

AK LEGISLATURE FINANCE COMMITTEES FILES 2007-2008 3334

210

FISCAL NOTE # 7

STATE OF ALASKA  
2007 LEGISLATIVE SESSION

BILL VERSION: CSSB 104(JUD)

ANALYSIS: (continued)

4. University of Alaska \$ 1,250.0 GF  
Engineering and Construction Management programs.

FY 10 to FY 13 Gas Pipeline Project Budget Request: \$ 46,000.0 GF

1. Direct Training \$ 40,000.0 GF

Annual investment of \$10 million to continue and expand training. The department will take steps to ensure that jobs are immediately available at the end of each training program by obtaining the commitment to apprentice agreements from employers.

2. University of Alaska \$ 6,000.0 GF

Provide \$1,500.0 annually to support Engineering and Construction Management programs.

# FISCAL NOTE

REPORTED OUT  
 MAY 11 2007  
 SENATE FINANCE COMMITTEE

STATE OF ALASKA  
 2007 LEGISLATIVE SESSION

Fiscal Note Number: 6  
 Bill Version: CSSB 104(JUD)  
 (S) Publish Date: 4/20/07

Revision Date/Time (Note if correction): \_\_\_\_\_ Dept. Affected: Natural Resources  
 Title Natural Gas Pipeline Project RDU Resource Development  
 Component Alaska Gasline Inducements Act  
 Sponsor Rules Committee  
 Requester Senate Judiciary Component No. new

**Expenditures/Revenues** (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Personal Services	261.3	612.2	612.2	612.2	612.2	612.2
Travel	20.0	20.0	20.0	20.0	20.0	20.0
Contractual	10.8	27.0	27.0	27.0	27.0	27.0
Supplies	10.0	19.0	10.0	10.0	10.0	10.0
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
<b>TOTAL OPERATING</b>	<b>302.1</b>	<b>678.2</b>	<b>669.2</b>	<b>669.2</b>	<b>669.2</b>	<b>669.2</b>

<b>CAPITAL EXPENDITURES</b>	<b>500,000.0*</b>					
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<b>CHANGE IN REVENUES ( )</b>						
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**FUND SOURCE** (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF	302.1	678.2	669.2	669.2	669.2	669.2
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type--Do not abbreviate)						
<b>TOTAL</b>	<b>302.1</b>	<b>678.2</b>	<b>669.2</b>	<b>669.2</b>	<b>669.2</b>	<b>669.2</b>

Estimate of any current year (FY2007) cost: 0.0  
 Check this box (X) if funding for this bill is included in the Governor's FY 2008 budget proposal:

**POSITIONS**

Full-time	2	5	5	5	5	5
Part-time						
Temporary						

**ANALYSIS:** (Attach a separate page if necessary)  
 This bill authorizes the Alaska Gasline Inducement Act (AGIA) which would create a competitive public process for inviting applications for a license under this Act. The application process would include certain application requirements before an application can be considered as well as criteria by which the Commissioners of Natural Resources and Revenue will evaluate all qualifying applications.  
  
 The Act would also create inducements including state matching contributions for pipeline construction in an amount not to exceed \$500 million and the benefit of a state gas pipeline coordinator.  
  
 Under the AGIA, the licensee or its designated affiliate would be entitled to state matching contributions for qualified expenditures (post license costs incurred by the licensee that are directly and reasonably related to obtaining a certificate of public necessity and convenience from the FERC or RCA for development of the project).  
 (Continued on next page)

Prepared by: Kevin Banks, Acting Director Phone 269-8800  
 Division Oil and Gas Date/Time 4/10/2007  
 Approved by: Tom Irwin, Commissioner Date 4/10/2007  
 Agency Natural Resources

STATE OF ALASKA  
2007 LEGISLATIVE SESSION

BILL NO. CSSB 104(JUD)

ANALYSIS CONTINUATION

Until the close of the first binding season, the state will match up to 50 percent of the licensee's qualified expenditures pursuant to the amount specified in the application. After the close of the first binding open season, the state shall match the qualified expenditures at the amount specified but the amount may be no greater than 80 percent. Over a five year period, these contributions may not exceed \$500 million. The present value of the state's total \$500 million contribution would be roughly \$415 million, because state spending will be spread over several years.

