that reflect, incorporate, or analyze information
31 that is relevant to the development of the position or strategy of the commissioner of

1 revenue, the commissioner of natural resources, or the attorney general with respect
2 to a particular provision that may be incorporated into the contract are not public
3 records until the commissioner of revenue gives public notice under AS 43.82.410 of
4 the commissioner's preliminary findings and determination under AS 43.82.40'.
5 Nothing in this subsection

6 (1) makes a record or file of the Department of Revenue, the
7 Department of Natural Resources, or the Department of Law a public record that
8 otherwise would not be a public record under AS 09.25.100 - 09.25.220;

9 (2) affects the confidentiality provisions of (a) - (e) of this section; or

10 (3) abridges a privilege recognized under the laws of this state, whether
11 at common law or by statute or by court rule.

12 **Article 5. Contract Review, Approval, and Termination.**

13 **Sec. 43.82.400. Preliminary findings and determination regarding the**
14 **contract.** (a) If the commissioner develops a proposed contract under AS 43.82.200 -
15 43.82.270, the commissioner shall

16 (1) make preliminary findings and a determination that the proposed
17 contract terms are in the long-term fiscal interests of the state and further the purposes
18 of this chapter; and

19 (2) prepare a proposed contract that includes those terms and shall
20 submit the contract to the governor.

21 (b) To make the preliminary findings and determination required by (a)(1) of
22 this section, the commissioner shall compare the projected public revenue anticipated
23 from the approved qualified project with the estimated operating and capital costs of
24 the additional state and municipal services anticipated to arise from the construction
25 and operation of the approved qualified project. The commissioner shall address the
26 reasonably foreseeable effects of the proposed contract on the public revenue.

27 (c) In conjunction with the making of preliminary findings and determination
28 required by (a)(1) of this section, the commissioner shall describe the principal factors,
29 including the projected price of gas, projected production rate or volume of gas, and
30 projected recovery, development, construction, and operating costs, upon which the
31 determination made under (a)(1) of this section is based. If the commissioner has

1 previously submitted a proposed contract to the governor, the commissioner shall
2 describe any material differences between the terms of the currently proposed contract
3 and the previously proposed contract.

4 **Sec. 43.82.410. Notice and comment regarding the contract.** The
5 commissioner shall

6 (1) give reasonable public notice of the preliminary findings and
7 determination made under AS 43.82.400;

8 (2) make copies of the proposed contract, the commissioner's
9 preliminary findings and determination, and, to the extent the information is not
10 required to be kept confidential under AS 43.82.310, the supporting financial,
11 technical, and market data, including the work papers, analyses, and recommendations
12 of any independent contractors used under AS 43.82.240 available to the public and

13 .o

14 (A) the presiding officer of each house of the legislature;

15 (B) the chairs of the finance and resources committees of the
16 legislature; and

17 (C) the chairs of the special committees on oil and gas, if any,
18 of the legislature;

19 (3) offer to appear before the Legislative Budget and Audit Committee
20 to provide the committee a review of the commissioner's preliminary findings and
21 determination, the proposed contract, and the supporting financial, technical, and
22 market data; if the Legislative Budget and Audit Committee accepts the commissioner's
23 offer, the committee shall give notice of the committee's meeting to the public and all
24 members of the legislature; if the financial, technical, and market data that is to be
25 provided must be kept confidential under AS 43.82.310, the commissioner may not
26 release the confidential information during a public portion of a committee meeting;
27 and

28 (4) establish a period of at least 30 days for the public and members
29 of the legislature to comment on the proposed contract and the preliminary findings
30 and determination made under AS 43.82.400.

31 **Sec. 43.82.420. Coordination of public and legislative review.** To the extent

1 practicable, the commissioner shall coordinate the public comment opportunity
2 provided under AS 43.82.410(4) with a review by the Legislative Budget and Audit
3 Committee under AS 43.82.410(3).

4 **Sec. 43.82.430. Final findings, determination, and proposed amendments;
5 execution of the contract.** (a) Within 30 days after the close of the public comment
6 period under AS 43.82.410(4), the commissioner of revenue shall

7 (1) prepare a summary of the public comments received in response to
8 the proposed contract and the preliminary findings and determination;

9 (2) after consultation with the commissioner of natural resources, if
10 appropriate, and with the pertinent municipal advisory group established under
11 AS 43.82.510, prepare a list of proposed amendments, if any, to the proposed contract
12 that the commissioner of revenue determines are necessary to respond to public
13 comments;

14 (3) make final findings and a determination as to whether the proposed
15 contract and any proposed amendments prepared under (2) of this subsection meet the
16 requirements and purposes of this chapter.

17 (b) After considering the material described in (a) of this section and securing
18 the agreement of the other parties to the proposed contract regarding any proposed
19 amendments prepared under (a) of this section, if the commissioner determines that the
20 contract is in the long-term fiscal interests of the state, the commissioner shall submit
21 the contract to the governor.

22 (c) The commissioner's final findings and determination under (a) of this
23 section are final agency decisions under this chapter.

24 **Sec. 43.82.435. Legislative authorization.** The governor may transmit a
25 contract developed under this chapter to the legislature together with a request for
26 authorization to execute the contract. A contract developed under this chapter is not
27 binding upon or enforceable against the state or other parties to the contract unless the
28 governor is authorized to execute the contract by law. The state and the other parties
29 to the contract may execute the contract within 60 days after the effective date of the
30 law authorizing the contract.

31 **Sec. 43.82.440. Judicial review.** A person may not bring an action

1 challenging the constitutionality of a law authorizing a contract enacted under
2 AS 43.82.435 or the enforceability of a contract executed under a law authorizing a
3 contract enacted under AS 43.82.435 unless the action is commenced within 120 days
4 after the date that the contract was executed by the state and the other parties to the
5 contract.

6 **Sec. 43.82.445. Administrative termination of a contract.** (a) The
7 commissioner shall include terms in a contract developed under AS 43.82.020 that
8 provide for administrative termination of a party's rights under the procedures and
9 conditions set out in this section if the party has

10 (1) ceased to meet the requirements of AS 43.82.110 as a qualified
11 sponsor or qualified sponsor group;

12 (2) intentionally or fraudulently misrepresented, in whole or in part,
13 material facts or circumstances upon which the contract was made;

14 (3) failed to comply with a condition or material term of the contract
15 or a provision of this chapter; or

16 (4) failed to comply with the approved qualified project plan or any
17 updated project plan.

18 (b) Before administrative termination of a contract under this section, the
19 commissioner shall give notice to the parties of the commissioner's intent to terminate
20 the contract and an opportunity to be heard. The commissioner may also provide the
21 parties an opportunity to cure any deficiency that is the basis for the termination if the
22 commissioner determines that curing the deficiency is appropriate under the
23 circumstances.

24 (c) Notwithstanding (a) and (b) of this section, the commissioner may not
25 administratively terminate a contract after the party has committed full project funding
26 except as provided in (e) of this section.

27 (d) A party to a contract who is affected by the commissioner's action
28 to terminate under (a) of this section may file an appeal with the superior court under the
29 Alaska Rules of Appellate Procedure.

30 (e) The commissioner may provide terms and conditions in a contract
31 developed under AS 43.82.020 upon which a party's rights under the contract may be

1 administratively terminated after the party commits full project funding.

2 **Article 6. Municipal Participation.**

3 **Sec. 43.82.500. Obligation to share payments with municipalities.** If the
4 commissioner develops a contract under AS 43.82.020 that includes terms that exempt
5 a party to the contract, and the property, gas, products, and activities associated with
6 the approved qualified project that is subject to the contract, from a municipal tax or
7 assessment in accordance with AS 29.45.810 or AS 29.46.010(b), or AS 43.82.200 and
8 43.82.210, the commissioner shall include a term in the contract that the party pay a
9 portion of the periodic payments due under the contract to the revenue-affected
10 municipality.

11 **Sec. 43.82.505. Payments to economically affected municipalities.** If the
12 commissioner executes a contract under AS 43.82.020 that will produce one or more
13 economically affected municipalities, the commissioner shall include a term in the
14 contract that provides for a portion of the periodic payments to the economically
15 affected municipalities under the principles in AS 43.82.520.

16 **Sec. 43.82.510. Municipal advisory group.** (a) If the commissioner approves
17 an application and proposed project plan under AS 43.82.140 and decides to develop
18 a contract under AS 43.82.020 and 43.82.200, the commissioner shall notify each
19 revenue-affected municipality and economically affected municipality.

20 (b) The mayor of a municipality notified by the commissioner under (a) of this
21 section may appoint one representative to a municipal advisory group in relation to the
22 application.

23 (c) Each municipal advisory group serves until a final action is taken on the
24 application for which the group was appointed.

25 (d) Each municipal advisory group shall elect a chair.

26 **Sec. 43.82.520. Duties of the commissioner of revenue in relation to**
27 **municipal participation.** (a) The commissioner shall meet with each municipal
28 advisory group periodically to report on the development of the contract provisions that
29 affect the municipalities.

30 (b) In developing a contract under AS 43.82.200 - 43.82.270, the commissioner
31 shall ensure that each revenue-affected municipality and economically affected

1 municipality receives a fair and reasonable share of the payments provided under
2 AS 43.82.210 in accordance with the following principles:

3 (1) the share of the payments to revenue-affected municipalities should
4 be given priority over payments to economically affected municipalities with due
5 regard to the anticipated size of the tax base that the contract would exempt from
6 municipal taxation by revenue-affected municipalities;

7 (2) the share of the payments to municipalities should be determined
8 with due regard to the anticipated economic and social burdens that would be imposed
9 on the municipality by construction and operation of the project;

10 (3) the respective shares of the total payments to the state and to
11 municipalities should be fixed in a manner to ensure that their respective interests are
12 aligned;

13 (4) to the extent practicable, the periodic amounts paid to each of the
14 municipalities should be stable and predictable; and

15 (5) to the extent practicable, the provisions for sharing payments with
16 municipalities should be consistent with the principles established in AS 43.82.210(b).

17 (c) In establishing the municipal shares under (b) of this section, the
18 commissioner shall consult with the pertinent municipal advisory group.

19 **Article 7. Miscellaneous Provisions.**

20 **Sec. 43.82.600. Governing law.** If a provision of this chapter conflicts with
21 another provision of state or municipal law, the provision of this chapter governs.

22 **Sec. 43.82.610. Regulations.** The commissioner of revenue, the commissioner
23 of natural resources, and the commissioner of labor may adopt regulations to carry out
24 their respective duties under this chapter.

25 **Sec. 43.82.620. Procedures for collection of amounts due; security.** (a)
26 The commissioner may adopt procedures for the collection of amounts due the state
27 under a contract developed under AS 43.82.020, including the collection of interest and
28 penalties.

29 (b) The commissioner may require a party to a contract developed under
30 AS 43.82.020 to provide security sufficient to guarantee amounts due under the
31 contract.

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Sec. 43.82.630. Reports and audits. The commissioner may require periodic reports from and may at reasonable intervals conduct audits and inspect the books of a party that has entered into a contract developed under AS 43.82.020 to ensure compliance with the provisions of this chapter and the regulations adopted under this chapter and of the terms of the contract.

Sec. 43.82.640. Annual report of the commissioner of labor. On an annual basis, the commissioner of labor shall prepare and present to the legislature a comprehensive report on each party to a contract with the state developed under AS 43.82.020, and its contractors, regarding the state residency of the employees working in this state on the approved qualified project that is subject to the contract. The commissioner of labor shall use state databases, including data from the quarterly reports by a party to the contract developed under AS 43.82.020 and its contractors for unemployment insurance purposes, to determine state residency of employees regarding compliance with AS 43.82.230.

Sec. 43.82.650. Contracts developed by the legislature. Nothing in this chapter prohibits or limits the legislature from soliciting or negotiating contract offers or proposals that provide for the periodic payments or adjustments described in this section.

Article 8. General Provisions.

Sec. 43.82.900. Definitions. In this chapter, unless the context requires otherwise,

- (1) "affected municipality" means an economically affected municipality or a revenue-affected municipality;
- (2) "commencement of commercial operations" means the start of regular deliveries of marketable products from an approved qualified project;
- (3) "cubic foot of gas" means the quantity of gas contained in a volume of one cubic foot at a standard temperature of 60 degrees Fahrenheit and a standard absolute pressure of 14.65 pounds per square inch;
- (4) "economically affected municipality" means a municipality the commissioner of revenue determines will be reasonably required to provide additional public services under the terms proposed in an application approved under

1 AS 43.82.140(a); the commissioner may consider historical data from construction of
2 the Trans Alaska Pipeline System, and information submitted by a municipality in
3 making the determination;

4 (5) "economic proximity" means the distance within which a person
5 may be willing to design, construct, and operate a gas line to provide service to a local
6 consumer;

7 (6) "economic rent" means the estimated total gross revenue less
8 estimated total costs for a qualified project over the term of a contract under
9 AS 43.82.020, measured in undiscounted nominal dollars; for purposes of this
10 paragraph, total costs do not include a rate of return on capital, financing costs, or any
11 payments to governments;

12 (7) "full project funding" means full approval by a party to a contract
13 under AS 43.82.020 for the expenditure of the capital necessary for construction and
14 operation of the approved qualified project that is subject to the contract;

15 (8) "gas" has the meaning given in AS 43.55.900;

16 (9) "group" means two or more persons;

17 (10) "lease or property" has the meaning given in AS 43.55.900;

18 (11) "periodic payment" means payment made in lieu of one or more
19 other taxes under a contract under AS 43.82.020;

20 (12) "revenue-affected municipality" means a municipality that the
21 commissioner of revenue reliably expects will be restricted from imposing a tax, or a
22 portion of a tax, as a result of implementation of a contract developed under this
23 chapter;

24 (13) "stranded gas" means gas that is not being marketed due to
25 prevailing costs or price conditions as determined by an economic analysis by the
26 commissioner for a particular project.

27 **Sec. 43.82.990. Short title.** This chapter may be cited as the Alaska Stranded
28 Gas Development Act.

29 * **Sec. 4.** AS 29.10.200 is amended by adding new paragraphs to read:

30 (54) AS 29.45.810 (exemption from municipal taxation);

31 (55) AS 29.46.010(b) (exemption from municipal assessment).

1 * Sec. 5. AS 29.45 is amended by adding a new section to read:

2 **Sec. 29.45.810. Exemption from municipal taxation.** (a) A party to a
3 contract approved by the legislature as a result of submission of a proposed contract
4 developed under AS 43.82 or as a result of acts by the legislature in implementing the
5 purposes of AS 43.82, and the property, gas, products, and activities associated with
6 the approved qualified project that is subject to the contract, are exempt, as specified
7 in the contract, from all taxes identified in the contract that would be levied and
8 collected by a municipality under state law as a consequence of the participation by
9 the party in the approved qualified project.

10 (b) This section applies to home rule and general law municipalities.

11 * Sec. 6. AS 29.46.010 is amended by adding a new subsection to read:

12 (b) Notwithstanding (a) of this section, a party to a contract approved by the
13 legislature as a result of submission of a proposed contract developed under AS 43.82
14 or as a result of acts by the legislature in implementing the purposes of AS 43.82, is
15 exempt, as specified in the contract, from assessment under this chapter against real
16 property associated with the approved qualified project that is subject to the contract.

17 * Sec. 7. AS 36.30.850(b) is amended by adding a new paragraph to read:

18 (38) contracts between the commissioner of revenue and an independent
19 contractor under AS 43.82.240.

20 * Sec. 8. AS 43.20.072 is amended by adding a new subsection to read:

21 (h) A taxpayer that has signed a contract approved by the legislature as a result
22 of submission of a proposed contract developed under AS 43.82 or as a result of acts
23 by the legislature in implementing the purposes of AS 43.82, providing for payments
24 in lieu of the tax under this chapter and that has nexus with the state solely as the
25 result of the taxpayer's participation in the approved qualified project that is subject
26 to the contract or would not, but for such participation, be engaged in the production
27 of oil or gas from a lease or property in this state or engaged in the transportation of
28 oil or gas by pipeline in this state, is not required to file a return under this section
29 unless required to do so by the contract.

30 * Sec. 9. AS 43.20.073 is amended by adding a new subsection to read:

31 (h) A corporation that has signed a contract approved by the legislature as a

1 result of submission of a proposed contract developed under AS 43.82 or as a result
2 of acts by the legislature in implementing the purposes of AS 43.82, providing for
3 payments in lieu of the tax under this chapter and that has nexus with the state solely
4 as the result of the corporation's participation in the approved qualified project that is
5 subject to the contract is not required to file a return under this section unless required
6 to do so by the contract.

7 * **Sec. 10. SEVERABILITY.** Under AS 01.10.030, if any provision of this Act, or the
8 application of a provision of this Act to any person or circumstance, is held invalid, the
9 remainder of this Act and the application to other persons or circumstances is not affected.

10 * **Sec. 11.** This Act takes effect immediately under AS 01.10.070(c).

1 Representative Ogan.

2 REPRESENTATIVE OGAN: There's those -- there's
3 a couple different [indisc.] of thinking on -- on the market
4 window, and assuming that the -- the 2005 window is -- is the
5 correct window, at least it was last year, what I've heard
6 here, it seems that would be a -- be a little glitch in the
7 Asian market that might buy us a little bit of extra time. Is
8 that a fair analysis.

9 DR. VANURES: No. I have never been the
10 believer in the concept of a window. Like I -- I have also
11 argued that, you know, if -- if the fiscal terms are right, if
12 the fiscal terms are effective, the Asian markets will grow
13 and this project will enter that market when the conditions
14 are -- are -- are appropriate and -- and good for this
15 project. Obviously, if there is less demand, if we have to
16 drop of two or three percent in demand in 1998, [indisc.] to
17 1997, instead of a growth of five percent, as was predicted,
18 that will cause some delays.

19 CHAIRMAN HODGINS: Thank you, Dr. VanUres.
20 Representative Bunde, you had a question of Dr. VanUres?

21 REPRESENTATIVE BUNDE: Yeah, thank you, Mr.
22 Chairman. Dr. VanUres, I -- I think perhaps you may have
23 answered this question. There was some discussion a moment
24 ago about the price of Alaska North Slope crude, and was it
25 fair to characterize your remarks as to say that the chances

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Alaska North Slope LNG Economics

Based on Pedro van Meurs' February, 1997 Report

Base Case Economic Assumptions

- Project cost of \$15 Billion
- LNG Price of \$3.50/MMBTU
- Six year sales volume ramp-up
- Peak sales 14.5 million tons/yr

Economic Results

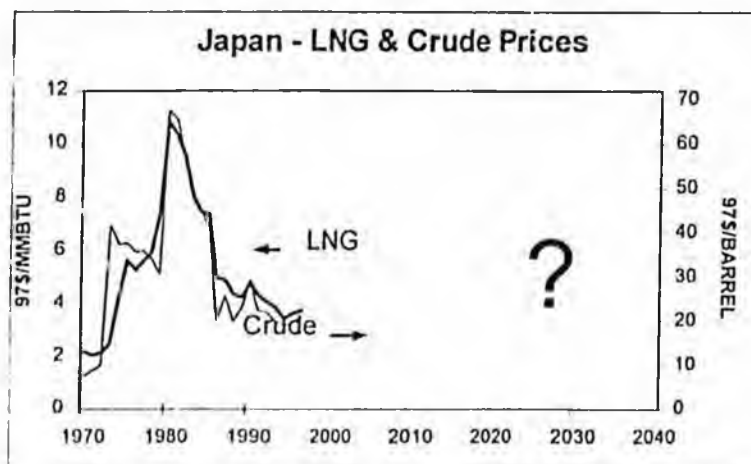
	\$15 Billion	\$12 Billion	Benchmarks
ROR - Total Capital	8.9%	10.8%	PvM "hurdle rate" of 12% to 14%*
ROR - Investor's Equity	11.4%	14.6%	PvM "hurdle rate" of 15% to 17%*
Netback Price	-\$0.10/mcf	\$0.64/mcf	PvM "minimum" of \$0.98 to \$1.02/mcf

* Each investor will have his own judgment as to the minimum acceptable ROR which will depend on many factors including the investor's cost of capital and the judgment as to the relative risk of the project.

Project Risks

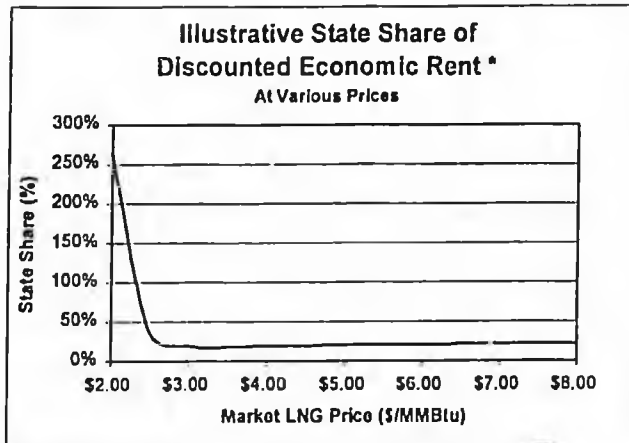
- The relative risks of a project is an important factor in deciding about the attractiveness of a project and in deciding the hurdle rate.
- Van Meurs states, "It should be noted that relatively speaking the Alaska project cannot be considered low risk."

Relative Project Risk Alaska vs Ras Laffan		
	Alaska	Ras Laffan
Risks		
Regional conflict risk	Very Low	Very High
General country risk	Low	Average
Gas reserve risk	Low	Very Low
Gas price risk	Average-High	High
Regulatory/legal risk	High	Low
Risk of cost overrun	High	Low
Market access	High	Average
Fiscal stability	High	Low



Key Conclusions from van Meurs' Report

- The Project is currently uneconomic
- The state fiscal system is not favorable to the project because it:
 - Does not offer fiscal stability ("an ANS LNG project will not occur without a significant enhancement of the stability of the fiscal terms.")
 - Is front-end loaded (i.e. state take begins before the project produces any revenue)
 - Is regressive (i.e. state take increases with decreasing profitability).



* Current Fiscal System at \$12 Billion Investment

Van Meurs' Recommendations

- Substantially reduce costs.
- Improve profitability through a fiscal package in which the Federal, State and Local governments cooperate.
- Reduce the risks to the project (e.g. provide fiscal stability via a contractual arrangement between the state and the producers).

of a future legislature to revoke that contract and change that person's tax liability through the enactment of a general law. Viewed another way, Sections 1 and 4 of Article IX allow a contract to stand in the stead of a general law imposing a tax. This means that a future legislature may amend the tax liability imposed by the contract just as it may amend any general tax law.

[A contract that can be amended by any general tax law is not really a contract. The DOL's position that a tax contract entered into by the state is subject to unilateral change or even termination by the state runs contrary to the basic tenet of contract law that a purported agreement that does not bind both parties is illusory and therefore unenforceable, i.e., it is not really a contract. Accordingly, the DOL's position, if correct, would render a section of the Alaska Constitution as having no effect. As shown above, Article IX, Section 1 clearly provides that there may be circumstances under which the power of taxation may be contracted away. If the state is incapable of entering into a binding tax agreement (i.e., a contract), it necessarily follows that the power of taxation cannot therefore be "contracted away" as provided for in the Constitution.]

There is a contrary interpretation of Article IX, Sections 1 and 4. Article IX, Section 1 does not clearly state that the power of taxation may never be contracted away; instead, it states "[t]his power shall not be suspended or contracted away, except as provided in this article." Nowhere else in Article IX is the suspension or contracting away of the taxing power explicitly discussed. The minutes of the Constitutional Convention reveal, however, that what the framers had in mind was the provision in Section 4 empowering the legislature to create tax exemptions by general law.

[The Alaska Constitutional Convention was specifically presented with the opportunity to establish a constitution which would prohibit a legislature from entering into a binding tax contract and they intentionally chose not to do so. The language for the section which ultimately became Article IX of the Alaska Constitution initially proposed to the Finance and Taxation Committee of the Constitutional Convention provided: "the power to (sic) taxation shall never be surrendered, suspended or contracted away" and did not provide for any possible exceptions. The explanatory information provided with this proposed language provided in part: "Its object is to prevent the state from exempting, particularly by contract, individuals and corporations from taxation." 3 Constitutional Studies, Staff Paper IX, "State Finances", at 4-5 (1955).

It should be noted that the same explanatory material provided:

The power to tax is not considered inalienable, however. In granting exemptions, one legislature may bind another and thereby lose for the state its power to tax. The exemption may, under certain conditions, result in a contract relationship that legislatures may not abrogate without violating the federal constitutional guarantee against state legislation impairing the obligation of contracts. (Emphasis added.) Id. at 15-16.

In the face of this information, the framers of the Alaska Constitution clearly chose to provide the legislature with the authority to grant binding tax exemptions, if authority to do so is granted by general law, and such authorization does not result in a complete surrender of the taxing authority.

The commentary of the Constitutional Convention further demonstrates the intent of the framers of the Alaska Constitution on this issue. The December 16, 1955 commentary concerning the Article IX, Section 4 language on exemptions provided in part: "The legislature is authorized to make further tax exemptions to encourage, among other things, new industry." This commentary also provided: "The power to tax is never to be surrendered, but under terms that may be established by the legislature, it may be suspended or temporarily contracted away. This could include industrial incentives, for example." Also, the Secretary of the Finance Committee to the convention stated on the floor of the convention on December 19, 1955: "Section 1 is a rather routine statement that the power of taxation shall never be surrendered or contracted away. The reason for the division of the thought there and the addition of the words 'except as provided herein' is to remove doubt as to what we might mean later on down in the article by providing exemptions Section 4 deals with exemptions from taxation, most of which is pretty standard And then in the last paragraph of that section it provides that other exemptions may be provided by general law. This would allow for, among other things, a granting of tax incentives to new industries." (Emphasis added.)

The Alaska Legislature in both the Alaska Industrial Incentive Act and the Industrial Incentive Tax Credit Act has provided that the granting of the tax exemption or the tax credit established a contract between the taxpayer and the state. The Acts specifically provided: "A grant of tax exemption under this chapter is considered a contract between the grantee and the state," AS 43.25.040 (repealed), and "A grant of tax credit under this chapter shall be considered a contract between the grantee and the state," AS 43.26.020 (repealed). The Alaska Supreme Court has recognized that the tax exemptions granted pursuant to the Alaska Industrial Incentive Act were not subject to challenges under the commerce and equal protection clauses of the Constitution and recognized that there was a contract between the state and the grantee. The issue of whether a future legislature was bound to that contract, however, was not before the court.]

The framers' choice of language creates an ambiguity, if not an outright conflict, between Secs. 1 and 4, because a general law tax exemption as a rule is not considered a "suspension" or a "contracting away" of the taxing power, but rather an exercise of it. This ambiguity leaves open the argument that the framers' intent was to allow the legislature to authorize by general law the state to enter contracts exempting persons from certain taxes and that such contracts would be binding on future legislatures--i.e., future legislatures could not impose new or different tax obligations on the signatories to the contracts without running afoul of the Impairment of Contracts Clause of the U.S. Constitution.

ALASKA CONSTITUTIONAL CONVENTION

Commentary on the Article on Finance And Taxation

(Sec. 1 Taxing Power)

The power to tax is never to be surrendered, but under certain conditions may be established by the legislature, it may be suspended or temporarily contracted away. This could include industrial incentives, for example.

(Sec. 2 Taxation of Non-residents)

This section and its wording is required by the latest proposed enabling act, H.R. 2535.

(Sec. 3 Uniform Standards for Assessment)

The legislature is authorized to set up, notwithstanding local rule or any system for the selection of assessors, uniform standards of assessment.

(Sec. 4 Exemptions from Taxation)

All property owned by the state and its subdivisions is exempt from taxation unless the legislature directs otherwise. An exception from tax immunity might be appropriate if a government engaged in what is normally a private business, such as operating a ski resort, a moving picture theater, or a swimming pool.

The second sentence of this section is intended to exempt from taxation that part of the property of religious, charitable, cemetery, or educational organizations which is actually used for those purposes, as the legislature may direct. But their property used for other



OILWATCH ALASKA

PO Box 101553 Anchorage, AK 99510 © Ph: 907-277-8910 Email: oilwatch@alaska.net

DT: March 31, 1998
TO: Representative Ramona Barnes
FR: Jim Sykes, Executive Director
RE: Questions about Gas to Liquids (GTL) Technology, HB 393

FAX CONTAINS FOUR (4) PAGES

Dear Representative Barnes,

Thank you for asking some important questions in regards to HB 393. Your forthrightness about doing thorough committee work on the bill was appreciated.

I will recap some of the content during our last meeting with Dr. Van Mueres in regards to GTL. Please be aware that the views of Dr. Van Mueres and those of state economists are not always the same in this area. Dr. Van Mueres sketched out the following example:

Imagine \$100 billion worth of Natural gas at \$3.50 per mcf. Subtract \$15 billion for the cost of the pipeline and maybe another \$10 billion for operating costs over the life of the line. You are left with \$75 billion to tax the natural gas that goes through the pipeline. Next, imagine losing around 40% of the energy converting to gas liquids which may be worth \$0.50 per mcf that would leave approximately \$15 billion of taxable product. The plant that makes the gas liquids could also make diesel which could be sold commercially. The state may not currently have a way of taxing the end diesel product which companies could use in operations or sell for profit.

GTL Technology is developing to where less energy is required to convert the gas liquids and more energy is retained in the conversion. It might be good to find out if the state could successfully tax a GTL downstream product such as diesel. It would seem prudent to address such an issue prior to negotiating a contract for our natural gas.

I am enclosing some of the latest information on GTL and potentially newer and better technologies from the Scientific American March issue. If GTL technologies become substantially more efficient and profitable, the state should prepare to tax them for their real value. Under the present circumstances, GTL's do not appear to be worth much to the State of Alaska, although that could change. It is very doubtful that new GTL technologies would address the same markets as LNG within the same time frame of 2005.

If you have further questions, please call 277-8910, 338-5551 or the cell phone at 230-3081.

Most sincerely,



Liquid Fuels from Natural Gas

Natural gas is cleaner and more plentiful than oil. New ways to convert it to liquid form may soon make it just as cheap and convenient to use in vehicles

by Safaa A. Fouda

Recently countless California motorists have begun contributing to a remarkable transition. Few of these drivers realize that they are doing something special when they tank up their diesel vehicles at the filling station. But, in fact, they are helping to wean America from crude oil by buying a fuel made in part from natural gas.

Diesel fuel produced in this unconventional way is on sale in California because the gas from which it is derived is largely free of sulfur, nitrogen and heavy metals—substances that leave the tailpipe as noxious pollutants. Blends of ordinary diesel fuel and diesel synthesized from natural gas (currently produced commercially by Shell in Indonesia) meet the toughest emissions standards imposed by the California Air Resources Board.

But natural gas is not only the cleanest of fossil fuels, it is also one of the most plentiful. Industry analysts estimate that the world holds enough readily recoverable natural gas to produce 500 billion barrels of synthetic crude—more than twice the amount of oil ever found in the U.S. Perhaps double that quantity of gas can be found in coal seams and in formations that release gas only slowly. Thus, liquid fuels derived from natural gas could keep overall production on the rise for about a decade after conventional supplies of crude oil begin to dwindle.

Although global stocks of natural gas are enormous, many of the deposits lie far from the people in need of energy. Yet sending gas over long distances often turns out to be prohibitively expensive. Natural gas costs four times as much as crude oil to transport through pipelines because it has a much lower energy density. The so-called stranded gas can be cooled and compressed into a liquid for shipping by tanker. Unfor-

tunately, the conversion facilities required are large and complex, and because liquefied natural gas is hard to handle, the demand for it is rather limited.

But what if there were a cheap way to convert natural gas to a form that remains liquid at room temperature and pressure? Doing so would allow the energy to be piped to markets inexpensively. If the liquid happened to be a fuel that worked in existing vehicles, it could substitute for oil-based gasoline and diesel. And oil producers would stand to profit in many instances by selling liquid fuels or other valuable chemicals made using the gas coming from their wells.

Right now the gas released from oil wells in many parts of the world holds so little value that it is either burned on site or reinjected into the ground. In Alaska alone, oil companies pump about 200 million cubic meters (roughly seven billion cubic feet) of natural gas back into the ground daily—in large part to avoid burdening the atmosphere with additional carbon dioxide, a worrisome greenhouse gas.

But recent technical advances have prompted several oil companies to consider building plants to convert this natural gas into liquid form, which could then be delivered economically through the Alaska pipeline. On the Arabian Peninsula, the nation of Qatar is negotiating with three petrochemical companies to build gas conversion plants that would exploit a huge offshore field—a single reservoir that contains about a tenth of the world's proved gas reserves. And Norway's largest oil company, Statoil, is looking at building relatively small modules mounted on floating platforms to transform gas in remote North Sea fields into liquids. Although these efforts will use somewhat different technologies, they all must address the same

fundamental problem in chemistry: making larger hydrocarbon molecules from smaller ones.

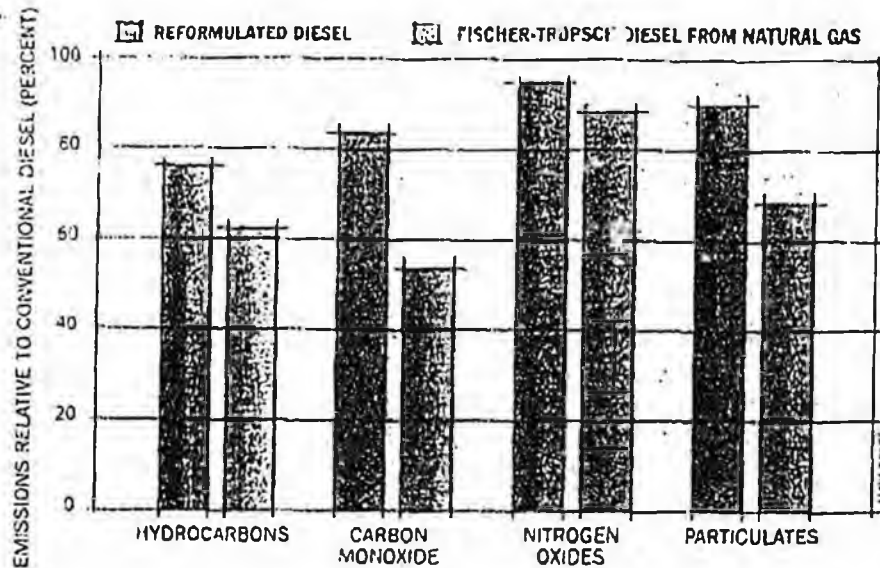
The Classic Formula

The main component of natural gas is methane, a simple molecule that has four hydrogen atoms neatly arrayed around one carbon atom. This symmetry makes methane particularly stable. Converting it to a liquid fuel requires first breaking its chemical bonds. High temperatures and pressures help to tear these bonds apart. So do cleverly designed catalysts, substances that can foster a chemical reaction without themselves being consumed.

The conventional "indirect" approach for converting natural gas to liquid form relies on brute force. First, the chemical bonds in methane are broken using steam, heat and a nickel-based catalyst to produce a mixture of carbon monoxide and hydrogen known as syngas (or, more formally, synthesis gas). This process is called steam re-forming.

The second step in the production of liquid fuels (or other valuable petrochemicals) from syngas uses a method invented in 1923 by Franz Fischer and Hans Tropsch. During World War II, Germany harnessed this technique to produce liquid fuels using syngas made from coal and atmospheric oxygen, thus establishing a reliable internal source for gasoline and diesel.

This Fischer-Tropsch technology has allowed Sasol in South Africa to produce liquid fuels commercially for decades using syngas derived from coal. The company uses the same basic technique today: syngas blown over a catalyst made of cobalt, nickel or iron transforms into various liquid hydrocarbons. Conveniently, the Fischer-Tropsch reaction gives off heat, and often this heat is



HARMFUL VEHICLE EMISSIONS were lowered somewhat in 1993, when U.S. regulations required that diesel fuel be reformulated to reduce pollution. Fuel derived from natural gas using Fischer-Tropsch synthesis creates even fewer emissions than reformulated diesel.

fuels by 15 percent. These savings would accrue because the production of syngas could be done at temperatures about 200 degrees lower than those currently used and because there would be no need to liquefy air. With cheap and plentiful oxygen, partial oxidation alone could supply syngas. This first step would then release energy rather than consume it.

My Canadian colleagues and I, along with researchers at the University of Florida, are now attempting to create a different kind of ceramic membrane that would offer yet another advantage. The membranes we are trying to develop would remove hydrogen from the gas mixture, driving the partial oxidation of methane forward and providing a stream of pure hydrogen that could be used later in refining the final products or as an energy source itself.

We also expect to see significant improvements soon in the catalysts used to make syngas. In particular, researchers at the University of Oxford are studying metal carbides, and my colleagues at the Canadian Center for Mineral and Energy Technology are investigating large-pore zeolites. Both materials show great promise in reducing the soot generated during operation, a problem that not only plugs the reactor but also reduces the activity of the catalysts over time.

Cheaper than Oil?

Although the prospects for such brute-force methods of converting natural gas to liquid fuel improve every day, more ingenious techniques on the horizon would accomplish that transformation in a single step. This approach could potentially cut the cost of conversion in half, which would make liquid fuels produced from natural gas actually less expensive than similar products refined from crude oil.

Early efforts to achieve such "direct" conversion by using different catalysts and adding greater amounts of oxygen had produced mostly disappointment. The hydrocarbons that were formed proved more reactive than the methane supplied. In essence, they burned up

used to drive the oxygen compressors needed to make syngas.

Just which liquids emerge from the reaction depends on temperature. For example, running a reaction vessel at 330 to 350 degrees Celsius (626 to 662 degrees Fahrenheit) will primarily produce gasoline and olefins (building blocks often used to make plastics). A cooler (180 to 250 degree C) operation will make predominantly diesel and waxes. In any case, a mixture results, so a third and final step is required to refine the products of the reaction into usable fuels.

Refining synthetic crudes derived from gas is in many respects easier than working with natural crude oil. Synthetic crude contains virtually no sulfur and has smaller amounts of cancer-causing compounds than are found in conventional oil. So the final products are premium-quality fuels that emit fewer harmful substances.

A Partial Solution

This brute-force method of converting gas to liquids is reliable, but it is expensive because it uses so much energy. Conventional steam re-forming compresses methane and water vapor to about 30 times normal atmospheric pressure and heats these reactants to about 900 degrees C. And one must add more heat still, to coax the energy-hungry reaction continuously along. This extra heat comes from injecting a small amount of oxygen into the mixture, which combusts some of the methane (and, as an added benefit, makes more syngas). Chemists call this latter maneuver partial oxidation.

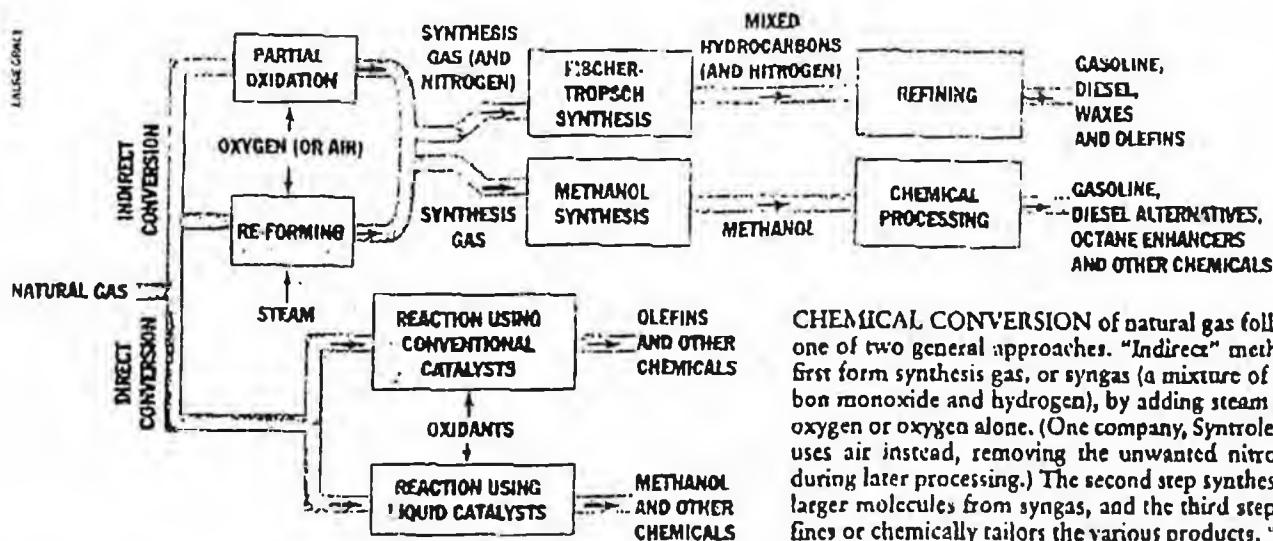
In general, syngas is generated using

various combinations of steam re-forming and partial oxidation. In most cases, the process requires large quantities of oxygen—and oxygen is costly. Existing methods of separating oxygen from air rely on refrigeration to cool and liquefy it, an energy-intensive and expensive manipulation. Hence, lowering the cost of oxygen is the key to making syngas cheaply.

Fortunately, recent developments promise to revolutionize the way oxygen is produced over the next few years. One strategy is simply to work with air instead of pure oxygen. Syntroleum Corporation in Tulsa has developed a way to make liquid fuels using blown air and methane for the re-forming step, followed by Fischer-Tropsch synthesis. At sites where natural gas is sufficiently cheap (for example, places where it is now being flared), the process should prove profitable even at current crude oil prices. Together with Texaco and the English company Brown & Root, Syntroleum plans to build a commercial plant that will use this technique within two years.

Several other private companies, universities and government research laboratories are pursuing a wholly different approach to the oxygen problem: they are developing ceramic membranes through which only oxygen can pass. These membranes can then serve as filters to purify oxygen from air. Though still difficult and expensive to construct, laboratory versions work quite well. They should be commercially available within a decade.

Such materials could reduce the cost of making syngas by about 25 percent and lower the cost of producing liquid



CHEMICAL CONVERSION of natural gas follows one of two general approaches. "Indirect" methods first form synthesis gas, or syngas (a mixture of carbon monoxide and hydrogen), by adding steam and oxygen or oxygen alone. (One company, Syntroleum, uses air instead, removing the unwanted nitrogen during later processing.) The second step synthesizes larger molecules from syngas, and the third step refines or chemically tailors the various products. "Direct" conversion of natural gas in one step requires an oxidant and may involve special liquid catalysts.

faster than they were produced. Unless the product is somehow removed from the reaction zone, yields are too low to be practical.

Fortunately, researchers have recently found ways to circumvent this problem. The trick is to run the reaction at comparatively mild temperatures using exotic catalysts or to stabilize the product chemically—or to do both. For example, chemists at Pennsylvania State University have converted methane to methanol directly using a so-called homogeneous catalyst, a liquid that is thoroughly mixed with the reactants and held at temperatures lower than 100 degrees C. And Catalytica, a company in Mountain View, Calif., has achieved yields for direct conversion that are as high as 70 percent using a similar scheme. Its liquid catalyst creates a relatively stable chemical intermediate, methyl ester, that is protected from oxidation. The final product (a methanol derivative) is easily generated with one subsequent step.

Methanol (also known as wood alcohol) is valuable because it can be readily converted to gasoline or to an octane-boosting additive. And in the near future methanol (either used directly or transformed first into hydrogen gas) could also serve to power fuel-cell vehicles on a wide scale. Thus, methanol can be regarded as a convenient currency for storing and transporting energy.

Moreover, the reactions used to synthesize methanol can be readily adjusted to churn out diesel alternatives such as dimethyl ether, which produces far fewer troublesome pollutants when it burns. So far dimethyl ether, like propane, has found little use as a transportation fuel because it is a gas at room

temperature and pressure. But recently Air Products, a supplier of industrial gases in Allentown, Pa., announced the production of a dimethyl ether derivative that is liquid at ambient conditions. So this substitute for conventional diesel fuel would reduce emissions without major changes to vehicles and fueling stations.

Now You're Cooking with Gas

Scientists and engineers are pursuing many other possible ways to improve the conversion of natural gas into liquids. For instance, process developers are constantly improving the vessels for the Fischer-Tropsch reaction to provide better control of heat and mixing.

The most ambitious efforts now under way attempt to mimic the chemical reactions used by specialized bacteria that consume methane in the presence of oxygen to produce methanol. Low-temperature biological reactions of this kind are quite promising because they can produce specific chemicals using relatively little energy.

Whether or not this bold line of research ultimately succeeds, it is clear that even today natural gas can be converted into liquid fuels at prices that are only about 10 percent higher per barrel than crude oil. Modest improvements in technology, along with the improved economics that come from making specialty chemicals as well from gas, will broaden the exploitation of this abundant commodity in coming years. Such developments will also provide remarkably clean fuels—ones that can be easily blended with dirtier products refined from heavier crude oils to meet increas-

ingly strict environmental standards. So the benefits to society will surely multiply as people come to realize that natural gas can do much more than just run the kitchen stove. □

The Author

SAFAA A. FOUHA received a doctorate in chemical engineering from the University of Waterloo in 1976. Since 1981 she has worked at the CANMET Energy Technology Center, a Canadian government laboratory in Nepean, Ontario. There she manages a group of researchers studying natural gas conversion, emissions control, waste oil recycling and liquid fuels from renewable sources. Recently she headed an international industrial consortium intent on developing better methods to convert natural gas to liquid fuels.

Further Reading

METHANE CONVERSION BY OXIDATIVE PROCESSES: FUNDAMENTAL AND ENGINEERING ASPECTS. Edited by E. E. Wolf. Van Nostrand Reinhold, 1992.

THE DIFFERENT CATALYTIC ROUTES FOR METHANE VALORIZATION: AN ASSESSMENT OF PROCESSES FOR LIQUID FUELS. J. M. Fox III in *Catalysis Reviews: Science and Engineering*, Vol. 35, No. 2, pages 169–212; August 1993.

CONVERT NATURAL GAS INTO CLEAN TRANSPORTATION FUELS. M. Agce in *Hart's Fuel Technology and Management*, Vol. 7, No. 2, pages 69–72; March 1997.

REMOTE GAS STRATEGIES. World Wide Web site by Zeus Development Corporation available at <http://www.remotegasstrategies.com/>

10.2.4 FURTHER ENHANCED COMPETITION

Significant improvements in fiscal terms may result in making the Yemen project more attractive.

Qatar may also become more aggressive in marketing gas once the current two projects are fully onstream. An ongoing further development of more projects would be beneficial for the Qatar economy.

10.3 RECOMMENDATION

Improved fiscal terms may help considerably in securing the earliest possible "slot" for the Alaska project during the 2005 - 2010 period. This would avoid the risks of further delays. However, on the other hand a delay in the project may be in some cases beneficial for Alaska and it is therefore not necessarily disastrous if some delays would occur.

Based on generalized economic calculations the indicative Project ROR of these projects could be compared with the applicable hurdle rates as follows for the \$ 3.50 scenario:

INDICATIVE COMPARATIVE ANALYSIS AND RATING OF FUTURE PROJECTS				
	Hurdle	ROR	Diff	Rating
	%	%	%	%
Alaska - \$12 billion	12.0%	10.8%	-1.2%	5
Canada-PACRIM	12.0%	12.0%	0%	2
Australia-Gorgon	12.0%	11.1%	-0.9%	4
Russia-Sakhalin II	14.0%	11.0%	-3.0%	8
Mal-Bintulu III	12.0%	11.4%	-0.6%	3
Indon- Irian Jaya	13.0%	14.1%	+1.1%	1
Indonesia-Natuna	13.0%	10.8%	-2.2%	7
PNG-Hides	13.0%	11.3%	-1.7%	6
Yemen - Hunt	13.0%	9.9%	-3.1%	9

It can be seen how Alaska seems to rate in the middle of the group of future projects.

Both the Canadian PAC-RIM and the Irian Jaya project are in the hurdle rate range. Malaysia III is close to the hurdle rate. The other projects seem unattractive at this time.

The total output of the projects would be 37.8 million tons per year. Only a few of these projects might be launched prior to 2010. Therefore, for Alaska to be able to enter the market in the 2005 - 2010 period, Alaska would have to compete with the best of these projects.

This indicates that the rate of return of the Alaska project would have to be improved considerably in order to make the project more profitable in comparison with the indicative rate of return of competing projects.

5.5 EFFECT OF TIME ON THE PROJECT

The effects of time on the Alaska LNG project are important.

As indicated earlier, the ramp-up speed could add about 0.7% to the Project ROR if the ramp up time could be reduced from 6 to 3 years. It is likely that the ramp up time could be reduced somewhat over time.

By the year 2010 the Pacific markets may increase at a rate of 3 million or more per year instead of 2.5 million tons per year. This might result in a situation where the ramp up time could be reduced to 5 years or 4.5 years. This would increase the rate of return and make the market access risk less. //

At the same time the liquid loss which is estimated at 384 million barrels if the project starts in 2005 might be reduced to less than half this amount by the year 2010. This would add about 0.2% to the Project ROR.

A general benefit to Alaskan's might be that over time the CIF prices for gas in East Asia may increase in real terms, creating a considerably higher economic rent which in turn would result in much higher government revenues.

The main drawback of delays in the Alaska project is that the project may be "nibbled to death" by small projects coming in ahead of the Alaska project. Petroleum exploration in Asia used to be primarily for oil. Gas was considered a by-product. However, the strongly emerging gas markets in Asia have now created a situation where petroleum companies are now exploring for gas.

Exploration in Thailand, Pakistan and China is in many cases aimed at discovering gas. Vietnam may shortly initiate a program aimed at making gas exploration more attractive. Therefore, it can be expected that many gas discoveries will be made during the next decade.

At the same time the economics of small LNG liquefaction facilities is improving.

All such conditions could lead to a situation where Alaska may be delayed.

5

¶ 70,259

Yukon Pacific Corporation (ERA Docket No. 87-68-LNG), November 16, 1989.

DOE/FE Opinion and Order No. 350

Order Granting Authorization to Export Liquefied Natural Gas from Alaska

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C. State of Alaska

⁴ See, e.g., *Grand Valley Gas Company*, 1 FE ¶ 70,239 (August 25, 1989); *Potomac Energy Corporation*, 1 FE ¶ 70,237 (August 24, 1989); *Cascade Natural Gas Corporation*, 1 FE

¶ 70,225 (June 12, 1989); and *Wisconsin Public Service Corporation*, 1 FE ¶ 70,230 (June 19, 1989).

merce,⁸⁷ the exercise of that authority is subject to any terms or conditions attached by the DOE to the import or export approval.⁸⁸ In order to avoid overlap with enforcement of the "ANGTA condition" and to relieve the export from duplicative and unnecessary regulation, the DOE has decided to exercise its authority to limit any jurisdiction the FERC might otherwise acquire over the export project in the event TAGS and ANGTS share a facility that is subject to the FERC's interstate commerce jurisdiction, such as the Alaska Gas Conditioning Facility proposed by the ANGTS sponsors. The FERC shall only exercise such authority over the export project to the extent necessary to ensure that the shared facility is constructed and operated in accordance with FERC's regulations, including those concerning the environment. The FERC shall have no other authority over Yukon Pacific's export project, including its rates, except to the extent necessary to ensure that Yukon Pacific pays its part of the costs of any shared facility. The DOE intends this limitation on the FERC's authority to apply not only to the gas conditioning plant, but also to any other facility subject to the FERC's jurisdiction that the export project might utilize. This limitation does not apply to the FERC's section 3 authority over the liquefaction plant, marine terminal, and transportation of the LNG.

With respect to the liquefaction plant and marine terminal, the Secretary delegated to the FERC section 3 authority over the siting and construction of new import/export facilities. This delegation stipulates that the FERC cannot approve any site that the DOE disapproves. On the basis of its environmental review, the DOE has concluded that the Valdez export site is preferable to all other export sites that were considered in the FEIS, including the Cook Inlet site. Three factors discussed in the FEIS indicate that Port Valdez is environmentally preferable to the Cook Inlet alternative. First, the Cook Inlet alternative creates new disturbances in Minto Flats, an important sub-

sistence use area. By contrast, the impacts of the proposed project are in an existing transportation and utility corridor. Second, the Cook Inlet alternative crosses Denali National Park and Preserve, and would impact visitors traveling to and from the park. While the proposed project would impact visitors and travelers elsewhere, Denali has the greater concentration. Finally, the Cook Inlet alternative includes a 15-mile subsea crossing, an impact to an ecosystem that does not occur under the proposed project. Accordingly, the DOE disapproves all sites other than the Valdez site. This action should not be interpreted as approval of the Valdez site. As discussed previously in Section V.B.5. *supra*, the DOE is requiring as Departmental policy that the FERC conduct its own examination of the health, safety, and environmental impacts associated with Yukon Pacific's use of the Valdez site for its proposed export project, including the liquefaction plant, the marine terminal, the LNG tankers, and the LNG tanker routes, and that it impose all appropriate conditions to mitigate the environmental effects resulting from the construction and operation of those facilities.

VI. Conclusion

After taking into consideration all the information in the record of this proceeding, I find that granting Yukon Pacific authority to export up to 14 million metric tons annually of liquefied North Slope natural gas for sale to the Pacific Rim countries of Japan, South Korea, and Taiwan during a term of 25 years has not been shown to be inconsistent with the public interest.

ORDER

For the reasons set forth above, pursuant to section 3 of the Natural Gas Act, it is ordered that:

A. Yukon Pacific Corporation (Yukon Pacific) is authorized to export for sale to Japan, South Korea, and Taiwan a total of up to 14 million metric tons of liquefied natural gas (LNG) annually from the North Slope of Alaska over a 25-year

⁸⁷ See DOE Delegation Order No. 0204-112, *supra* note 79.

⁸⁸ In *TransCanada Pipelines v. FERC*, No. 87-1229, June 16, 1989, the D.C. Circuit Court of Appeals found "Congress specifically pre-

cluded FERC from exercising its general ratemaking authority over imported [and exported] gas except to the extent that the Secretary expressly delegates the task to FERC." *Slip op.*, at 11; see also *id.*, at 7-9.

period beginning on the date of the first delivery, upon the conditions herein set forth.

B. For purposes of this Order, the "export project" means the Trans-Alaska Gas System (TAGS) and all appurtenant facilities, including production facilities, gas conditioning facilities, liquefaction plant, marine terminal, and LNG tankers.

C. With respect to the place of exportation for the LNG authorized in Ordering Paragraph A above, all locations other than Port Valdez, Alaska, are hereby rejected.

D. No cost of the export project shall be recovered from U.S. consumers of natural gas except to the extent that the cost relates to facilities and natural gas used and useful for supplying North Slope natural gas to the U.S. consumers.

E. No action shall be taken in connection with the export project that would compel a change in the basic nature and general route of the Alaska Natural Gas Transportation System (ANGTS) or otherwise prevent or impair in any significant respect the expeditious construction and initial operation of ANGTS.

F. All aspects of the export project shall be implemented in accordance with all applicable environmental procedures and requirements and shall comply with all preventive and mitigative measures imposed by Federal and State agencies to protect the public health, safety and environment.

G. All contracts and other documents that underlie the acquisition, transportation, and sale of North Slope gas authorized herein shall be filed with the DOE within 30 days of their execution.

H. Within 48 hours after deliveries begin, Yukon Pacific shall notify the

Office of Fuels Programs, Fossil Energy, Room 3F-056, FE-50, 1000 Independence Avenue, S.W., Washington, D.C. 20585, in writing of the date that the first export of LNG authorized in Ordering Paragraph A above occurs.

I. With respect to the exports authorized by this Order, Yukon Pacific shall file reports with the Office of Fuels Programs (1) after the first full calendar month of service, and (2) within thirty days following each calendar quarter, indicating, whether sales of exported natural gas have been made, and if so, giving by month, the total volume of exports in Mcf and the average price for exports per MMBtu delivered to each respective purchaser. The reports shall also provide the details of each export transaction, including the name(s) of the purchaser(s), LNG tankers utilized, volumes sold to each purchaser, and identification of markets served.

J. Except for the authority under DOE Delegation Order No. 0204-112 over the export site, including the liquefaction plant, marine terminal, and related transportation of LNG, the Federal Energy Regulatory Commission (FERC) shall exercise no authority over the export project except to the extent necessary to ensure that (1) any facility used for the provision of natural gas from Alaska to another state and thereby subject to the FERC's interstate commerce jurisdiction is constructed and operated in accordance with the FERC's regulations, including those concerning the environment, and (2) the export project pays its share of the costs of any such facility.

Issued in Washington, D.C., on November 16, 1989.

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 (23 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 (Port Valdez) 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 (Air Quality) permit for LNG plant/marine terminal at Anderson Bay (Port Valdez):** *Reserves critical Port Valdez airshed "space" for future LNG plant and marine terminal emissions; issued by Alaska Department of Environmental Conservation, August 5, 1997.¹*

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.

November 12, 1997
House Oil & Gas
Gas Commercialization Team
Hearing on North Slope Gas Commercialization

Testimony by ARCO Alaska, Inc.

Mr. Chairman, for the record, my name is George Findling. I am a Coordinator in the gas commercialization group for ARCO Alaska, Inc. Today, I would like to elaborate on ARCO's plans to commercialize North Slope gas. Since ARCO's plan is LNG delivered to the Far East, I will mostly focus on this. Then I will briefly address gas to liquids technology.

To try to achieve economic viability of an Alaskan LNG, ARCO is moving on a four-point plan. Here's a brief elaboration on each of the four points:

Point #1 - Reduce project costs

Currently our most reliable cost estimate would suggest an expected cost of about \$15 billion for the gas conditioning plant, pipeline system, LNG plant/terminal and ships. Although not achievable right now, we think that it is reasonable to visualize a cost goal of \$12 billion or lower. But, before we could make such a cost estimate a reality, we need to complete the next phase of engineering and determine if cost reductions are feasible. At this time, ARCO is participating in preparatory work that will allow the next phase of engineering to begin in 1998. There are two important aspects to this engineering work. First, the work may demonstrate that significantly reduced costs are not achievable. Second, we need to find a group of motivated sponsors to fund the engineering work. And this brings us to the second point of our plan.

Point # 2 - Develop a viable project structure

There are two considerations here: what will the project structure be and who will participate (i.e. who is a sponsor). To bring focus, we are testing all of our plans for this project against three basic commercial structures. One we call leaseholder/integrated and it is somewhat analogous to the current structure for TAPS. In its pure form, the leaseholders own the downstream facilities in proportion with each's gas throughput, so leaseholders are both shippers and carriers. Also in this structure, the leaseholders sell directly to the buyers in the Far East. The second structure is similar to the first except that the downstream is made up of a carrier consortium that provides both transportation and processing. The third commercial structure is what we call the downstream/consortium, where, again in a pure form, the downstream sponsors purchase gas from the leaseholders and sell LNG to the Far East buyers. Considering the track record of LNG projects around the world, the actual structure for an Alaskan project may well be some variation or combination of these pure commercial structures.

An important step in developing a viable project is to attract sponsors who are interested in risking downstream investment dollars to try to make a project economic. Further, each sponsor needs to bring something, such as unique resources or skills, that help reduce gross project costs and or risks. When you consider the commercial structures discussed above, it is possible that a sponsor group may well be broader than just North Slope Leaseholders. In concept, we would like the sponsor group to be self-assembled and ready to proceed with the next phase of engineering in mid-1998.

Point #3 - Develop a viable market

The essence of LNG marketing is for LNG sellers to develop long term, durable relationships with buyers. Only through such relationships can the sellers and buyers come to understand and believe so much in the economic viability of a project that they are willing to make 30 year commitments. In this regard, there are several marketing matters that underpin ARCO's efforts.

The consensus projections we see on Far East LNG supply and demand seem to reveal a couple of trends. First, committed, expansion and new "phaseable" supplies are likely to meet demand through about 2005. But post 2005, demand begins to out pace these supplies, eventually opening up the opportunity for a large, green field project such as Alaska North Slope Gas. While this gives us some hope, we recognize that there may be more competing green field projects than there is demand. And, as the State of Alaska's consultant, Pedro Van Muers points out, Alaska does not rank on par with the most competitive in terms of overall economic viability, even considering some of Alaska's inherent advantages. Now, it might seem that we should simply declare our intentions to move ahead and that would secure Alaska's place in the market. But the problem with that approach is that the buyers will not commit to a noncompetitive project. Developing an economically competitive project in parallel with traditional marketing activities is essential.

When considering marketing, there is another matter relating to commercial structure that should be acknowledged. Some have said that the far east buyers do not hear a unified "voice" from Alaska: the translation of this metaphor is that since there is no clear project structure or sponsor group, the roles of individual companies that visit the market place may be unclear to the buyers. For example, currently only the leaseholders can represent themselves as having gas for sale. Remember that buyers are looking to commit to long term LNG supplies: they want to see a rock solid commercial structure made up of highly motivated project sponsors who have access to gas and are ready to risk investment capital. While it requires some patience, we believe that the process of sponsor group self formation will ultimately produce a strong voice to the market.

In keeping with the approach of moving the project forward on all fronts, ARCO has maintained ongoing market activities. In the past two years, we have made six trips to the market and have hosted visits by trading companies here in Alaska. In general, buyers are

reacting positively to the prospects of making an Alaskan project economically viable and seem comfortable with our timing horizons.

Point # 4 Pursue federal and state fiscal /commercial regulatory matters

There seems to be general consensus that modifications to the state fiscal and commercial regulatory approaches are necessary to achieving a viable project. Please remember that such modifications are not sufficient to make a project viable: cost and other risk reductions are still critical. That said, here's a quick summary of the fiscal/regulatory issues.

There are two issues concerning the competitiveness of the state fiscal regime: long term stability and appropriate level of economic rent take. Since the discovery of Prudhoe Bay, there have been many changes in the state tax scheme, both at the statutory level and in the administration of the law concerning oil. No Alaskan LNG project can be competitive with the best international green field LNG projects if this same level of uncertainty exists. Happily, we see significant progress on this issue. In past years, major improvements have been realized on oil tax and royalty issues. Building on this experience, we are hopeful that the HB-250 process implemented by the legislature and administration can lead to the needed stability for an Alaskan LNG project.

The second issue is what the level of State take of economic rent is appropriate and competitive with provinces in which competitive green field projects are located. The work by Pedro Van Muers suggests that the current state fiscal system is too regressive and front end loaded to be competitive.

On the commercial regulatory front, there are issues of content and of jurisdiction. Concerning content, the issues of access (sometimes thought of as common carrier) and of rate (sometimes thought of as tariff) are the most leveraging.

On access, large LNG projects typically establish long term contractual relationships amongst sponsors and between sellers and buyers. Typically, the sales and purchase agreements are the most important to the project and the security of these agreements is essential to every project aspect. Clearly, these contracts are not secure if there is a chance that contracted throughput could be displaced by others. Therefore, the traditional notions of common carrier regulation must be abandoned in favor of some mechanism that creates guaranteed access. Naturally, there can also be no governmental mandate to expand the transportation system for late comers with out adequate compensation.

On the issue of rate regulation, there are two considerations. First, rate regulation will be tied to the commercial structures mentioned earlier. For the leaseholder integrated and carrier consortium structures, a recognition of contracted rates may be appropriate. But, our economic evaluations show that traditional cost of service tariffs will create too much front end burden on the project. Therefore, some type of levelized rate will be needed.

For the downstream consortium, rate regulation is meaningless because the project is in the business of buying gas and selling LNG, not providing transportation services.

Under current law, it is not absolutely clear whether regulatory jurisdiction would be federal or state and that jurisdictional question needs to be resolved. What ever the resolution, the export project requirements relative to access and rate point to less, rather than more, commercial regulatory activity.

On the federal fiscal side, the Pedro Van Muers study has compared overall tax regimes for a variety of potential LNG projects. While the federal and state structure in the US complicates the comparison, his results show that other countries are more competitive. Significantly, since the US government would take a larger share of the economic rent than the state under current law, its actions can be most leveraging to improving project economics. Van Muers identifies the depreciation rate on project investment for federal income tax as a potential candidate for modification.

These are the essentials of our four point plan to pursue an Alaskan LNG project with a target first LNG delivery in 2007. As we have said in the past, this timeframe is only viable if everything in our plans goes positively.

Gas to Liquids Technology

Mr. Chairman, we were requested to also talk about ARCO's views on Gas to Liquids technology. Such a discussion for ARCO will be necessarily brief in the Alaskan context. As I said above, for ARCO, LNG is the base case for Alaska; gas to liquids is the dark horse. It is necessarily the dark horse because development is in progress and pilot testing is needed. While we would not be so foolish as to rule out GTL for Alaska at this early stage, our corporate efforts on GTL are neither targeted to only Alaska nor are they taking away from resources currently being applied to Alaskan LNG. But, if the GTL technology proves to be viable and economic it could provide another option for Alaska.

As we previously announced on October 24, ARCO's Plano research lab is planning a 70-barrel per day pilot plant at our Cherry Point refinery in Washington State. The plant, to be operational in late 1998, is based upon our licensing agreement with Syntroleum. The GTL process is commonly thought to have three basic steps: production of synthesis gas from natural gas, conversion of the synthesis gas to "white crude" and the refining of this white crude to low aromatic, middle distillates. The focus of our pilot plant will be on advancing Syntroleum's proprietary technology for the second of these steps. Our tests may include a wide range of feed gas compositions; we see this technology has as having long term potential for commercializing stranded gas where ever it may occur in the world.

We understand that questions about the implication of GTL in Alaska have been raised. Since all we are doing is not ruling out GTL ARCO has not examined these matters rigorously. Considering that LNG is our base development case in Alaska and considering

that the technology is proprietary, perhaps the best thing we can do is direct you attention to some recent technical survey articles. One was in the Oil and Gas Journal, June 23, 1997 issue. Another was in the June 1997 Quarterly Review of Asian-Pacific Markets by Wood MacKenzie. If there is interest, we would be glad to pursue reprints of these.

Mr. Chairman, thank you for the opportunity to testify. I would be happy to address your questions.

February 24, 1997⁸
House Oil & Gas
Hearing on HB-393 – Alaska Stranded Gas Development Act

Testimony by ARCO Alaska, Inc.:

Mr. Chairman, for the record, my name is George Findling. I am the Business Development Advisor in the gas commercialization group for ARCO Alaska, Inc.

Today, I would like to both express ARCO's overall support for HB-393 and discuss how this legislation fits into ARCO's plans for commercializing its very large gas resource on Alaska North Slope.

First, Mr. Chairman, our North Slope Gas commercialization manager, David Lawrence, was unable to be here today. He hoped you would understand, though, when you learned that he is in the far east continuing efforts to facilitate the self-assembly of a viable sponsor group for an Alaskan LNG project. I would like to expand on this for just a moment.

Several weeks ago, in January, ARCO sent out letters of inquiry to determine the level of interest of those who could potentially help advance a very large, complex, international LNG project in Alaska. Basically, the letters requested, under provisions of confidentiality, the opportunity for us to present a potential plan and discuss alternative ways forward. Since then, we have received many positive responses to the letters and have initiated presentations. This week, David is leading an ARCO Alaska team to the Far East for further presentations. I wish I could provide further details, but the formation process is in the fragile early stages and we do not want to complicate it by making representations for others. As is our policy, when there are developments which can be discussed, we will do so proactively.

I would like now to turn to the bill being considered by the committee. Looking back, the legislature is to be congratulated for enacting HB-250 last year. As you know, that bill created a substantial and cooperative effort during 1997 by the state's gas commercialization team and interested parties. This effort has led to the proposed legislation now contained in HB-393. I would like to overview the bill and then briefly elaborate on how HB-393 supports ARCO's plans.

I would like to make three main observations about HB-393.

First, it provides the framework under which a competitive fiscal system can be developed. In our view, the framework legislation opens the door for cooperative action, in parallel with developments in other aspects of the project, to help to try to make an Alaskan project commercially viable. We see many important general provisions in the bill. It will not place inordinate demands on the state's staff because it allows the state to entertain applications from only serious parties. It is balanced in keeping sensitive and

proprietary information confidential, yet provides for public scrutiny of essential aspects leading to the fiscal system. It promotes Alaska hire and in-state gas matters. It accommodates current uncertainties in technology, project approach, development timing, and fiscal system development. Finally, it is also important to recognize that HB-393 does not in itself, create any unilateral and irrevocable commitments, which is appropriate at this early stage of project maturity.

Secondly, under this legislation, the fiscal system is provided by long term contract, and this can be very powerful in improving competitiveness. The execution of a fiscal contract near to the time of project sanction can give a level of fiscal stability which is both leveraging to the economics and competitive with other gas-rich provinces.

Third, we would support the addition of language calling for legislative approval of any contract. Not only is it appropriate in such a unique and significant decision, but this process of legislative action can significantly improve the durability and stability of the fiscal system.

Mr. Chairman, I would like now to turn to how the legislation relates to the ARCO plans. In our November testimony to this committee, we described how ARCO is moving forward on a four point plan to try to achieve economic viability of an Alaskan LNG project. For reference, I can provide copies of the testimony. Today, I would like to discuss the interrelationships between our plans and the legislation.

We see that the fiscal legislation both enables development to continue and integrates well into those activities. Let's look at those aspects in the context of a time line.

As we have said in the past, our current planning basis has the start up of an LNG project in late 2007, if everything goes right. And this makes 1998 important because a phased conceptual engineering effort should get underway later in the year to stay on track. This engineering is needed to establish confidence in and further reduce estimated project costs, which are essential to the project economics. It is also needed to develop the information necessary to develop proposals to potential gas buyers and to proceed with other project development activities.

In order for this next stage of engineering to commence, a sponsor group needs to be in place that can advance the project and share in the costs. In our preliminary discussions with potential sponsors, they have responded very positively to the prospects of framework fiscal legislation like HB-393. For ARCO specifically, we see passage as a critical signal of the long term willingness of the state to help make the project competitive.

Looking forward, HB-393 integrates well into our LNG project development plans. As the technical work matures and the sponsor group gels, the bill allows an application to be submitted for a fiscal contract. In our view, and again using our planning basis, the development of a fiscal contract should commence no later than 2000. Since the bill is

written generally, it does allow for flexibility in the timing of the application, the project structure and the nature of the new fiscal system, which are three important uncertainties right now. Under the bill, the fiscal contract can be developed in parallel with the other major agreements, such as sales and purchase agreements. Again, using our planning basis, it is our view that the fiscal contract should be in place no later than sometime in 2002. With that, the major agreements could be consummated and project sanction could occur, sometime in the 2003 timeframe.

Mr. Chairman, now I must pause for an important reality check. As I said above, a 2007 startup is our planning basis. But keep in mind that meeting such a start up requires that everything fall in place, almost without a hitch. Most importantly, we ultimately have to have a commercially viable project before it can be sanctioned. Simply stated we are trying to turn what is today a non-competitive project into a competitive project. It should be recognized that this effort may not succeed: for example, in the long term, we might not be able to get costs and cost uncertainty down; the federal government may chose not to provide the essential fiscal modifications that I described in my November testimony and the market may not be able to be developed at prices that can sustain an Alaskan project. In the shorter term, we may have difficulty attracting sufficient potential sponsors or we may find some other insurmountable hurdle. The bottom line message is that any timeline can change and that moving forward on each step requires success in the previous steps. Nonetheless, ARCO continues to be committed to trying to find a viable way forward by pursuing critical technical, fiscal, and commercial avenues.

As we mentioned in our November testimony before this committee, Gas to Liquids is our dark horse case for commercializing North Slope stranded gas. Without negatively impacting our Alaskan LNG development efforts, our Plano research group is trying to advance the technology in parallel. Critical to this effort is our licensing agreement with Syntroleum and our planned pilot test at our Cherry Point refinery this year. We are pleased to see that HB-393 does not preclude this option for commercializing stranded gas.

My final comments relate to commercial regulation, a topic that is not directly related to substance of HB-393. As you may recall, this topic was addressed in 1997 by the gas commercialization team under the auspices of HB-250. It was also addressed in our November testimony before this committee. While ARCO anticipates that state legislation is probably needed, we think more work needs to be done to develop an appropriate proposal. We would anticipate that the particulars of how instate gas will be handled will be part of that commercial regulatory approach. While this topic is not ripe for HB-393, we know that gas for local communities is a vital concern that can not be forgotten. Therefore, we support both the current wording in HB-393 addressing this topic in the application process.

In closing, ARCO is committed to trying to commercialize it's ANS gas as evidenced by our proactive plans. We think that the prospects for success in this effort can be substantially improved by a cooperative effort with the state. By that measure, HB-393,

is an essential step in developing that cooperation and we make this statement of support for the bill before the committee today.

Mr. Chairman, thank you for the opportunity to testify. I would be happy to address your questions.

ARCO Alaska, Inc.
Post Office Box 100360
Anchorage, Alaska 99510-0360
Telephone 907 276 1215



March 31, 1998

Representative Scott Ogan
Chairman
House Resources Committee
Alaska State Legislature
State Capitol (MS 3100)
Juneau, Alaska 99801-1182

Dear Chairman Ogan:

This letter addresses the matter raised at today's House Resources hearing concerning ARCO's planning basis for the startup of an Alaskan LNG project. As we stated in previous testimony to the legislature, our interpretation of the most likely startup date is 2007. I would emphasize that this is our interpretation: others may see it differently. We get to this planning basis in two ways: 1) by looking at various supply/demand figures calibrated by direct discussions with mayor potential LNG buyers and 2) by considering the many activities needed to get a project on line.

Our interpretation of supply/demand data suggests that around 2007, demand outpaces supply in the far east market. We estimate that, by that time, this additional demand may be on the order of 5 to 15 million tons per year, which may allow for the placement of the initial Alaskan LNG supplies. Naturally, this only can happen if the Alaskan project is able to compete economically with other supplies targeting this market.

Whatever the interpretations of the market situation, ARCO believes that the real focus should be on the near term activities that are necessary to develop a competitive project and place the gas in the market at the earliest opportunity. As we have testified previously, we think that the critical activity is to form a viable, motivated sponsor group that can advance the project on all fronts, especially the pursuit of cost improvements. Ideally, we would like to see the formation of the sponsor group and the commencement of conceptual engineering 1998. With that, and assuming that everything goes well, full project funding approval could occur sometime in the 2003 timeframe, allowing startup in 2007. I must repeat that this is our planning basis and it assumes successful outcomes along the way: in short that we are able to turn an uncompetitive project into a competitive project.

Page 2 – Findling to Rep. Ogan

Finally, HB-393 is an essential signal that the state wants to proceed down the development road in partnership with private parties. It gives us the basic confidence to pursue our multi-point plan. Therefore, ARCO supports HB-393 in its current form and we recommend favorable action on it.

If we can provide additional information on this matter, please do not hesitate to ask.

Sincerely,

A handwritten signature in cursive script that reads "George R. Findling". The signature is written in black ink and is positioned above the printed name and title.

George R. Findling
Business Development Advisor

Draft Testimony for House Resources - 31st March, 1998

For the record my name is David Brooks. I hold the post of Manager Alaska Gas in BP Exploration Alaska Incorporated and I am responsible for BP's initiatives to commercialize the gas reserves on the North Slope of Alaska.

Mr. Chairman I should like to thank you for this opportunity to testify before this committee and to explain BP's views on this Bill. I would also like to take this opportunity to compliment the Chairman and the members of the House Oil and Gas Committee on their work with the Bill.

The Bill addresses the issue of the commercialization of the gas reserves on the North Slope.

Today in Prudhoe Bay we have proven some 25 trillion cubic feet of gas and the US geological survey suggests that there could be in excess of another 100 trillion cubic feet yet to be found on the North Slope.

That is a lot of gas.

These proven plus yet to find reserves amount to another oil field at least the size of Prudhoe Bay, and that represents a very large commercial prize for BP, the State and the people of Alaska if we can find economic ways to get that gas to market, in some form or other.

I would like to assure the members of this committee that BP is taking the issue of the commercialization of those gas resources very seriously and continues to dedicate resources to exploring routes to commercialize it.

Over the past year or so we have had the pleasure and honor of working with the legislature, the state administration, other gas owners and interested parties on the commercialization of the North Slope gas. The Gas Commercialization Report published in January of this year was an outcome of that work and we consider it to be a very sound and professional review of the challenges surrounding the commercialization of the gas. This Bill is the next logical step following the recommendations of the Commercialization Report.

However, before I comment on the Bill in detail, I would like to note that already the gas on the North Slope is providing significant value to the State of Alaska.

Today some 7 and a half billion cubic feet of gas per day are produced and the majority of this is used in enhanced oil recovery initiatives. We estimate those initiatives have increased the recoverable oil reserves in Prudhoe Bay by some 2 billion barrels and that approximately 40% of today's Prudhoe Bay oil production is attributable to enhanced oil recovery and gas injection techniques. At a crude oil price of around \$16 per barrel that additional production generates some \$400 million per year for the state.

BP believes that this piece of legislation is important for the State and for the development of stranded gas. However, it is only enabling legislation, it does not commit the State to anything other than to enter into a negotiation, it does not "give anything away". The Bill creates options and as such BP supports it .

Our perception today is that the gas in Prudhoe Bay cannot competitively be brought to market. The Bill defines such gas as "Stranded Gas". But the Bill is broader than gas in Prudhoe Bay. The Bill applies to stranded gas wherever it might be found in Alaska and this is important as there has, as yet been little or no exploration specifically for gas. Thus the Bill creates an option, for the discussion of the North Slope Gas and for the discussion of any other gas that might be found in the future.

The Bill also leaves open the option for the route to commercialization of that gas. The Bill is applicable to both an LNG project and to a gas to liquids project . Although today, neither of these are commercially viable, we hope that one or perhaps both will be at some time in the future. And please do not forget, these two options are not mutually exclusive. The vast quantities of gas already proven on the North Slope means that we could do both an LNG project and a gas to liquids project. A strength of the Bill is that it encourages these options.

The Bill creates an option, an opportunity, for a qualified sponsor of a qualified project to enter in to a negotiation with the State and to define a fiscal contract specific to that project. The contract will be subject to the approval of the legislature, will define the taxes to be paid by the project and will define the extent to which the legislature intends to bind future legislatures on the fiscal treatment of the project. In this, the Bill provides an opportunity for the State and the sponsor of a project to address the fiscal risk in a the project, one of the key risks for gas projects which was identified by the State in the Commercialization Report.

The Bill is also a balanced Bill, in so much as it considers other issues important to the people and the State of Alaska. Any project must address in its scope how it will make gas available for use in the State . The project sponsor will also be required to the extent possible under the law to maximize the use of Alaskan labor and Alaskan contractors - something which BP strongly supports. And the Bill incorporates a process by which the communities in Alaska which will be affected by a project can assure themselves that they are being fairly treated in the negotiation and distribution of the taxes from the project.

Mr. Chairman and members of the Committee,

- This Bill is a piece of legislation that creates options for the State to generate value from the enormous gas resources on the North Slope of Alaska.
- The legislation gives nothing away, it only allows for a negotiation to take place.
- We urge you not to turn it into a gas pipeline Bill but to leave it as it is, applicable both to LNG and gas to liquids.

We also urge you to reconsider the sunset clause on page 10 of the Bill. That clause limits the applicability of Bill to projects making an application before the end of June, 2001. And by doing so it closes off options for the future.

Although we are working hard, we cannot control the development of technology or of markets for the gas. We cannot say when additional Stranded Gas fields might be found. But by keeping a cut off date, any cut off date, in the Bill we believe that the State is potentially reducing its options and possibly giving a negative message to the potential developers of technology and stranded gas resources. We would recommend to this Committee that the sunset clause be deleted.

Mr. Chairman, members of the committee with those reservation and comments I would like to reiterate that BP supports this legislation.

Thank you for your attention. I would be happy to answer any questions that you might have.

TAGS Pipeline Costs

vs.

Alliance Project

Comparison of TAGS pipeline cost estimate with cost reported for "Alliance" project.

Pipeline costs are typically expressed on a "diameter inch - mile" basis which accounts for variation of costs with the diameter of pipelines.

TAGS cost:

\$6 billion
diameter = 42 inch
length = 796 miles
compressor stations = 3

cost expressed in diameter inch - mile = $(\$6 \text{ billion}) / (796 * 42)$

= \$179,500 per diameter inch - mile

Alliance cost:

\$2.7 billion
diameter = 214 miles of 42 inch,
1,632 miles of 36 inch
length = $(214 + 1,632) = 1,846$ miles
compressor stations = 14

"average" diameter = $(214/1846) * 42 + (1632/1846) * 36 = 36.7$ inch

cost expressed in diameter inch - mile = $(\$2.7 \text{ billion}) / (1846 * 36.7)$

= \$40,000 per diameter inch - mile

Relative costs of TAGS and "Alliance" projects (on diameter inch - mile basis)

TAGS cost / Alliance cost = $\$179,500 / \$40,000 = 4.5$

Alliance project on target for mid-1998 construction start

Approval given for contractors to use mechanized welding on pipe line's 900-mi section in United States

A Staff Report

Alliance Pipeline representatives report the 1,900-mi pipe line project to move natural gas from Western Canada to the Chicago area is on track to meet a mid-1998 construction start date.

The project still has to clear a number of U.S. and Canadian regulatory hurdles and finalize financing before construction can start. Alliance fully anticipates that approvals will be received during the Spring, which will allow work to kick off June or July. Pending final approval dates, completion is scheduled for late 1999.

Plans call for the \$2.7-billion line to reach Chicago, where it will interconnect with the North American pipe line grid. Design specifications will allow an initial throughput of 1.325 Bcf/d of rich natural gas (1,200 Btu/cf) at a maximum allowable operating pressure of 1,740 psi.

The system's Canadian portion will consist of:

- 214 mi of 42-in. and 758 mi of 36-in. steel pipe
- 44 laterals totaling about 479 mi. ranging in length from about 0.2 to 86 mi and in diameters from 4 to 24 in.
- Seven compressor stations of about 31,000 to 38,000 hp each, spaced about 120 mi apart
- Mainline block valves spaced about 20 mi apart.

The U.S. portion will consist of:

- 874 mi of 36-in. steel pipe

- Seven compressor stations of about 31,000 to 38,000 hp each, spaced about 120 mi apart

- Mainline block valves spaced about 20 mi apart

The pipe line will generally parallel existing rights-of-way for most of its length.

ture in the bid package. With a number of projects scheduled for 1998 and 1999, the contractors won't be left high and dry in the event the project does not move forward. A specified payment will be made regardless.

Perhaps, the most unusual aspect of the project is that mechanized (auto-

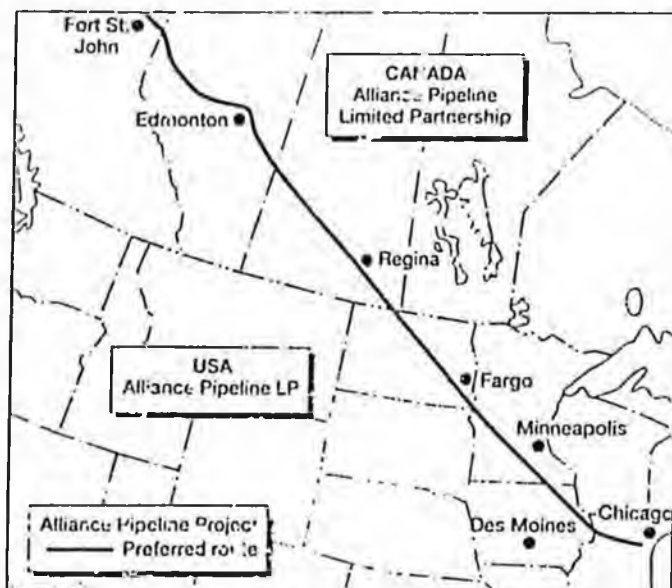
matic) welding will be an integral part of the construction process. This represents the first time mechanized welding will be used on a major U.S. pipe line construction project. The decision to use the system followed extensive demonstrations and testing as well as negotiations with the "unions" involved with construction.