AGIA will generate a number of project benefits that could more than offset its costs. The size of these benefits will depend on ultimate project scope and market prices, which AGIA leaves to the competitive process. Actual benefits will vary depending upon project terminus (Alberta, Chicago), size (1.2 Bcf/day, 4.5 Bcf/day), mode of transport (pipeline only, pipeline plus LNG facilities), among other things. Illustrative benefits shown here assume a 4.3 Bcf/day project to Alberta, Canada with a construction cost that is 50% greater than assumed in 2001. Results are presented in present value dollars, assuming a discount rate of 5%, to recognize that a dollar of state benefit received in the future will be worth less than a dollar spent today.

First, AGIA is likely to result in a project sooner than if no pipeline legislation is passed. By having the state agree to shoulder a large share of the up-front capital that is particularly risky, AGIA ensures that in exchange project proponents commit to move the project forward past clearly defined benchmarks. Because AGIA results in a project sooner, the current value of project revenues to the state is enhanced. Assuming a gas price of \$5.50, if AGIA accelerates project startup by one year, from 2017 to 2016, state benefits will exceed \$1.6 billion; a two-year acceleration in the project returns \$3.2 billion; a three-year acceleration generates \$4.9 billion.

Second, AGIA's requirement of a minimum 70 percent share of debt in the determination of tariffs ensures that the state will not pay unnecessarily high transportation costs. Without this protection, project tariffs could be calculated on the basis of 60 or even 50 percent debt and still pass regulatory scrutiny. The tariff benefits of a 70 percent debt structure, rather than 60 percent or 50 percent, are 26 cents and 55 cents per MMBtu, respectively. The savings to the state are \$1.25 billion and \$2.63 billion, respectively. Meanwhile, lower tariffs improve project economics for holders of both existing and yet to be discovered gas reserves, thereby increasing the likelihood that the project will commence sooner. The degree to which such savings are realized depends on how, absent AGIA's requirements, project tariffs would otherwise have been determined.

Third, AGIA's pipeline access provisions promise to increase competition for exploration and development of Alaska's gas resources, leading to earlier and more significant pipeline expansions. The value to the state of such expansions is scenario specific, and cannot be accurately predicted. That said, if AGIA's expansion provisions caused the pipeline to expand by 10% in year 3 of its operations, whereas without AGIA such an expansion would not occur, the increase in state royalty and taxes would be roughly \$3 billion in today's dollars. Even if the chances that such an expansion would otherwise not occur were only one in five the AGIA investment of \$500 million would more than pay for itself in this provision alone.

Finally, AGIA will directly ensure lower tariffs. The state's direct investment in up-front development costs would reduce the cost of moving gas to Alberta by roughly 4 cents. The present value royalty and tax benefits of this 4 cent tariff reduction come to \$183 million. Put differently, assuming \$5.50 gas prices, during pipeline operation the state will receive roughly 45% of the value of its contribution in increased royalty and production tax benefits. And at gas prices of \$7.50 or higher the state's up-front contribution actually generates more in royalty and tax benefits than its costs.

The state gas pipeline coordinator will help expedite the review and coordination of all state and federal permits and processes, ensure that all state and federal environmental requirements have been completed, and coordinate with the federal coordinator for natural gas transportation projects in Alaska. It is this position's responsibility to ensure that no steps have been missed that may slow down the construction of the pipeline and that the state's involvement in the Federal EIS process facilitates expeditious permitting.

The state gas pipeline coordinator is an exempt position (Range 26M \$209,0). To assist the state coordinator, four additional positions would be needed: a Pipeline Engineer (Range 26D \$150,9), a Natural Resource Specialist IV with knowledge of state and federal environmental regulations and administrative procedure (Range 21C \$108,9), a Natural Resource Specialist III to assist with title work (Range 18C \$91,1), and an Administrative Clerk II (Range 8 \$52,3). It is anticipated that the state coordinator and clerk would begin in FY 08. There will be travel associated with the functions of at least two of these positions. All of the positions will sunset one year after commencement of the gas pipeline commercial operations.