Welded joints will be inspected using the ultrasonic inspection method. Ultrasonic testing, which has proven successful in Canada as well as on international projects, was selected based on speed and economics.

Current status. Alliance is supported by long-term com-

mitments by shippers for contracted capabilities totaling approximately 1,300 MMcf/d, or 98% of the available firm capacity of 1,325 MMcf/d on the Alliance Pipeline Project.

The project is now moving through the regulatory approvals process in both the U.S. and Canada. Certificates of Public Convenience and Necessity are required from FERC, which approved a Preliminary Determination on Non-Environmental Issues on July 30, 1997, and from the Canadian National Energy Board



Alliance. Pending approvals, the Western Canada to Chicago Alliance gas pipe line project is scheduled for a mid-1998 construction.

Representatives report bid packages were based on using six spreads to build the 900-mi U.S. portion over a year-and-a-half time period. The mileage has been established with reachable objectives in both years. In 1998, the mileage is around 75 to 80 mi, depending on the length of the spread. This leaves some 100 mi per spread to complete in 1999. These objectives are makeable considering most of the route crosses agricultural land.

Alliance also included a unique fea-

(NEB), before which public hearing started on Nov. 17, 1997. In both countries, other federal, state/provincial, regional and local permits/approvals will be required before construction can begin.

Financial advisory services for the Alliance project are provided by: The Bank of Montreal, the Bank of Nova Scotia (Scotia Capital Markets), the National Westminster Bank of Canada (NatWest Markets), the Chase Manhattan Bank of Canada (Chase Securities Inc.) and Goldman, Sachs & Co. Initial response from the investment community reportedly has been positive, and it is anticipated there will not be difficulty in financing the project.

Environmental effects.

Land use disturbance generally will not exceed about 105 ft in width. Adverse environmental effects from construction and operation can be minimized since the pipe line will generally parallel existing rights-of-way and because effective mitigative measures will be undertaken. For example, much of the route is located on agricultural land that can be successfully restored by separating topsoil from subsoil and conserving it in stockpiles for replacement after construction.

After the line is installed, all lands affected by construction activities will be cleaned up and rehabilitated. Well proven design and construction measures will be used in all areas to minimize environmental effects and to satisfy commitments to regulators and landowners. The restoration effort will be monitored after construction to ensure successful reclamation occurs.

The pipe will be buried for its entire length except for above ground facilities, such as compressor stations. In Canada, depth of cover will be a min-

imum of 42 in. in agricultural land, 36 in. in forested areas or native pasture lands, or 24 in. in areas where consolidated rock is encountered.

In the U.S., negotiated Agricultural Mitigation Agreements have been signed with the states of Illinois, Minnesota, Iowa and North Dakota to address many important issues, including depth of cover, drainage tile repair and topsoil conservation.

Design, construction, operation and maintenance of the Alliance Pipeline will use proven and accepted technologies, methods and procedures to protect public health and safety and to

preserve private and public property.

Supply/demand. Several independent studies suggest that the Western Canada Sedimentary Basin has significant amounts of natural gas awaiting discovery and development.

Ongoing technological advances such as 3-D seismic and horizontal drilling have expanded reserve potential. Producers have identified northwest Alberta and northeast British Columbia as areas with high potential for new gas developments. However, for these reserves to be developed, lower-cost market access is required.

North America gas demand is expected to grow by about 1.5% per year, or 1 Bcf/d/y. Canadian gas cannot participate in this growth without new pipe lines. The Alliance capacity represents about 20% of this demand growth over the next five years.

Given that lead times on a new pipe line are quite long, the market will have sufficient advance knowledge of the Alliance Pipeline to allow gas supply sources to participate in this growing market.

The future of the North American gas market will be tied closely to the emerging

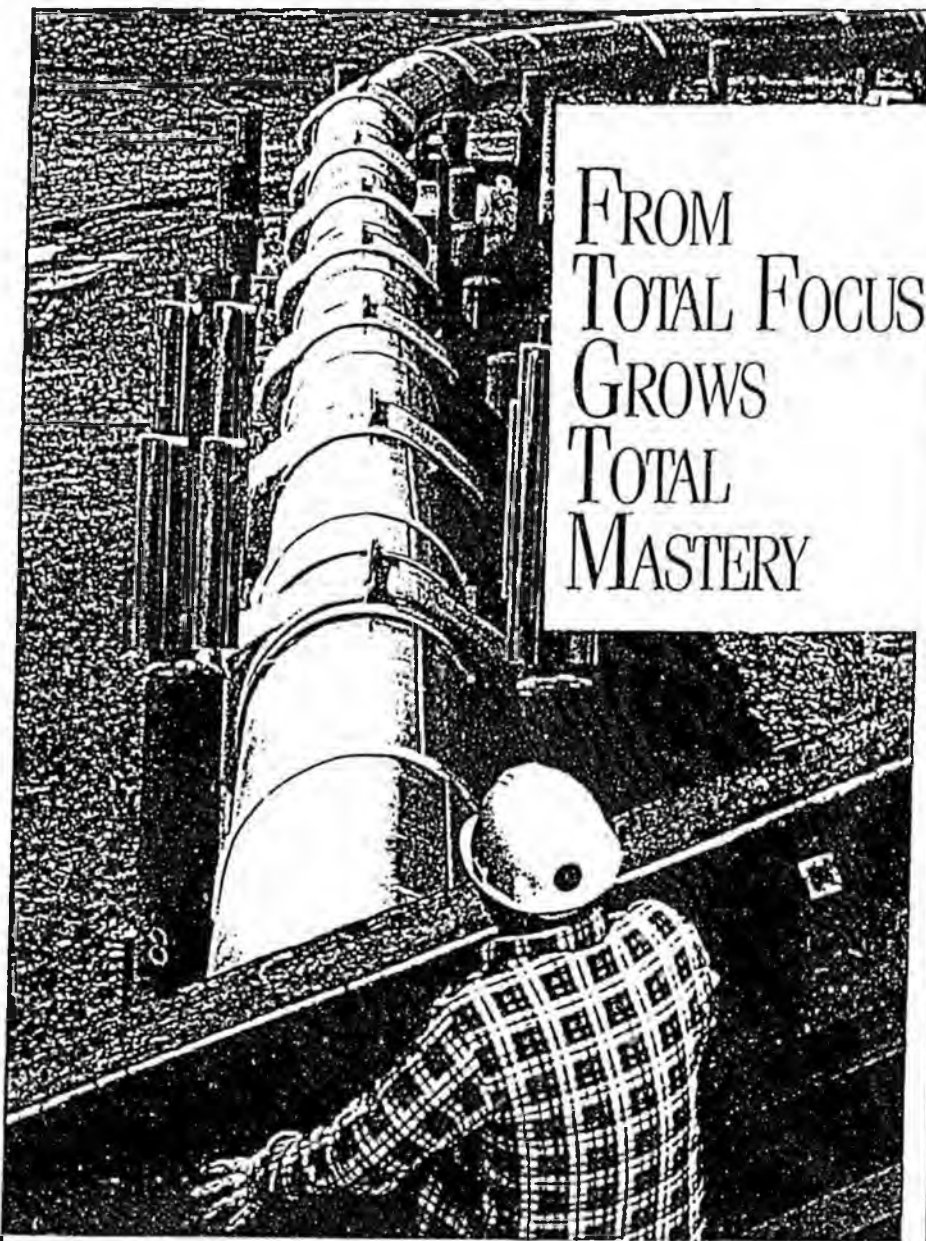
cost structure for the next sources of incremental supply. It is likely that the Western Canada Sedimentary Basin represents the incremental supply for the foreseeable future. Reducing the transportation cost of this supply is key to participating in the future growth of, and to providing security of supply for, the North American gas market.

Although North America is currently served by existing pipe lines, deregulation has led to market developments which have resulted in huge growth in short-term gas contracts, with a corresponding reduction in the

Continued on pg. 48-N

Initial Capacity	1,325 MMcfd
Mainline length	1,900 miles
Diameter	36 and 42 inch
Lateral length	4 to 24 inch
Wall thickness	0.521 inch (mainline)
Mainline stations	14 stations, 131,000 to 138,000 hp
Lateral stations	26 stations, 200 to 5,000 hp
Maximum operating pressure	1,740 psi
Rich gas system	Up to 1,200 Btu/cf
Capital cost	\$27 billion
Operating cost	\$61 million/yr

Producers	Pipe Lines
Beaumont Canada, 2.2%	Coastal Corporation, 11.2%
Chatyco Resources, 20.2%	IPL Energy, 23.4%
Cordoba Corporation, 3.3%	Mapco, 5.2%
Gulf Canada Resources, 18.7%	Westcoast Energy, 11.2%
Pinnacle Resources, 1.0%	
Ranjer Oil, 3.4%	
Summit Resources, 4.7%	
Unocal Corporation, 5.5%	
Total	51%



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Alliance project . . .

Continued from pg. 48-K

long-term market. Alliance will create an opportunity to deliver western Canadian gas to a point where North American market competition exists and the market volume and liquidity is large: the Chicago area market center, or "hub."

This will result in a North American physical gas "hub," where supplies from Canada can compete with existing supplies from the mid-continent, west Texas and the U.S. Gulf Coast and underpin delivery systems to other markets.

By providing increased natural gas transportation capacity to the "hub," Alliance will provide enhanced capability to deliver a significant, competitive, long-term and secure supply to the integrated North American pipe line grid.

Natural gas liquids. The historic practice for natural gas production has been based on the concept of removing natural gas liquids (NGLs) from the indigenous, produced gas—primarily methane—prior to exporting the natural gas from western Canada, even though for the past 25 years much of this NGL supply also has been exported.

As gas supply has increased, this practice has meant either additional liquid pipe line capacity is required to accommodate the NGLs, or that NGLs also would suffer from a lack of market access.

As a unique feature, Alliance will transport high-Btu gas in its natural state of hydrocarbon composition as produced from the reservoirs. This includes mostly methane, but also includes small amounts of ethane, propane and butane.

Only the water, heavy hydrocarbon condensate and other impurities, such as sulfur, will be removed prior to shipment. Through transportation of high-Btu gas, the pipe line minimizes the transport cost on a heating value basis.

It also provides a different market opportunity for higher Btu content NGLs contained in natural gas such as the conventional heating market. NGL extraction at Chicago is an option being studied by the pipe line partners as a separate business opportunity through the Aux Sable Liquid Products LP.

LNG demand, shipping will expand through 2010

Warren R. True Pipeline/Gas Processing Editor

The 1990s, especially the middle years, have witnessed a dramatic turnaround in the growth of liquefied-natural-gas (LNG; Fig. 1) demand which has tracked equally strong natural-gas demand growth.

Much of this growth has been for power generation in Asia, but even U.S. LNG demand in 1996 made a strong recovery (OGJ, Jan. 12, 1998, p. 33).

This trend was underscored late last year by several annual studies of world LNG demand and shipping.

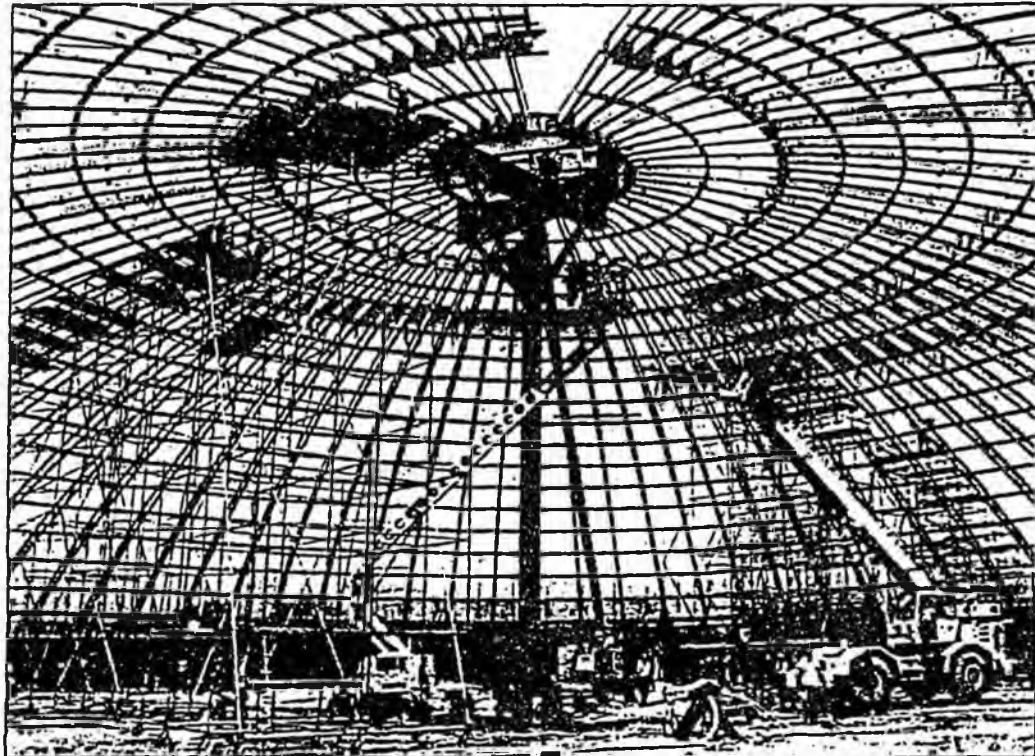
As 1998 began, however, economic turmoil in Asian financial markets has clouded near-term prospects for LNG in particular and all energy in general. But the extent of damage to energy markets is so far unclear.

Overall, nonetheless, demand growth in power-generation markets for natural gas including LNG appears likely to continue through 2000 if more slowly than was evident early in the 1990s.

A study by U.S.-based Institute of Gas Technology, Des Plaines, Ill., reveals that LNG imports worldwide have climbed nearly 8%/year since 1980 and account for 25% of all natural gas traded internationally. In the mid-1970s, the share was only 5%.

In 1996, the most recent year for which complete data are available, world LNG trade rose 7.7% to a record 92 billion cu m, outpacing the overall consumption for natural gas which increased 4.7% in 1996.

By 2015, says the IGT study, natural-gas use would surpass coal as the world's second most widely used fuel, after petroleum. Much of this growth will occur in the devel-



The dome for Tank No. 1 of Atlantic LNG's Trinidad project was installed late last year as the project moves toward start-up in 1999.

oping countries of Asia where gas use, before the current economic crisis began, was projected to grow 8%/year through 2015.

Similar trends are reflected in another study of LNG trade released at yearend 1997, this from Ocean Shipping Consultants Ltd., Surrey, U.K. The study was done too early, however, to consider the effects of the financial problems roiling Asia.

Global LNG demand will grow significantly through 2010, says Ocean Shipping's study, and result in eventual growth of seaborne shipping capacity.

World trade in LNG will expand to 122.7 billion cu m in 2000 and 155.8 billion cu m in 2005 from 92.5 billion cu m in 1995.

By 2010, LNG trade levels will reach more than 183 billion cu m, equivalent to an expansion of more than 4.5%/year during the 15-year period.

LNG trade expansion will be most dynamic near term, says Ocean Shipping, bolstered by expansion projects in Indonesia and Malaysia, along with new ones in Qatar, Oman, Nigeria, and Australia.

LNG Imports, exports

IGT figures for 1996 (Table 1) show that almost 77% of the world's LNG was delivered to the three Asian countries, Japan, Korea, and Taiwan. Demand in the region rose nearly 9% that year.

Japan retained the title of world's largest LNG importer, with 61% of the total, but its

market grew only 5%. Since Korea began importing LNG more than 10 years ago, says IGT's study, its demand has grown 20%/year; in 1996, Korean imports grew 40% to 13 billion cu m.

The shock of currency devaluation and related economic woes in early 1998 will likely slow that growth.

Almost all the remainder of world LNG production went to Europe in 1996, where markets have remained static. That will change for 1997: Italy completed refurbishing its only terminal at Panigaglia and resumed imports from Algeria. Turkey nearly doubled its imports in 1996 and, says IGT, has an enormous appetite currently being fed by spot market purchases.

For exports (Table 2), Asia-

Oceania accounted for 70% of 1996 LNG production, the world's largest being Indonesia with 35% of total sales. Algeria regained its second-place standing after revamping its plants.

Exports from Malaysia rose 29% in 1996 with completion of the Dua plant. And at start of 1997, Qatar moved into ninth position as exporter and will likely be exporting more than 12 million metric tons/year by 2000.

Oman, Trinidad, and Nigeria will soon join the list of exporting countries, possibly by very late 1998.

Ocean Shipping says Japan will import nearly 80 billion cu m/year by 2010, 36% more than in 1995.

South Korea's commitment to gas use and LNG imports is reflected in a growth of about 314% in trade levels to 29.5 billion cu m/year by 2010.

Taiwan's imports will also see more than a threefold increase during 1995-2010, increasing to 14 billion cu m/year. Japan, South Korea, and Taiwan combined, the study said, will account for 70% of world LNG trade in 2010.

New markets in Thailand, India, China, and Philippines should boost LNG trade medium to long-term, although their combined share of trade by 2010 will only reach a 10% share-equivalent to 17.5 billion cu m/year.

Ships, routes

In its annual study of LNG shipping, Ocean Shipping found that, when combined with an increasing level of scrapping, worldwide natural-gas-demand projections suggest a steady rise in total newbuilding.

Records set

Near-term (to 2000) average newbuilding need, in terms of the prevailing fleet capacity, will rise to 8.2%/year from 7%/year. Medium to long-term growth rates will moderate, falling to 5-6%/year to 2010.

With Middle East exports of LNG to the Far East set to

expand the next 15 years, Ocean Shipping says improved economies of scale are likely with the construction of larger LNG carriers.

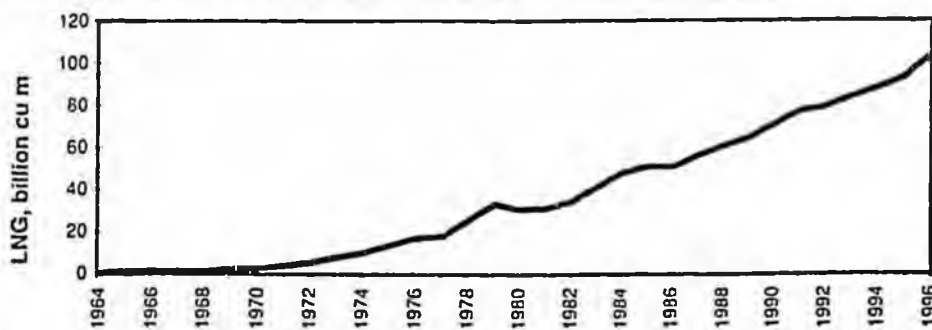
Port restrictions will be the main constraint to size expansion, with the construction of 175,000-200,000 cu m vessels considered feasible.

LNG newbuilding prices declined during the early 1990s but recovered by 1996 to within 2% of the peak 1991

level. Additional South Korean yards have entered the LNG market with first delivery in 1994, and competition has intensified.

Yards in France, Japan, and South Korea have begun tendering for new vessels, although the project-based nature of LNG trading still results in the majority of new orders being placed with domestic yards, says Ocean Shipping.

GROWTH OF WORLD LNG TRADE



Source: Institute of Gas Technology, Des Plaines, Ill.

LNG IMPORTING COUNTRIES, 1996

Country	Million metric tons	Billion cu m of gas	% of total	% change over 1995
Japan	44.237	56.034	60.93	4.50
Korea	9.470	11.995	13.05	35.99
Spain	5.568	7.053	7.67	0.19
France	5.104	6.466	7.03	0.13
France/Belgium*	0.165	0.209	0.23	-76.97
Belgium†	2.862	3.625	3.94	-5.96
Taiwan	2.575	3.262	3.55	5.55
Turkey	1.767	2.238	2.43	97.63
U.S.	0.850	1.077	1.17	124.35
Total	72.598	91.959	100	7.68

*Joint purchases from Abu Dhabi. †To this should be added 0.485 million cu m received by GdF for Distrigaz.

Source: Group internationale des importateurs du gaz naturel liquéfié, Paris.

LNG EXPORTING COUNTRIES, 1996

Country	Million metric tons	Billion cu m of gas	% of total	% change over 1995
Indonesia	25.372	32.139	34.95	3.85
Algeria	14.412	18.256	19.85	8.94
Malaysia	12.112	15.342	16.68	29.11
Australia	7.151	9.058	9.85	2.19
Brunei	6.038	7.649	8.32	-0.64
Abu Dhabi	5.315	6.732	7.32	9.03
U.S.	1.312	1.662	1.81	-1.79
Libya	0.885	1.121	1.22	-18.99
Total	72.598	91.959	100	7.68

Source: Group internationale des importateurs du gaz naturel liquéfié, Paris.

The state of LNG shipping—volumes, vessels, and routes—is published annually by the Society of International Gas Tanker & Terminal Operators Ltd. (Sigtto), London. The most recent issue, LNG Log 22 for 1996, reflects the steady growth of LNG transport by sea.

In 1996, more than 1,750 voyages were completed by 91 vessels (Table 3). Loaded LNG vessels traveled nearly 4 million nautical miles and delivered more than 160 million cu m of LNG to 27 receiving terminals worldwide.

The number of voyages, nautical miles, and total cargoes for 1996 exceeded records set in 1995. Since 1964, says the Sigtto report, there have been only 2 years (1980 and 1981) when the amount of LNG discharged failed to exceed that of the previous year.

The year 1996 witnessed further concentration of LNG transport to and within the Far East. More than 124 million cu m (76.9% of the year's total volume) were discharged at Asian terminals to which vessels traveled on 1,129 voyages and during which they steamed 3.35 million miles, representing 84.4% of the worldwide total.

The number of vessel entries into Tokyo Bay, said the Sigtto report, increased to 429, equal to an arrival on average every 20.4 hr. In total since the maiden arrival of Polar Alaska at Negishi late in 1969, no fewer than 6,737 LNG carrier arrivals (27.2% of the 24,788 worldwide voyages logged to the end of 1996) have been

1996 LNG DELIVERIES*

Region	Voyages	%	Logged miles	%	Deliveries, cu m	%	Cu m-miles	%
Europe	619	35.1	556,299	14.0	35,414,792	21.9	42,802,552,972	10.1
Far East	1,129	64.0	3,347,277	84.5	124,232,414	76.9	375,915,663,314	88.3
U.S.	15	0.9	59,396	1.5	1,810,602	1.1	7,135,902,569	1.7
Total	1,763		3,962,972		161,457,814		425,854,118,855	

*As of Dec. 31, 1996.

Source: LNG LOG 22. Sigfto, London.

recorded at the entrance to Tokyo Bay.

The cumulative amount of LNG landed has nearly doubled in the 7 years ending in 1996. Total number of voyages the study projected to have been completed by yearend 1997 was approximately 26,000.

Newbuildings, new routes

Five vessels made their initial cargo-carrying appearances in 1996, says LNG Log 22.

The fourth of five ships built at Chantiers de l'Atlantique for Petronas Tankers Sendirian Berhad, Puteri Zamrud, equipped with four Gaz Transport tanks of 130,568 cu m capacity, completed nine voyages from Bintulu to various terminals in Japan, Korea, and Taiwan.

Another Korean vessel, the Hyundai Greenpia, made her initial appearance late in the year and completed two voyages. She has a capacity of about 130,000 cu m contained in four Kvaerner spherical tanks.

Two new Liberian-flagged carriers for National Gas Shipping Co., Abu Dhabi, began service in 1996.

Mubaraz, the first vessel from the Kvaerner Masa yard in Finland, completed ten voyages from Das Island. Mraweh, the second of four vessels on order, made six deliveries.

Two more ships were delivered in 1997 bringing the National Gas fleet to eight vessels. Four earlier vessels were built in Japanese yards, says LNG Log 22.

Finally in 1996, the 19,474-cu m Surya Aki left the Kawasaki Heavy Industries yard at Sakaide, Japan. This Bahamian-registered ship,

owned by MCCG International and managed by P.T. Humppus Sea Transport, Indonesia, has three Kvaerner spherical tanks and a 12,000-hp (8,827-kw) steam-turbine propulsion plant. The Surya Aki opened two new routes during the year.

There were seven routes in 1996 over which LNG was carried for the first time. Four were to Japanese destinations, including three newly opened receiving terminals; two others were in Spain; and the last, to the U.S. (Table 4).

In Japan, the three new terminals were the following:

- At Hatsukaichi, west of Hiroshima, the site of an installation of Hiroshima Gas Co. Ltd. and at which LNG from Bontang will be discharged. The Surya Aki completed five voyages over the Bontang-Hatsukaichi route in 1996.

- At Kogoshima, at the extreme southern end of the island of Kyushu, the terminal owned by Nippon Gas Co. Ltd.

- At Sodeshi, near Shizuoka, approximately midway between Tokyo and Nagoya, the terminal owned by Shizuoka Gas Co. Ltd.

In Europe, Spain's Enagas added two new port pairs to its network with routes between Marsa-el-Brega and Huelva and Das Island and Huelva.

Finally, Das Island was source of one cargo in 1996 for Everett, Mass., for Cabot; another followed in 1997.

LNG Log 22 says the first of these voyages, made by Khanur under charter to Cabot, marks the first call at a U.S. terminal since the Colar Freeze under charter to El Paso, arrived at Cove Point, Md., in March 1980.

Future vessels

Set to join the world's LNG fleet in 1997 were several vessels to serve Far Eastern receiving terminals.

Among these were the first of ten vessels to carry Qatar LNG from Ras Laffan to a new Japanese terminal at Kawagoe. Chubu Electric Corp., buyer of the gas, also has terminals at Chita and Yokkaichi in the Chubu region around Nagoya.

The first two of these vessels, actually handed over by the building yard before yearend 1996, are Al Zubarah and Al Knor, 135,000 cu m ships built by Mitsui and Mitsubishi, respectively, and to be operated by Mitsui OSK Lines and NYK.

Equipped with five Kvaerner spherical tanks, both are owned by a consortium consisting of Mitsui OSK, NYK, Kawasaki Kisen, Showa Line, and Iino Kaiun.

These were followed in 1997 by Al Ravan, from Kawasaki Heavy Industries, and Al Wajbah, from Mitsubishi. Later, six more vessels now being built will join the Qatar fleets. LNG Log 22 says that still more would undoubtedly serve the Ras Laffan plant in the future.

The last two vessels for Abu Dhabi's National Gas Shipping Co., Alhamra and Umm Al Ashtan, will be delivered by the Kvaerner Masa yard in Finland.

NKK Corp.'s Tsu, Japan, shipyard in mid-1997 launched Aman Sendai (OGJ, Oct. 20, 1997, p. 52), the second LNG carrier NKK has launched that uses the membrane-tank system. The 18,800-cu m Aman Sendai was built for Asia LNG Transport Sdn. Bhd. (ALT), Malaysia.

ALT is a shipping joint venture between Japan's Nippon

Yusen K.K. and Malaysia's PNSL Bhd. The first and sister vessel, the 18,800-cu m Aman Bintulu, was also built at NKK's Tsu works and delivered to ALT in October 1993.

The Aman Sendai was to be chartered by Malaysia LNG Sdn. Bhd. (MLNG) to transport LNG from Malaysia's Sarawak gas fields to Gas Bureau of Sendai, Miyagi Prefecture, on the Pacific Coast about 350 km north of Tokyo, according to NKK.

The city concluded a 20-year agreement with MLNG to purchase 150,000 metric tons (more than 7.3 bcf) of LNG annually from June 1997 and build a new LNG receiving terminal at its port.

Sendai's Gas Bureau is Japan's third medium-sized regional city gas utility to supply natural gas by directly importing LNG. Japan's three largest gas companies, in Tokyo, Osaka, and Nagoya, have already switched to LNG from LPG/naphtha.

In addition, NKK said in late 1997 that it had received a third order from ALT for another LNG carrier. The vessel, also to transport LNG for Saibu Gas, is under construction at NKK's Tsu shipyards and expected to be completed in September 1998.

LNG Log 22 reports that the last of the five "princesses" for Petronas Marine Sendirian Berhad was to be delivered in 1997 by Chantiers de l'Atlantique, of St. Nazaire. She is to be named Puteri Firuz.

In the future, Korea Gas Corp. has six ships on order for 1999 delivery, split among Hyundai, Samsung, Daewoo, and Hanjin. Moreover, seven additional vessels to be built by the same shipyards will follow in 2000 and later.

OPERATING LNG RECEIVING TERMINALS

Terminal and country	Owner	Start-up date	Vaporization design capacity, million cu m/day	Storage capacity, cu m of LNG	Source of supply	Expansion plans
Japan Negishi	Tokyo Gas. Tokyo Electric	1969	53	1.25 million (16 tanks)	Alaska, Brunei	
Senboku 1	Osaka Gas	1972	9	4 x 45,000	Brunei	
Sodegaura	Tokyo Gas. Tokyo Electric	1973	110	2.66 million (35 tanks)	Brunei, Abu Dhabi, Malaysia, Indonesia	
Senboku II	Osaka Gas Kansai Elec. Nippon Steel	1977	50	1,405 million (17 tanks)	Indonesia, Australia	
Tobata	Kyushu Elec. Nippon Steel, et al.	1977	25	8 x 60,000	Indonesia, Australia	
Chita	Chubu Elec. Toho Gas	1977	25	4 x 75,000	Indonesia	
Himeji	Kansai Elec.	1979	17	6 x 80,000 1 x 40,000	Indonesia, Australia	
New Chita	Chubu Elec. Toho Gas	1983	33	6 x 80,000 1 x 160,000	Indonesia, Australia	
Nigata	Tohoku Elec. Nihonkai LNG	1984	40	520,000 (6 tanks)	Indonesia, Australia	
Himeji Joint Terminal	Osaka Gas Kansai Elec.	1984	15	1 x 40,000 6 x 80,000	Indonesia, Australia	
Higashi-Ogishima	Tokyo Electric	1984	55	9 x 60,000	Malaysia, Indonesia	
Futtsu	Tokyo Electric	1985	60	4 x 90,000 2 x 125,000	Malaysia, Australia, U.S., Abu Dhabi	+250,000 cu m storage 1999; 250,000 cu m 2002; 250,000 cu m 2004
Yokkaichi	Chubu Elec.	1987	23	4 x 80,000	Australia, Indonesia	
Yanaï	Chugoku Electric	1990	9	6 x 80,000	Australia, Indonesia	
Oita	Kyushu Elec. Oita Gas	1990	12	4 x 80,000	Australia, Indonesia	
Yokkaichi Works	Toho Gas	1991	2.4	2 x 80,000	Australia, Indonesia	
Fukuoka	Saibu Gas	1993	4.1	2 x 35,000	Malaysia	
Kagoshima	Nippon Gas Co.	1996	0.3	1 x 36,000	Indonesia	
Hatsukaichi	Hiroshima Gas	1996	0.4	1 x 85,000	Indonesia	+1.1 million cu m sendout cap.
Kawagoe	Chubu Electric	1997	20	4 x 120,000	Qatar	
Sodeshi-Shimizu	Shizuoka Gas	1997		1,800,000	Malaysia	
Other Asia Pyeong Taek (Korea)	Korea Gas Corp.	1986	50	7 x 100,000	Indonesia, Malaysia, Brunei, Australia	+3 x 100,000 cu m storage in 1998
Inchon (Korea)	Korea Gas Corp.	1996	25	3 x 100,000	Indonesia, Malaysia	+700,000 cu m storage in 2000
Yung-An (Taiwan)	Chinese Petroleum Corp.	1990	28	6 x 100,000	Indonesia, Malaysia	Adding 390,000 cu m storage
Europe Panigaglia, Italy	Snam	1969	11	1 x 40,000 6 x 80,000	Algeria	
Barcelona, Spain	Enagas	1970	24	2 x 50,000 2 x 80,000	Algeria, Libya	
Fos-sur-Mer, France	Gaz de France	1972	22	2 x 35,000 1 x 80,000	Algeria	
Montoir, France	Gaz de France	1980	36	3 x 120,000	Algeria	
Zeebrugge, Belgium	Distrigaz	1987	16	3 x 87,000	Algeria	
Huelva, Spain	Enagas	1988	10.8	1 x 65,000 1 x 100,000	Algeria	
Cartagena, Spain	Enagas	1989	4.2	1 x 55,000	Algeria	+6.6 million cu send out 105,000 cu m storage by 1999
Marmara Ereğlisi, Turkey	Botas	1994	16	3 x 85,000	Algeria	
U.S. Everett, Mass.	Distrigas	1971	12	1 x 60,000 1 x 95,000	Algeria	+4.0 million cu m sendout cap. by 1998
Lake Charles, La.	Trunkline LNG	1980-1981; reopened 1989	19	3 x 94,400	Algeria	
Cove Point, Md.	Cove Point LNG	1975-80; now operating as storage peak shaving facility	27	3 x 60,000	Algeria	

Source: Institute of Gas Technology, Des Plaines, Ill.

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NEWS RELEASE



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FOR IMMEDIATE RELEASE: February 9, 1998

98-031

KNOWLES' BILL ENCOURAGES GASLINE DEVELOPMENT, JOBS

Bill includes Provisions for Alaska Hire, Gas for Alaska Communities

Legislation that encourages development of Alaska's enormous North Slope natural gas reserves, while providing for the hire of Alaska workers and use of Alaska businesses and gas for Alaska communities, was transmitted to the Legislature by Gov. Tony Knowles today.

"The challenge we face is to bring the North Slope's vast natural gas reserves to market in a cost-effective manner, while still making sure it's a good deal for Alaskans," Knowles said. "This legislation allows the state to negotiate a tax structure that provides the incentives producers need to develop this resource in a highly competitive world market, while securing commitments from the producers to hire Alaskans, use Alaska businesses and provide gas for Alaska communities."

The result of nearly a year's work by Knowles' Gas Commercialization Team, the legislation authorizes the state to negotiate with the sponsors of a gas line project for payments in lieu of taxes that otherwise would be imposed by the state or a municipality. This would include state and local property taxes; sales and use taxes; production or severance tax; and state corporate income tax. For municipalities, the bill provides the option of an equity interest in the project in lieu of taxes.

The idea is to create a progressive tax structure that shifts the tax burden from the beginning of a project to later years when producers are realizing the profits from their investment. Such "back-end loading" of the tax burden is intended to reduce the risks and improve the economics of a gas project that might not otherwise be developed.

In return, the bill clearly spells out that Alaska communities must have access to the clean-burning energy and describes terms regarding the notification, recruitment and employment of Alaska residents and Alaska businesses on the project. The bill requires contractors to advertise in-state and use Alaska job service organizations in recruitment efforts.

Experts estimate there are 35 trillion cubic feet of natural gas on the North Slope, some of which is currently re-injected into the Prudhoe Bay fields to increase oil production. This gas is America's second largest reserve of hydrocarbon energy, second only to

Prudhoe's oil fields. Alaska's major gas owners are BP, ARCO, Exxon and the state. The state's 12.5 percent royalty share of the gas is not changed in Knowles' legislation.

"An Alaska natural gas project makes good sense for many reasons," Knowles said. "It will create an estimated 10,000 construction jobs and 600 permanent jobs for Alaskans. It will help stimulate the American economy, improve our balance of payments, and strengthen Alaska's relationship with our Pacific Rim trading partners. It provides millions of dollars to the state and federal treasuries and will make natural gas available to Alaska communities along pipeline route."

The bill requires that the Revenue Commissioner compare the projected in lieu payments with the estimated cost of additional state and local government services; address the effect of the proposed contract on the state's revenue; and determine whether the proposed contract terms are in the best interests of the state. Knowles called for the legislature to review and formally approve any contract terms after extensive public hearings.

In order to make that best interest finding, the legislation requires the disclosure of financial, technical and market information regarding the project that is necessary for the development of contract terms and describes the treatment of proprietary information.

Knowles' legislation is the culmination of several years of work. Knowles first negotiated a memorandum of understanding with North Slope gas owners on the steps needed to move the proposal ahead. Noted natural gas economist Dr. Pedro Van Meurs provided expert analysis on the world natural gas market and recommendations on state actions to make the project feasible. Last year, Knowles and the Legislature created the Gas Commercialization Team to examine the complex issues involved and draft the proposed legislation.

"In the past few years we have seen the gas line project go from impossible to improbable to now the doable," Knowles said. "This legislation is the next step forward. It allows the state to negotiate a long-term contract that improves the competitiveness of the project and provide the state with its fair share of the benefits. That contract must also address Alaska hire and contracting and payments to municipalities in lieu of taxes for social impacts of development. And it includes a plan to make gas available to Alaska communities.

"The major reason Alaska is as close to a natural gas project as it is today is the partnership between the legislative and executive branches of state government and industry," Knowles added. "This is a bipartisan issue that all Alaskans can support. I urge the Legislature's quick and careful consideration of this bill."



Resource Development Council for Alaska, Inc.

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Founded 1975

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March 18, 1998

Representative Mark Hodgins, Chairman
Special Committee on Oil and Gas
Alaska State Legislature
State Capitol (MS 3100)
Juneau, AK 99801-1182

Dear Representative Hodgins:

RE: Support for HB 393, relating to development of Alaska's stranded natural gas resources.

The Resource Development Council for Alaska, Inc. (RDC) supports HB 393 and urges its passage. RDC has long advocated for the exploration, development and production of Alaska's oil and gas resources. This legislation allows the state to create favorable fiscal conditions for the development of Alaska's stranded gas reserves on the North Slope.

RDC realizes HB 393 alone will not create a situation in which a North Slope natural gas project is economically feasible. The costs, profitability and risk of any potential project must be thoroughly examined. A restructuring of the state's current "front-end loaded" tax scheme, will likely help to attract an appropriate investor or investor group.

By providing a mechanism from which a suitable tax and royalty scheme may be created, HB 393 grants the state the power and flexibility needed to maximize the economic benefit of a North Slope gas project.

The development of a North Slope natural gas project will create substantial permanent and temporary jobs for Alaskans. HB 393 addresses the need to have a strong Alaska hire policy for a North Slope gas project.

It is important that measures be taken to address potential impacts that a project may have on local communities. The legislation provides for a socio-economic study to quantify these impacts. The current legislation addresses the issue of revenue sharing with municipalities and we encourage the committee to consider input from all effected parties.

The development of Alaska's stranded natural gas resources would bring great benefits to the people and communities of Alaska. RDC encourages the State Legislature to establish a fiscal and regulatory regime which provides stranded gas projects in Alaska the best possible opportunity to become economically feasible. HB 393 gives the state the ability to accomplish this goal and RDC urges its passage.

Sincerely,

RESOURCE DEVELOPMENT COUNCIL
for Alaska, Inc.


Ken Freeman
Executive Director

Testimony of David Brooks
House Subcommittee on Oil and Gas
February 19 or 24, 1998

David Brooks

Thank you Mr. Chairman

For the record my name is David Brooks and I hold the position of Manager, Alaska Gas for BP Exploration (Alaska) Inc.

In this position I am responsible for managing BP's initiatives to commercialize North Slope gas.

Those initiatives include the possible liquefied natural gas export project and the development of economic technology for the conversion of gas to liquid hydrocarbons, the so called gas-to-liquids technology.

I have been with BP for 23 years and involved in the gas business for 16 years.

Prior to moving to Alaska last November, I was commercial manager of BP's Business Unit in Abu Dhabi in the Middle East where BP is a partner in two oil concessions and a 5 million tonne per year LNG project (the Abu Dhabi Gas Liquefaction Company).

Prior to my assignment in Abu Dhabi, I led the commercial side of BP's participation in the Australian North West Shelf LNG project.

Today, I would like to briefly discuss the proposed Alaska Stranded Gas Development Legislation.

This legislation is clearly the logical next step following the Gas Commercialization Report which was published earlier this year. In passing we would wish to comment that we were encouraged by the Report and pleased to have been able to contribute to its development. For the record we would like to compliment the authors of the Report on a very professional piece of work which addressed the key issues in a what is a complex area.

We also welcomed the opportunity to work with the State's team in developing this legislation and we are supportive of it.

We believe the legislation would offer sponsors of stranded gas projects an opportunity to negotiate fiscal contracts with the State thereby increasing the certainty in respect of the level, methodology, and rules for calculating the State's taxes and royalties over the life of the project.

We believe that the establishment of a fiscal contract between the project sponsors and the State based upon the profitability of the project and the principles set out in the legislation would enhance the international competitiveness of the project and reduce the fiscal risks, one of the key objectives identified by the State's consultant as necessary to improve the economic attractiveness of a North Slope gas development.

We recognize that as the legislation is discussed there may be issues and questions which arise. We look forward to working with the members of the legislature as they consider the merits of this legislation.

Thank you for this opportunity to comment and explain BP's views.

Anchorage
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email: unite@akvoice.org

Alaska Conservation Voice
Speaking Out for Alaska's Future

Juneau
P.O. Box 22151
Juneau, Alaska 99802
phone: 907-463-3366
fax: 907-463-3312
email: unite@akvoice.org

TO: Honorable Members, House Oil and Gas Committee, Alaska State Legislature

FROM: Kay Brown, executive director, Alaska Conservation Voice

DATE: February 25, 1998

SUBJECT: Comments on HB 393 — incentives for stranded gas development

Thank you for the opportunity to comment on HB 393. These comments are submitted on behalf of the Alaska Conservation Voice, a statewide coalition of conservation groups.

The Alaska Conservation Voice supports a fair return for Alaskans from the sale and extraction of public resources.

Therefore, HB 393, proposing incentives to encourage stranded gas development, raises questions:

Is it prudent for the Legislature to authorize open-ended renegotiation of tax and royalty obligations in order to encourage development of as-yet uneconomic gas resources? Is it possible or likely under the scheme proposed that the people of Alaska will receive benefits comparable to what would be obtained without this legislation?

Secs. 1 and 2 of the bill, Findings and Intent, by their nature offer no legal assurance that any renegotiated contract will in fact "fully and fairly compensate the people of the State of Alaska" for the severance of publicly-owned resources or other public costs, including the negative effects and risks that a project could impose on the State.

A shift of payments to the future as proposed entails risks that the Sponsor Group will not be able or willing to meet its future obligations to the State. What if the operation never does become profitable? What if the company has better things to do with its money? What if the leases are assigned to a new party who doesn't honor those old commitments?

We need only to look at the State's recent experience with the Northstar lease renegotiations to see that original contractual commitments may not be honored or considered binding by lessees. In that example, British Petroleum acquired leases through assignment and then refused to honor the net profit bid agreements, which would have deferred payments to the future and given the state a significant share of future net profits. BP has been able to demand new terms as a condition of development, despite prior commitments. Why should these proposed contracts be any more reliable?

Representatives of the administration have stated that any contract proposed would not reduce the state's royalty on gas. Yet, HB 393 proposes broad authority allowing renegotiation of royalty terms [Sec. 43.82.220]. Why is this needed?

What is a "significant share" of a project's economic rent, when discounted to present value, under favorable price and cost conditions [Sec. 43.82.210(b)(6)]? Could this return to the state be less than what the state would receive under the original contract terms and existing tax laws? What happens to the state's share under unfavorable price and cost conditions? How much is a job worth? How much revenue loss is acceptable to get jobs? How do environmental requirements affect the economic rent for purposes of this calculation?

What share of the rent will be deemed "sufficient to compensate the sponsors for risks under a range of economic circumstances"? Looking again at the Northstar renegotiation example, rates of return in excess of 20% from the net profit leases were not adequate to satisfy BP.

Why do municipalities, but not the State, have the option to acquire "an equity or other interest in a project"? What benefits and risks would a municipality incur with an equity share? Should the State also have this option?

Are the municipalities assured that "periodic payments" will be adequate to compensate for the real costs of providing schools, public safety and other services for the influx of workers associated with a big project? Which municipalities will be included?

Which particular items are open to renegotiation is somewhat unclear. Could environmental requirements be dropped through a negotiated contract in order to make a project more economically competitive?

Why should only an aggrieved applicant have standing to seek judicial review? [Sec. 43.82.150] Other people might be legitimately aggrieved, including Alaska citizens and royalty owners, and they should have appeal rights as well.

"Notwithstanding any contrary provisions of AS 38" is a phrase that appears many times in the bill. What precedents would be established in this legislation that could adversely affect other state interests?

Looking at the timeline, how much oil recovery would be lost due to accelerated development of North Slope gas, and how would this affect state revenues? How will this possibility be acknowledged and compensated in the balancing of considerations?

Some have suggested that legislative approval should be part of the process. While that may provide some comfort, Alaska's history with negotiated royalty oil and other contracts indicates that, once a proposal is put forth by the administration and industry sponsors, any changes legislators might suggest are likely to be resisted and difficult to achieve.

The Alaska Conservation Voice urges caution in giving the administration broad authority to change lease terms established by competitive bidding, or to change tax obligations imposed by the Legislature and now uniformly applied. This committee should carefully consider HB 393 in light of legislators' trust responsibilities for public resources and address the questions and issues posed here before moving forward with this bill. We appreciate the committee's deliberative debate thus far, and urge you to look more deeply into these issues.

Thank you for your consideration.

RECEIVED

TONY KNOWLES, GOVERNOR

PLEASE REPLY TO

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ANCHORAGE, ALASKA 99501-1994
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□ KEY BANK BUILDING
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JUNEAU, ALASKA 99811-0300
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FAX (907) 465-6735

DEPARTMENT OF LAW

OFFICE OF THE ATTORNEY GENERAL

March 13, 1998

Representative Marc Hodgins
Chairman, Special Committee on Oil and Gas
State Capitol Room 110
Juneau, AK 99801-1182

VIA FACSIMILE AND FIRST CLASS MAIL

Re: CSHB 393 (Stranded Gas Development Act)

Dear Representative Hodgins:

At the March 10, 1998, Special Committee on Oil and Gas hearing on CSHB 393 (Stranded Gas Development Act), you asked whether the proposed legislation could go further in requiring Alaska hire without running afoul of the Alaska and U.S. Constitutions. For the reasons set out below, in our opinion the provisions in the legislation before you, with the changes proposed by Commissioner Condon, likely go as far as the courts would allow.

As I briefly discussed at the hearing, the courts have historically found Alaska local hire laws unconstitutional, either under the privileges and immunities clause of the U.S. Constitution or under the equal protection clause of the Alaska Constitution. In *Hicklin v. Orbeck*, 437 U.S. 518 (1978), under the privileges and immunities clause, the U.S. Supreme Court struck down an Alaska local hire law that applied to all employment which was the "result" of state oil and gas leases and required Alaskan residents be hired in preference to nonresidents so long as Alaskans were available. The *Hicklin* court held that employment in the construction industry was a fundamental right entitled to the protection of the privileges and immunities clause, and discrimination against nonresidents would only be permitted if there were a substantial reason justifying the discrimination. The State failed to prove that nonresidents were a "peculiar source of the evil of unemployment."

Following the *Hicklin* decision, the Legislature enacted a narrower local hire statute which required public construction contractors to have a work force that included at least 90% Alaska residents. In *Robison v. Francis*, 713 P.2d 259 (Alaska 1986), the Alaska Supreme Court, again, under the privileges and immunities clause of the U.S. Constitution, held the statute unconstitutional. The court rejected the State's argument that nonresident construction workers were a "peculiar source of unemployment problems in Alaska" because they took construction jobs that would otherwise be taken by Alaska residents. The court upheld the superior court's finding that the nonresidents were no more a peculiar source of unemployment in the construction industry in Alaska than they would be in any other state. *Robison*, 713 P.2d at 266. In addition, the court upheld the superior court's finding that in Alaska there may be many other sources of unemployment -- climatic extremes, the absence of construction activities in rural areas, and the lack of training in rural areas.

TO: MARC HODGINS, Chairman, Special Committee on Oil and Gas
RE: HB 393 (Stranded Gas Development Act)

March 13, 1998
Page 2

Following *Robison*, in 1986, the Legislature amended AS 36.10 to require contractors on public construction projects to give hiring preferences to residents of economically distressed zones. In *State v. Enserch Alaska Constr. Inc.*, 787 P.2d 624 (Alaska 1989), the Alaska Supreme Court held that the hiring preference for economically distressed zones provided for in AS 36.10 violated the equal protection clause of the Alaska Constitution. The court reasoned that the disparate treatment of unemployed workers in one region in order to confer an economic benefit on similarly situated workers in another region is not a legitimate legislative goal. *Enserch*, 787 P.2d at 634.

With the background of these cases, in our opinion it is unlikely that CS HB 393 could contain significantly more substantial, or quantifiable, Alaska Hire provisions without running afoul of the Alaska and U.S. Constitutions. At this time, far in advance of pipeline construction, it would be highly questionable whether one could reasonably establish nonresident workers as a peculiar source of evil, not knowing future employment conditions in the State.

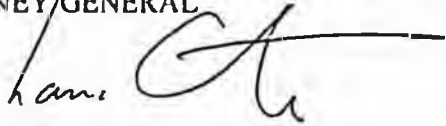
It is our understanding that CS HB 393 contains a new subsection (c) to Section 43.82.230 which would provide that "[s]ubject to the voluntary agreement of the qualified sponsors the commissioner may include a term in the contract providing for incentives to encourage training and hiring of Alaska residents." As I briefly discussed at the hearing, for a variety of reasons, a sponsor may, in a manner similar to the Northstar example, voluntarily commit to substantive Alaska hire goals that the State may not mandate through legislation. Moreover, these incentives would be more contemporaneous with pipeline construction and could, presumably, be more closed tailored to addressing future employment conditions in the State. Therefore, this proposed language may help address your concern that the legislation contains the tools by which the State may obtain more solid assurances of Alaska hire.

I hope this letter addresses your questions. If you have additional questions or concerns, please let me know.

Very truly yours,

BRUCE M. BOTELHO
ATTORNEY GENERAL

By:


Lawrence Z. Ostrovsky
Assistant Attorney General
Oil, Gas & Mining Section

cc: Commissioner Condon
Pat Pourchot
Jack Griffin
Ed Flanagan
Mary Marshburn

LZO/mb



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e-mail: crfbarnes@alaska.net
(907) 264-3681

Richard F. Barnes
President

March 17, 1998

Special Committee on Oil and Gas
Alaska House of Representatives

Dear Committee members:

Re: HB 393

ENSTAR Natural Gas has great concern about the present language of HB 393.

In the findings of Section 1, line 22 the bill discounts any significant need for North Slope gas besides export. However, the North Slope Gas Commercialization Team said in its (October 1, 1997) report that Southcentral Alaska may face natural gas shortages as soon as 2004. Our consultants and Unocal reached similar conclusions, especially if gas exports continue to Japan from the Kenai LNG plant based on Cook Inlet supplies.

We are concerned that Anchorage, Mat-Su and Kenai are being cut out of access to North Slope gas. The bill gives power to a commissioner to enter a contract with a project sponsor that withdraws the right of the state to take royalty gas in kind. In turn, the project sponsor must make "gas available to meet reasonably foreseeable demand in this state for gas within proximity of the project." (Sec. 43.82.010, line 18-20) This language appears in multiple locations in the bill. This concept may cover Fairbanks, Glennallen and Valdez, which presumably are "within proximity of the project." It does not appear to recognize the importance to the 97,000 homes and businesses, representing over half the population of the state, that may need to depend on North Slope gas for energy security. Nor does it address the needs of continued supply to the electricity-generating utilities, the ammonia-urea plant at Kenai, the LNG plant at Kenai or any economic development that may depend on gas.

We applaud the state's effort to encourage construction of a gas pipeline from the North Slope to a southern terminus. However, what may be the most advantageous approach for the project sponsors could be contrary to the best interests of the majority of Alaska's population. If the project sponsors control the working interest and the royalty interest from the North Slope, there may be no gas for domestic use. To legislate such an outcome would be bad public policy. We ask that you not pass HB 393 out of committee without correcting this problem.

Very truly yours,

ALASKA STATE CHAMBER OF COMMERCE

Resolution 98-12

Development of Stranded Alaska North Slope Gas

WHEREAS, Alaska has at least 26 trillion cubic feet of natural gas resources in the Prudhoe Bay field and five to ten trillion cubic feet of additional natural gas resources in other North Slope fields; and

WHEREAS, these natural gas resources are currently stranded, without a transportation means to reach a market; and

WHEREAS, possible favorable conditions for the sale of North Slope gas to Pacific Rim markets beginning after 2005 may exist; and

WHEREAS, the Alaska Legislature recently expressed their support for intensified activities to advance economic North Slope gas sales through their unanimous passage of House Concurrent Resolution No. 1; and

WHEREAS, the Alaska State Chamber also recognizes that the petroleum industry is developing technologies which may offer other alternatives to produce the gas in the future; and

WHEREAS, the Alaska State Chamber believes commercial development of stranded natural gas from the North Slope and the construction of associated facilities would greatly benefit the future economic health of the State of Alaska, its local governments and private enterprise; and

WHEREAS, the Alaska State Chamber supports the commercial development of natural gas from the North Slope including the construction and operation of the associated facilities;

THEREFORE, BE IT RESOLVED that the Alaska State Chamber urges the Governor and the Alaska State Legislature to continue to take those steps, particularly to provide a stable and appropriate fiscal and regulatory environment, which will give an Alaska stranded gas project the best opportunity to become commercially viable, thus enabling the earliest possible development of the resource.

ADOPTED

December 5, 1987

BY

Pamela LaBolle

Pamela La Bolle
President

BY

David W. Marquez

David Marquez
Chairman, Board of Directors

RESOLUTION NO. 98-18

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF VALDEZ, ALASKA, SUPPORTING THE FIVE (5) YEAR TAX EXEMPTION PROPOSED BY THE MAYORS OF THE FAIRBANKS NORTH STAR BOROUGH, NORTH SLOPE BOROUGH, CITIES OF FAIRBANKS, NORTH POLE AND VALDEZ FOR THE CONSTRUCTION OF THE TRANS-ALASKA GAS PIPELINE

WHEREAS, plans for a Trans-Alaska gas pipeline have been discussed and debated for many years in Alaska; and

WHEREAS, owners of the Trans-Alaska Gas Pipeline project are pursuing the construction of a natural gas pipeline; and

WHEREAS, the municipalities of Fairbanks North Star Borough, North Slope Borough, Cities of Fairbanks, North Pole and Valdez have recognized the importance of the construction of a natural gas pipeline; and

WHEREAS, the Mayors from these municipalities have agreed to offer up to a five (5) year tax exemption to the owners of the Trans-Alaska Gas Pipeline; and

WHEREAS, in exchange for this exemption, the Mayors propose that the municipalities involved would take an ownership position proportionate to the dollar value of the exempted taxes for the proposed five (5) year period; and

WHEREAS, the State of Alaska and other interested parties supporting the construction of a Trans-Alaska gas pipeline have stated that to be economically viable, a "tax holiday" would need to take place during construction as there would be little or no cash flow during that phase; and

WHEREAS, gas line take-offs would be expected so that each of these municipalities would have natural gas distributed to its citizens and businesses; and

WHEREAS, the Mayors of the affected municipalities find this a reasonable position and in the best interest of those communities involved by providing a less expensive form of energy to their citizens and will provide considerably cleaner emissions produced through combustion which will significantly affect air quality; and


WHEREAS, the State of Alaska is on record as stating that a tax exemption of some sort is necessary to move a gas line project to reality and would have to offer similar concessions for that part of the pipeline not located in an organized municipality; and

WHEREAS, through a small financial ownership interest by the municipalities in the pipeline, the revenue stream produced for at least the next fifty (50) years would diminish the amount of taxes exempted at the "front end" of the project; and

WHEREAS, this is a very positive approach to solving one of few remaining obstacles to construction of the gas line and creates a government/business partnership that is in the interest of the public and demonstrates flexibility from municipalities that show them to be part of a solution rather than part of a problem.

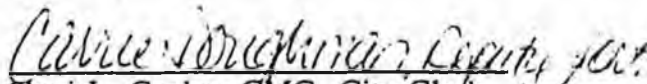
NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Valdez, Alaska, strongly supports the plan put forth by the Mayors of those municipalities involved and requests the Legislature and the Governor to support the plan by providing the same tax incentives in the unorganized areas of the State that would be affected.

PASSED AND APPROVED this 17th day of February, 1998.



David C. Cobb, Mayor

ATTEST:



Sheri L. Caples, CMC, City Clerk



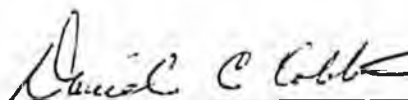
PROPOSED AMENDMENTS TO HB 393 BY PIPELINE MAYORS

1. The Commissioner has the power to defer municipal taxes - not exempt pipeline owners from them.
2. The taxes may be deferred for a maximum of 5 years from the first year in which the taxes could have been collected.
3. The agreement must provide that any deferred taxes be repaid with interest (at the long bond rate calculated as of January 1) during the first five years after the period of deferment.
4. Municipalities that defer taxes must be able to issue bonds up to the amount necessary to accommodate expenditures required to be made by the municipality as a result of the impact of the project. The bonds must be guaranteed by the State of Alaska.
5. No deferrals of property taxes may be permitted for facilities which are presently subject to the ad valorem property tax.
6. The deferral of taxes may only apply to (1) projects that require construction of a Trans-Alaska natural gas pipeline; and (2) facilities in existence during the initial exemption period.
7. Communities in proximity to the pipeline must have guaranteed access to gas at a price equal to the wellhead value plus the allocated transportation costs to the pipeline connection.

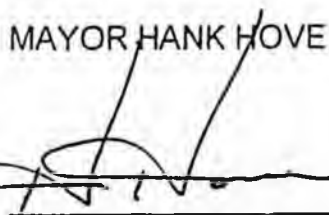
MAYOR DAVID C. COBB

MAYOR HANK HOVE

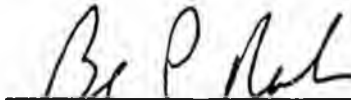
MAYOR BENJAMIN NAGEAK



City of Valdez



Fairbanks North Star Borough



North Slope Borough

www.mdc.gov/valdez

advance and with as much certainty as the Constitution of the State of Alaska allows; 1
and 2

(3) maximize the benefit to the people of the state of the development 3
of the state's stranded gas. 4

**Sec. 43.82.020. Contracts for payments in lieu of other taxes and for 5
royalty adjustments.** The commissioner may, under this chapter, enter into a contract 6
with a qualified sponsor or qualified sponsor group providing for (1) periodic payment 7
in lieu of one or more taxes that otherwise would be imposed by the state [OR A 8
MUNICIPALITY] upon the qualified sponsor or members of the qualified sponsor group as 9
a consequence of the sponsor's or group's participation in an approved qualified 10
project under this chapter; and (2) certain adjustments regarding royalty under 11
AS 43.82.220. 12

Article 2. Qualification and Application Procedures. 13

Sec. 43.82.100. Qualified project. Based on information available to the 14
commissioner, the commissioner may determine that a proposal for new investment is 15
a qualified project under this chapter only if the project 16

(1) would produce at least 500 billion cubic feet of stranded gas within 17
20 years from the commencement of commercial operations; and 18

(2) [IS CAPABLE, SUBJECT TO APPLICABLE COMMERCIAL
REGULATION AND TECHNICAL AND ECONOMIC CONSIDERATIONS, OF MAKING]
would make gas available in sufficient quantities to meet reasonably foreseeable [DEMAND IN THIS
STATE FOR GAS] present and future needs of communities within proximity to the project at a
price equal to the wellhead value plus the allocated transportation costs to the pipeline connection. 19

Sec. 43.82.110. Qualified sponsor or qualified sponsor group. The 22
commissioner may determine that a person or group is a qualified sponsor or qualified 23
sponsor group if the person or a member of the group 24

(1) intends to own an equity interest in a qualified project or commit 25
gas that it owns to a qualified project; and 26

(2) meets one or more of the following criteria: 27

(A) owns a working interest in at least 10 percent of the 28
stranded gas proposed to be developed by a qualified project; 29

(B) has the right to purchase at least 10 percent of the stranded 30
gas proposed to be developed by a qualified project: 31

Sec. 43.82.180. Withdrawal of applications. Subject to the terms of a 1 reimbursement agreement under AS 43.82.240 or other agreement with the Department 2 of Revenue, the Department of Natural Resources, the commissioner of revenue, or the 3 commissioner of natural resources affecting the withdrawal of an application, a 4 qualified sponsor or qualified sponsor group may withdraw an application submitted 5 under AS 43.82.120 at any time before the date that the commissioner of revenue 6 enters into a contract under AS 43.82.430 without further obligation under this chapter. 7

Article 3. Contract Development. 8

Sec. 43.82.200. Contract development. If the commissioner of revenue 9 approves an application and proposed project plan under AS 43.82.140, the 10 commissioner may develop a contract under AS 43.82.020 that may include 11

(1) terms concerning periodic payment in lieu of one or more taxes as 12 provided in AS 43.82.210; 13

(2) terms developed under AS 43.82.220 relating to 14

(A) timing and notice of the state's right to take royalty in kind 15 or in value; or 16

(B) royalty value; 17

(3) terms regarding Alaska hire and Alaska contracting under 18 AS 43.82.230; 19

[(4) TERMS REGARDING PERIOD PAYMENT TO, OR AN EQUITY OR 20 OTHER INTEREST IN A PROJECT FOR, MUNICIPALITIES UNDER AS 43.82.500;] 21

(4) terms regarding arbitration or alternative dispute resolution 22 procedures; 23

(5) terms and conditions for administrative termination of a contract 24 under AS 43.82.440; and 25

(6) other terms or conditions that are 26

(A) necessary to further the purposes of this chapter; or 27

(B) in the best interests of the state. 28

Sec. 43.82.210. Contract terms relating to payment in lieu of one or more state 29 taxes. (a) If the commissioner of revenue approves an application and proposed 30 project plan under AS 43.82.140, the commissioner may develop proposed terms, for 31

inclusion in a contract under AS 43.82.020, for periodic payment in lieu of one or more of the following taxes that otherwise would be imposed by the state [OR A MUNICIPALITY] upon the qualified sponsor or a member of the qualified sponsor group as a consequence of participating in an approved qualified project:

(1) oil and gas production taxes and oil surcharges under AS 43.55;

(2) oil and gas exploration, production, and pipeline transportation property taxes under AS 43.56;

(3) oil and gas conservation tax under AS 43.57;

(4) Alaska net income tax under AS 43.20;

[(5) MUNICIPAL SALES AND USE TAX UNDER AS 29.45.650 -29.45.680 OR 29.45.700 - 29.45.710;]

[(6) MUNICIPAL PROPERTY TAX UNDER AS 29.45.010 - 29.45.250 OR 29.45.550 - 29.45.600;]

[(7) MUNICIPAL SPECIAL ASSESSMENTS UNDER AS 29.46;]

(5) a comparable tax or levy imposed by the state [OR A MUNICIPALITY] after the effective date of this bill section;

(6) other state taxes [OR MUNICIPAL TAXES] or categories of state taxes identified by the commissioner.

(b) If the commissioner chooses to develop proposed terms under (a) of this section, the commissioner shall, if practicable and consistent with the long-term fiscal interests of the state, develop the terms in a manner that attempts to balance the following principles:

(1) the terms should, in conjunction with other factors such as cost reduction of the project, cost overrun risk reduction of the project, and increased fiscal certainty and successful marketing, improve the competitiveness of the approved qualified project in relation to other development efforts aimed at supplying the same market;

(2) the terms should accommodate the interests of the state, [THE AFFECTED MUNICIPALITIES,] and the project sponsors under a wide range of economic conditions, potential project structures, and marketing arrangements;

(3) the state's [AND AFFECTED MUNICIPALITIES' COMBINED] share of the

approved qualified project's economic rent under the contract should be relatively 1
progressive; that is, the state's [AND AFFECTED MUNICIPALITIES' COMBINED] annual
share of 2

the approved qualified project's economic rent generally should not increase when 3
there are decreases in project profitability, or decrease when there are increases in 4
project profitability; 5

(4) the state's [AND AFFECTED MUNICIPALITIES COMBINED] share of the 6
approved qualified project's economic rent under the contract should be relatively 7
lower in the earlier years than in the later years of the approved qualified project; 8

(5) the terms should allow the project sponsors to retain a share of the 9
approved qualified project's economic rent that is sufficient to compensate the sponsors 10
for risks under a range of economic circumstances; 11

(6) the terms should provide the state [AND AFFECTED MUNICIPALITIES]
with 12
a significant share of the approved qualified project's economic rent, when discounted 13
to present value, under favorable price and cost conditions: 14

(7) the method for calculating the periodic payment in lieu of certain 15
taxes under the contract should be clear and unambiguous; and 16

(8) while cost calculations for the approved qualified project under the 17
contract should be based on amounts that closely approximate actual costs, agreed- 18
upon formulas reflecting reasonable economic assumptions should be used if possible 19
to promote administrative certainty and efficiency. 20

(c) Except as provided in (b) of this section, the commissioner's discretion 21
under this section in developing proposed terms for a contract under AS 43.82.020 is 22
not limited to consideration of the approved qualified project's economic rent. 23

Sec. 43.82.215. Contract terms relating to deferment of municipal taxes and assessments.

(a) If the commissioner of revenue approves an application and proposed project plan under AS 43.82.140, the commissioner may develop proposed terms for inclusion in a contract under AS 43.82.020 for deferment of municipal property taxes under AS 29.45.10 - 29.45.250 or 29.45.550 - 29.45.600 that otherwise would be imposed by a municipality upon the qualified sponsor or a member of the qualified sponsor group as a consequence of participating in an approved qualified project.

(b) Any deferments of municipal property taxes are subject to the following limitations which must be set out in the agreement

(1) the deferment may not exceed five years from the date the taxes were due and payable on any portion of the project.

(2) all deferred taxes must be repaid with interest calculated (at the Consumer Price Index calculated as of January 1 of each tax year) in equal annual installments during the first five years after the period of deferment.

(3) property taxes may not be deferred on facilities which are subject to taxes under AS 29.45.010 - 29.45.250 or 29.45.550 - 29.45.600 on the effective date of a contract under this chapter.

(4) property taxes may be deferred on only (1) property required for construction and operation of a Trans-Alaska natural gas pipeline; and (2) facilities that are constructed during the initial deferment period.

Sec. 43.82.218. Issuance of municipal bonds. Municipalities whose taxes have been deferred may issue bonds up to the amount necessary to accommodate expenditures required to be made by the municipality as a result of the impact of the project. The payment of principle and interest on such bonds shall be guaranteed by the State of Alaska in the event that the project sponsors fail to pay the full amount of the deferred taxes.

Sec. 43.82.220. Contract terms relating to royalty. (a) Notwithstanding any 24 contrary provisions of AS 38, the commissioner of natural resources, with the 25 concurrence of the commissioner of revenue and the affected parties holding a state 26 lease or unit agreement, may develop proposed terms, for inclusion in a contract under 27 AS 43.82.020, that modify the timing and notice provisions of the applicable oil and 28 gas leases and unit agreements pertaining to the state's rights to receive its royalty in 29 kind or in value, if 30

(1) the viability of the approved qualified project depends upon long- 31

[ARTICLE 6. PAYMENT TO MUNICIPALITIES; EQUITY OR 1
OTHER PARTICIPATION BY MUNICIPALITIES. 2

SEC. 43.82.500. PAYMENT TO MUNICIPALITIES; EQUITY OR OTHER
PARTICIPATION BY 3
MUNICIPALITIES. (A) IF THE COMMISSIONER EXECUTES A CONTRACT UNDER AS
43.82.020 THAT 4
INCLUDES TERMS THAT EXEMPT A PARTY TO THE CONTRACT, AND THE
PROPERTY, GAS, PRODUCTS, AND 5
ACTIVITIES ASSOCIATED WITH THE APPROVED QUALIFIED PROJECT THAT IS
SUBJECT TO THE CONTRACT, 6
FROM A MUNICIPAL TAX IN ACCORDANCE WITH AS 29.45.810, AS 29.46.010(B), 7
AS 43.82.200, AND 43.82.210, THE COMMISSIONER SHALL REQUIRE, AS A CONDITION
OF THE 8
CONTRACT, THAT THE PARTY INSTEAD MAKE PERIODIC PAYMENT TO THE
AFFECTED MUNICIPALITY IN 9
A FAIR AND REASONABLE AMOUNT AS DETERMINED BY THE COMMISSIONER
UNDER (B) OF THIS 10
SECTION. 11

(B) AFTER CONSULTATION WITH THE AFFECTED MUNICIPALITY, THE
COMMISSIONER SHALL 12
DETERMINE THE AMOUNT OF PAYMENT DUE UNDER (A) OF THIS SECTION. IN
MAKING THE 13
DETERMINATION REQUIRED BY THIS SUBSECTION, THE COMMISSIONER SHALL 14
(1) ESTIMATE THE TOTAL OPERATING AND CAPITAL COSTS OF
ADDITIONAL SERVICES 15
AND CONSTRUCTION THAT WOULD BE PROVIDED AND PAID FOR BY THAT
MUNICIPALITY DURING THE 16
TERM OF THE CONTRACT UNDER AS 43.82.020 AS A RESULT OF THE
CONSTRUCTION AND OPERATION 17
IN THE MUNICIPALITY OF THE APPROVED QUALIFIED PROJECT THAT IS SUBJECT
TO THE CONTRACT; AND 18

(2) AMORTIZE THE TOTAL COSTS ESTIMATED UNDER (1) OF THIS SECTION OVER THE 19 TERM OF THE CONTRACT OR A PORTION OF THE TERM OF THE CONTRACT. 20 (C) IN LIEU OF PAYMENTS UNDER (A) OF THIS SECTION, THE COMMISSIONER, WITH THE 21 CONCURRENCE OF THE MUNICIPALITY, MAY INCLUDE A TERM IN A CONTRACT UNDER AS 43.82.020 22 THAT PROVIDES THE MUNICIPALITY WITH AN EQUITY OR OTHER INTEREST IN THE APPROVED QUALIFIED 23 PROJECT THAT IS SUBJECT TO THE CONTRACT.] 24

Article 7. Miscellaneous Provisions. 25

Sec. 43.82.600. Governing law. If a provision of this chapter conflicts with 26 another provision of state or municipal law, the provision of this chapter governs. 27

Sec. 43.82.610. Regulations. The commissioner of revenue, the commissioner 28 of natural resources, and the commissioner of labor may adopt regulations to carry out 29 their respective duties under this chapter. 30

Sec. 43.82.620. Procedures for collection of amounts due; security. (a) 31

CSHB 393 Flow Chart

*The Alaska Stranded Gas
Development Act*

Defined terms

What is STRANDED GAS?

Gas that is uneconomic or uncompetitive to develop.

What is a QUALIFIED PROJECT?

A project that would develop and market 500 bcf if STRANDED GAS over a twenty year period and make gas available to local communities.

What does it take to be a QUALIFIED SPONSOR?

An intent to own an equity interest in the project and

1. Own some or all of the stranded gas; or
2. Have a right to purchase some of the stranded gas; or
3. Have the major permits necessary to construct the project; or
4. Have the financial strength to construct the project.

Project Sponsors Apply

A QUALIFIED SPONSOR may apply to the Commissioner of Revenue for a contract to make payments in lieu of certain state and local taxes for a QUALIFIED PROJECT to develop STRANDED GAS

Project Sponsors Requirements

Proposed project sponsors applying for a contract must establish:

1. That gas is stranded gas.
2. That they are Qualified Sponsors.
3. That the proposed project is a Qualified Project.
4. That there is a Project Plan that reflects a proposal for diligent development of the gas, and includes reasonable provisions for providing gas to local communities.

**Commissioners of Revenue and
Natural Resources Review
Application**

**Parties May Proceed to Contract
Negotiation Upon Commissioner
of Revenue's Approval of the
Application for a Contract**

CSHB 393
Flow Chart
3/17/98 :
page 2

**Commissioner of Revenue must
answer the following questions:**

1. Is the gas stranded?
2. Do the proposers meet the standards for Qualified Sponsors?
3. Is the proposed project a Qualified Project?

**Commissioner of Natural
Resources and Commissioner
of Revenue must answer the
following questions:**

1. Does the Project Plan provide for diligent development?
2. Is there a satisfactory plan for providing gas to local communities?

If the answer is "yes" to all five questions pertaining to the review of the application, then the Commissioner of Revenue may decide to proceed to contract negotiations to provide for periodic payments in lieu of taxes.

The Commissioner of Revenue and the Commissioner of Natural Resources Negotiate a Contract with Sponsors that Provides for Payments in Lieu of Certain Taxes, Alaska Hire, Certain Royalty Arrangements, Gas for Communities and Revenue Sharing with Communities

CSHB 393
Flow Chart
3/17/98:
page 3

The Commissioner of Revenue may, with respect to contract fiscal terms, develop payments in lieu of certain state or municipal oil and gas, income, property, or other taxes. Fiscal terms shall:

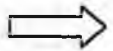
1. Improve the competitiveness of the Alaska project
2. Function effectively under a wide range of economic and market conditions
3. Link the State's share to project profitability (make tax "progressive")
4. Make State's share "backend loaded"-lower tax rates in earlier years, higher rates in later years
5. Allow Sponsor a share of the project's return commensurate with the Sponsor's assumed risk
6. Have the State's share increase under favorable price and cost conditions
7. Be clear and unambiguous
8. Base payment terms on actual costs if possible, or formulae

In addition to fiscal terms, the contract shall also:

1. Provide for Alaska Hire within the limits of Constitutional restrictions
2. Provide gas for Alaska communities
3. Provide for a fair and reasonable sharing of revenue with affected communities. Development of municipal revenue sharing terms shall be based on the following:
 - i. The size of the tax base that would be exempted
 - ii. The anticipated economic and social burdens imposed on a municipality from a project
 - iii. The need for stable and predictable payments
 - iv. The eight fiscal principles outlined above.

With the concurrence of the Commissioner of Revenue, the Commissioner of Natural Resources may negotiate terms to include in the contract that:

- A. Provide for a method for valuing the gas for royalty purposes; and
- B. Modify the rights of the State to take royalty in-kind rather than in-value.



The Commissioner of Revenue notifies the mayors of the affected communities and they establish the Municipal Advisory Group. One member from each affected community is appointed to serve on the group. The Commissioner of Revenue must:

1. Consult with the Municipal Advisory Group on the development of municipal revenue sharing terms
2. Consult with the Municipal Advisory Group about issues affecting the communities during negotiations.

**The Commissioner of Revenue
Completes Contract and Makes
Preliminary Findings**

**Public and Legislature
Review Proposed Contract**

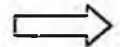
CSHB 393
Flow Chart:
3/17/98
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Commissioner of Revenue completes contract and makes preliminary findings and a determination that the contract is in the long term fiscal interests of the State. With an affirmative finding the Commissioner shall:

1. Submit the contract to the Governor.
2. Make the findings, contracts and supporting data available for public and legislative review



A period of at least 30 days begins for the public and the legislature to review and comment upon the proposed contract and findings.



The Commissioner of Revenue Reviews the Contract in Light of Public Comment and May Seek to Amend the Contract

The Legislature Considers Legislation to Authorize the Executive Branch to Execute the Contract

CSHB 393
Flow Chart.
3/17/98;
page 5

The Commissioner of Revenue prepares a summary of public comments. After consultation with the Commissioner of Natural Resources and the Municipal Advisory Group, the Commissioner of Revenue:

1. May develop proposed amendments to the contract and attempt to secure Sponsor agreement to the proposed amendments
2. Make final findings and a determination that the contract is in the long term fiscal interest of the State.



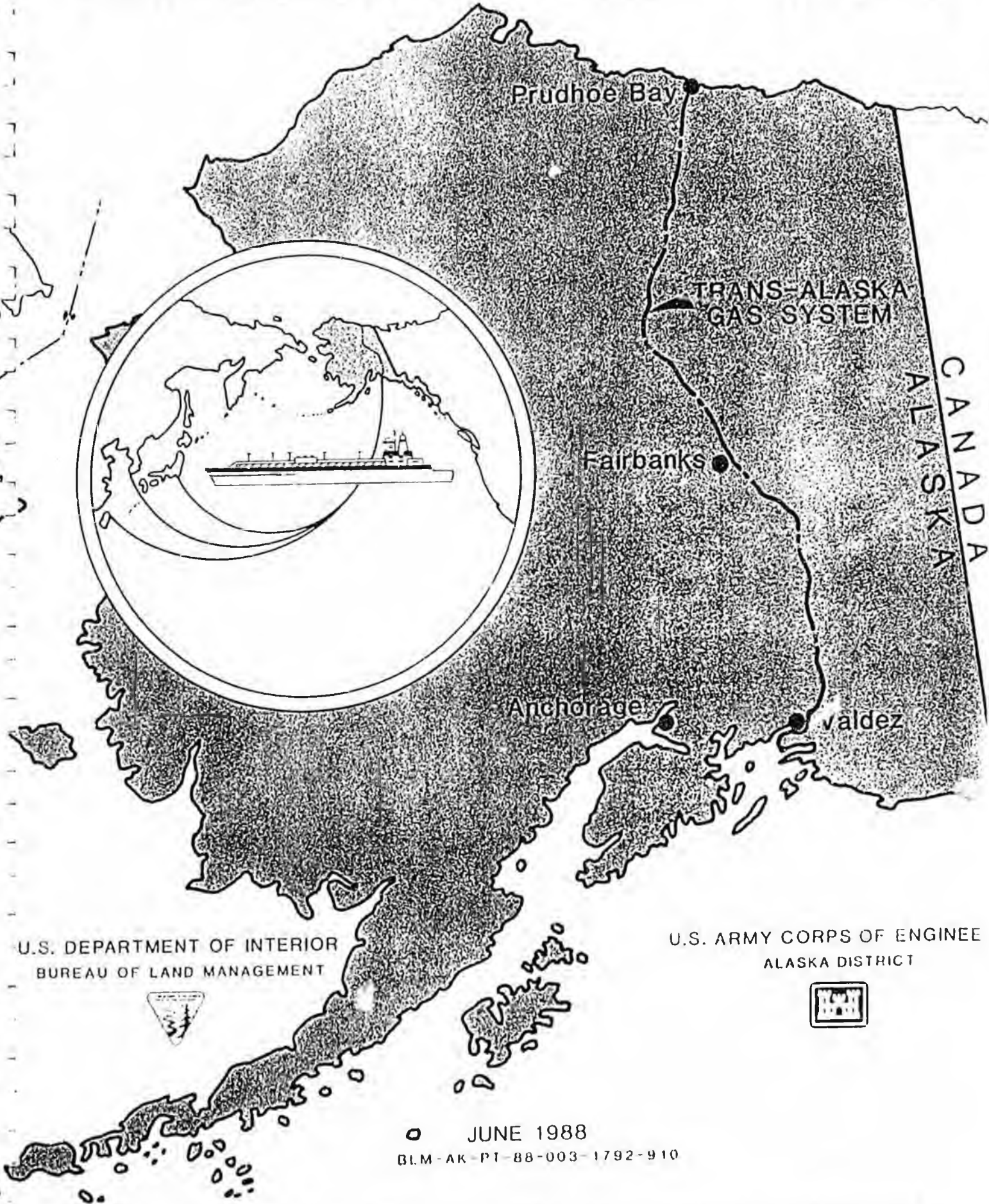
The Commissioner submits the proposed contract and final findings to the Governor. The Governor submits the findings and proposed contract together with a bill requesting authority to execute the contract to the legislature.



The Executive Branch and the Sponsors Execute the Contract

If the legislature grants the executive branch the authority to execute the contract, then the Governor must do so within 60 days of the effective date of the authorizing legislation.

TRANS-ALASKA GAS SYSTEM FINAL ENVIRONMENTAL IMPACT STATEMENT



U.S. DEPARTMENT OF INTERIOR
BUREAU OF LAND MANAGEMENT



U.S. ARMY CORPS OF ENGINEER
ALASKA DISTRICT



○ JUNE 1988
BLM-AK-PT-88-003-1792-910

HARDING LAWSON ASSOCIATES • 601 EAST 57TH PLACE • ANCHORAGE, ALASKA 99518

Bureau of Land Management
Department of the Interior
U.S. Army Corps of Engineers
Department of the Army

**FINAL
ENVIRONMENTAL IMPACT STATEMENT
FOR THE PROPOSED
TRANS-ALASKA GAS SYSTEM**

Prepared by
Bureau of Land Management
and
U.S. Army Corps of Engineers

Cooperating Agencies

Department of Agriculture

Forest Service

Department of Commerce

National Marine Fisheries Service

Department of Energy

Economic Regulatory Administration

Department of the Interior

Bureau of Indian Affairs

Bureau of Mines

Fish and Wildlife Service

Geological Survey

Minerals Management Service

National Park Service

Department of Transportation

Coast Guard

Federal Highway Administration

Office of Pipeline Safety

Environmental Protection Agency

Federal Energy Regulatory Commission

State of Alaska

Division of Governmental Coordination

Department of Fish and Game

Department of Natural Resources

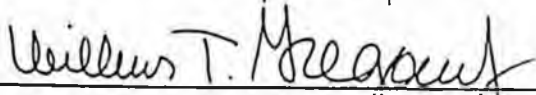
Department of Transportation and Public
Facilities

Department of Environmental Conservation

JUNE 1988
BLM-AK-PT-88-003-1792-910



Michael J. Penfold, Alaska State Director, Bureau of Land Management



Col. Wilbur T. Gregory Jr., District Engineer, Alaska District,
U.S. Army Corps of Engineers

COVER SHEET

PROPOSED TRANS-ALASKA GAS SYSTEM

(X) Final

Lead Agencies: U.S. Department of the Interior
Bureau of Land Management
Alaska State Office

U.S. Army Corps of Engineers
Alaska District, Regulatory Branch

Cooperating Agencies:
Department of Agriculture
Forest Service

Department of Commerce
National Marine Fisheries Services

Department of Energy
Economic Regulatory Administration

Department of Transportation
Coast Guard
Federal Highway Administration
Office of Pipeline Safety

Environmental Protection Agency

Federal Energy Regulatory Commission

Office of the Federal Inspector

Department of the Interior
Bureau of Indian Affairs
Bureau of Mines
Fish and Wildlife Service
Geological Survey
Minerals Management Service
National Park Service

State of Alaska

Division of Governmental Coordination
Department of Fish and Game
Department of Natural Resources
Department of Transportation and
Public Facilities
Department of Environmental Conservation

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ABSTRACT

YUKON PACIFIC CORPORATION (YPC) PROPOSES TO CONSTRUCT THE TRANS-ALASKA GAS SYSTEM (TAGS) AS A 796.5 MILE LONG, BURIED, CHILLED, HIGH PRESSURE, 36-INCH OUTER DIAMETER NATURAL GAS PIPELINE BETWEEN PRUDHOE BAY AND A TIDEWATER TERMINAL AND LNG PLANT AT ANDERSON BAY. THE ENTIRE PROJECT IS LOCATED IN ALASKA. TEN COMPRESSOR STATIONS WOULD BE BUILT AT REGULAR INTERVALS ALONG THE PIPELINE. OPERATIONS AND CONTROL CENTER FOR THE TAGS PROJECTS WOULD BE IN VALDEZ; HEADQUARTERS AND ADMINISTRATION IN ANCHORAGE, AND MAINTENANCE IN FAIRBANKS. THE PROPOSED TAGS CLOSELY PARALLELS THE EXISTING TRANSALASKA OIL PIPELINE SYSTEM IN ITS ENTIRETY AND A PORTION OF THE AUTHORIZED BUT UNCONSTRUCTED ALASKA NATURAL GAS TRANSPORTATION SYSTEM. UP TO 2.3 BILLION CUBIC FEET OF CONDITIONED NATURAL GAS PER DAY WOULD BE MOVED THROUGH TAGS FOR LIQUIFICATION AND EXPORT BY TANKER TO JAPAN, TAIWAN AND KOREA. YPC ESTIMATES THAT TAGS HAS THE CAPABILITY TO REDUCE THE U.S. BALANCE OF TRADE DEFICIT BY \$2.5 BILLION ANNUALLY AT FULL OPERATION.