This fiscal note assumes that the FY07 Supplemental Appropriation for Gasline requested in HB138/SB82-Sec2(a&b) will be fully funded.

\* \$300,000,000 was appropriated last year (SLA2006/Ch13/Sec1-1) from the general fund to Alaska Housing Finance Corporation for the purpose of funding capital projects including financing expenses and may be available to partially fund the matching grant.

# FISCAL NOTE

REPORTED OUT  
 MAY 11 2007  
 SENATE FINANCE COMMITTEE

STATE OF ALASKA  
 2007 LEGISLATIVE SESSION

Fiscal Note Number: 5  
 Bill Version: SB 104  
 (S) Publish Date: 3/5/07

Revision Date/Time (Note if correction): \_\_\_\_\_ Dept. Affected: Administration  
 Title Alaska Gasline Inducement Act RDU AOGCC  
 Component AOGCC  
 Sponsor Rules Committee  
 Requester Governor Component No. 2010

**Expenditures/Revenues** (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Personal Services	0.0	0.0	0.0	0.0	0.0	0.0
Travel	0.0	0.0	0.0	0.0	0.0	0.0
Contractual	0.0	0.0	0.0	0.0	0.0	0.0
Supplies	0.0	0.0	0.0	0.0	0.0	0.0
Equipment	0.0	0.0	0.0	0.0	0.0	0.0
Land & Structures	0.0	0.0	0.0	0.0	0.0	0.0
Grants & Claims	0.0	0.0	0.0	0.0	0.0	0.0
Miscellaneous	0.0	0.0	0.0	0.0	0.0	0.0
<b>TOTAL OPERATING</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

<b>CAPITAL EXPENDITURES</b>	0.0	0.0	0.0	0.0	0.0	0.0
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<b>CHANGE IN REVENUES ( )</b>	0.0	0.0	0.0	0.0	0.0	0.0
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**FUND SOURCE** (Thousands of Dollars)

1002 Federal Receipts	0.0	0.0	0.0	0.0	0.0	0.0
1003 GF Match	0.0	0.0	0.0	0.0	0.0	0.0
1004 GF	0.0	0.0	0.0	0.0	0.0	0.0
1005 GF/Program Receipts	0.0	0.0	0.0	0.0	0.0	0.0
1037 GF/Mental Health	0.0	0.0	0.0	0.0	0.0	0.0
1162 AOGCC Receipts	0.0	0.0	0.0	0.0	0.0	0.0
<b>TOTAL</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

Estimate of any current year (FY2007) cost: 0.0

Mark this box (X) if funding for this bill is included in the Governor's FY 2008 budget proposal:

**POSITIONS**

Full-time						
Part-time						
Temporary						

**ANALYSIS:** (Attach a separate page if necessary)

This legislation will not have a fiscal impact upon the Alaska Oil and Gas Conservation Commission.

Prepared by: Jody J. Colombie, Special Assistant I  
 Division Alaska Oil and Gas Conservation Commission  
 Approved by: Rachael Petro, Deputy Commissioner  
 Agency Department of Administration

Phone 793-1221  
 Date/Time 3/2/07 3:19 PM  
 Date 3/2/2007 1:00pm

# FISCAL NOTE

REPORTED OUT  
 MAY 11 2007  
 SENATE FINANCE COMMITTEE

STATE OF ALASKA  
2007 LEGISLATIVE SESSION

Fiscal Note Number: 4  
 Bill Version: SB 104  
 (S) Publish Date: 3/5/07

Revision Date/Time (Note if correction): \_\_\_\_\_ Dept. Affected: Commerce  
 Title Alaska Gasline Inducements Act RDU Regulatory Commission of Alaska (399)  
 Component Regulatory Commission of Alaska  
 Sponsor Rules  
 Requester By Request of the Governor Component No. 2417