THE FEIS ANALYZES CONSTRUCTION AND OPERATION OF THE PROPOSED TAGS, AN ALTERNATIVE ROUTING TO COOK INLET, AND THE ALTERNATIVE OF NO-ACTION.

THIS FEIS HAS BEEN PREPARED ACCORDING TO THE REQUIREMENTS OF THE NATIONAL ENVIRONMENTAL POLICY ACT OF 1969 (NEPA) AND REGULATIONS FOR IMPLEMENTING NEPA.

THIS FEIS SERVES AS A NEPA COMPLIANCE DOCUMENT FOR THE U.S. ARMY CORPS OF ENGINEERS, AND BUREAU OF LAND MANAGEMENT, ECONOMIC REGULATORY ADMINISTRATION AND FEDERAL ENERGY REGULATORY COMMISSION.

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- 1/ Other than Appendix I (supplemental), L (supplemental), N, and O, all others would be identical to those included in the DEIS and are not reproduced again in the FEIS. They are hereby incorporated by reference. Appendix I (supplemental), L (supplemental), N, and O are included in this document.

- 2/ On June 6, 1988, the Northwest Alaskan Pipeline Company issued a press release about a future potential for modification to the ANGTS project as described in Appendix B of the DEIS. These prospective modifications are summarized as follows: 1) make greater use of snow/ice construction in Alaska where possible; 2) shorten the overall construction schedule by greater use of winter construction; 3) revise the mix of previously approved construction methodology; 4) increase the flow of natural gas throughout from 2.1 BCFD to 2.3 BCFD; 5) decrease pipe diameter in the Alaska segment from 48 inches to 42 inches; 6) increase operating pressure from 1,260 psig to 2,160 psig; 7) reduce the number of compressor stations; 8) reduce the number of other related facilities. On June 8, 1988, a representative of Northwest Alaska Pipeline Company indicated there were no firm plans at this time as to when remobilization of ANGTS would start or when the modifications would be submitted for Federal review/approval. Although detailed technical information is not yet available on the potential June 6, 1988 ANGTS modifications, the overall cumulative effects described in this FEIS are based upon the assumption that ANGTS will be constructed. The FEIS appears to still represent a reasonable estimate of cumulative effects; if anything, the overall thrust of the prospective ANGTS modifications would cause a lesser degree of total cumulative effect.

- 3/ Appendix D has been deleted at the request of EPA since there is substantial uncertainty on the process and design of a gas conditioning facility at Prudhoe Bay needed to provide LNG quality natural gas to TAGS. Prior NEPA evaluations and an expired PSD analysis may not be transferrable or may not be appropriate for TAGS (EPA 1988a).

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SECTION 1.0 INTRODUCTION

gas (methane). Should the LPG Project be developed, it is probable that the operating pressures of existing TAPS facilities would be converted to a higher pressure system. The increased operating pressure of TPAS still would not handle two-phase flow. Therefore, this alternative is not considered a viable option to the proposed action.

1.9.2.2 Convert Natural Gas to a Liquid at Prudhoe Bay and Comingle with Crude Oil in TAPS

During the public scoping process and again during review of the DEIS, a suggestion was made to convert natural gas to a liquid at Prudhoe Bay and then use the existing TAPS to transport both oil and gas to Valdez.

This alternative is possible only to the extent the natural gas, as a liquid, would be compatible with the operating potentials of the TAPS crude oil delivery system.

Natural gas liquids (NGLs) comprise a group of hydrocarbons that occur naturally in gaseous form or in solution with oil in a reservoir. NGLs are recoverable as liquids by condensation or absorption processes.

The average composition of gas reinjected in the Prudhoe Bay reservoir is shown in Table 1.9.2-1.

TAPS was designed to transport large volumes of crude oil. The maximum temperature of the oil when injected into the pipeline is 145°F. The design operating pressure of the pipeline is 1180 psi.

Through addition of long chain polymers (which lower the viscosity and reduce the friction factor) and project modifications, Alyeska Pipeline Service Company has determined the present 145°F injection temperature for TAPS can be lowered to about 110° to 111°F. At this lowered temperature, and at atmospheric pressure, approximately 40,000 barrels more of NGLs (as a liquid) can be comingled daily with the crude oil in TAPS. Methane, the principal component of the feed gas for the proposed TAGS project, is a gas at these temperatures and pressures; and, therefore, is not compatible with the design of TAPS. At a temperature of -259°F, liquid natural gas (LNG) is not compatible with the TAPS design or operating requirements.

Table 1.9.2-1

Composition of Gases Reinjected in Prudhoe Bay Reservoir Since 1978

<u>Constituent</u>	<u>Average Reinjected Since Percent Volume) 1978¹</u>
N ₂ (nitrogen)	.48
CO ₂ (carbon dioxide)	12.77
C ₁ (methane)	73.72
C ₂ (ethane)	6.97
C ₃ (propane)	3.56
iC ₄ (iso-butane)	.48
nC ₄ (normal butane)	1.15
iC ₅ (iso-pentane)	.23
nC ₅ (normal-pentane)	.29
C ₆ + (hexanes and heavier)	.37
	100.20% ²

1 (Personal communication - R. Douglass, February 1987).

2 Does not add to 100 percent because of rounding within constituent averages.

Accordingly, the option of converting natural gas to a liquid to be comingled with crude oil in TAPS is not considered a practicable alternative to TAGS.

1.9.3 Regional Pipeline/LNG Plant Alternatives Screening

The initial screening considered alternative pipeline routes and LNG plants in various regions of Alaska. This analysis concluded that only the Cook Inlet and Prince William Sound areas provided feasible alternatives for the pipeline, LNG plant, and marine terminal (see Appendix C). In western Alaska limited tanker access related to sea ice as well as other factors eliminated the region from further consideration. Pipeline distance to Yakutat or other southeast ports and the extensive mountainous terrain that would have to be crossed would be insurmountable obstacles to this project and eliminated the southeast region from further consideration. Figure 1.9.3-1 provides a summary of the criteria evaluation for the statewide route options.

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	Western Alaska		Southcentral		Southeast Alaska	
	Norton Sound	Bristol Bay	Cook Inlet	Prince William Sound	Yakutat Bay	Lynn Canal/Chatham Strait
Continuous Operation of a Marine Terminal	●	⊗	○	○	⊗	○
Minimize Length of Pipeline	○	●	○	○	●	●
Maximize Use of Existing Utility/Transportation Corridor	●	●	○	○	●	○
Maximize Use of Existing Infrastructure	●	●	○	○	⊗	○
Avoidance of Environmentally Sensitive Area	●	●	⊗	○	●	●
Avoid Permitting Delays	●	●	●	○	●	●

○ = Favorable
 ⊗ = Moderately Favorable
 ⊗ = Unfavorable
 ● = Highly Unfavorable

Figure 1.9.3-1 Summary of Criteria Evaluation for Statewide Route Options

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1.9.4 Alternative Sites within Cook Inlet and Prince William Sound Region

Along with the applicant's proposed project and the Cook Inlet-Boulder Point alternative considered in this EIS, two additional Cook Inlet and three Prince William Sound alternative LNG plant/marine terminal sites were evaluated for project feasibility by YPC and evaluated in this FEIS. These include Gold Creek, Robe Lake, and Gravina in Prince William Sound, and Cape Starichkof and Harriet Point in the Cook Inlet region (Figures 1.9.4-1 and 1.9.4-2). Other sites previously considered by FPC for the El Paso proposal as having LNG plant site potential in the Gravina area were Hawkins Island and Bidarka Point. *Although Gravina was used as a representative site for Prince William Sound sites outside of Port Valdez, each of these three Prince William Sound sites had similar access problems as identified in subsection 1.9.4.3 and required difficult marine crossings.* Eleven pipeline criteria, ten LNG plant site criteria, and seven criteria related to the marine terminal were used to consider the degree of favorability for each of the alternative sites. Results of this analysis are presented in Appendix C and summarized in Figure 1.9.4-3. Evaluation of the applicant's proposed project and the Cook Inlet-Boulder Point alternative are presented for comparison with the other sites on Figure 1.9.4-1 and in Section 2. The other Prince William Sound and Cook Inlet sites were inferior to the proposed project and Boulder Point sites, respectively, and were eliminated from further consideration. The existing Phillips-Marathon LNG site and the adjacent Nikiski site previously evaluated for the Pacific Alaska LNG Associates Projects (FERC, 1978) cannot accommodate the scale of facilities necessary for TAGS.

1.9.4.1 Cape Starichkof

Cape Starichkof, which shares a common alignment with the Boulder Point site as far as Boulder Point, has one distinct disadvantage--the extra pipeline length and additional compressor station required to transport the gas 59 more miles would have

many implications for construction time and associated increase in impacts to the environment and costs. The LNG site characteristics are similar to those for Boulder Point except that land availability would be more of an issue and the environment around Cape Starichkof is more sensitive with respect to fish and shellfish, the fisheries (as economic entity), and recreational use of the area. Marine terminal site characteristics are also similar to those for Boulder Point with the exception that navigational hazards, uncharted submerged boulders and outcrops, and potential sea-ice problems would be less of a factor at Cape Starichkof. The same permitting problems associated with Denali National Park and Preserve exist. Cape Starichkof was rated as less favorable than Boulder Point and eliminated from further consideration.

1.9.4.2 Harriet Point

The pipeline alignment to Harriet Point poses problems over the Boulder Point and Cape Starichkof alignments. Like Starichkof, Harriet Point would require a longer pipeline and an additional compressor station. Most of the route along the western shore of Cook Inlet is away from available infrastructure to support construction. Few data exist for environmental impact assessment and engineering design analyses. The route also passes through areas of sensitive environments for wildlife and fisheries. The LNG plant site has advantages of land availability and little potential impact to public safety from an accident or spill should one occur. One distinct disadvantage for the LNG plant site is the lack of any infrastructure. Facility construction and operation would be much more difficult and costly since there is no community or commercial base in the immediate vicinity to support the project. The potential for any secondary development would be curtailed. Along with the permitting issue associated with the crossing of Denali National Park and Preserve, Harriet Point would be rated as less favorable than Boulder Point and eliminated from further consideration.

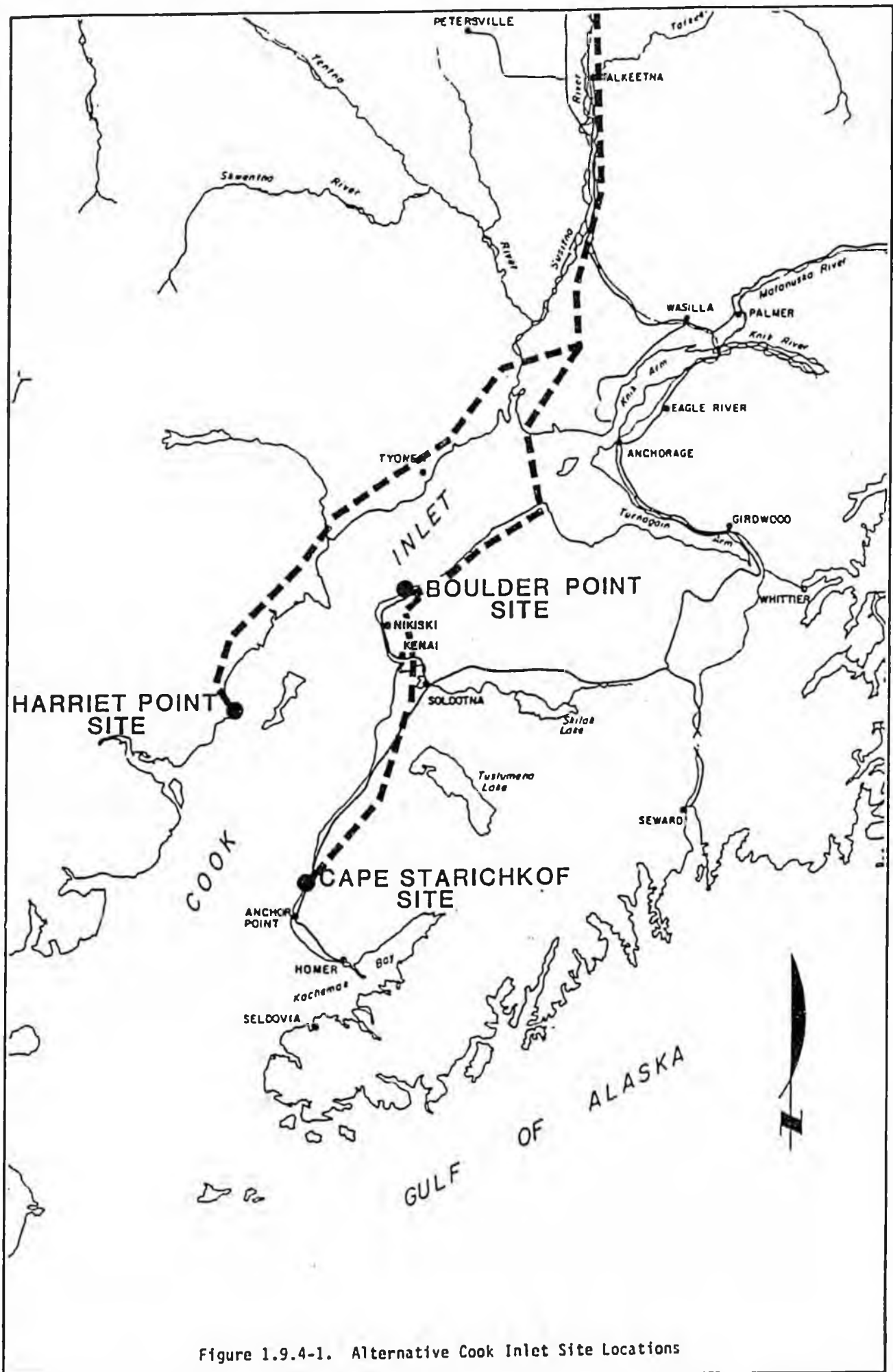


Figure 1.9.4-1. Alternative Cook Inlet Site Locations

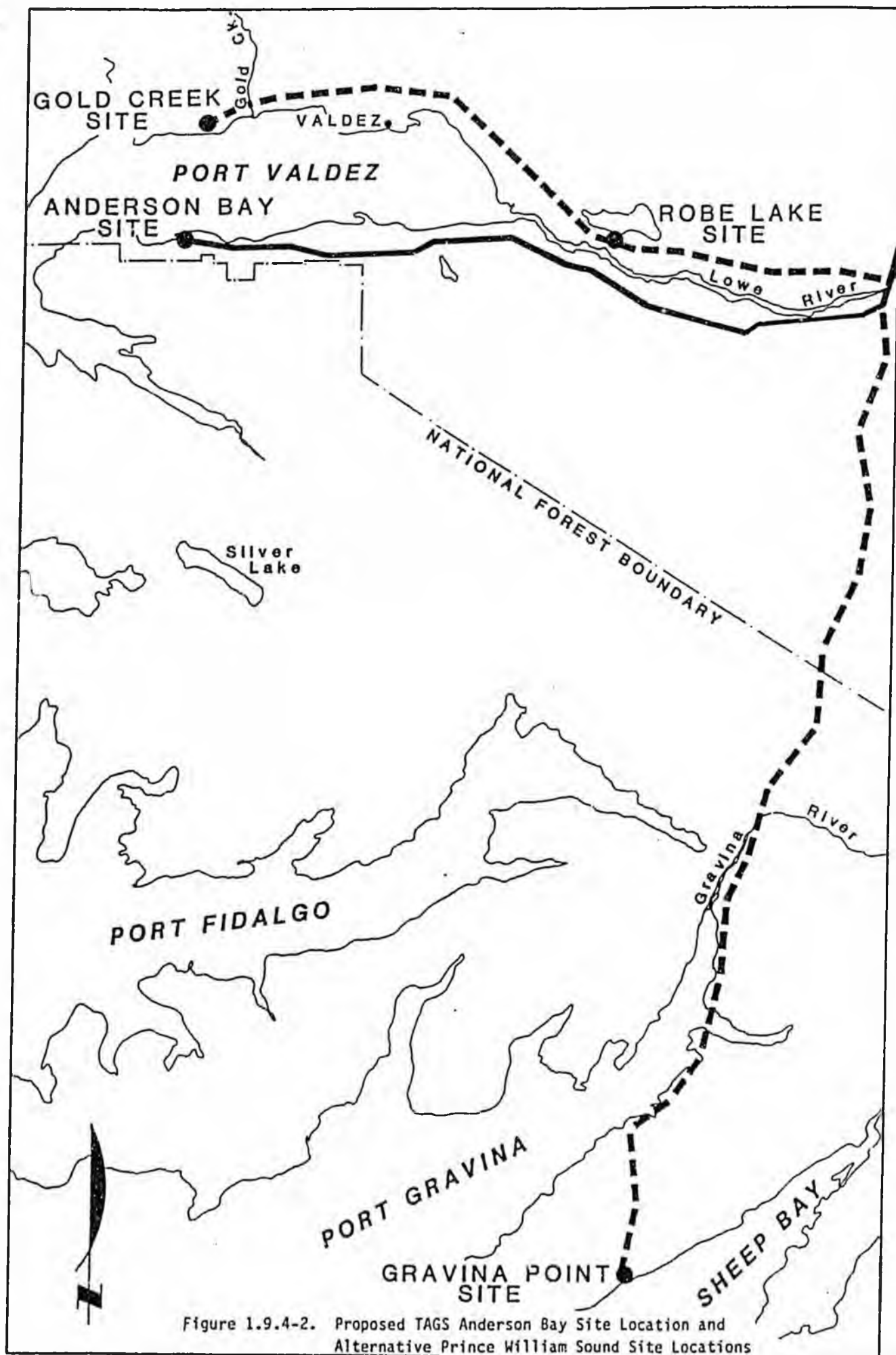


Figure 1.9.4-2. Proposed TAGS Anderson Bay Site Location and Alternative Prince William Sound Site Locations

Figure 1.9.4-3 Criteria Evaluation Matrix for Proposed TAGS Project and Alternative Locations

	Prince William Sound				Cook Inlet		
	Proposed Project to:	Alternatives			Alternatives		
	Anderson Bay	Gravina	Gold Creek	Robe Lake	Boulder Point	Cape Starichkof	Harriet Point
Pipeline Criteria							
- Minimize length of pipeline	○	⊗	○	○	○	⊗	⊗
- Maximize use of existing infrastructure	○	⊗	○	○	⊗	⊗	⊗
- Maximize use of proven construction techniques	○	⊗	⊗	○	⊗	⊗	⊗
- Maximize opportunity for parallel construction techniques	○	⊗	○	○	⊗	⊗	⊗
- Avoid areas of potential geohazards	⊗	⊗	⊗	⊗	⊗	⊗	⊗
- Minimize potential conflicts with sensitive environments	○	⊗	○	○	⊗	⊗	⊗
- Maximize compatibility with current and planned land use	○	⊗	○	○	⊗	⊗	⊗
- Minimize the number of water crossings	○	⊗	○	○	○	○	⊗
- Avoid permitting delays	○	⊗	○	○	●	●	●
- Minimize potential threat to national security	○	⊗	○	○	⊗	⊗	⊗
- Maximize availability of gas to Alaska consumers	⊗	⊗	⊗	⊗	○	○	○
LNG Plant Criteria							
- Adequacy of available land	○	○	○	●	⊗	⊗	○
- Avoid areas with poor foundation characteristics	○	○	○	○	⊗	⊗	⊗
- Avoid areas with faults	⊗	⊗	⊗	○	⊗	⊗	⊗
- Avoid sites potentially exposed to seismic sea waves	○	○	○	○	○	○	○
- Minimize length of pipeline to marine terminal	○	○	○	●	⊗	⊗	⊗
- Maximize use of existing community infrastructure	⊗	●	⊗	⊗	○	○	⊗
- Avoid sensitive environmental habitat	⊗	⊗	⊗	⊗	⊗	⊗	⊗
- Public safety considerations	○	○	⊗	●	⊗	○	○
- Maximize value added industrial opportunities	⊗	●	⊗	⊗	○	○	○
- Minimize site preparation requirements	⊗	⊗	⊗	⊗	○	○	○
Marine Terminal Criteria							
- Minimize exposure to extreme oceanographic conditions	○	○	○	○	⊗	⊗	⊗
- Minimize distance from shore to 60' MLLW depth	○	○	○	⊗	⊗	⊗	⊗
- Maximize suitability of tanker maneuvering and anchorage area	○	○	○	⊗	⊗	⊗	⊗
- Minimize potential hazards to navigation	○	⊗	○	⊗	⊗	⊗	⊗
- Minimize potential problems related to soils and geohazards	○	○	⊗	⊗	○	○	○
- Minimize threat to national security	⊗	⊗	⊗	⊗	⊗	⊗	⊗

○ Favorable
 ⊗ Moderately Favorable
 ⊗ Unfavorable
 ● Highly Unfavorable

SECTION 1.0 INTRODUCTION

1.9.4.3 Gravina

For the pipeline from Livengood to the site, Gravina was rated as unfavorable for use of proven technology, geohazards, land-use compatibility, and permitting. All of these factors were related to the segment of the route from Keystone Canyon through the Chugach Mountains, including 15 miles of routing through the Chugach National Forest. Though operation of a marine terminal at the site had no serious drawbacks for the LNG facility, Gravina was considered to be highly unfavorable with respect to infrastructure for construction and operation of the facility and potential benefits that might be derived from secondary developments in the vicinity of the plant. The Gravina site has numerous distinct disadvantages compared to the proposed Anderson Bay site and was eliminated from consideration.

1.9.4.4 Gold Creek

The Gold Creek site rated as favorable or moderately favorable for nearly all evaluation criteria. The final segment of the pipeline alignment, near Robe Lake and around the outskirts of the city, was not as favorable as that of the proposed project. The last 3 miles along the west shore of Port Valdez would be in steep side hills, which would result in difficult construction, movement of large volumes of material, and a broad visual scar along the mountainside. The LNG plant site would require extensive excavation and would pose the added problem of disposing of a large volume of spoil from the site. Use of the Gold Creek site would negatively affect potential expansion of the city and recreational use of the Gold Creek area and would require major site work and spoil disposal. Although the rating of the Gold Creek site was similar to the proposed Anderson Bay site, *it has more difficult access to the site and site preparation was not as favorable as the proposed TAGS project and was eliminated from further consideration.*

1.9.4.5 Robe Lake

Although the Robe Lake alternative would result in the shortest pipeline among

Prince William Sound alternative, consideration of the LNG site and the associated marine terminal facility immediately highlight the major concerns with this alternative. Land that would be needed for the LNG facility is in the midst of residential and recreational use areas. Major site work would be required, resulting in impacts on aesthetics, interference with recreational use, and even removal of the parcel of land available for residences or recreation. *Although the safety record for LNG plants is excellent, should a catastrophic accident or spill occur, this site would be the worst among the TAGS alternatives in terms of potential impact to public safety. Further, the distance from the LNG plant site to the shoreline and the distance from shore to water deep enough for tanker maneuvering and berthing combine to require a 5-mile cryogenic loading pipeline from the plant to the LNG tanker loading area. The engineering and cost of such a line would make it nearly unfeasible. The location of the berthing and maneuvering area within the harbor has disadvantages with respect to navigational safety, and the submarine soils in this region of the harbor are not favorable for development. Overall, the Robe Lake site should be eliminated from consideration.*

1.9.5 Summary

Neither of the Cook Inlet alternatives to Cape Starichkof nor Harriet Point offers engineering, environmental, cost, or safety advantages over location of a facility at Boulder Point. The cost, time, and additional impacted area associated with the Cape Starichkof and Harriet Point sites make them less desirable options and therefore eliminated from further consideration.

Of the three alternatives considered for the Prince William Sound region, Gold Creek is the only one that appears comparable to *but not better than* the proposed Anderson Bay site. However, due to the extensive earthwork required for the LNG plant site and the associated spoil disposal requirements, the difficult pipeline constructability for the last 3 miles to the site, and the greater negative impacts on city of Valdez recreational use and potential future expansion, this alternative

CONTENTS (Contd)

- 1/ Other than Appendix I (supplemental), L (supplemental), N, and O, all others would be identical to those included in the DEIS and are not reproduced again in the FEIS. They are hereby incorporated by reference. Appendix I (supplemental), L (supplemental), N, and O are included in this document.
- 2/ On June 6, 1988, the Northwest Alaskan Pipeline Company issued a press release about a future potential for modification to the ANGTS project as described in Appendix B of the DEIS. These prospective modifications are summarized as follows: 1) make greater use of snow/ice construction in Alaska where possible; 2) shorten the overall construction schedule by greater use of winter construction; 3) revise the mix of previously approved construction methodology; 4) increase the flow of natural gas throughout from 2.1 BCFD to 2.3 BCFD; 5) decrease pipe diameter in the Alaska segment from 48 inches to 42 inches; 6) increase operating pressure from 1,260 psig to 2,160 psig; 7) reduce the number of compressor stations; 8) reduce the number of other related facilities. On June 8, 1988, a representative of Northwest Alaska Pipeline Company indicated there were no firm plans at this time as to when remobilization of ANGTS would start or when the modifications would be submitted for Federal review/approval. Although detailed technical information is not yet available on the potential June 6, 1988 ANGTS modifications, the overall cumulative effects described in this FEIS are based upon the assumption that ANGTS will be constructed. The FEIS appears to still represent a reasonable estimate of cumulative effects; if anything, the overall thrust of the prospective ANGTS modifications would cause a lesser degree of total cumulative effect.
- 3/ Appendix D has been deleted at the request of EPA since there is substantial uncertainty on the process and design of a gas conditioning facility at Prudhoe Bay needed to provide LNG quality natural gas to TAGS. Prior NEPA evaluations and an expired PSD analysis may not be transferrable or may not be appropriate for TAGS (EPA 1988a).

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TRANS-ALASKA GAS SYSTEM DRAFT ENVIRONMENTAL IMPACT STATEMENT

Prudhoe Bay



TRANS-ALASKA
GAS SYSTEM

Fairbanks

Anchorage

Valdez

CANADA
ALASKA

U.S. DEPARTMENT OF INTERIOR
BUREAU OF LAND MANAGEMENT



U.S. ARMY CORPS OF ENGINEERS
ALASKA DISTRICT



SEPTEMBER 1987

A P P E N D I X C

EVALUATION OF ALTERNATIVE PIPELINE
ROUTES AND LNG PLANT/MARINE
TERMINAL LOCATIONS TO THE TRANS-ALASKA
GAS SYSTEM PROPOSAL FOR SOUTHCENTRAL ALASKA

EVALUATION OF ALTERNATIVE PIPELINE ROUTES AND
LNG PLANT/MARINE TERMINAL LOCATIONS TO THE
TRANS-ALASKA GAS SYSTEM PROPOSAL FOR SOUTHCENTRAL ALASKA

I Introduction

The following evaluation of alternatives was conducted during the preparation of this Draft Environmental Impact Statement to evaluate the range of project alternatives within the southcentral area of Alaska, namely the Cook Inlet and Prince William Sound areas. It includes several route options to tidewater to supply the export market. Transport of Prudhoe Bay natural gas to Lower 48 markets has been addressed in previous proposed projects and will not be addressed here. Information on other optional proposals to transport Prudhoe Bay natural gas to the domestic markets is presented in EIS's published for three projects: Alaskan Arctic Pipeline Company proposal (BLM 1976), El Paso Alaska Company proposal (FPC 1976a), and Northwest Alaskan Pipeline Company (formerly ALCAN) proposal (FPC 1976b). This study assumes that the authorized but unconstructed Alaska Natural Gas Transportation System (ANGTS) project will be built, and this does not constitute an alternative to the proposed TAGS project.

This DEIS presents information on a broad range of alternatives to the proposed project, to describe the process through which alternatives were evaluated, and to present the conclusions of the evaluation. The discussion of these initial alternatives to implement the proposed project includes:

- Consideration of alternative transportation modes and systems
- Consideration of statewide alternative pipeline routes and coastal terminal sites
- Evaluation of specific alternative regional pipeline routes and sites for LNG facilities/terminals

- Comparison of environmental and engineering of feasible combined routes and sites to the proposed TAGS project that were evaluated but eliminated from further consideration

II Regional Overview of Alternatives Considered

A. Introduction

The feasibility of an alternative to the basic economic and physical requirements of the project must be evaluated in the context of existing environmental, social, and safety objectives. The basic physical requirements are that a pipeline from Prudhoe Bay to a coastal port be constructable and that the coastal location be suitable for construction and operation of the LNG plant and marine terminal. Finally, the plan must provide for safe and economic transportation of LNG with minimum downtime.

The coastal region of Alaska was subdivided into three general regions--western, southcentral, and southeastern. The northernmost coastal areas were not considered due to the well-documented extreme climatic conditions and sea ice that covers the entire area with the opening of nearshore leads only during summer season, normally not more than eight to 12 weeks.

General criteria were used for this initial screening to evaluate characteristics of alternative regional pipeline routes and coastal regions. The general criterion was that the system had to be capable of transporting natural gas from Prudhoe Bay to tidewater year-round for export to markets in Asian Pacific Rim markets.

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Alternatives in previous EIS's, including TAPS and the ANGST (El Paso, Northwest Alaskan, and Alaskan Arctic proposals) were reviewed. Those studies evaluated various Alaska pipeline routes and terminus sites, including Norton Sound, Bristol Bay, Cook Inlet, Prince William Sound, Yakutat Bay, and Lynn Canal/Chatham Strait.

B. General Criteria

The following list of general criteria focuses primarily on the ability of tidewater ports to support a year-round marine export operation and the feasibility of constructing and operating a pipeline to ports in that region.

- Continuous operation of marine terminal
- Ability of the marine terminal facility to operate on a year-round basis. Natural gas flow through the pipeline would be continuous and storage capacity would be limited.
- Minimize length of pipeline - The length of the pipeline generally determines the amount of environmental disturbance, compressor stations, and energy use for the system. A longer route would be justifiable to avoid sensitive areas.
- Maximize the use of existing utility/transportation corridors - Restricts the environmental disturbances to areas previously affected by a linear project. A new utility corridor would open an undisturbed area to other development with environmental impacts beyond that associated with a single project. More information is available on existing corridors, which would facilitate planning and mitigation of specific impacts.
- Maximize use of existing infrastructure
- Locate project facilities to maximize use of existing roadways, workpads, construction camps, material sites, airports, and other facilities. This reduces impact on new areas and reduces the requirements for foundation materials.
- Avoidance of environmentally sensitive areas - Generally avoid sensitive environmental areas such as conservation system units, state and local parks, state refuges, wetlands, roadless areas, and areas having high subsistence value.
- Avoid permitting delays - Avoid areas that would require a lengthy approval process or schedule delays, such as in conservation system units.

C. Evaluation of Statewide Route Options

1. Introduction

The following subsections present the major reasons for elimination of these regional pipeline routes to tidewater.

These criteria and the evaluations conducted by the FPC in the FEIS (1976a) for the El Paso project (pp. II-376 through II-449) and the DOI in the FEIS (1976) for the Alaskan Arctic project (Alternative Volume pp. 623 to 684) are adopted by reference and were used to evaluate the

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routes to various coastal regions as summarized in Figure 11-1.

2. Western Alaska

Norton Sound

- Heavily massed sea-ice conditions from October through July which would prevent reliable year-round operations.
- Major ice floes, sea ice, and fog during remainder of year would affect safety of tanker operations.
- Adverse impact to subsistence and the Native way of life.
- Significant disturbance to previously unaffected areas, including the Kobuk Valley National Park, Cape Krusenstern National Monument, Chukchi-Imuruk National Wildlife Reserve, Koyukuk National Wildlife Refuge, and the Selawik National Wildlife Refuge. The route would also traverse the Gates of the Arctic National Park and Preserve.
- Minimal use of existing utility/transportation corridors or existing infrastructure.

Bristol Bay

- Seasonally very heavy weather which could delay tanker traffic through the Aleutian chain.
- Length of the pipeline would be approximately 150 miles longer with three additional compressor stations.
- Significant disturbance to major unimproved areas on the southern

portion of the route, including the crossing of Denali and Lake Clark national parks and preserves.

- Minimal use of existing utility/transportation corridor or existing infrastructure for the approximately 300 miles of route.

3. Southeastern Alaska

Lynn Canal/Chatham Strait

- Route would add an additional 210 miles of pipeline and three to four additional compressor stations.
- Route would traverse more than 200 miles in the Yukon Territory in Canada crossing the Kluane National Park and affecting the Kluane Territorial Game Sanctuary.
- The route through Canada would require an international treaty.
- Pipeline would cross the Tetlin National Wildlife Refuge.
- LNG tanker would be mixed into an area of confined navigation and increasing tourism and commercial vessel traffic.

Yakutat Bay

- Route would add approximately 200 miles of pipeline and three to four additional compressor stations.
- Route would traverse more than 200 miles in the Yukon Territory crossing the Kluane National Park and affecting the Kluane Territorial Game Sanctuary.

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Figure II-1 Summary of Criteria Evaluation for
Statewide Route Options

	Western Alaska		Southcentral			
	Norton Sound	Bristol Bay	Cook Inlet	Prince William Sound	Yakutat Bay	Lynn Canal/Chatham Strait
Continuous Operation of a Marine Terminal	●	⊗	○	○	⊗	○
Minimize Length of Pipeline	○	●	○	○	●	●
Maximize Use of Existing Utility/Transportation Corridor	●	●	○	○	●	○
Maximize Use of Existing Infrastructure	●	●	○	○	⊗	○
Avoidance of Environmentally Sensitive Area	●	●	⊗	○	●	●
Avoid Permitting Delays	●	●	●	○	●	●

○ = Favorable
⊗ = Moderately Favorable
⊗ = Unfavorable
● = Highly Unfavorable

- Pipeline would cross Tetlin National Wildlife Refuge.
- Significant disturbance of Tongass National Forest and the Wrangell-Saint Elias National Park and Preserve.

- Constructability concerns for the crossing of the Saint Elias Mountains.
- Minimal use of existing utility/transportation or existing infrastructure for the final 100 miles of alignment.

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3. Southcentral Alaska

Initial screening for general criteria (Section 1.9.3.2) as well as evaluations of both the El Paso Alaska Project (FPC 1976a) and Alaskan Arctic Project (BLM 1976) determined that there were several feasible pipeline routes to southcentral Alaska, including Prince William Sound and Cook Inlet, that warranted further consideration.

4. Summary

Based on evaluation criteria of feasibility of constructing and operating a pipeline and of suitability of tidewater ports for year-round operation of a marine terminal, alternatives outside western and southeastern Alaska were eliminated. Only routes to southcentral Alaska warranted further consideration.

III Evaluation of Alternatives to the Proposed Project

A. Introduction

This section addresses regional pipeline route alternatives to Cook Inlet and alternative LNG sites in both the Prince William Sound and Cook Inlet areas. In the Cook Inlet region three alternatives were identified for LNG plant and marine terminal sites: Harriet Point, Boulder Point, and Cape Starichkof (Figure III-1).

The proposed project's LNG plant site and marine terminal are located at Anderson Bay in Port Valdez. Two sites at Port Valdez (Gold Creek and Robe Lake) and one in eastern Prince William Sound (Gravina) were considered as alternatives to Anderson Bay

(Figure III-2). During the scoping process, a fourth, known as the ALPETCO site, was identified but was subsequently removed from consideration because the site has been leased for development of a petroleum refinery.

Additional LNG plant sites and marine terminal locations were evaluated for both Prince William Sound and Cook Inlet in the FEIS for the El Paso project (FPC 1976a) in the discussion of "Alternatives to the Proposed Action" (pp. II-376 to II-520) and in the EIS for the Western LNG Project (FERC 1978) in the discussion of "Alternatives to the Proposed Action" (pp. 233 to 296). Several sites were determined to be acceptable for a smaller project with fewer LNG tanker calls per year. They were eliminated as unacceptable for the proposed TAGS project because it requires almost daily LNG tanker calls.

Two extensive environmental studies have been conducted through the area of the Cook Inlet alternative alignments--the Anchorage-Fairbanks Transmission Intertie, Environment Assessment Report (1982) and the studies related to the Susitna Basin Hydroelectric Project (1984).

B. Alternative Pipeline Route and LNG Facility Sites

1. Alternative Cook Inlet Regional Pipeline Route

Both the proposed TAGS pipeline alignment and the alternative Cook Inlet regional route are the same for the first 395 miles, from Prudhoe Bay to the vicinity of Livengood. Therefore, the comparative

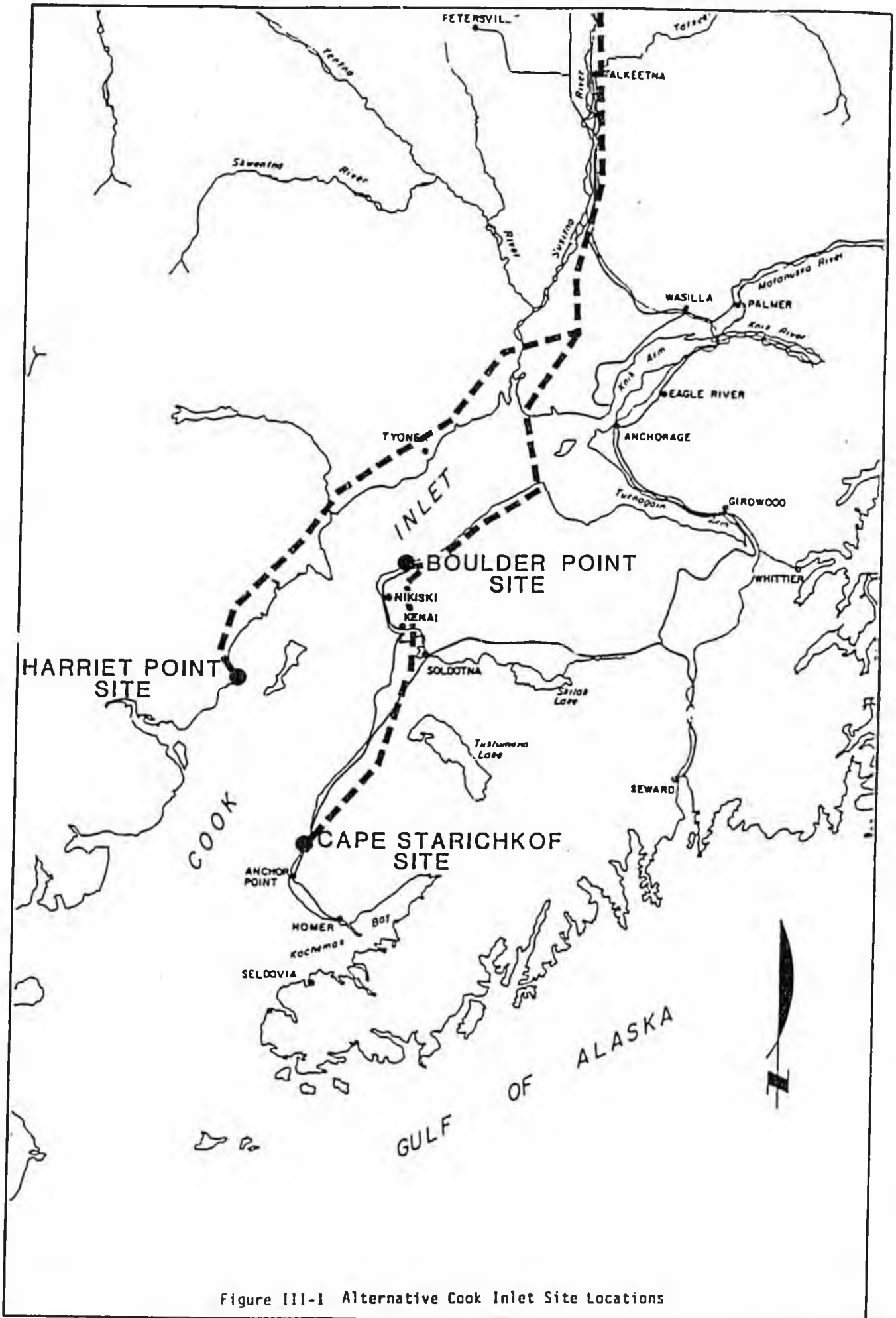


Figure III-1 Alternative Cook Inlet Site Locations

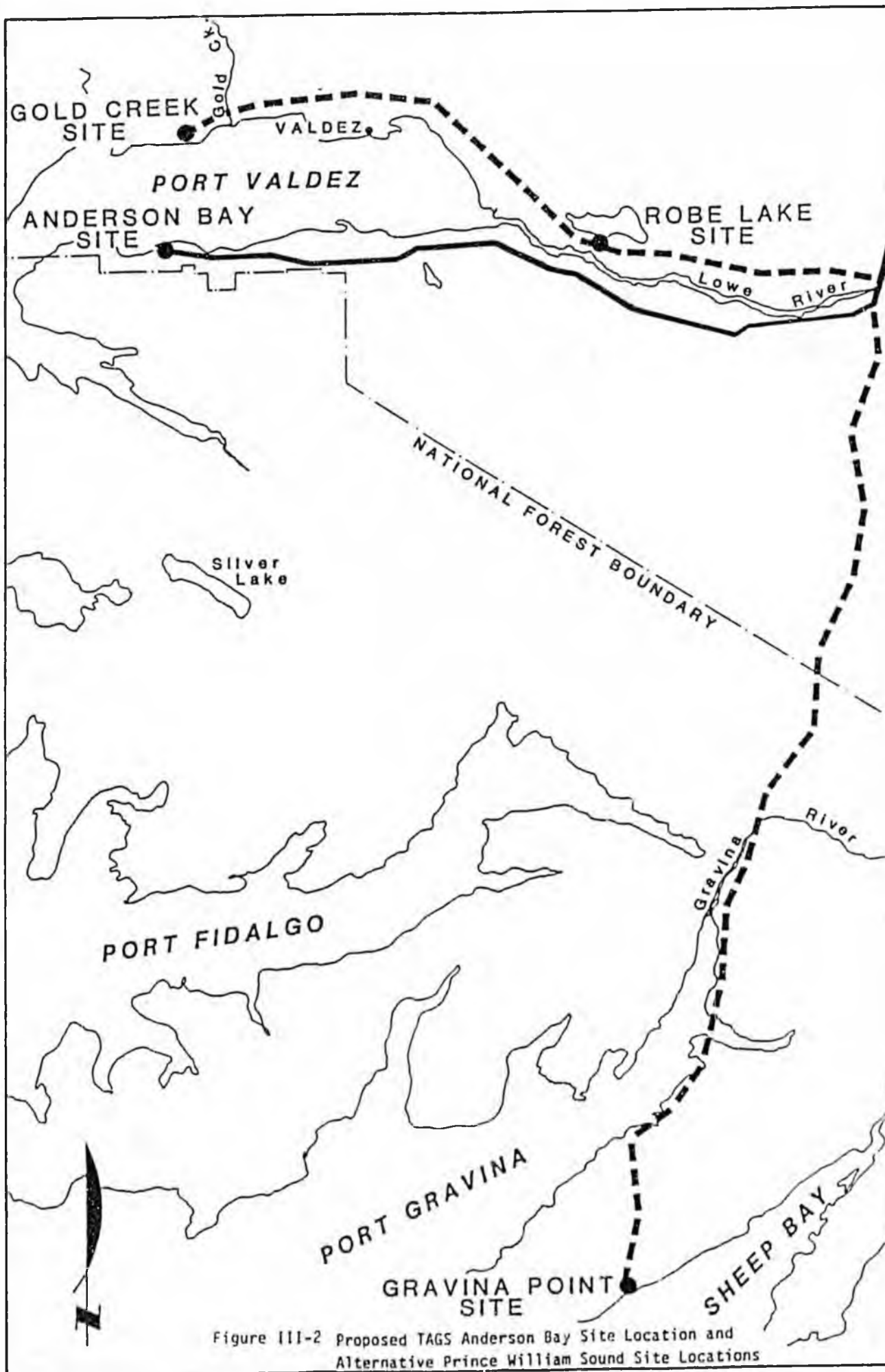


Figure III-2 Proposed TAGS Anderson Bay Site Location and Alternative Prince William Sound Site Locations

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discussion in this alternative section considers only the differences from Livengood to Prince William Sound and Cook Inlet as shown in Alignment Map 3 at the end of the document.

From Livengood the alternative Cook Inlet regional pipeline route would diverge from the proposed pipeline route. It proceeds southward, following along the eastern margin of Minto Flats before crossing the Minto Fault. The route continues southward through Nenana with an elevated crossing at the Tanana River. From Nenana the route follows the Alaska Railroad, with an elevated crossing of the Nenana River near Lialo. The route then generally follows the Parks Highway to a point just south of Healy, where it parallels the Alaska Railroad for several miles before again joining the Parks Highway, traversing a portion of the Denali National Park and Preserve and using two elevated crossings of the Nenana River.

The route continues south, paralleling the highway just inside the park boundary before leaving the park near McKinley Village. As the route proceeds south, it again crosses the Nenana River with an elevated crossing. It passes through Cantwell and Summit and enters into Broad pass. In this area the route crosses the McKinley strand of the Denali Fault system, also thought to be active.

Several route options to avoid Denali National Park and Preserve were evaluated and discarded because of engineering constraints due to the very rough terrain and potentially severe environmental impacts.

In the Nenana River Valley between Healy and McKinley Village, a pipeline route would involve crossing Denali National Park and Preserve along the existing cleared right-of-way for the Parks Highway. This route is feasible and constructable without long-term operation or maintenance difficulties. An optional route to avoid Denali National Park and Preserve along the east side of the Nenana River was given preliminary evaluation and dropped because

of substantial environmental concern and difficult pipeline construction, operation and maintenance issues. Another option along the existing Anchorage-Fairbanks Intertie powerline also was evaluated. This option completely avoids the immediate area of Denali National Park and Preserve, but involves an area where the intertie was constructed by helicopter because of numerous deep ravines on steep slopes and because of environmental concerns associated with Denali National Park and Preserve. Construction, operation and maintenance of a pipeline in this area requires all weather access, which in turn creates significant environmental concerns. Accordingly, this intertie option was dropped from further consideration.

Once through Broad Pass the route traverses the upper Chulitna River valley, requiring an aerial crossing at Hurricane Gulch as it continues to follow the Parks Highway through Denali State Park and into the Susitna River valley south of Talkeetna. Following the highway south, this pipeline route crosses the Susitna River near Sunshine and Montana creeks in an elevated mode. Between Kashwitna and Willow the pipeline route departs the highway right-of-way, proceeding south around Nancy Lake State Recreation area toward Flat Horn Lake near the mouth of the Susitna River and the Susitna Flats State Game Refuge.

Two alternate routes could be followed from this point. The first proceeds west to Harriet Point along the western side of Cook Inlet. The second goes due south with a submarine pipeline crossing of the Cook Inlet and along the western shore of the Kenai Peninsula to Boulder Point or Cape Starfchkof.

C. LNG Sites for the Cook Inlet Pipeline Alternative

1. Harriet Point

To reach Harriet Point the alternative pipeline route extends from the north side

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of Cook Inlet and proceed southwesterly, crossing the Susitna River through the Susitna Flats State Game Refuge and following a more southerly course along the Beluga Power Plant transmission line and across the Beluga River. The route along the northwest shore of Cook Inlet lies primarily in an extensive coastal plain that borders a low-lying, marshy coastline, extending south to Harriet Point. Extensive muddy tidal flats of impermeable fine-grained sediments are found along the coast (ESL 1980a).

The Harriet Point site is located on the west side of Cook Inlet approximately 60 miles south of the village of Tyonek, as shown in Figure III-1. The closest development is an oil pipeline terminal and marine port facility at Drift River, 15 miles north. There is no nearby community development. The site proximity to Mount Saint Augustine and Mount Redoubt volcanoes and poor access constrain development of any kind in the area.

Harriet Point is surrounded by Cook Inlet. Relief generally is low, but some grading would be required. Soils are reported to be suitable for development. Bedrock is probably more than several hundred feet deep, mantled with glacial till, outwash, and alluvial silt (OIW 1975). Site terrain and topography would allow the LNG plant to be located near the marine terminal. There are no active faults nearby.

Distance from shore to the 60-foot isobath would be more than 4,500 feet. Coastal bluffs border the point. Muddy tidal flats of impermeable, fine-grained sediments are found along the shorelines. A number of rock promontories along the northeast side of Harriet Point and some shoaling exist in the inlet between the Point and Kalgin Island.

Tanker maneuverability would probably be impeded by currents and inherently poor tanker berth configurations possible at this site. Anchorage would be available (OIW 1975). The port site might offer some

natural protection. Wave, tide, and current conditions are acceptable, though tidal currents are quite strong. The velocity of the current between Harriet Point and Kalgin Island during a large tidal exchange has been estimated at more than 8 knots. Tsunamis also are a possibility (DOI 1972).

Ice and icing conditions are not well defined. Generally, prevailing winds force ice to the west side of Cook Inlet. Ice conditions at Drift River are reportedly more hazardous than at Nikiski. During 1972 pack ice from 6 to 18 inches thick extended south of Harriet Point as far as Chiskik Island (OIW 1975). Fog can also hamper marine operations.

2. Boulder Point

The Boulder Point alternative pipeline route would require a 15-mile Cook Inlet crossing to Point Possession on the Kenai Peninsula. From the Point Possession area the pipeline would parallel an existing gasoline pipeline right-of-way southwesterly for about 50 miles along the coast, terminating at Boulder Point just north of Nikiski, one of the Cook Inlet sites previously considered for location of the LNG plant and marine terminal, as shown in Figure III-1. This route avoids the Kenai National Moose Refuge but traverses the Susitna Flats State Wildlife Refuge for about 16 miles and the Captain Cook State Recreation Area for about 1.5 miles.

The Boulder Point site is located on the east side of Cook Inlet on the Kenai Peninsula approximately 17 road miles north of the city of Kenai and 6 miles north of an existing petroleum, petrochemical, refining, and LNG industrial complex at Nikiski. Boulder Point is located northeast of East Forelands, a designated reserve for navigational purposes.

Commercial and residential development is not common, particularly near the site. Good infrastructure is in place for supporting construction and operations, but land availability could be a problem.

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Possible conflicts with nearby shipping and docking operations at Nikiski might exist (DOI 1976).

The north Kenai Road passes within 1.5 miles of the Boulder Point site, ending at Captain Cook State Recreation Area. The Nikishka airstrip is approximately 1.5 miles inland from Boulder Point; a regional airport at Kenai approximately 14 air miles south.

Boulder Point has fair proximity to deep water, coastal bluffs are of moderate height, and the shoreline is stable. It is the northernmost feasible industrial site with deepwater marine access on the east side of Cook Inlet and the closest site to Anchorage (ESL 1980b).

Soils are suitable for development (loess over glacial outwash), and terrain above the cliffs is gently sloping to hilly (SCS 1962). Bedrock foundation may be lacking. Faults, volcanoes, and glacial floods should not be a problem. The water table is low, and liquefaction potential is low (OIW 1975; SCS 1962).

Site terrain and topography would allow construction of the LNG plant a safe distance from the marine terminal. Distance from the 60-foot isobath to shore is approximately 4,000 feet. Earlier studies (OIW 1975) indicated acceptable anchoring depths less than 200 feet and an adequate maneuvering area (2,000 feet minimum). Navigational aids are present, and the state requires a licensed coastal pilot for vessels moving up Cook Inlet above Kachemak Bay.

A number of prominent rock outcrops occur along the shoreline of Boulder Point, particularly on the north side. NOAA National Ocean Survey charts warn of numerous uncharted and dangerous submerged boulders in the eastern portion of Cook Inlet. Some shoaling also exists along the east side of the Inlet. Projected dangers from tsunamis are minimal due primarily to low predicted wave height, historical resistance of central Cook Inlet to earthquake-caused tsunamis, and existence of

the Alaska Regional Tsunami Warning System (OIW 1975).

Floating ice and icing conditions can be severe problems in this area, and extreme tidal exchanges are generally strong (BLM 1976; OIW 1975). Ice in Cook Inlet would be an inherent winter hazard, requiring ice strengthening of LNG tankers, advance scheduling, and two berths. Six out of 13 accidents recorded in Cook Inlet during a four-year study period (1971-1974) were due to ice. The ice problem is most severe in the upper inlet, particularly north of the forelands, a constriction shown in Figure III-1. LNG shipments to/from the existing Nikiski facility have been delayed due to ice or strong winds, though only for short periods of time (OIW 1975). Increased LNG tanker traffic due to the TAGS project might, however, increase the incidence of such delays.

3. Cape Starichkof

Cape Starichkof is located approximately 64 miles south of Boulder Point. The route from near Boulder Point proceeds southwest with two crossings of the Kenai National Wildlife Refuge. It then continues almost due south, again crossing a portion of the Kenai National Wildlife Refuge and the Kenai River Management Area.

The Cape Starichkof site is located 13 miles south of Ninilchik, 25 miles northwest of Homer, and 7.5 miles north of Anchor Point, as shown in Figure III-1.

The primary industry in this part of Cook Inlet is fishing. Substantial residential development has occurred in the immediate area, and both developed and undeveloped recreational lands are in the vicinity. A communication tower is just east of the proposed site. The Sterling Highway would run either adjacent to or through the LNG plant site on the east; a school land patent borders the plant site. An airstrip is located at Anchor Point, and a controlled airport is located in Homer.

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Some industrial and commercial infrastructure would be available at Anchor Point and Homer (OIW 1975).

Location of terminal facilities would be in an area where there is the potential to affect a substantial portion of the salmon migrating along the eastern shore of Cook Inlet.

Cape Starichkof is the only location between Kenai and Homer with nearshore deep water and suitable uplands for industrial development and beach access. To the north and south of the cape, two upland sites have been identified and designated for marine-related industry (ESL 1980b); however, neither of these is appropriate for the LNG plant site. The most suitable site lies in an area with high recreational use and spectacular views of Cook Inlet with a backdrop of snowy mountains.

Sufficient land at suitable elevations would be available, though there might be some jurisdictional constraints. Much of the site is nearly level, though some grading would be required with consideration for surrounding wetlands. Soil may be marginal for foundations (ESL 1980c). Soil borings taken 1 mile south and 5 miles north of the site showed silt in the top 3 to 5 feet overlying 40 to 50 feet of dense gravelly material. Subbituminous coal seams may occur below 50 feet. The water table is high, around 10 feet below ground surface (OIW 1975). Drainage is usually good. Surface waters are generally confined to streams and marshes; a few shallow lakes are present.

Geologic hazards are few. There are no nearby faults or glaciers. Coastal bluffs, generally less than 300 feet high, are found along the shoreline, and they are susceptible to landslides and slumps (USGS

1976; OIW 1975; FERC 1978). Volcanic activity in lower Cook Inlet could disrupt facility operation. Liquefaction potential is not well defined. Gravelly soil is not typically susceptible to liquefaction, but the high water table may affect this susceptibility (OIW 1975). Cape Starichkof subsided 0.5 feet during the 1964 earthquake.

Moorage and anchorage areas would be sufficient for the marine terminal. Tidal currents and wave heights are reported to be relatively moderate compared to those near the Boulder Point site farther north. Average currents at Cape Starichkof are 2.3 knots during floodtide; maximum is 3.5 knots. Maximum wave heights of 10 to 12 feet generally occur several times a year (FERC 1978). Swells occur but apparently result in few navigation problems. Tsunami risk is somewhat greater than at Boulder Point but still considered moderate. LNG plant facilities would be located above the historical high-flood water mark (OIW 1975).

Distance from the 60-foot isobath to shore is approximately 4,200 feet (FERC 1978). Although bathymetry might be adequate for navigation and offshore anchoring (60- to 200-foot depth), significant longshore drift and shoaling are found in the area. Extensive dredging would be required to remove local shallow shoal areas (OIW 1975; DOI 1976; ESL 1980c).

Large-scale mobile bedforms are reported along the bottom of lower Cook Inlet off the coast of Cape Starichkof. Migration of bedforms can affect offshore structures and navigation (NOAA 1979).

The marine terminal would not be exposed to the ice and icing conditions present above the East Forelands owing to its location in lower Cook Inlet. Cape Starichkof is generally ice free, though

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pack ice has developed as far south as Anchor Point in severe winters (OIW 1975).

D. Alternative LNG Sites in Prince William Sound

1. Gold Creek Site

To reach the Gold Creek site the pipeline would be routed to deviate from the proposed alignment and pass just northeast of the city of Valdez, as shown in Figure III-2. The Gold Creek site lies on the northwest shore of Port Valdez, approximately 4.5 miles west of the city of Valdez, 2 miles east of Shoup Bay, and 4.5 miles across Port Valdez from the TAPS oil terminal. The Valdez airport lies about 8 miles east of the site.

The site is comprised of a bedrock ridge and a bench mantled with glacial till. Above elevations of 500 feet, slopes are extremely steep. Sufficient space could be developed for an LNG plant by excavation of terraces in the hillside and grading the bedrock ridge. Most of the site lies between the 300- and 500-foot elevation.

Drainage varies from good to poor. An unnamed stream cuts through the site in an east-west direction. Another part of the area is flat and marshy. There are no known active faults in the vicinity.

The eastern face of the site is bound by a steep rocky shoreline. To the south the coastline is less steep and has a coarse, rocky substrate. In the vicinity of the marine terminal the 60-foot isobath lies approximately 500 feet offshore. Navigation charts do not show any rock hazards along the shoreline. Offshore anchorage is available, and there is ample area for maneuvering vessels.

General wind, wave, tide, and current data were not specifically extracted for this site, though detailed data are available from several sources. Seiche run-up during the 1964 earthquake was 124 feet near Gold Creek.

2. Robe Lake Site

The Robe Lake site is located along the south shore of the lake, approximately 6.5 miles southeast of Valdez, 4 miles southeast of the Valdez airport, and 4.5 miles east of the TAPS terminal as shown in Figure III-2. The site is bound on the south by the Richardson Highway.

The area is comprised of an east-west bedrock ridge mantled with till. An LNG plant would be developed on the site by excavating and grading the ridgetop. This would reduce the ridge from a natural elevation of 400 feet to approximately 200 feet. Bedrock foundations would be available for critical LNG plant facilities.

All Prince William Sound and Cook Inlet sites are in a Uniform Building Code Zone 4 seismic (High-Seismic Zone) area. Recent (postglaciation in bedrock) displacement has not been observed or documented anywhere in the Valdez area, even though many lineaments and old inactive faults exist. Five areas on or adjacent to the site have been identified as avalanche zones; four areas have potential for mass wasting (Valdez CDD 1986).

Robe Lake is a valuable local resource used for recreational boating, swimming, fishing, and hunting. It is also used as a floatplane base. Several homes are scattered around the lake; a 150-home subdivision is just to the west. A state land disposal for residential use is located on the east side of the lake.

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The LNG loading lines would leave the site along a westerly route, cut south across the Lowe River floodplain, and continue west to the marine terminal site near Solomon Gulch Creek. The total length of the LNG loading line route would be approximately 5 miles.

3. Gravina Site

To reach the Gravina site the pipeline route would deviate from the proposed TAGS pipeline route just south of Keystone Canyon through a 2.1-mile tunnel from Browns Creek to Dead Creek and then follow Dead Creek along the Gravina shoreline. A marine crossing at Beartrap Bay and Comfort Cove would be necessary prior to reaching the Gravina site near Sheep Bay, as shown in Figure III-2. The total length of this route would be approximately 807 miles. The route traverses rugged, heavily glaciated ridges of the Chugach Mountains.

The majority of this route and the LNG facility site are within the Chugach National Forest. There is little road access. The FPC's El Paso EIS (1976a) and the USFS' Chugach National Forest EIS (1984) are incorporated by reference for a description of natural resources along the pipeline corridor to Gravina.

The Gravina site is located on the southeastern shore of Gravina Peninsula approximately 35 miles south of Valdez, 14 miles northwest of Cordova, and 4 miles northeast of Gravina Point. There is no nearby community development or infrastructure.

The closest communities are Cordova and Valdez, both accessible to the site only by air or sea. Cordova is primarily a fishing community with limited industrial and commercial support and access is by air or sea. Valdez is also an important fishing

and recreation community that has been industrialized to some extent by the TAPS terminal development. Valdez is accessible to the rest of the state by air, sea, and the road system.

The Gravina site has a southeasterly exposure to Orca Bay, Sheep Bay, and Prince William Sound. The site is on a sloping terrace with low and rolling topography and occasional irregular ridges. Elevation is about 500 feet. North of the site, the terrain rises steeply to 1,100-foot peaks 4,000 feet from shore.

Bedrock on the terrace is believed to consist of pointed and fractured slate and is generally less than 30 feet below the surface with some outcropping. Soil cover on the terrace consists of organic silts underlain with gravel and peat. Steeper slopes are generally covered with 5 to 10 feet of organic material. Glaciated valleys adjacent to the site may have granular soils 20 feet thick over silty glacial till (FPC 1976a).

Drainage on steeper slopes is good. Flatter slopes and low-lying areas with organic soils are poorly drained, resulting in ponding.

The Gravina site is in a highly seismic area, though no active fault zones are known in the immediate vicinity.

The shoreline at Gravina is characterized by bluffs ranging from 50 to 100 feet high, oriented in a northeasterly direction (FPC 1976a). The 60-foot isobath lies approximately 1,300 feet from shore (FPC 1976a).

Orca Bay at the marine terminal site is approximately 6 miles wide, allowing ample maneuvering room. Waters in the immediate vicinity range from 50 to 300 feet deep, and anchorage is considered adequate. No underwater obstructions are noted on navigation charts. The entrance to Sheep

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Bay is about 4 miles wide, and water depth averages less than 60 feet. There are several small islands and shoal areas. Tidal and wind drift currents present no problem. Wave height could be up to 24.5 feet at the marine terminal site. Locally generated tsunami wave height estimates range from 10 to 16 feet/6 min. Maximum run-up height is estimated to be between 30 to 40 feet above mean sea level.

Ice and icing problems would be minimal. Prince William Sound is essentially ice free except for icebergs from nearby glaciers. Some sheet ice has been reported, probably the result of freshwater inflow at the head of various bays. Some shore ice could develop but not to significant levels. Calving by Columbia Glacier would probably not be a factor since major icebergs are tracked for notice to shipping traffic.

Navigation might be affected because, geographically the Gravina site tanker route would not be in the Valdez vessel traffic service. Periods of reduced visibility (0.5 miles) occur primarily at night, especially during summer.

IV System Components for the Alternatives

The basic project components for the proposed TAGS project and the alternatives, discussed in Section 2 of the DEIS, would be similar. The pipeline route from Prudhoe Bay to near Livengood for the proposed project and all alternatives considered would be the same. Likewise, the proposed project's approach to road crossings, elevated and below-ground river and stream crossings, fault crossings, and other basic construction techniques would be the same for all alternatives.

The major differences in construction would be for those conditions specific to the Cook Inlet alternative route that would require different construction techniques, such as the subsea pipeline under Cook Inlet, the approach to the pinch point near Denali National Park and Preserve, and the major access roads required for access to the compressor stations located in Minto and Susitna flats. To reach the Gravina site in eastern Prince William Sound, a 2.1-mile tunnel and 2 miles of subsea pipeline would be required.

Table IV-1 summarizes the major facility components that would be required for the alternatives when compared to the proposed project.

A. Mainline Pipeline and Compressor Stations

With the exception of the routes to Harriet Point and Cape Starichkof, the proposed project and the other alternatives would require construction of approximately 800 miles of pipeline and 10 compressor stations. The pipeline route to Harriet Point and Cape Starichkof would each require more than 800 miles of pipeline and an additional compressor station.

B. Elevated River Crossings

The Cook Inlet alternative would require six elevated crossings at the Yukon, Tanana, and Nenana (two crossings) rivers and at Hurricane Gulch and Montana Creek. These crossing techniques are discussed in the DEIS in Subsection 2.3.4 for the Yukon River and Subsection 2.3.3 for the remaining river crossings and are shown in Figures 2.3.3-2 and 2.3.4-4.

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Table VI-1 Summary of Major Facility Components for the
Proposed Project and Alternatives

	Prince William Sound				Cook Inlet		
	Proposed Project	Alternatives			Alternatives		
	Anderson Bay	Gravina	Gold Creek	Robe Lake	Harriet Point	Boulder Point	Cape Starichkof
Pipeline to LNG Site (miles)	797	807	797	783	826	791	856
Compressor Station	10	10	10	10	11	10	11
Elevated River Crossings	4	4	4	4	6	6	6
Subsea Pipeline (miles)	None	2	None	None	None	15	15
Length of Loading Line (miles)	<1	<1	<1	5	>1	>1	>1
Ferry Loading	yes	no	no	no	yes	no	no
Construction Camp at LNG Plant/Terminal Site	yes	yes	yes	yes	yes	yes	yes

C. Subsea Pipeline

A pipeline to the two sites on the Kenai Peninsula for the Cook Inlet alternative would require a 15-mile subsea crossing beneath Cook Inlet. The route to Gravina, an alternative in the Prince William Sound area, would require subsea crossings of Beartrap Bay and Comfort Cove for a length of between 0.5 and 2 miles, respectively.

Construction of the Cook Inlet subsea pipeline crossings would use a large pipeline lay barge capable of handling the concrete-coated, 36-inch diameter pipe. Welding of pipe joints and completion of the coating process at the joints would be

accomplished on the lay barge, and completed sections would be lowered to the sea floor. The pipe would then be buried using a jet sled equipped with high-capacity airlift pumps. Provisions for excavating and removing occasional boulder size material from the pipe alignment and trench would be incorporated in the construction plan.

Due to the extreme tidal fluctuations and currents found in Cook Inlet, a multipoint anchoring system would be required to hold the lay barge in position. The presence of the lay barge and its multipoint anchor system would result in the need for a traffic control system for vessels bound to and from the Port of

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Anchorage during the construction phase. Additionally, pipe burial depth should be sufficiently deep to provide adequate protection from anchor dragging and protection from scour.

D. Loading Lines

All three of the Cook Inlet area alternative locations would require a loading line greater than 1 mile in length from the LNG storage tanks to the loading berth as described in Subsection 2.5 of the DEIS. The cryogenic loading lines between the LNG storage tanks and the marine terminal would be less than a mile for the proposed Anderson Bay site and the Gravina and Gold Creek alternative sites in the Prince William Sound area. The Robe Creek alternative site, also in Prince William Sound, would require a cryogenic loading line 5 miles long.

E. Ferry Landings

A ferry landing would be required at the proposed site at Anderson Bay since there would be no road access. The Harriet Point alternative on the western side of Cook Inlet would also require a ferry landing due to the lack of roads in the area, as described in Subsections 2.5 and 2.6. of the DEIS

F. Temporary Construction Camps at LNG Plant Site and Marine Terminal

The lack of road access to the proposed Anderson Bay Site would mean a 1,700-bed temporary camp since no workers could commute. The remoteness of both the alternative Gravina and Harriet Point site would also require a temporary camp of about the same size as described in Subsection 2.3.1 of the DEIS. Although Gold Creek,

Robe Lake, Boulder Point, and Cape Starichkof are reasonably accessible to existing infrastructure by roadways, each site would probably require a construction camp, though somewhat smaller than the remote sites.

V Project Evaluation Criteria

A. Introduction

The following set of evaluation criteria was developed to identify and evaluate environmentally acceptable and economically feasible routes to transport Prudhoe Bay natural gas to tidewater and on to Asian Pacific Rim markets. The criteria were separated by major project components--pipeline system, LNG plant site, and marine terminal--and reflect project design, construction, and operational requirements. The criteria are presented below, and their applicability and importance are described.

B. Pipeline

1. Minimize Length of Pipeline

Minimize pipeline length to reduce total area of environmental disturbance, land commitments, and resources used, including gravel and water resources. The pipeline length also has a direct relationship to construction and operational and maintenance costs, construction schedules, need for additional compressor stations, and fuel usage.

2. Maximize Use of Existing Infrastructure

Use of existing construction infrastructure (access roads, construction camps, airports, materials, and disposal

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sites) as well as transportation corridors and existing, developed residential and commercial facilities in cities and towns along the route reduces the need to develop such infrastructures for project needs and reduces resource requirements.

3. Maximize Use of Proven Construction Techniques

Maximum use of construction techniques which have been used in the Arctic or for projects in similar topography, terrain and soils, wetlands, and water crossings to minimize potential construction and operational problems and potential environmental impacts. Avoid extremes of topography, terrain, soils, and hydrologic conditions that require the use of new or innovative engineering techniques.

4. Maximize Opportunity for Parallel Construction Techniques Along Existing Facilities

Wherever possible, use facilities along existing pipelines, transmission lines, and roadways would maximize construction efficiency and minimize the level of environmental impacts.

5. Avoid Areas of Potential Geohazards

Avoid, if possible, areas of known or potential geohazards that could affect the integrity of the system or could cause environmental disturbance or unsafe conditions during either construction, operations, or maintenance. Potential geohazards include slope instability,

seismic fault lines, and areas subject to soil liquefaction and avalanches.

6. Minimize Potential Conflicts with Sensitive Environments

Minimize conflicts with sensitive environmental areas by generally avoiding proximity to those environments. To the maximum extent practicable, pipeline routes should avoid conservation system units such as national parks, preserves, and forests; endangered species feeding or breeding areas; and wetlands.

7. Maximize Compatibility with Current and Planned Land Use

Maximize land-use compatibility and avoid direct land-use conflicts in undeveloped areas, recreation areas, subsistence use areas, wildlife habitat, and residential areas.

8. Minimize the Number of Water Crossings

Pipeline route selection should reduce the number of river and stream crossings to minimize environmental impacts to fisheries, bank stability, and other potential effects especially in significant habitat areas for fish movement, spawning, overwintering, and rearing.

9. Avoid Permitting Delays

Avoid areas that would require a potentially protracted approval processes or unnecessary schedule delays, such as in conservation system units and designated state recreation or wildlife lands.

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10. Minimize Potential Threat to National Security

Joint use of areas with facilities designated as important for national security should be evaluated for its direct bearing on the achievement of national security goals that depend on uninterrupted economic activity.

11. Maximize Availability of Gas to Alaska Consumers (if feasible)

The location of the gas pipeline near the greatest number of users of natural gas provides at least potential future benefit of gas diversion to consumers along the route.

C. LNG Plant Site

1. Adequacy of Available Land

A minimum of 250 acres of suitable terrain for construction of facilities would be required along with an adequate buffer safety zone to ensure public safety and security of operations.

2. Avoid Areas with Poor Foundation Characteristics

A foundation of bedrock or a dense glacial till with well-drained gravelly material that has a low potential for soil liquefaction during earthquakes and frost action would provide good foundation support for engineering integrity and safety of operation.

3. Avoid Areas with Faults

Avoid areas with active earthquake faults to ensure safety of operations and

integrity of facilities and to minimize extensive engineering design requirements.

4. Avoid Sites Potentially Exposed to Seismic Sea Waves

The LNG plant should be sited so that facilities are located above the highest expected seismic sea wave run-up or with adequate elevation to prevent flooding.

5. Minimize Length of Pipeline to Marine Terminal

Minimize the length of the cryogenic LNG pipeline from the storage tanks to the marine terminal site for engineering feasibility and operational safety. (Maximum distance is 2.5 miles.)

6. Maximize Use of Existing Community Infrastructure

The LNG plant site should have reasonable access to existing community infrastructure to provide for construction and operational support, housing, adequate transportation, and public services.

7. Avoid Sensitive Environmental Habitat

Site location should minimize impact to sensitive or unique environmental areas or wildlife habitat in vicinity of the site.

8. Public Safety Considerations

The LNG plant site should be sufficiently distant from residential areas, airports, or critical facilities to ensure adequate public safety in the event accident or LNG spill.

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9. Maximize Value-added Industrial Opportunities

The LNG plant should be located in an area where the commercial use of natural gas for value-added industrial offers the greatest potential for development.

10. Minimize Site Preparation Requirements

Avoid sites with topographic conditions that require extensive preconstruction site preparation and material requiring disposal.

D. Marine Terminal

1. Minimize Exposure to Extreme Oceanographic Conditions

The site should be located in an area protected from extreme winds, high tides, strong currents, sea ice, and exposure to waves from storms and seismic events.

2. Minimize Distance from Shore to 50-foot MLLW Depth

The distance from shore to the LNG tanker berthing area (60' MLLW depth) directly affects the length of cryogenic pipeline required from the LNG plant to the ship-loading terminal facility with engineering design, project safety, and cost considerations.

3. Maximize Suitability of Tanker Maneuvering and Anchorage Area

Area of marine terminal must have 50-foot water depth close to shore and an adequate navigation channel and turning basin to meet safety requirements (minimum 2,000-foot turning diameter) and suitable

anchorage area with water depths less than 200 feet.

4. Minimize Potential Hazards to Navigation

Optimum tanker approach channels should have a minimum width of 450 feet, minimum water depth of 50 to 60 feet, and require no sharp channels, turns, or obstructions to shipping. Ports of entry should have a well-defined vessel traffic control system.

5. Minimize Potential Problems Related to Soils and Geohazards

Potential seismic activity and marine subsoil conditions (shear strength, bedrock depth, liquefaction possibilities) must be factored into final site selection. Geohazard considerations include magnitude and probability of the occurrence of earthquake and seismic sea waves created by a subsurface slide.

6. Minimize Potential Threat to National Security

Minimize interaction with facilities designated as important for national security goals.

VI An Evaluation of Reasonable Range Alternatives to the Proposed Action

A. Introduction

This section presents the results of the application of evaluation criteria for the pipeline route, LNG plant site, and marine terminal criteria, listed in Section IV, for the proposed TAGS project and the project alternatives in the Prince William Sound and Cook Inlet regions. In

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Section VI.B summarizes important aspects of rating each alternative for each criterion and provides the rationale for the ratings listed in Figure VI-1. Section VI.C. includes an evaluation of each alternative with respect to the criteria established.

Results summarized in Figure VI-1 indicate the degree of favorability of the proposed project alternatives considered for each specific criterion under discussion. Categories are defined as follows.

Favorable - based on this criterion, the site/alignment offers no impediments to construction and operation of the proposed facility.

Moderately Favorable - the site/alignment has negative conditions that could be mitigated with a reasonable effort and expense within a reasonable time frame and with a high probability of success.

Unfavorable - the site/alignment has major negative conditions that could probably be mitigated but with unreasonably high expense, time frame, and/or uncertainty of success.

Highly Unfavorable - the site/alignment has major negative conditions that could not be adequately mitigated with a reasonable effort and expense, within a reasonable time frame, and/or with a high probability of success.

B. Evaluation of Pipeline Criteria

1. Minimize Length of Pipeline

The distance to Boulder Point is similar to the proposed action and is also favorable. The magnitude of additional

pipeline length for both Cape Starichkof and Harriet Point (of 59 to 29 miles, respectively), however, would require one more compressor station with attendant increases in costs for construction and operations and environmental impacts associated with the presence of the facility and would be rated unfavorable.

The total length of the pipeline right-of-way from Prudhoe to Anderson Bay would be 796.5 miles. With a maximum variance in pipeline length of only 14 miles from the proposed route, the Prince William Sound alternative alignments are not significantly different from each other or from the proposed route. In general, such a difference in length alone would not be expected to greatly affect cost, time of construction, or total area disturbed by the pipeline and would therefore be rated favorable. Gravina pipeline would be approximately 10 miles longer than that proposed for Anderson Bay and would rate moderately favorable.

2. Maximize Use of Existing Infrastructure

Along the Cook Inlet regional alignments, available infrastructure is variable and discontinuous. From Livengood through Minto Flats and again from north of Willow through the Susitna Flats, there would be no infrastructure to support construction. For the Harriet Point site, there would be little supporting infrastructure for the more than 100 miles of alignment from Willow beyond the minimal amount associated with the power lines to the Chugach Electric Association Beluga generating facility and the Susitna to Tyonek road system. More than 100 miles of workpad and access roads would be required to construct the pipeline segment between

Figure VI-1 Criteria Evaluation Matrix for Proposed TAGS Project and Alternative Evaluations

	Prince William Sound				Cook Inlet		
	Proposed Project to:	Alternatives			Alternatives		
	Anderson Bay	Gravina	Gold Creek	Robe Lake	Boulder Point	Cape Starichkof	Harriet Point
Pipeline Criteria							
- Minimize length of pipeline	○	⊗	○	○	○	⊗	⊗
- Maximize use of existing infrastructure	○	⊗	○	○	⊗	⊗	⊗
- Maximize use of proven construction techniques	○	⊗	⊗	○	⊗	⊗	⊗
- Maximize opportunity for parallel construction techniques	○	⊗	○	○	⊗	⊗	⊗
- Avoid areas of potential geohazards	⊗	⊗	⊗	⊗	⊗	⊗	⊗
- Minimize potential conflicts with sensitive environments	○	⊗	○	○	⊗	⊗	⊗
- Maximize compatibility with current and planned land use	○	⊗	○	○	⊗	○	⊗
- Minimize the number of water crossings	○	⊗	○	○	○	○	⊗
- Avoid permitting delays	○	⊗	○	○	●	●	●
- Minimize potential threat to national security	○	⊗	○	○	⊗	⊗	⊗
- Maximize availability of gas to Alaska consumers	⊗	⊗	⊗	⊗	○	○	○
LNG Plant Criteria							
- Adequacy of available land	○	○	○	●	⊗	⊗	○
- Avoid areas with poor foundation characteristics	○	○	○	○	⊗	⊗	⊗
- Avoid areas with faults	⊗	⊗	⊗	⊗	⊗	⊗	⊗
- Avoid sites potentially exposed to seismic sea waves	○	○	○	○	○	○	○
- Minimize length of pipeline to marine terminal	○	○	○	●	⊗	⊗	⊗
- Maximize use of existing community infrastructure	⊗	●	⊗	⊗	○	○	⊗
- Avoid sensitive environmental habitat	⊗	⊗	⊗	⊗	⊗	⊗	⊗
- Public safety considerations	○	○	⊗	●	○	⊗	○
- Maximize value added industrial opportunities	⊗	●	⊗	⊗	○	○	○
- Minimize site preparation requirements	⊗	⊗	●	⊗	○	○	○
Marine Terminal Criteria							
- Minimize exposure to extreme oceanographic conditions	○	○	○	○	⊗	⊗	⊗
- Minimize distance from shore to 60' MLLW depth	○	○	○	⊗	⊗	⊗	⊗
- Maximize suitability of tanker maneuvering and anchorage area	○	○	○	⊗	⊗	⊗	⊗
- Minimize potential hazards to navigation	○	⊗	○	⊗	⊗	○	○
- Minimize potential problems related to soils and geohazards	○	○	⊗	⊗	○	⊗	○
- Minimize threat to national security	⊗	⊗	⊗	⊗	⊗	⊗	⊗

Note: Individual criterion cannot be weighted on an equal basis.

- Favorable
- ⊗ Moderately Favorable
- ⊗ Unfavorable
- Highly Unfavorable

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Willow and Harriet Point, making this alternative unfavorable with regard to infrastructure requirements.

In addition to the infrastructure requirements for Minto Flats and Susitna Flats, the Boulder Point route would require infrastructure support for a 15-mile subsea pipeline from the north shore of the Cook Inlet near the mouth of the Susitna River to Point Possession on the Kenai Peninsula and about 15 more miles of road construction along a roadless pipeline right-of-way from Point Possession to the first existing road access to that right-of-way. Overall, the existence of suitable infrastructure along much of the route, including a parallel railroad and highway system and population and commercial centers in the Railbelt and Kenai areas, would be somewhat counterbalanced by a lack of infrastructure in specific areas to yield Boulder Point a rating of moderately favorable.

From near Boulder Point the route to Cape Starichkof would be accessible to the Sterling Highway and, thus, to the full support capabilities of the Kenai Peninsula. This route is also considered to be moderately favorable.

From Livengood southward the proposed project alignment to Anderson Bay generally follows the existing TAPS utility pipeline corridor and benefits directly from the potential use of a number of existing access roads and camp pads used for TAPS construction used for TAPS construction. The route also makes maximum use of the existing highway systems, airports and airstrips, and population centers that have supported similar construction and operations activities in the past. The route variations for Gold Creek and Robe Lake are insignificant as related to available infrastructure, and these routes

are also considered to be favorable in this regard.

The Gravina alignment is the same as for Anderson Bay, Gold Creek, and Robe Lake to the vicinity of Keystone Canyon near Valdez. From Keystone Canyon to the terminus at Gravina the alignment has no infrastructural support. Construction requirements would include roads and camps for most of the 32 miles of mountainous terrain between Keystone Canyon and Gravina. Similarly, operation of this segment of pipeline would rely on infrastructure support from Valdez and Cordova by marine or air service. Even with consideration of the highly favorable infrastructure of the route to Keystone Canyon, the overall Gravina route infrastructure would be considered unfavorable.

3. Maximize Use of Proven Construction Techniques

Constructability for the Cook Inlet alternative routes from Livengood to Cook Inlet in general would not be expected to pose greater problems than for the proposed TAGS alignments. The much smaller existing data base for engineering design could lead to construction delay as problems are found along the route (e.g., a complicated aerial crossing of Hurricane Gulch), potentially less suitable soils and drainage conditions in the Susitna Flats, and difficulties with the subsea pipeline crossing of the Cook Inlet.

For Boulder Point the need for a 15-mile subsea pipeline across Cook Inlet represents an important additional constructability consideration. Extension of the pipeline route to Cape Starichkof adds crossings of several heavily utilized sport-fishing streams, including the Kenai

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River. It also traverses extensive areas of poor drainage and areas where there was extensive ground breaking as the result of the 1964 earthquake that might be expected to have a similar response to future seismic events. On the basis of these factors, both the Boulder Point and Cape Starichkof sites are considered unfavorable in terms of constructability.

Constructability considerations for the route to Harriet Point--in addition to those mentioned for the route from Livengood to Cook Inlet excluding the subsea Cook Inlet crossing--are seismic activities, crossing extensive wetlands, and the potential for flooding by the Drift and Chakachatna rivers due to bursting of glacial lake dams or glacial melt. Volcanic activity is also severe in the area. Seismic considerations include a crossing of the Castle Mountain Fault, extensive ground breaking and cracking, and seismic activity associated with several nearby active volcanoes. Overall these factors would be considered to be unfavorable for this route.