**Expenditures/Revenues** (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
<b>TOTAL OPERATING</b>	0.0	0.0	0.0	0.0	0.0	0.0

<b>CAPITAL EXPENDITURES</b>						
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<b>CHANGE IN REVENUES ( )</b>						
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**FUND SOURCE** (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (1141 RCA Receipts)						
<b>TOTAL</b>	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY2007) cost: 0.0

Mark this box (X) if funding for this bill is included in the Governor's FY 2008 budget proposal:

**POSITIONS**

Full-time						
Part-time						
Temporary						

**ANALYSIS:** *(Attach a separate page if necessary)*

The Regulatory Commission of Alaska (RCA) regulates pipelines and pipeline carriers operating in Alaska under AS 42.06.140(a). AS 42.06.240 requires the RCA to issue a certificate of public convenience and necessity for pipeline carriers engaged in the intrastate transportation of oil or gas by pipeline, or constructing or extending pipeline facilities. To the extent this legislation results in the construction of an intrastate pipeline subject to RCA regulation, costs will be accounted for under the existing RCA structure.

The RCA's budget is funded through the Regulatory Cost Charge (RCC) mechanism and direct charge mechanisms. General funds are not allocated for support of the agency, nor are they anticipated to be necessary as a result of this legislation. The RCC is recalculated each year and allows the agency to recover its operating costs through an assessment on the revenues of economically regulated utilities and pipeline carriers.

Prepared by: Kate Giard, Chair  
 Division: Regulatory Commission of Alaska  
 Approved by: Emil Notti, Commissioner  
 Agency: Commerce, Community, and Economic Development

Phone 907.276.6222  
 Date/Time 2/28/07 3:05 PM  
 Date 2/28/2007

# FISCAL NOTE

REPORTED OUT  
 MAY 11 2007  
 SENATE FINANCE COMMITTEE

STATE OF ALASKA  
 2007 LEGISLATIVE SESSION

Fiscal Note Number: 3  
 Bill Version: SB 104  
 (S) Publish Date: 3/5/07

Revision Date/Time (Note if correction): \_\_\_\_\_ Dept. Affected: Revenue  
 Title AGIA RDU Administration & Support  
 Component Natural Gas Commercialization  
 Sponsor Governor  
 Requester Rules Committee Component No. 2859

**Expenditures/Revenues** (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Personal Services	294.0	294.0	294.0	294.0	294.0	294.0
Travel	25.0	25.0	25.0	25.0	25.0	25.0
Contractual	1,997.0	900.0	450.0	10.0	10.0	10.0
Supplies	10.0	2.0	2.0	2.0	2.0	2.0
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
<b>TOTAL OPERATING</b>	<b>2,226.0</b>	<b>1,221.0</b>	<b>771.0</b>	<b>331.0</b>	<b>331.0</b>	<b>331.0</b>

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	2,226.0	1,221.0	771.0	331.0	331.0	331.0
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type--Do not abbreviate)						
<b>TOTAL</b>	<b>2,226.0</b>	<b>1,221.0</b>	<b>771.0</b>	<b>331.0</b>	<b>331.0</b>	<b>331.0</b>

Estimate of any current year (FY2007) cost: 784.0

Check this box (X) if funding for this bill is included in the Governor's FY 2008 budget proposal:  X

**POSITIONS**

Full-time	2	2	2	2	2	2
Part-time						
Temporary						

**ANALYSIS:** (Attach a separate page if necessary)

Operating expenditures include costs for 2 additional economists/commercial analysts in exempt positions. These positions would be used to draft the tax related provisions of the request for application, assess economic viability of projects contained in applications, including economic impacts on future state revenues and value of inducements, and develop the Department's recommendations for changes to the existing gas production tax statutes and regulations that will need to be in place as inducement for producer's gas commitments under the Alaska Gasline Inducements Act. In addition, property tax impacts of pipeline construction to state and municipal revenues will need to be understood and forecasted.