Construction of the TAGS pipeline from Livengood to Anderson Bay would rely on engineering designs and construction techniques proven during construction of TAPS along the same corridor as well as with the authorized ANGTS gas pipelines, which has an approved design for basically the same system as the proposed TAGS through Delta Junction. Pipeline routes to alternative sites at Robe Lake and Gold Creek would similarly rely on proven construction techniques in known geological and geotechnical environments. Robe Lake would be considered as favorable. However, because the last 3 miles of pipeline alignment to Gold Creek would be located on steep sideslope, this route would be rated as moderately favorable. The pipeline route to Gravina would require routing through 32 miles of glaciated mountainous terrain

through the Chugach National Forest and a 2.1-mile mountain tunnel. In terms of constructability, this route alternative would have to be considered as unfavorable.

4. Maximize Opportunity for Parallel Construction Techniques Along Existing Facilities

Each of the three Cook Inlet alternatives also has lengthy stretches with no parallel access. These include lengths through Minto Flats for approximately 70 miles and Susitna Flats for approximately 50 miles, Cook Inlet submarine crossings, and that portion of the route to Boulder Point and Cape Starichkof on the northern part of the Kenai Peninsula prior to convergence with an existing pipeline corridor. Boulder Point and Cape Starichkof would be moderately favorable.

The Harriet Point alternative route along the west side of Cook Inlet partially parallels an existing small-diameter gas pipeline and an existing oil pipeline near Drift River and is rated as moderately favorable.

Construction efficiency would be maximized and environmental impacts minimized for the routes that closely follow existing pipeline and transportation corridor. The proposed route to the Prince William Sound sites in Port Valdez all benefit from a close association with TAPS and its existing access roads and have been rated favorable for this criterion.

Gravina departs from the TAPS line at Keystone Canyon and then proceeds through the Chugach Mountains and the Chugach National Forest for approximately 32 miles--an area with no existing access from which to utilize parallel construction--and is rated as moderately favorable.

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5. Avoid Areas of Potential Geologic Hazards

Alignments to Cook Inlet must pass through a similar range of geohazardous conditions as the proposed alignment, including crossings of the Minto Fault and the McKinley strand of the Denali fault system, marshlands, and the Tanana River with its multiple shifting channels. The Boulder Point and Starichkof alignments must cross the inlet with a 15-mile subsea pipeline as well as the Castle Mountain fault system. The Cape Starichkof alignment further traverses 15 miles of terrain susceptible to seismically induced failure. As geohazards are much less well-known along both the Boulder Point and the Starichkof alternatives, these routes are rated unfavorable for geohazards.

The Harriet Point alignment runs parallel to the Basin Bay Fault, which intersects the Castle Mountain Fault. The Castle Mountain Fault has been the site of many earthquakes. This route also transits areas which could be susceptible to seismically induced cracking and ground breakage and is located with the vicinity of two active volcanoes. Harriet Point is rated as unfavorable.

Geologic hazards are natural or man-made geologic conditions that potentially endanger life and property. Geologic hazards that TAGS may encounter during its design life include mass wasting, ground subsidence or heave, earthquake-induced ground failure, glaciating, snow avalanche, erosion, flooding, and tsunamis or seiche. As TAPS demonstrated, technology is available to identify these hazards, determine their probable severity, and to mitigate their effects in siting, design, and construction.

Geohazards are considered as moderately favorable for the proposed alignment because the hazards have been identified and taken into consideration in the siting and design of TAPS.

The difference in geohazards between routes to Robe Lake and Gold Creek differ from the proposed alignment in passing through some additional avalanche and landslide areas but overall are not considered to present major differences in engineering design requirements. These are also rated as moderately favorable.

The 32 miles of alignment, unique to Gravina alternative, pass through the heavily glaciated Chugach Mountains, through areas with avalanches and landslides near tunnel entrances, and crosses the Jack Bay and Gravina faults. This alignment is considered to be unfavorable.

6. Minimize Potential Conflicts with Sensitive Environments

Cook Inlet alternatives impinge on several sensitive areas avoided by the proposed project. South of Livengood to Tanana the Cook Inlet pipeline traverses Minto Flats, an important waterfowl and subsistence use area for Alaska Natives. A compressor station and an access road would also be required in this general area for the life of the project. The alternative pipeline route passes through the eastern edge of Denali National Park and Preserve, which, aside from any question of obtaining congressional approval for this part of the right-of-way, is the most heavily visited park in Alaska. Pipeline construction activities could directly interfere with park traffic and disturb the aesthetics and scenic qualities for park visitors from north of the park on through Broad Pass and south through Denali State Park. South of

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Willow, the Cook Inlet route passes through the Susitna Flats, which are characterized by high waterfowl use, several highly productive anadromous fish streams, and associated high recreational use. Whether potentially increased access is considered as positive in promoting use and development or as negative in disturbing the ecosystem and changing the character of this area for recreational use, it is quite likely that construction of a pipeline through this area would produce changes in the Susitna Flats. A compressor station and access road would be required there for the life of the project.

In addition, the Boulder Point route crosses a small part of the Captain Cook State Recreation Area. The Cape Starichkof route would cross the Kenai River Management Zone, which is heavily used by both sport and commercial salmon fishermen.

The Harriet Point route passes through critical waterfowl habitat, including nesting areas of the rare tule goose and the Trading Bay State Game Refuge with critical moose, brown bear, and other large mammal habitat and significant salmon streams.

Boulder Point and Cape Starichkof were considered as moderately favorable and Harriet Point unfavorable due to these factors.

The proposed TAGS route follows existing utility corridors for its entire length and poses minimal change in character or use of environments along the 800-mile corridor. A few specific areas are near places known to be used by threatened or endangered species, mainly peregrine falcons near Sagwon Bluffs, Grapefruit Rocks, and along the Tanana River and bald eagles south of Keystone Canyon. Minor routing adjustments and other mitigation such as timing of construction should effectively avoid any potential impacts. The routes to

Anderson Bay, Gold Creek, and Robe Lake are considered as favorable. The route to Gravina must continue across 15 miles of undeveloped Chugach National Forest land. With the linear aspect of the intrusion, the low potential for postconstruction impacts of a buried pipeline, and the absence of conflict with current use of this forest land, this route is considered as moderately favorable.

7. Maximize Compatibility With Current and Planned Land Use

The Cook Inlet alternative alignment (from Livengood to Cook Inlet) traverses the eastern end of Denali National Park and Preserve, which would pose a major potential land-use conflict due to the Alaska National Interest Lands and Conservation Act (ANILCA). Aside from problems related to permits and approvals with ANILCA Title XI (see Section VI.A.9 discussion), pipeline construction activities would interfere with the current use by visitors to the park in terms of both aesthetics and traffic flow. The pipeline also would cross approximately 70 miles of roadless fish and wildlife subsistence habitat in the vicinity of Minto Flats; would traverse highly utilized fishing and recreational areas along the Alaska Railroad/Parks Highway corridor, including McKinley Village, Denali State Park, and the Nancy Lakes Recreation Area; and would cross approximately 50 miles of undeveloped area in the Susitna Flats area. The alignment to Boulder Point would traverse 17 miles of the Susitna Flats State Game Refuge, the edge of the Kenai National Wildlife Refuge, and the Captain Cook State Recreation area. From Boulder Point to Cape Starichkof the alignment crosses several heavily utilized sport salmon fishing streams and the Kenai National Wildlife

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Refuge. The route to Harriet Point on the west side of Cook Inlet is largely undeveloped, but it is undergoing significant change. In addition to an established timber harvest area, a major coal export program is beginning. It also would cross more than 20 miles of the Susitna State Game Refuge. All three of the Cook Inlet routes are considered unfavorable because of land-use conflicts at Minto and Denali National Park and Preserve.

The proposed alignment from Livengood to Anderson Bay follows a designated transportation and utility corridor through the Prince William Sound area. The proposed alignment traverses a portion of Blueberry Lake SRS. The alignments to Robe Lake and Gold Creek alternative sites pass near several existing or proposed recreational sites in the vicinity of Robe Lake, including the Salmonberry Ridge Ski Hill and the proposed bike trail extension No. 3. Beyond Robe Lake, the route to Gold Creek passes near the Robe River Neighborhood Park and the proposed Robe River Fishing Platform (Valdez CDD 1986). The Gold Creek route would also pass through state lands proximate to the city of Valdez, the Valdez Airport, and the proposed Gold Creek Trail (CDD 1986). Because the final pipeline segment represents such a small proportion of the total alignments and nearly any impacts on these existing and planned land uses would be due to construction only, the Gold Creek and Robe Lake alignment has been rated overall as favorable and similar to the proposed Anderson Bay route.

The pipeline alignment to Gravina transits approximately 15 miles of the Chugach National Forest. The Forest Service has defined a management direction for the Gravina Management Area that includes maintenance of landscape character and

"dispersed recreational opportunities" as well as enhancement of marine-oriented recreational opportunities and fish habitat. Installation of 36-inch gas pipeline would not necessarily interfere with these objectives. This alternative is considered as moderately unfavorable on the basis of its potential conflict with the Chugach National Forest Plan (USFS 1984).

8. Minimize the Number of Surface Water Crossings

Approximately 100 streams are crossed by Cook Inlet regional pipeline alignments between Livengood and Cook Inlet. Though total stream crossings are fewer for the Cook Inlet routings to Boulder Point and Cape Starichkof, many of these are heavily utilized by anadromous fish and receive much heavier recreational use than the streams along the proposed route south of Livengood. By comparison with streams crossed by the proposed alignment, the Boulder Point and Starichkof are considered to be favorable and Harriet Point to be moderately favorable due to the sensitivity of those streams crossed.

The pipeline route from Livengood to Valdez would have to cross approximately 150 streams and rivers. Most of these streams were also crossed by the TAPS pipeline and would be crossed by ANGTS to Delta Junction. The difference in total stream crossings between Gold Creek, Robe Lake, and the proposed Anderson Bay project site is two less for Robe Lake, two more for Gold Creek. Each of these three alignments is considered to be favorable with respect to stream crossings. The alignment to Gravina has approximately six additional streams, plus it crosses Charter Bay and Comfort Cove

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on Prince William Sound and would therefore rate unfavorable.

9. Avoid Permitting Delays

The Livengood to Cook Inlet alternative alignment passes through several areas that pose major issues related to permits and approvals. Subsistence use in the Minto Flats area, heavily used anadromous fish streams, and crossing the Denali State Park and Susitna Flats State Wildlife Refuge make obtaining permits through these areas potentially difficult. The most problematic segment to permit along the Cook Inlet alignments would be through the Denali National Park and Preserve.

On the basis of the requirement of ANILCA, Title XI, congressional approval would be required for a right-of-way through Denali National Park and Preserve and a suitable alternative to that alignment designated, namely the action proposed to construct the TAGS project to Anderson Bay. All three Cook Inlet alternatives are considered to be highly unfavorable due to the project time delays that would be involved in any attempt to secure congressional approval when the proposed route to Anderson Bay would avoid the Denali National Park and Preserve entirely.

The procedure under 43 CFR 36 for authorizing a pipeline through Denali National Park and Preserve would require among other things:

No federal approvals for any part of the proposed pipeline system until all the provisions of 43 CFR 36 are met.

A determination that there are no other alternative modes of access or any

economically feasible and prudent alternative.

Since the National Park Service lacks authority to issue rights-of-way for pipelines under Section 28 of the Minerals Leasing Act of 1920 (30 USC 185), approval of the proposed TAGS project through a portion of the Denali National Park and Preserve therefore would require:

A specific determination that "... there is no economically feasible and prudent alternative route for the system."

A recommendation by the National Park Service to the president that the TAGS should cross a portion of the Denali National Park and Preserve.

A presidential recommendation to Congress supporting legislation to authorize construction of the TAGS project through Denali National Park and Preserve.

An act of Congress approving a TAGS alignment through Denali National Park and Preserve.

Several route options around Denali National Park and Preserve have been considered. These include following the general route of the Anchorage-Fairbanks Intertie and along the eastern bench above the Nenana River. The former was deleted because of severe engineering problems associated with crossing steep, deeply incised terrain (the intertie required helicopters to install its facilities in this area). The latter has severe conflict

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with expanding commercial lodging establishment supporting visitors to Denali National Park and Preserve and to the scenic setting now afforded park visitors.

Since an acceptable environmental and cost-effective alternative has previously been reviewed and approved as discussed in Appendix J of the DEIS, the Cook Inlet alternatives are unfavorable from a permit standpoint.

Number and type of permits discussed in the DEIS generally apply to both routes. However, the process and timing to obtain these permits is quite different. The proposed alignment from Livengood to Anderson Bay generally follows existing transportation and designated utility corridors and probably has less potential permitting delays since it is basically adjacent to constructed TAPS and authorized ANGTS to Delta Junction.

Additional technical reviews would be necessary whenever TAGS would lie close to authorized ANGTS or to TAPS. Routings to Prince William Sound would have more proximity reviews than those to Cook Inlet.

Both Cook Inlet and Prince William Sound routes involve military installations. Cook Inlet has one, and Prince William Sound has two. Cook Inlet routings would require permits from the Alaska Railroad; Prince William Sound would not.

Air quality permitting for the LNG plant near Valdez would probably require a monitoring program, as discussed in Subsection 4.2.6 in the DEIS. Preliminary emissions calculations indicate no major air emission increase from the facility as identified in Subsection 4.2.6 in the DEIS. The route alignments to Anderson Bay, Robe Lake, and Gold Creek would differ only in permits related to land use near Valdez. Though they might elicit a different response from local agencies relative to

current land use plans, there is no current information to suggest that either of these sites would be less favorable in terms of securing necessary permits, and all are considered favorable. The alignment to Gravina would pass through approximately 15 miles of the Chugach National Forest.

The forest is managed for multiple use, and there are no specific provisions for a utility right-of-way. On the basis of potential permitting problems which could delay or halt the proposed project, the Gravina alignment would have to be considered moderately favorable.

10. Minimize Potential Threat to National Security

Three questions must be answered with regard to pipeline alternative alignments and potential national security impacts. First, would any of the alignments potentially affect U.S. dependence on foreign energy supplies during a time of international conflict when supplies might be curtailed? Secondly, do any of the proposed alternative alignments pose a greater risk to the security of the supply from an action of war or terrorism? Finally, do the alignments pose any greater or lesser ability to establish effective security measures to protect them?

No matter which alignments were selected, 800 miles of pipeline always carries the potential for terrorism. None of the alignments offers any greater or lesser exposure to disruption. The only obvious potential difference vis-a-vis national security rests in the proximity of the TAGS pipeline to the existing TAPS and the authorized ANGTS systems. Should it ever become necessary to attempt to protect the TAGS line from possible terrorist

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actions, it would seem that security measures to protect a single TAPS, TAGS, and ANGTS corridor would have a greater potential for success than trying to secure two separate alignments through uninhabited areas. On this basis the proposed alignment to Anderson Bay and the alternatives to Robe Lake and Gold Creek are all considered favorable, and the Gravina and three Cook Inlet alignments are considered as moderately favorable.

11. Maximize Availability of Gas to Alaska Consumers

Though there is no specific plan to provide access lines to tap natural gas flowing through the proposed TAGS for use by public or commercial facilities along the route, this criterion considers the possibility of greater access to potential future uses as a favorable characteristic.

Cook Inlet alternative alignments also pass near Fairbanks, and potential future gas use would be considered favorable. In addition, the route parallels the Railbelt from Fairbanks through the Matanuska-Susitna Borough, providing potential direct future gas supplies to the population along this corridor. The Boulder Point and Cape Starichkof alignments provide a potential future gas supply to an area (Kenai/Soldotna) with the population and industrial infrastructure to maximize the potential for any possible future uses. The Harriet Point alignment, though it veers away from the prime population and infrastructure areas as it heads to the west side of the inlet, would pass through an area that has current industrial facilities (Beluga Power Plant, Drift River petroleum facility) and is proposed for future development (expansion of Beluga Power Plant and development of Diamond Chuitna coal mine

and export terminal). On the basis of this overall analysis, all Cook Inlet alignments are considered to be favorable.

The proposed alignment from Livengood to Anderson Bay passes close to the Fairbanks area, affording potential access to the second-largest population center in the state. With the recent completion of the Anchorage-Fairbanks electrical intertie and with the presence of the Alaska Railroad line from Fairbanks through Anchorage to Seward, both future public and commercial uses for natural gas are potentially favorable. Other than the Fairbanks area, the route passes through only small population centers through the remainder of the route to the Valdez terminus, where additional future possibilities may exist for use of natural gas.

The Robe Lake and Gold Creek alignments are essentially the same as the proposed project for this criterion and would be moderately favorable. Gravina differs mainly in that the alignment does not pass as close to Valdez, where existing infrastructure and resident population provide greater potential for wanting a gas supply or value-added industries than does Gravina. Therefore, the Gravina route would be rated unfavorable.

C. LNG Plant Site

1. Adequacy of Available Land

Adequate land is available at both Boulder Point and Cape Starichkof to construct the LNG plant and probably to provide an adequate buffer. The lands at the LNG plant site and for the buffer zone are, however, under private individual and Native corporation ownership, and development would be uncertain. The site at Cape Starichkof is privately owned and

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located adjacent to several residences and a recreational use area. The Boulder Point site is owned by individuals and a Native corporation and is rated as moderately favorable. The Cape Starichkof site has been given a rating of unfavorable. The Harriet Point site, located on state lands, is isolated from any other use and has adequate acreage for the construction of the LNG plant site and an adequate buffer zone. This site is rated as favorable.

The proposed LNG site at Anderson Bay contains approximately 300 acres of developable land with a 3,000-acre uninhabited buffer zone surrounding the shore side of the site which provides an adequate zone to ensure public safety. The site itself would be located on state-owned land, and the buffer zone is within both state and federal lands. The Gold Creek and the Gravina sites would be located on state-owned and possibly the Chugach Natives' corporation land and have adequate land area suitable for the development of an LNG plant site and buffer zone. All three of these sites are rated as favorable. The Robe Lake site, though located on state lands with adequate acreage for the construction of the LNG plant, abuts to privately owned land proximate to existing residential development and a high recreational use area. This site is considered highly unfavorable.

2. Avoid Areas With Poor Foundation Characteristics

The three Cook Inlet sites have an abundance of glacial till, gravel outwash, and alluvial material. Each site appears to contain foundation materials which are acceptable though not as desirable as the bedrock base found at the four Prince William Sound area sites and therefore would

be considered as moderately favorable in this evaluation.

The Anderson Bay site is composed of a series of bedrock ridges mantled with glacial till, presenting a good base for facility foundations. Robe Lake, Gold Creek, and Gravina sites are similar in structure, presenting similarly favorable foundation conditions.

3. Avoid Areas With Faults

None of the sites considered has active faults identified that could pose design and safety problems, although all of Alaska is potentially active. Therefore, the proposed Anderson Bay site and all alternatives would be considered as moderately favorable with regard to this criterion.

4. Avoid Sites Potentially Exposed to Seismic Sea Waves

Boulder Point and Cape Starichkof would be well above historical high water levels. Harriet Point site would be elevated high enough to withstand waves from seismic or volcanic events. On the basis of potential exposure to seismic sea waves, all Cook Inlet alternative sites were considered favorable.

The configuration and orientation of Port Valdez minimizes the potential that any major tsunami generated in Prince William Sound would have a major impact in the port. The proposed facility at the Anderson Bay site would be located above the highest anticipated seiche that might be expected to develop through submarine landslides such as occurred in Shoup Bay during the 1964 earthquake when the site was exposed to a maximum wave run-up of 78 feet (FPC 1976a). The Gold Creek site, at 300 to 500 feet,

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would be well above any potential seismic seawave, even though the 1964 run-up was 174 feet. The Robe Lake site (at 200 to 400 feet above sea level) would be both well away from the port and above the critical height.

The Gravina site would be located well above the predicted 10- to 16-foot wave height and 30- to 40-foot wave run-up elevation (FPC 1976a). All sites were evaluated to be favorable.

5. Minimize Length of Piping to Marine Terminal

The required loading line length is a factor of the distance from the LNG plant to the shore and the shore to the marine berth. All three of the alternative Cook Inlet sites have marine terminals located between 4,000 and 5,000 feet from shore. The length of the loading lines would be within 2.5 miles, and each would be considered moderately favorable.

At the proposed Anderson Bay and Gold Creek sites the distance from shore to marine terminal would be approximately 500 feet as is Gold Creek, and Gravina would be about 1,500 feet. All of these sites are rated as favorable for this characteristic since LNG storage tank facilities are close to the shoreline, and a minimal length of loading line would be required. The Robe Lake site would require approximately 5 miles of loading line between the LNG plant and the marine terminal since the LNG plant site would be situated a considerable distance from the marine terminal. This site would receive an unfavorable rating; in fact, this length of cryogenic loading line would be sufficiently beyond the 2.5-mile limit set by the FPC (1976a) that the site would be eliminated from further consideration.

6. Maximize Use of Existing Community Infrastructure

Of the three Cook Inlet sites, the two on the Kenai Peninsula, Boulder Point, and Cape Starichkof, would have excellent infrastructural support, including highway access, a commercial airport, available support industry, population base, and communities oriented toward expansion. These are considered as highly favorable for this criterion. Harriet Point, on the other hand, has no infrastructural base and would be considered as unfavorable.

The Robe Lake, Gold Creek, and proposed Anderson Bay LNG facility site have the advantage of being close to Valdez and its developed marine harbor area. Other advantages include a population base, housing, schools, airport, and highway access. Undoubtedly, these would require some expansion, but there is an excellent infrastructure base to develop. Anderson Bay, however, would require a 1,700-person camp during construction, and operation crews would be ferried to the site. Smaller camps would be required at both Robe Lake and Gold Creek during construction. All three of these would be considered moderately favorable.

Gravina offers no existing infrastructure from which to expand. All roads, airports, housing, and services would have to be built. All support services would either be developed or imported by air or water. Gravina would be rated as highly unfavorable by this criterion.

7. Avoid Sensitive Environmental Habitat

Among the Cook Inlet sites considered, Boulder Point has the least potential for impact on critical habitat. All three sites

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have various amounts of spruce woodland and mixed wetlands used by moose, bear, and other small mammals. Separating Cape Starichkof is the site's proximity to important anadromous fish streams, beach set net sites, important salmon migratory travel route to upper Cook Inlet, and clamming areas with attendant high recreational use. Harriet Point is distinguished by designation as critical habitat for moose, Harriet Creek is an anadromous stream, and the coastal intertidal zone is considered critical for razor clams and harbor seals. Boulder Point is considered moderately favorable, and Harriet Point and Cape Starichkof are rated as unfavorable with respect to potential impacts to sensitive environments.

The proposed Anderson Bay site is similar to much of the land surrounding Port Valdez and Prince William Sound in general. It does not have any particularly high concentrations of shorebirds or waterfowl and is not noted for use by marine mammals. An active bald eagle nest has been spotted to the west and outside of the buffer zone. Of two streams that cross the site, one is utilized by anadromous fish. Assuming that disturbance to the eagle nest can be minimized, the site is considered to be moderately favorable with respect to this criterion.

The Gold Creek site is similar to Anderson Bay with the exception that there is important waterfowl use of nearby Island Flats. There is an active bald eagle nest within 0.5 miles of the site and an anadromous fish stream crosses just north of the site.

The Robe Lake site is upland of an important salmon spawning area and migratory pathway but is itself not of major

importance as a sensitive environment. Gold Creek and Robe Lake sites are considered moderately favorable on the basis of limited potential to impact sensitive environments.

Sensitive aspects of Gravina include the presence of numerous bald eagle nests and utilization of the area by sea otters, harbor seals, and sea lions (FPC 1975). Gravina is rated as unfavorable on this basis.

8. Public Safety Considerations

Of the Cook Inlet sites, Boulder Point and Cape Starichkof both have a small number of nearby residences, some recreational use, and are considered as moderately favorable. Large areas of privately held land in the vicinity could be developed in the future. At Boulder Point residences in the vicinity of the LNG plant site could be required to be relocated, depending on the need for a specified exclusion zone. Harriet Point is well away from any population and would be rated as favorable.

The Anderson Bay site is well away from residential and commercial areas, airports, and the Alyeska marine terminal. In the event of a major accident or spill (as discussed in Subsection 4.2.19 of the DEIS) the Anderson Bay site would be considered as favorable in terms of public safety. The Gold Creek site is away from residential or commercial areas but in a heavy recreational use area. The Robe Lake site is surrounded by residences and is also heavily used for recreation. Gold Creek would be considered as moderately favorable and Robe Lake highly unfavorable from the standpoint of public safety in the event of a major accident or spill. Gravina would be well away from any population and is rated favorable.

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9. Maximize "Value-added" Industrial Opportunities

Of the Cook Inlet alternatives, those sites with access to the strong infrastructural base of the Kenai Peninsula, Boulder Point, and Cape Starichkof are rated as favorable. For Harriet Point, potential secondary development would have to wait additional infrastructure to support the expansion, so this site would be considered as unfavorable.

The proposed Anderson Bay site, as well as the other two sites on Port Valdez, offer some potential for development of secondary industries in that the requisite infrastructure and economic base are extant in Valdez. With the presence of the TAPS terminal operation and the proposed Alaska Pacific Refinery, it could be expected that future expansion would be limited only by space and the community's ability to absorb additional population. The potential for industrial value-added opportunities for these sites would be considered as moderately favorable. With virtually no infrastructural development, Gravina would be considered as highly unfavorable with respect to this criterion.

10. Minimize Site Preparation Requirements

Boulder Point, Cape Starichkof, and Harriet Point sites would require the least site work for LNG plant construction and are considered as favorable.

The proposed Anderson Bay site would require a substantial amount of earthwork before construction. Soils are of good quality overlaying bedrock, and site preparation would not pose major difficulties. Excess material could be used to develop the construction wharf,

off-loading area, construction support, and laydown area. The situation is similar for the Robe Lake and Gravina sites, and all are considered as moderately favorable. The Gold Creek site would require extensive earthwork with the added problem of spoil disposal for the vast amount of excess material created during site preparation. Gold Creek would be rated as unfavorable for this criterion.

D. Marine Terminal

1. Minimize Exposure to Extreme Oceanographic Conditions

Each of the three Cook Inlet sites must deal with high currents and waves, sea ice that can include solid iced-up conditions at Boulder Point, common occurrence of floating ice "pancakes" in the range of 6 to 18 inches thick, and the possibility of seismic sea waves. Tsunami risk is perhaps greatest at Harriet Point due to the presence of active volcanoes near the site. Currents and sea ice are greatest at Boulder Point. Overall oceanographic conditions that could affect daily operations and safety would be considered to be unfavorable at all three sites.

The proposed marine terminal site at Anderson Bay is in an area with low currents and waves of less than 1 foot about 90 percent of the time, very little sea ice, and a less than average potential impact from seismic sea waves. This situation would be similar at the other three alternative Prince William Sound sites considered in this analysis. The presence of icebergs calved from Columbia Glacier in ship channels of Prince William Sound is closely monitored by the U.S. Coast Guard and reported through the Valdez Vessel Traffic Service and is not considered an

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obstacle to operations. All Prince William Sound sites evaluated would be considered favorable with respect to oceanographic conditions that would be encountered in Alaska coastal waters.

2. Minimize Distance to 60-Foot
Depth Isobath

At Boulder Point, Harriet Point, and Cape Starichkof, the 60-foot isobath is between 4,000 and 5,000 feet offshore. Boulder Point, Harriet Point, and Cape Starichkof are classified as moderately favorable.

The 60-foot isobath is located within 500 feet of the shoreline for the proposed Anderson Bay site as well as for alternative Gold Creek. The alternative Robe Lake site 60-foot isobath is approximately 2,500 feet offshore but several miles from the LNG plant site. The berthing area for the Gravina alternative lies about 1,000 feet offshore. On the basis of the distance to tanker berthing depth from the shoreline, Anderson Bay, Gold Creek, and Gravina would be considered favorable, but Robe Lake would be ranked as unfavorable.

3. Maximize Suitability of Tanker
Maneuvering and Anchoring Areas

Each of the three Cook Inlet sites has adequate room for maneuvering and anchoring, however, at Cape Starichkof these are areas of significant longshore drift and shoaling which could require dredging. Boulder Point and Harriet Point rate favorably, and Cape Starichkof is moderately favorable.

The area for anchoring and maneuvering vessels is excellent at the proposed Anderson Bay marine terminal location and for alternatives Gold Creek and Gravina due to the broad expanse of open water with

excellent anchorage depth of less than 200 feet (FPC 1976a). These three locations would be rated as favorable. The terminal facility location with the alternative Robe Lake site would be proximate to the main aggregation of Valdez recreational and commercial vessels and located at the head of the Port Valdez, which would restrict maneuvering room and limit anchorage areas. The Robe Lake location would be considered unfavorable with respect to this criterion.

4. Minimize Potential Hazards to
Navigation

All three of the Cook Inlet sites benefit from a good system of navigational aids and the requirement for vessels to be accompanied by a state licensed coastal pilot north of Kachemak Bay. All three of these sites must contend with problems associated with winter sea ice, shoaling, and submerged outcrops. The Cape Starichkof site in particular could require dredging to remove shoals. Uncharted submerged outcrops and boulders at Boulder Point pose definite hazard. With major consideration to navigation safety, Cape Starichkof and Harriet Point sites are considered as moderately favorable, and the Boulder Point site is rated as unfavorable.

The automated vessel traffic service (VTS) already in place for the Valdez Arm, Valdez Narrows, and Port Valdez and the limited potential navigational hazards (except for icebergs from Columbia Glacier and those related to shoaling and rock outcrops) make the proposed Anderson Bay site and alternative Gold Creek site favorable from a navigability standpoint. The alternative Robe Lake marine terminal site located near the main aggregation of Valdez recreation and commercial vessels and in the general vicinity of a sunken wreck

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would be rated as unfavorable. Gravina does not have the benefit of the automated VTS but otherwise has favorable navigation conditions and would be rated moderately favorable.

5. Minimize Potential Problems
Related to Soils and Geohazards

Cook Inlet marine terminal sites would all be subject to erosion and accretion problems associated with the high current regime and documented movement of large-scale mobile bedforms. Proximity to active volcanoes would expose facility operations to added risk of seismic sea wave. General engineering soil characteristics related to shear strength and liquefaction potential are considered to be favorable, and the Cook Inlet terminal sites are rated overall as favorable.

At the proposed Anderson Bay site there is minimal probability of a major submarine slide in the area of the marine terminal. The situation is similar in most respects to the Alyeska marine terminal site. A slide elsewhere in the harbor, such as occurred in Shoup Bay during the 1964 earthquake, would be expected to generate a sea wave that could affect any terminal site in Port Valdez. Such conditions would be incorporated into facility engineering design. At the Robe Lake terminal site there is some degree of sediment instability as evidenced by recurring submarine slides. Also, there is considerable potential for soil liquefaction and ground failure during a seismic event. Little information exists regarding submarine soils at Gold Creek; however, the submarine slopes along the front of the alluvial fan at the mouth of the creek are probably similar to those that underwent failure in Shoup Bay during the 1964 earthquake. The Gravina site has

favorable subsurface conditions with minimal probability of submarine slides (FPC 1976a). On this basis, the Anderson Bay and Gravina sites are considered to be favorable, but the Robe Lake terminal site is considered as unfavorable because marine-specific information on potential hazards for the Gold Creek site was not available. However, based on the fact that the sites similarity to Shoup Bay, the Gold Creek site should probably be classed as unfavorable until site-specific information could be developed to suggest otherwise.

6. Minimize Threat to National
Security

None of the sites considered poses any major advantage or disadvantage to national security from an economic point of view. The proposed TAGS LNG terminal and the Alyeska marine terminal are located within 3.5 miles of one another. Operations to secure and protect the two facilities in time of national crisis would be facilitated by their proximity. Due to the balance between these two factors, the proposed Anderson Bay site and all alternatives considered would be rated as moderately favorable with respect to this criterion.

E. Evaluation of Proposed TAGS Project and
Alternatives Considered

1. Introduction

The summary of evaluation criteria analyses (Table VI-1) provides a matrix for comparing the proposed action and the alternatives considered. The overall results of the criteria evaluation for the proposed project at Anderson Bay are summarized below, followed by a synopsis of the evaluation of each of the alternatives.

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2. Proposed Project - Anderson Bay

Evaluation criteria considered for the proposed TAGS project was rated either favorable or moderately favorable for each criterion.

Among criteria for the Livengood to proposed Anderson Bay route, only the number of water crossings and the potential access of the pipeline to possible future uses along the right-of-way were rated higher than for other alternatives.

LNG siting criteria for the Anderson Bay site were all favorable or moderately favorable.

3. Boulder Point

Evaluation of the pipeline route from Livengood to the Boulder Point site identifies numerous criteria for which this alternative is less desirable to the applicant's proposed project, including a 15-mile subsea crossing of Cook Inlet. Most significant are those factors ranked as unfavorable. These include use of proven construction technology, geohazards, and land-use incompatibility. Permitting is rated as highly unfavorable, largely on the basis of the passage through Denali National Park and Preserve. As discussed under evaluation of individual criteria (Section V.B.9), this alignment for this routing would require congressional approval.

For all criteria related to siting of the LNG plant, the Boulder Point site rated at favorable or moderately favorable. The Boulder Point ratings exceeded those for the proposed Anderson Bay site only for infrastructure, value-added development, and site preparation. For all other criteria, Anderson Bay was rated equal to or better. Public safety and marine terminal acceptability are superior at Anderson Bay.

The existing Kenai Peninsula infrastructure would be better able to support construction and operation of the facility with existing community resources. The Kenai Peninsula would probably be better situated to support expanded ancillary projects should they be possible. Third, site preparation at the Boulder Point site would require less construction terrain disturbance. For land availability, soil foundation characteristics (presence of bedrock), and the distance from the LNG plant to the marine terminal, the advantage lies with the proposed project.

Though characteristics of the marine terminal also all favor selection of the Anderson Bay site, the Boulder Point site is generally favorable. Rated as less favorable were two criteria for a Boulder Point marine terminal--the distance from shore to water deep enough for maneuvering and berthing is more than 4,000 feet and navigational hazards, including shoaling, submerged boulders, outcrops, ice conditions, and excessive currents. Despite these constraints the Boulder Point site appears to be a feasible alternative.

4. Cape Starichkof

Cape Starichkof, which shares a common alignment with the Boulder Point site as far as Boulder Point, has one distinct disadvantage--the extra pipeline length and additional compressor station required to transport the gas 59 more miles would have many implications for construction time and associated increase in impacts to the environment and costs. The LNG site characteristics are similar to those for Boulder Point except that land availability would be more of an issue and the environment in the Cape Starichkof vicinity is more sensitive with respect to

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fisheries, and recreational use of the area. Marine terminal site characteristics are also similar to those for Boulder Point except that navigational hazards, uncharted submerged boulders and outcrops, and potential sea-ice problems would be less of a factor at Cape Starichkof. The same permitting problems associated with Denali National Park and Preserve exist. Cape Starichkof was rated as less favorable than Boulder Point and eliminated from further consideration.

5. Harriet Point

The pipeline alignment to Harriet Point poses problems over the Boulder Point and Cape Strichkof alignments. Like Starichkof, Harriet Point would require a longer pipeline and an additional compressor station. Most of the route along the western shore of Cook Inlet is away from available infrastructure to support construction. Few data exist for environmental impact assessment and engineering design analyses. The route also passes through areas of sensitive environments for wildlife and fisheries. The LNG plant site has advantages of land availability and little potential impact to public safety from an accident or spill should one occur. One distinct disadvantage for the LNG plant site is the lack of any infrastructure. Facility construction and operation would be much more difficult and costly since there is no community or commercial base in the immediate vicinity to support the project. The potential for any secondary development would be curtailed. Along with the permitting issue associated with the crossing of Denali National Park and Preserve, Harriet Point would be rated as less favorable than Boulder Point and eliminated from further consideration.

5. Gravina

For the pipeline from Livengood to the site, Gravina was rated as unfavorable for use of proven technology, geohazards, land-use compatibility, and permitting. All of these factors were related to the segment of the route from Keystone Canyon through the Chugach Mountains, including 15 miles of routing through the Chugach National Forest. Though operation of a marine terminal at the site had no serious drawbacks for the LNG facility, Gravina was considered to be highly unfavorable infrastructure for construction and operation of the facility and with regard to potential benefits that might be derived from secondary developments in the vicinity of the plant. The Gravina site has numerous distinct disadvantages compared to the proposed Anderson Bay site and eliminated from consideration.

7. Gold Creek

The Gold Creek site rated as favorable or moderately favorable for nearly all evaluation criteria. The final segment of the pipeline alignment, near Robe Lake and around the outskirts of the city, was not as favorable as that of the proposed project. The last 3 miles along the west shore of Port Valdez would be located in steep-sided hills, which would result in difficult construction, movement of large volumes of material, and a broad visual scar along the mountainside. The LNG plant site would require extensive excavation and would pose the added problem of disposing of large volume of spoil from the site. Use of the Gold Creek site would negatively affect potential expansion of the city and recreational use of the Gold Creek area

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and would require major site work and spoil disposal. Although the rating of the Gold Creek site was similar to the proposed Anderson Bay site, it did not appear to have any substantive advantages over the proposed TAGS project and was eliminated from further consideration.

8. Robe Lake

Though the Robe Lake alternative would result in the shortest pipeline among Prince William Sound alternatives, consideration of the LNG site and the associated marine terminal facility immediately highlight the major concerns with this alternative. Land that would be needed for the LNG facility is in the midst of residential and recreational use areas. Major site work would be required, and resultant impacts on aesthetics, interference with recreational use, and even removal of the parcel of land from that available for residences or recreation would be major drawbacks. Though the safety record for LNG plants is excellent, should a catastrophic accident or spill occur, this site would be the worst among the TAGS alternatives in terms of potential impact to public safety. Further, the distance from the LNG plant site to the shoreline and the distance from shore to water deep enough for tanker maneuvering and berthing combine to require a 5-mile cryogenic loading pipeline from the plant to the LNG tanker loading area. The engineering and cost of such a line would make it nearly infeasible. The location of the berthing and maneuvering area within the harbor has disadvantages with respect to navigational safety, and the submarine soils in this region of the harbor are not favorable for development. Overall, the Robe Lake site should be eliminated from consideration.

F. Summary

Neither of the Cook Inlet alternatives to Cape Starichkof nor Harriet Point offers engineering, environmental, cost, or safety advantages over location of a facility at Boulder Point. The cost, time, and additional impacted area associated with the Cape Starichkof and Harriet Point sites make them less desirable options and therefore they have been eliminated from further consideration.

Of the three alternatives considered for the Prince William Sound region, Gold Creek is the only one that appears comparable to the proposed Anderson Bay site. However, due to the extensive earthwork required for the LNG plant site, routing through an area of expansion for the city of Valdez, the associated spoil disposal requirements, the difficult pipeline constructability for the last 3 miles to the site, and the greater negative impacts on Valdez recreational use and potential future expansion, this alternative offered no overriding advantage over the proposed project at Anderson Bay.

Note: For cited references, see References of DEIS pages ___ to ___.

OILWATCH ALASKA

PO Box 101555 Anchorage, AK 99510 © © Ph: 907-277-8910 Email: oilwatch@alaska.net

March 2, 1998

Hon. Representative Mark Hodgins
Room 110
State Capitol
Juneau, AK 99801-1182

Dear Representative Hodgins,

Your attention to the North Slope Gas Line is to be commended. Many questions remain to be asked and we have some as well.

In addition to the many economic type questions, there is the issue of anti-trust which deserves consideration. There are two active anti-trust cases coming forth at the moment, one is Oxy before the FERC and the other is Maritime Endeavor which has a federal case pending against Alyeska. These cases raise some of the same questions that Dr. Richard Fineberg pointed out in his report to us entitled, *The Big Squeeze: TAPS and the Departure of Major Oil Companies Who Found Oil on Alaska's North Slope*. This report suggests that the major owners of the Trans-Alaska Pipeline (TAPS) may be using their control of the pipeline to strangle competition. One result of these actions may be costing Alaskans and their public treasury billions of dollars. I will be happy to provide you a copy of Dr. Fineberg's report as well as communications we have had with the Attorney General's office. Dr. Fineberg's report and the anti-trust actions that are cropping up reinforce the need for an independent examination of the facts. Some of these same concerns may also apply to North Slope Gas.

We understand that Pedro Van Meures is appearing before House Special Committee on Oil and Gas Tuesday morning, and there are a number of questions that come to mind that he might be able to address:

1. What are the effects of Asian economic problems on (a) demand, (b) capital for a major (grassroots) project?
2. Are there any major changes in the supply from existing projects?

3. Effects of economic changes since 2/97 on (a) timing and (b) the number of possible grassroots projects.
4. Regarding the nine projects ranked at p. 21 of his 2/97 Executive Summary, how would he rank each of the nine projects in terms of:
 - (a) changes in hurdle rate of return for project and
 - (b) gap between (a) and the probable trend of the project's projected Rate of Return (better or worse than 12 months ago)?
5. Are there other competing grassroots project on the map?
6. Would formal structure of public oversight of the very broad negotiating powers the proposed package gives the administration materially affect the project's hurdle rate of return? If so, would it enhance (lower) the project's hurdle rate of return by reducing litigation threat and instability or would it detract from the project's attractiveness (raising the project's hurdle rate of return)?

It seems that the Asian economic crisis may: a) have little effect, b) kill some potential competing projects, c) may encourage Asian producers to sell their gas at much lower prices than Alaska could compete with in order to have some income as they struggle with their financial crises.

It is not easy to sort out, but I wish you well in trying to do so in the best interest of Alaskans--we need to be well compensated for our valuable nonrenewable resources. Rushing this project forth may or may not be beneficial. If there is anything that our expertise or knowledge base can contribute to your efforts, please call or email. Thank you.