Prepared by: Roger Marks  
 Division: Tax Division  
 Approved by: Jerry Burnell  
 Agency: Department of Revenue

Phone 269-0082  
 Date/Time 2/28/07 12:00 AM  
 Date 2/28/2007

FISCAL NOTE # 3

STATE OF ALASKA  
2007 LEGISLATIVE SESSION

BILL NO. SB 104

ANALYSIS CONTINUATION

Contractual expenditures include assistance in formulating revisions to the tax structure, studying comparative international fiscal systems for gas to ensure changes to state's gas production taxes leave Alaska in a globally competitive position, and writing regulations.

Other contractual costs are for legal support for attorneys/law firms with appropriate specialties outside of AGs office to advise us on tax structures and creation of new tax structure; assessment of legal issues and impediments to marketing options now being considered to assist in evaluation of projects; and legal assessment of financial covenants impacting state and its project selection in standard commercial financing arrangements and governmentally guaranteed financing scenarios.

The FY 2008 costs are also in the Oil & Gas Supplemental Bill (SB 82). In addition, that Bill contains FY 2007 costs of \$123,000 personal services, \$425,000 contractual, \$10,000 travel, and \$365,000 legal support.

# FISCAL NOTE

REPORTED OUT  
 MAY 11 2007  
 SENATE FINANCE COMMITTEE

STATE OF ALASKA  
 2007 LEGISLATIVE SESSION

Fiscal Note Number: 2  
 Bill Version: SB 104  
 (S) Publish Date: 3/5/07

Revision Date/Time (Note if correction): \_\_\_\_\_ Dept. Affected: Natural Resources  
 Title Alaska Gasline Inducements Act RDU Resource Development  
 Component Oil & Gas Development  
 Sponsor Rules Committee  
 Requester Governor Component No. 439

**Expenditures/Revenues** (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
<b>TOTAL OPERATING</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

<b>CAPITAL EXPENDITURES</b>						
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<b>CHANGE IN REVENUES ( )</b>						
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**FUND SOURCE** (Thousands of Dollars)

FUND SOURCE	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type--Do not abbreviate)						
<b>TOTAL</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

Estimate of any current year (FY2007) cost: 6,550.0 \*\* Requested as a capital project  
 Mark this box (X) if funding for this bill is included in the Governor's FY 2008 budget proposal:

**POSITIONS**

POSITIONS	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Full-time						
Part-time						
Temporary						

**ANALYSIS:** (Attach a separate page if necessary)  
 \*\*This fiscal note represents the gasline-related supplemental requested in HB138/SB82, Section 2 (a). This was requested as a capital project with an effective date of February 1, 2007.

Section 2(a) - \$6,550,000 general fund for gas pipeline analysis projects. This funding will be used to pay for consultants to advise the state on the structure of an RFP for gasline proposals; and to cover the cost of outside experts and legal counsel on federal pipeline law and the FERC process. DNR estimates that \$4,135,000 will be expended in FY07, and \$2,415,000 in FY08.

Prepared by: Kevin Banks, Acting Director Phone 907-269-8800  
 Division Oil & Gas Date/Time 3/1/2007  
 Approved by: Tom Irwin, Commissioner Date 3/1/2007  
 Agency Natural Resources

# FISCAL NOTE

STATE OF ALASKA  
2007 LEGISLATIVE SESSION

Fiscal Note Number: 1  
Bill Version: SB 104  
(S) Publish Date: 3/5/07

Revision Date/Time (Note if correction): \_\_\_\_\_ Dept. Affected: Natural Resources  
Title Alaska Gasline Inducement Act RDU Resource Development  
Component Alaska Gasline Inducement Act  
Sponsor Rules Committee  
Requester Governor Component No. new

**Expenditures/Revenues** (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Personal Services	261.3	612.2	612.2	612.2	612.2	612.2
Travel	20.0	20.0	20.0	20.0	20.0	20.0
Contractual	10.8	27.0	27.0	27.0	27.0	27.0
Supplies	10.0	19.0	10.0	10.0	10.0	10.0
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
<b>TOTAL OPERATING</b>	<b>302.1</b>	<b>678.2</b>	<b>669.2</b>	<b>669.2</b>	<b>669.2</b>	<b>669.2</b>