Most sincerely,



Jim Sykes, Executive Director

LEGAL SERVICES

DIVISION OF LEGAL AND RESEARCH SERVICES
LEGISLATIVE AFFAIRS AGENCY
STATE OF ALASKA

(907) 465-3867 or 465-2450
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Juneau, Alaska 99801-2105

MEMORANDUM

March 11, 1998

SUBJECT: Gas projects (CSHB 393(O&G))

TO: Representative Mark Hodgins, Chair
House Special Committee on Oil and Gas

FROM: Tamara Brandt Cook *TBC*
Director

Here is a draft committee substitute you requested of a bill originally introduced by the governor. I have some comments.

(1) The bill as introduced does not seem to comply with Art. IX, sec. 1 of the state constitution which states:

The power of taxation shall never be surrendered. This power shall not be suspended or contracted away, except as provided in this article.

Under AS 43.82.210 in the bill, a contract will contain terms that substitute periodic payments in lieu of taxes. These contract terms will, I suppose, be expected to prevent the state from later changing the law and imposing those taxes as a result of the federal and state prohibitions on the impairment of contracts. (Art. I, sec. 15, Constitution of the State of Alaska) The problem is that this is exactly the kind of contract that is prohibited under Art. IX, sec. 1. While the state may certainly provide for a tax exemption, I do not think it is possible for the state to give up its power to repeal the exemption and impose the tax in the future. Any contract that has that effect will probably be void as against public policy.

(2) AS 43.82.230(a) requires the commissioner of revenue to include in a contract a term requiring contracting with and employment of state residents, "within the constraints of law..." As a practical matter, there is little chance that such a term could ever be included. (*Hicklin v. Orbeck*, 565 P.2d 159 (Alaska 1977), rev'd on other grounds, 437 U.S. 518 (1978)) To the extent that the change made in this CS to the definition of "Alaska resident" adds a durational residency requirement of one year or longer, it is likely to be constitutionally invalid.

(3) The requirement added in AS 43.82.435 of this CS that the authority to enter into a contract be authorized by the legislature may violate the separation of powers doctrine. While the legislature may enact standards for the exercise of an executive power, it may generally not reserve the power to approve or authorize a particular action. For example,

Representative Mark Hodgins

March 11, 1998

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former AS 37.05.280, requiring legislative approval of certain leases of state office space, was held to violate the principle of separation of powers. (Marine View Chapter Juneau Tenants Association v. Alaska State Housing Authority, Superior Court, First Judicial District, 1JU-80-1037 Civ., Nov. 3, 1981) Currently the Procurement Code contains a similar lease approval requirement in AS 36.30.080, but at the time of the Code rewrite, a representative of the Attorney General's office testified that the provision was invalid. Likewise, the executive branch has, for many years, taken the position that the requirement for legislative approval of royalty oil contracts is unconstitutional (See Governor's transmittal letter for SB 164 dated April 22, 1995, Senate Journal, pages 1190-1191) Note, however, that while the executive branch has consistently, and, in my view, correctly, asserted that legislative approval provisions are unconstitutional, it has often conformed to them to accommodate the legislative desire for oversight.

(4) AS 43.82.400 uses the term "public revenue." I don't know what that means.

(5) The definition of "uneconomic or uncompetitive" added in paragraph 12 of AS 43.-82.900 in this CS is not useful. That phrase is not used in the bill at all except in the paragraph (11) of the same section. Taken together the net result of both the definitions is to define "stranded gas" as follows: (11) "stranded gas" means gas that is not being marketed due to prevailing cost or price conditions as determined by an economic analysis by the commissioner. Is that a good definition for your purpose? If so, I suggest you substitute it for paragraphs (11) and (12).

(6) In AS 43.82.510 added by this CS it is presumed that more than one municipality will be affected and so several members will be appointed to the group. What if only one municipality is affected?

(7) In AS 43.82.200(2)(A) and (B) are mutually exclusive. Does this make sense?

(8) AS 43.82.300 is unclear to me. Upon approval of an application, a commissioner can request certain information, but, if the information is not provided, the commissioner is prohibited from continuing to review the application. Hasn't the application already been approved? What, then, is left to review?

TBC:lmb
98-035.lmb

Enclosure

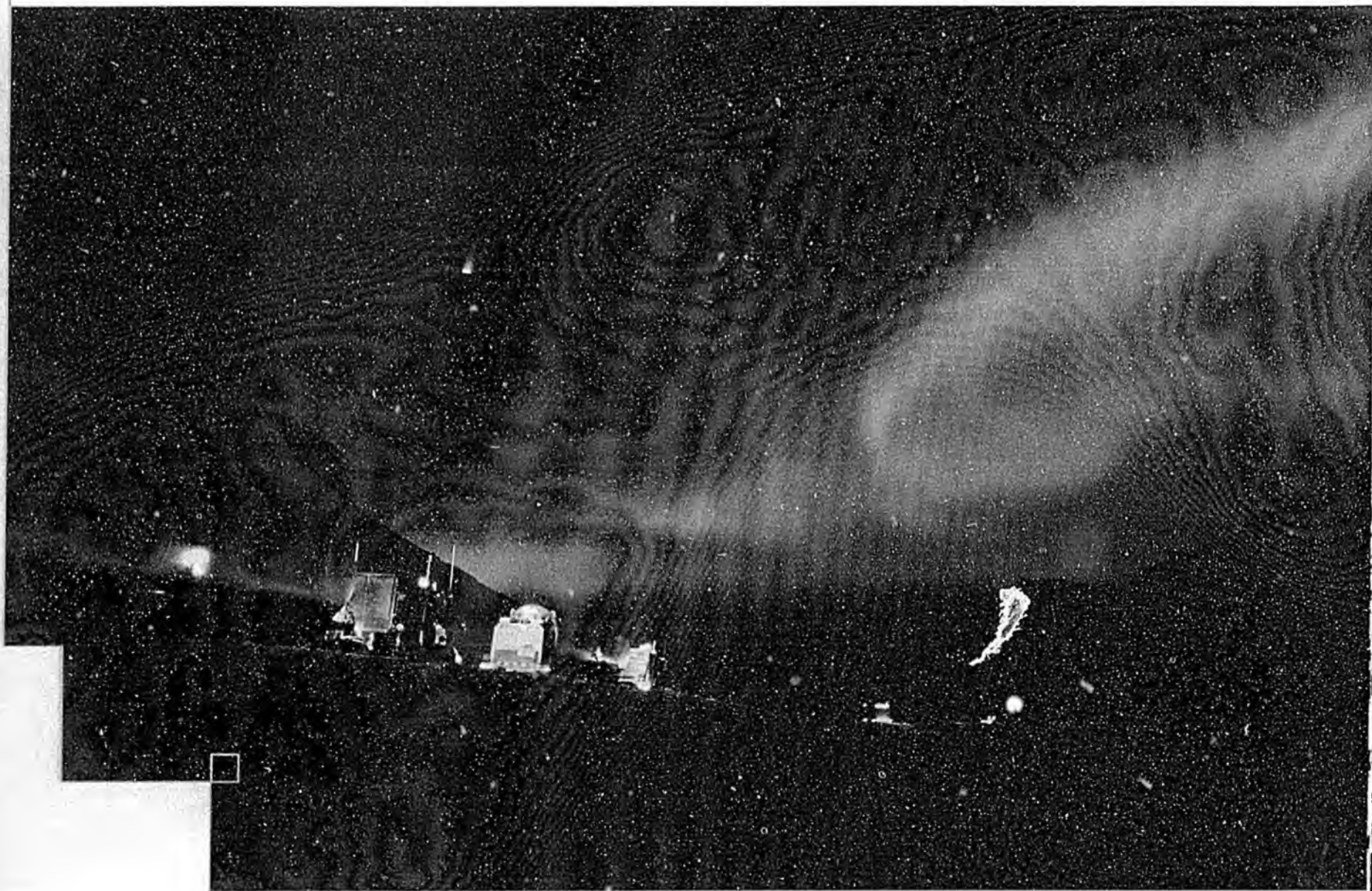


ALASKA NORTH SLOPE GAS

Naturally Powerful

ARCO Alaska, Inc. 

PARTNERS IN ALASKA'S FUTURE



*"Development of North Slope Gas
is an important part of ARCO
Alaska's strategic game plan."*

Ken Thompson
President, ARCO Alaska



*North Slope Gas Project
advantages include a proven
resource, existing infrastructure,
and growing market demand.*

ALASKA NORTH SLOPE GAS *Naturally Powerful*



Alaska has a unique opportunity: the state's North Slope contains enormous known natural gas resources. In geographic terms, Alaska is ideally situated for deliveries to Pacific Rim nations. Japan, Korea, Taiwan and many other Asian countries are expected to increase their use of natural gas throughout the next decade. On a worldwide level, the predicted demand for liquefied natural gas (LNG) will exceed current supplies within the same time frame.

The Alaska North Slope Gas Project would make it possible to deliver large volumes of LNG to these emerging markets overseas. Much of the necessary field equipment is already in place at Prudhoe Bay, including the world's largest gas-handling facility. The trans-Alaska pipeline may provide a right-of-way corridor and infrastructure for transportation to tidewater. Overseas transportation systems are established; since 1969, Alaska gas producers have been providing Japan with regularly scheduled tanker shipments of LNG from the Kenai region.

Before North Slope LNG can be brought to market, project sponsors must achieve economic viability. Three core challenges remain: further reduction of capital costs, confirmation of buyers for large volumes of LNG, and development of a stable, appropriate tax and regulatory environment.

Your interest in Alaska North Slope LNG is appreciated. The following pages provide an overview of the proposed methods for developing and marketing this clean-burning energy resource. For more details, please contact ARCO Alaska.

THE RESOURCE

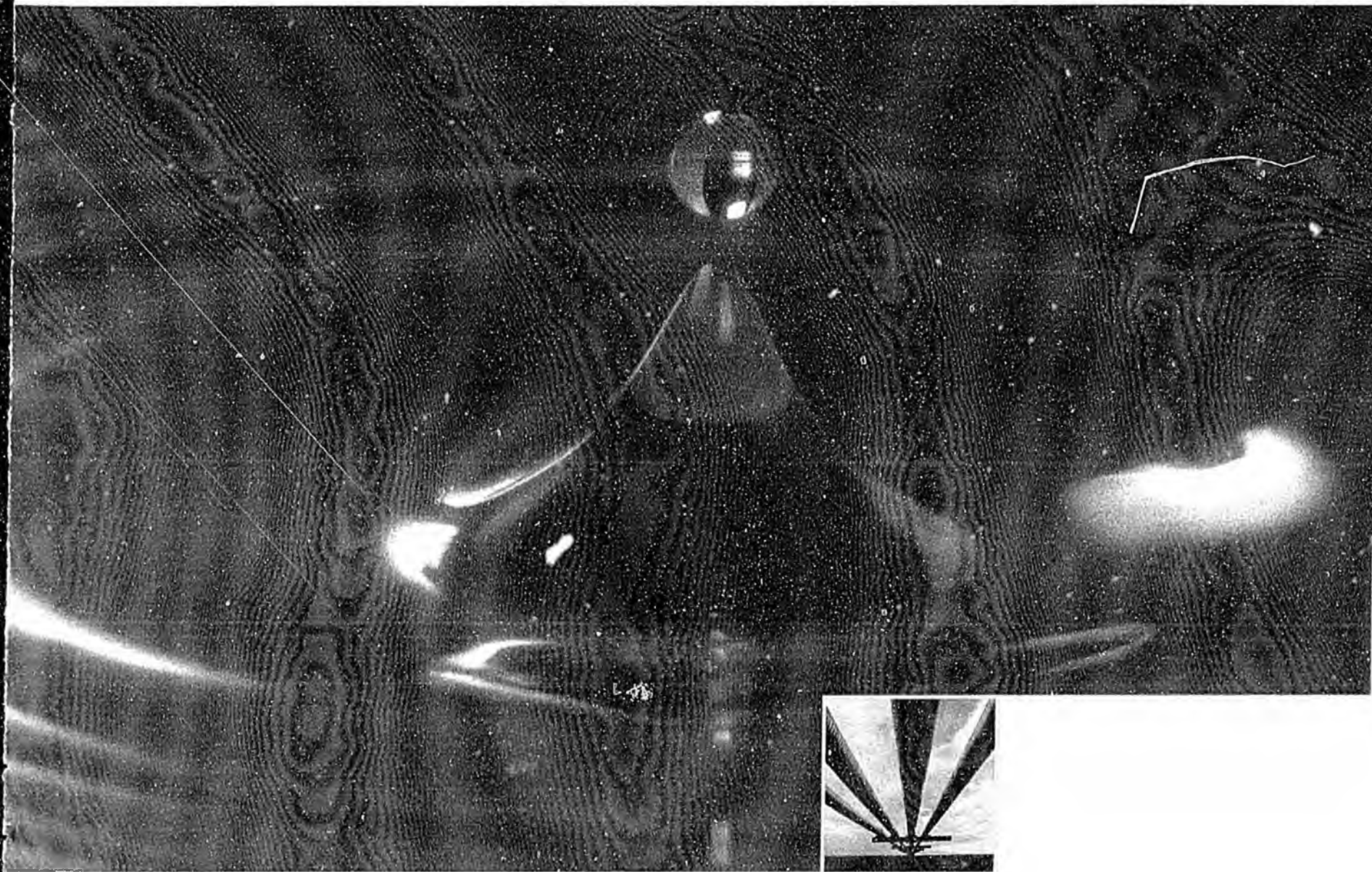
ARCO discovered the super-giant Prudhoe Bay oil field in 1968. Recoverable natural gas resources at Prudhoe Bay are estimated at 26 trillion cubic feet—the energy equivalent of more than 3.8 billion barrels of oil. Of this amount, ARCO owns 32 percent, or over 8 trillion cubic feet, of recoverable gas. Exxon and British Petroleum (BP) are also significant owners of the asset. Surrounding oil fields may contain an additional 5 trillion cubic feet.

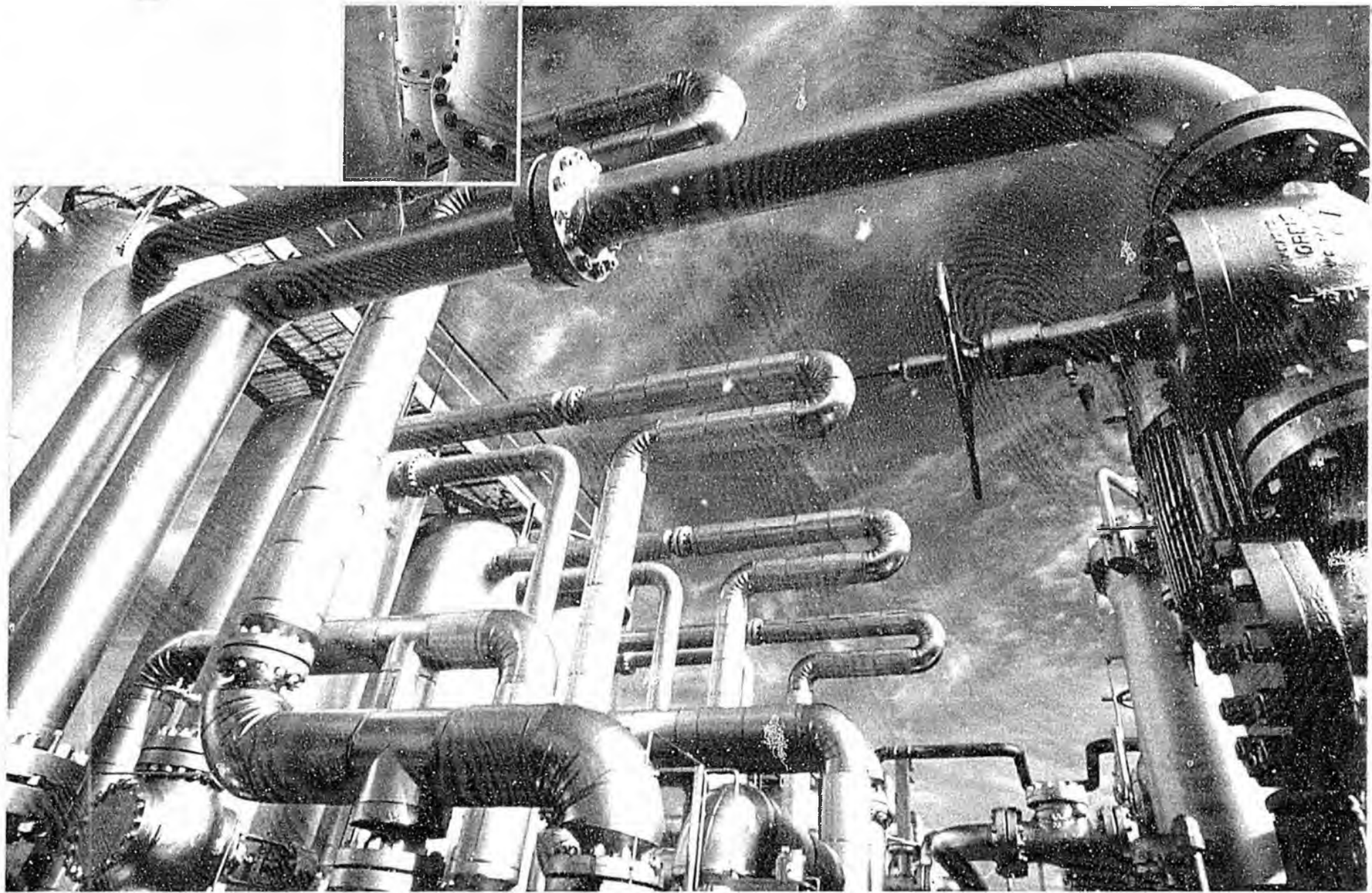
The North Slope generates large volumes of natural gas as a by-product of oil recovery. This gas is processed at facilities installed and operated by ARCO Alaska, on behalf of all Prudhoe Bay producers. Operations were expanded in 1990, and again in 1993, creating the world's largest gas-handling complex. The plant can safely process up to 8 billion cubic feet of natural gas every day—an amount exceeding Japan's daily gas usage.



Prudhoe Bay Gas Ownership

<i>ARCO</i>	32%
<i>Exxon</i>	32%
<i>BP</i>	21%
<i>State of Alaska</i>	13%
<i>Others</i>	2%







LNG transportation at low pressure in dedicated ships is the industry standard.

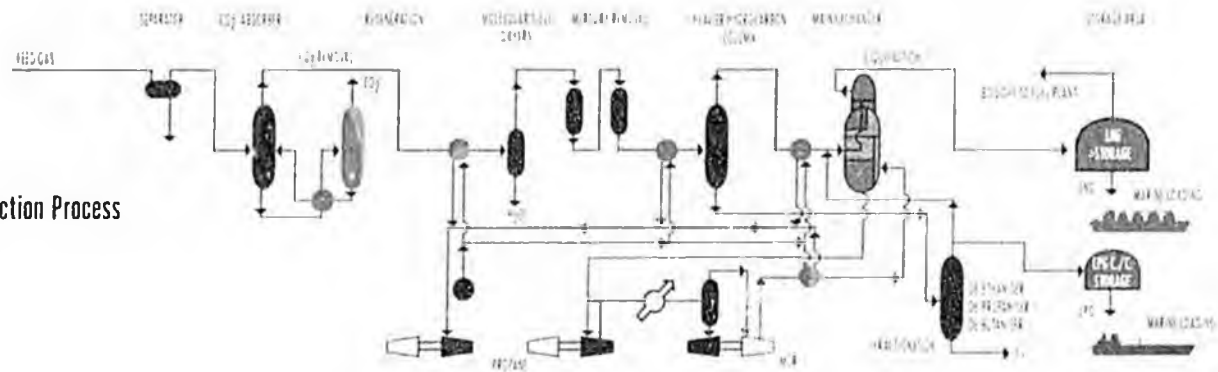
TECHNOLOGY & SAFETY

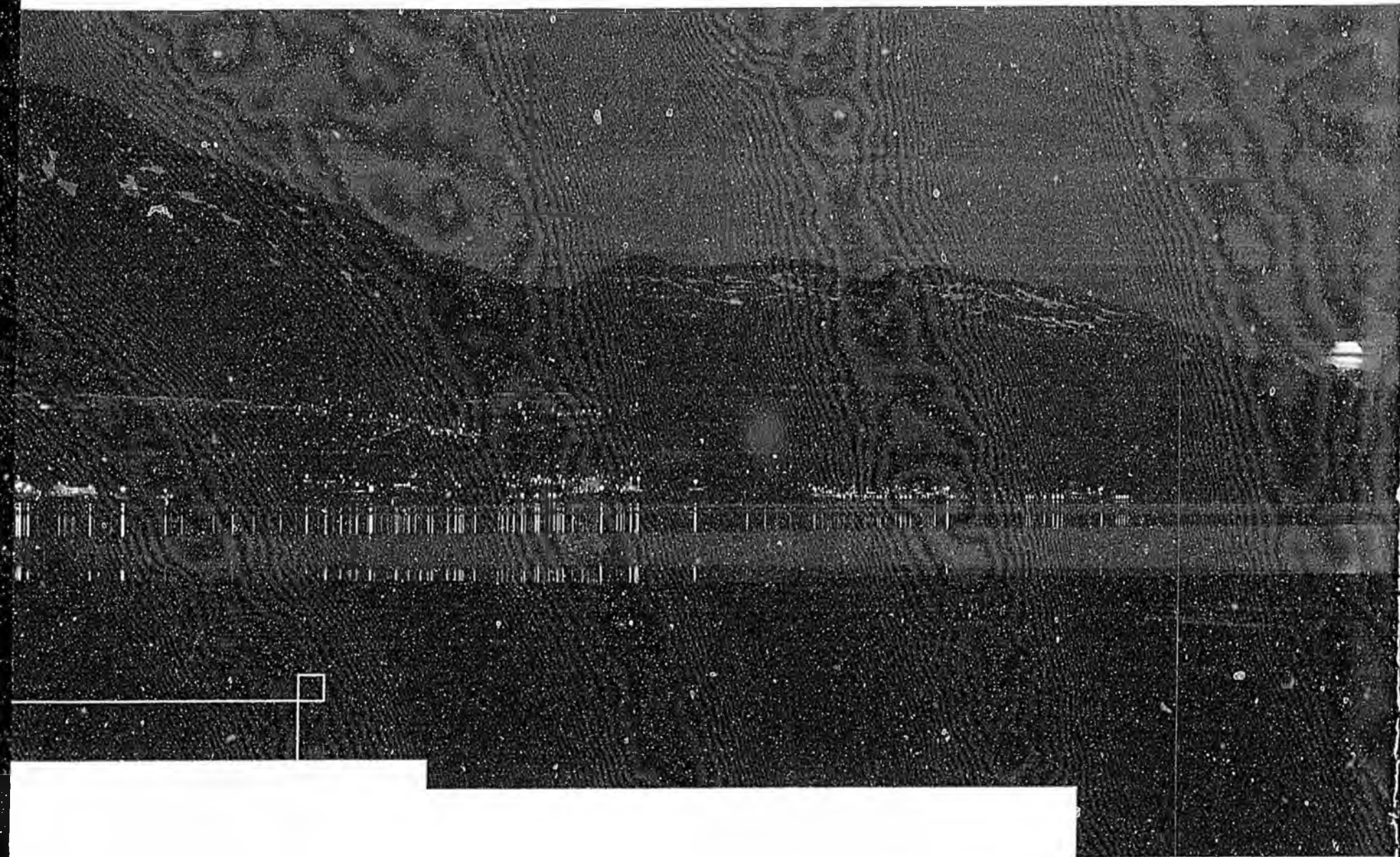
Natural gas is pure; it can be used directly by a power plant or other end-user. On land, gas is transported to market by pipeline. But before natural gas is transported long distances across water, it is liquefied by chilling to -260°F , using safe and proven super-cooling technologies. This LNG uses 1/600th of the volume required by the vapor; a gallon of LNG weighs 45 percent less than a gallon of water.

LNG is carried at low pressure in refrigerated tankers, and delivered to ports equipped with specialized receiving facilities. The liquid is stored in refrigerated tanks. When natural gas is needed, the LNG is allowed to warm, restoring the liquid to a gaseous state, which can then be piped to end-users.

ARCO Alaska has nearly three decades of experience working with North Slope natural gas. This proven expertise and safety record qualifies ARCO for this world-class LNG project.

Typical LNG Production Process







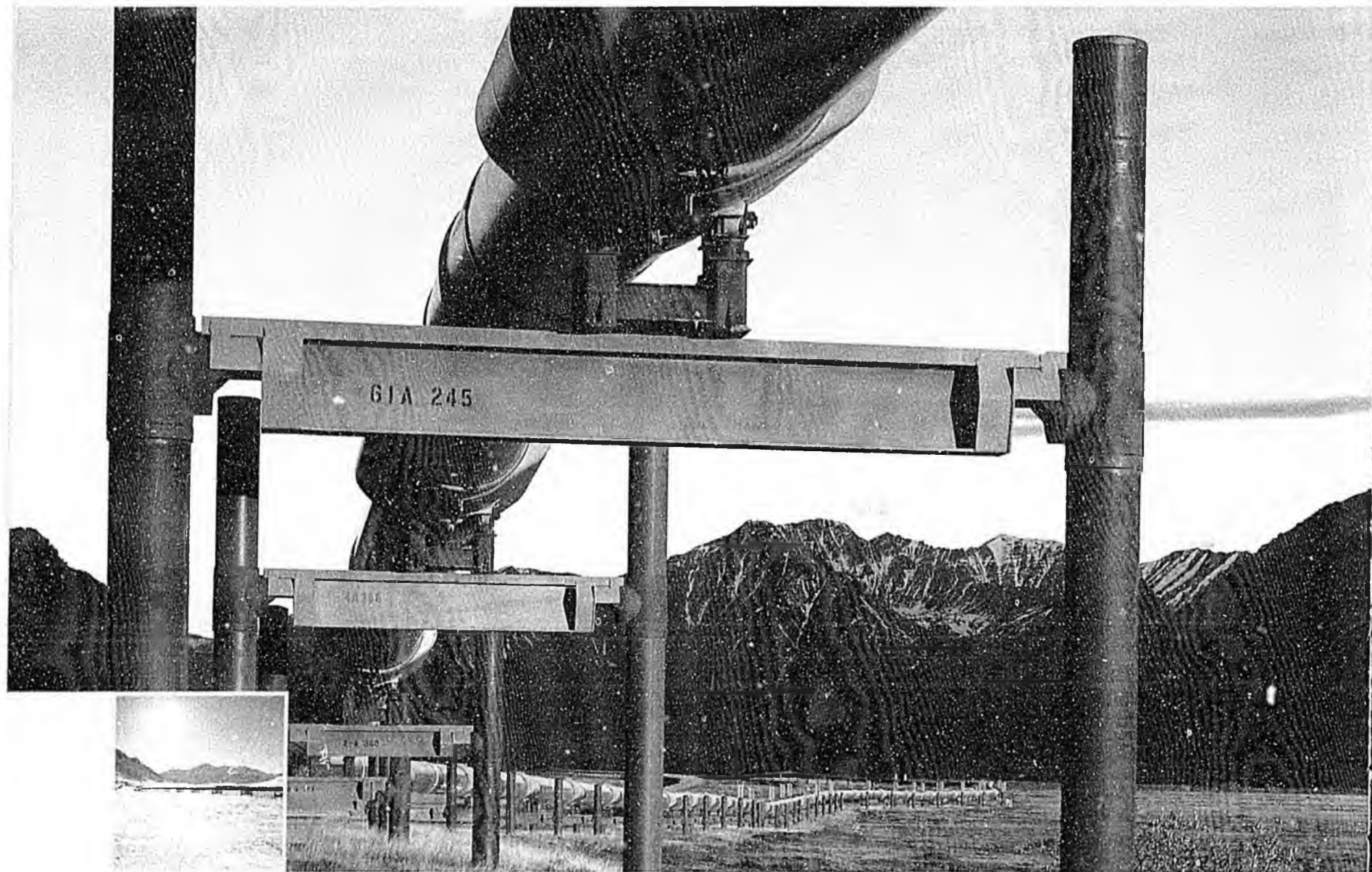
THE OPPORTUNITY

The Alaska North Slope Gas Project closely parallels crude oil production. Produced natural gas will begin its journey at a new Prudhoe Bay gas-conditioning facility, where carbon dioxide and trace impurities will be removed. After purification, the pipeline-quality gas will be pressurized to 2,400 psi, and then cooled to pipeline temperature (about 30°F). Gas will be transported from the North Slope via gas pipeline (located roughly parallel to the trans-Alaska oil pipeline) along an 800-mile route to a liquefaction plant at the existing Valdez Marine Terminal. After the gas is liquefied, it will be stored in low-pressure, double-walled tanks until transferred to refrigerated tankers.

The proposed production system incorporates existing infrastructure wherever possible, resulting in significant cost efficiencies. The current concept is designed to accommodate future opportunities and project enhancements as they are pursued.

LNG is the ARCO base plan, though other options are not being foreclosed. For example, technology for refining natural gas to petroleum liquid will be tested in 1998 in the pilot plant at the ARCO Cherry Point refinery. If proven viable, this technology may also have application on the North Slope.



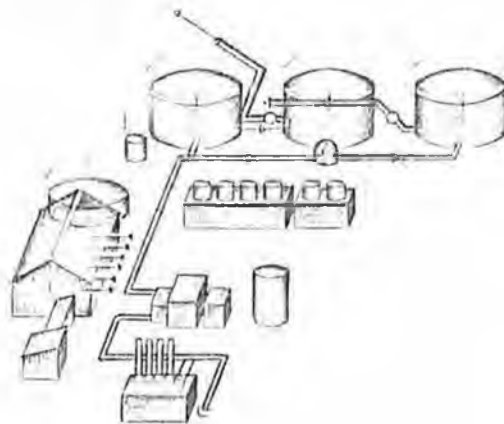


THE ECONOMICS

"Alaska has some of the world's greatest reserves of natural gas, and our people have a proven track record of safe, long-term resource development. We have some obstacles to overcome along the way, but we are working with the industry to make Alaska's North Slope gas competitive in world markets in the near future."

Governor Tony Knowles

LNG plant at Valdez
Artist's Rendering



Despite abundant supplies, expertise and in-place infrastructure, the success of the Alaska North Slope Gas Project depends upon overcoming significant economic hurdles. Natural gas projects of similar size, offering direct competition to Alaska LNG, will not need an 800-mile pipeline to an ice-free port. The cost of this physical requirement does place a competitive and economic burden on North Slope resources. As a result, attention is being focused on innovative ways to reduce capital and operating costs, thus creating a lower economic threshold for the project.

Project costs are currently estimated at \$15 billion, with potential for reduction to \$12 billion. Budget allocations include 37 percent for pipeline construction and compressor stations, 25 percent for tankers, 28 percent for a liquefaction plant and loading terminal, and 10 percent for a gas treatment plant.

To be fully feasible, the project will need further cost reductions, and a rapid ramp-up to coincide with market demand at the appropriate time. Alaska North Slope gas could be in the market starting in 2007, at the earliest.

ARCO plans to develop a project based upon realistic pricing with buyers in high-potential markets. In addition, we are working with the state and federal governments to improve the investing environment. Progress has been made by Alaska's current Legislature and administration to strengthen fiscal support for development of Alaska North Slope gas. We believe there is potential for even more improvement through ongoing discussion and cooperation.

THE MARKET

The U.S. Energy Information Office predicts a 76 percent increase in global demand for natural gas by 2015. In Asia, demand is expected to grow by 6.5 percent every year; regional growth-markets include China, India, the Philippines, Taiwan and Thailand. The worldwide demand for natural gas has been driven, in part, by increasing concern for the environment. The need for environmentally sensitive energy sources is particularly notable in Asia, where many countries import all their energy or rely heavily on nuclear power. Japan has been a leader in the shift toward LNG. In 1970, Tokyo Electric Power Company started the LNG trend with its first gas-fired electric power plant, based on LNG produced in Alaska.

Alaska remains a geographically and logistically attractive source of LNG, initially providing 14 million tons per year. Consider one of Alaska's inherent advantages: some buyers may be wary of making long-term commitments to obtain gas from regions where political and social instability could interrupt supply. In contrast, Alaska offers a secure supply, and a long history of dependable delivery.

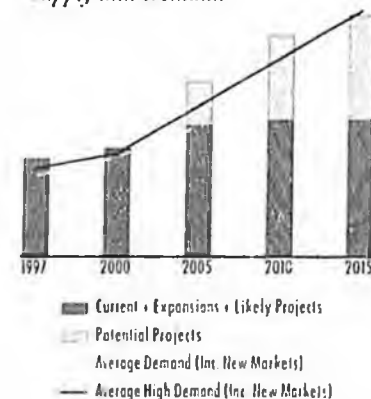


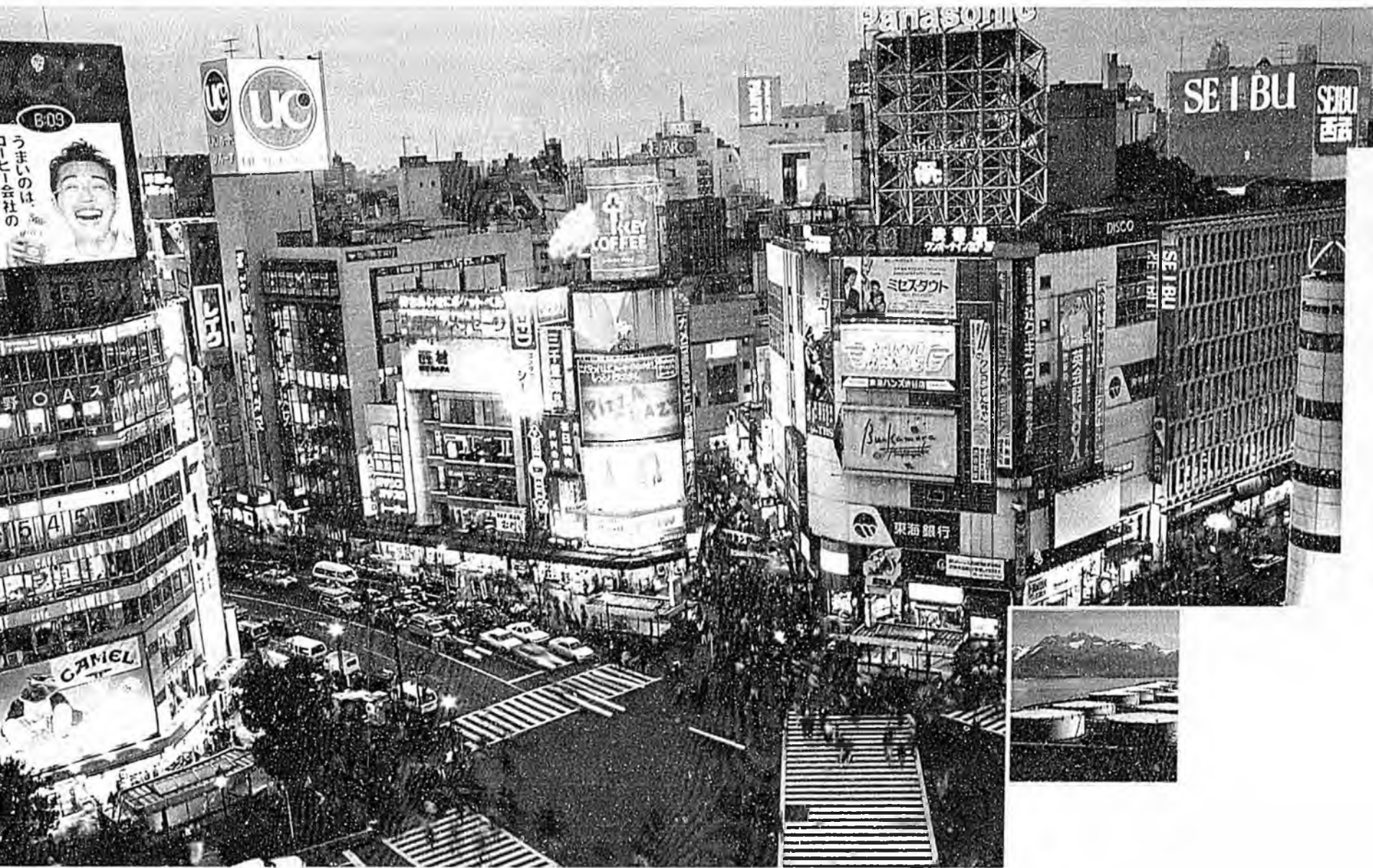
Over 80 percent of Japan's power is generated with clean-burning natural gas.

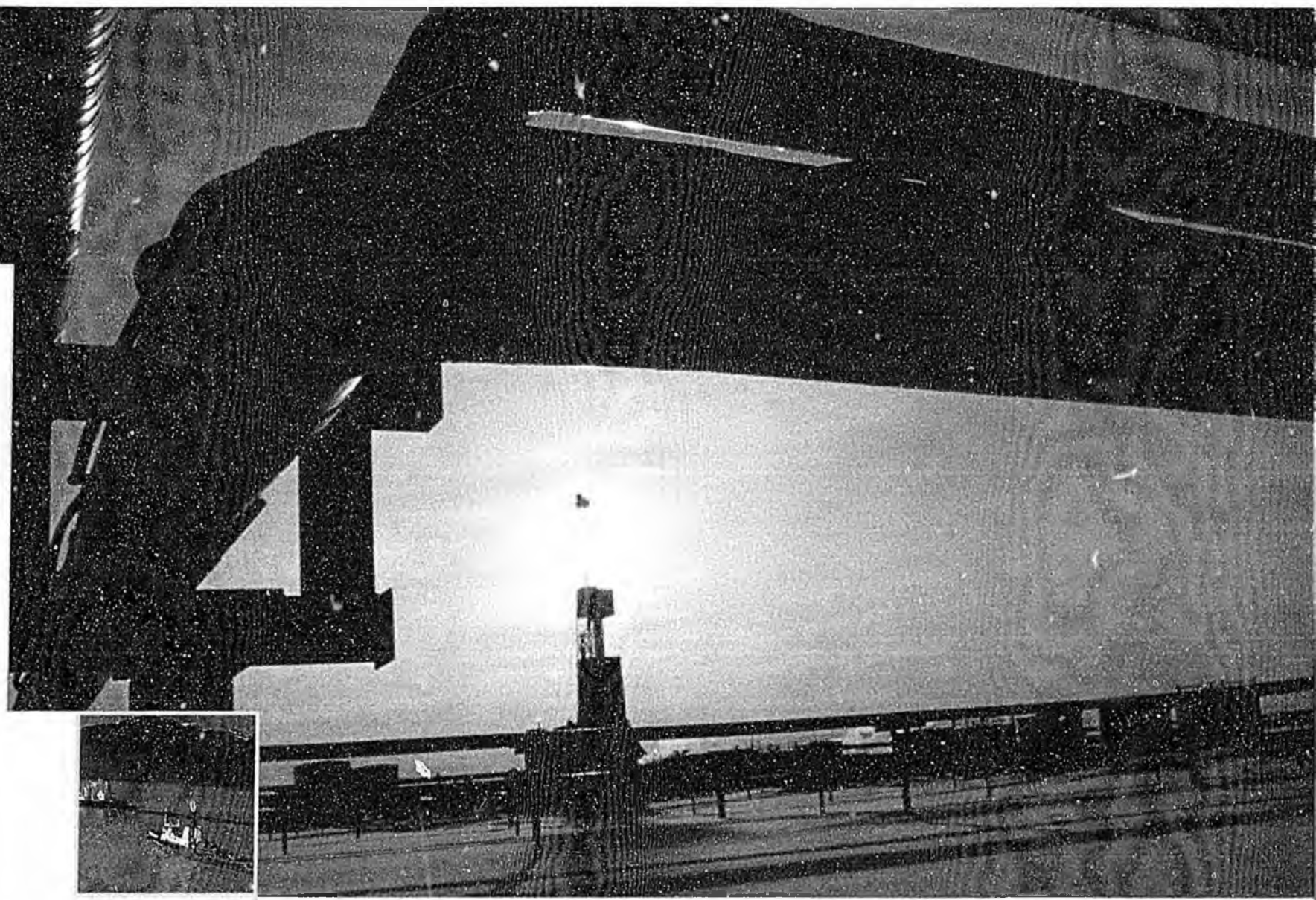
THE COMPETITION

In addition to existing Pacific Rim gas sources, substantial new LNG production is expected to become available between 2000 and 2005. This includes expansions in Malaysia, Australia and Qatar, and new green-field projects in Qatar and Indonesia. Consensus projections show a rough balance between supply and demand increases for the Pacific Rim, through about 2005. From 2005 to 2010 and beyond, demand increasingly outstrips supply, perhaps by 25 to 30 million tons per year by 2010. The Alaska North Slope Gas Project will be competing to fill this gap.

Far East LNG
Supply and Demand









THE EXPERTISE

An oil industry pioneer, ARCO Alaska wrote the book on safe, responsible development of arctic petroleum resources. Atlantic Richfield has earned a worldwide reputation as an innovative supplier of energy, and we are actively developing links with the countries that will ultimately buy North Slope natural gas.

ARCO Alaska has incomparable experience working with North Slope oil and gas. The world's largest miscible gas-flood project is located at Prudhoe Bay, supported by the world's largest gas-handling facilities complex. No other company in the world produces more oil through miscible gas technology.

ARCO is also an industry leader in environmentally sensitive resource utilization. We are internationally recognized for our clean-energy production, small "footprint" strategies on the North Slope, ongoing commitment to indigenous people, and care for wildlife habitat.


ALASKA NORTH SLOPE GAS
naturally powerful

Alaska has been exporting LNG to Japan for nearly 30 years. With economic feasibility, we can be poised to market 1-1 million tons per year of North Slope natural gas. Development of this resource can create jobs, state and federal revenue, and help to improve our balance of trade. Alaska North Slope natural gas is the right resource, in the right place, at the right time.

Alaska North Slope Gas
Naturally Powerful