<b>CAPITAL EXPENDITURES</b>	<b>500,000.0*</b>					
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<b>CHANGE IN REVENUES ( )</b>						
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**FUND SOURCE** (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF	302.1	678.2	669.2	669.2	669.2	669.2
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type--Do not abbreviate)						
<b>TOTAL</b>	<b>302.1</b>	<b>678.2</b>	<b>669.2</b>	<b>669.2</b>	<b>669.2</b>	<b>669.2</b>

Estimate of any current year (FY2007) cost: 0.0

Check this box (X) if funding for this bill is included in the Governor's FY 2008 budget proposal:

**POSITIONS**

Full-time	2	5	5	5	5	5
Part-time						
Temporary						

**ANALYSIS:** (Attach a separate page if necessary)

This bill authorizes the Alaska Gasline Inducement Act (AGIA) which would create a competitive public process for inviting applications for a license under this Act. The application process would include certain application requirements before an application can be considered as well as criteria by which the Commissioners of Natural Resources and Revenue will evaluate all qualifying applications.

The Act would also create inducements including: state matching contributions for pipeline construction in an amount not to exceed \$500 million and the benefit of a state gas pipeline coordinator.

Under the AGIA, the licensee or its designated affiliate would be entitled to state matching contributions for qualified expenditures (post license costs incurred by the licensee that are directly and reasonably related to obtaining a certificate of public necessity and convenience from the FERC or RCA for development of the project).

(Continued on next page).

Prepared by: Kevin Banks, Acting Director Phone 269-8800  
Division Oil and Gas Date/Time 2/28/2007  
Approved by: Tom Irwin, Commissioner Date 2/28/2007  
Agency Natural Resources

STATE OF ALASKA  
2007 LEGISLATIVE SESSION

BILL NO. SB 104

ANALYSIS CONTINUATION

Until the close of the first binding season, the state will match equally the licensee's qualified expenditures. After the close of the first binding open season, the state shall match the qualified expenditures at a level specified in the license but the amount may be no greater than 80 percent. Over a five year period, these contributions may not exceed \$500 million. The present value of the state's total \$500 million contribution would be roughly \$415 million, because state spending will be spread over several years.

AGIA will generate a number of project benefits that could more than offset its costs. The size of these benefits will depend on ultimate project scope and market prices, which AGIA leaves to the competitive process. Actual benefits will vary depending upon project terminus (Alberta, Chicago), size (1.2 Bcf/day, 4.5 Bcf/day), mode of transport (pipeline only, pipeline plus LNG facilities), among other things. Illustrative benefits shown here assume a 4.3 Bcf/day project to Alberta, Canada with a construction cost that is 50% greater than assumed in 2001. Results are presented in present value dollars, assuming a discount rate of 5%, to recognize that a dollar of state benefit received in the future will be worth less than a dollar spent today.

First, AGIA is likely to result in a project sooner than if no pipeline legislation is passed. By having the state agree to shoulder a large share of the up-front capital that is particularly risky, AGIA ensures that in exchange project proponents commit to move the project forward past clearly defined benchmarks. Because AGIA results in a project sooner, the current value of project revenues to the state is enhanced. Assuming a gas price of \$5.50, if AGIA accelerates project startup by one year, from 2017 to 2016, state benefits will exceed \$1.6 billion; a two-year acceleration in the project returns \$3.2 billion; a three-year acceleration generates \$4.9 billion.

Second, AGIA's requirement of a minimum 70 percent share of debt in the determination of tariffs ensures that the state will not pay unnecessarily high transportation costs. Without this protection, project tariffs could be calculated on the basis of 60 or even 50 percent debt and still pass regulatory scrutiny. The tariff benefits of a 70 percent debt structure, rather than 60 percent or 50 percent, are 26 cents and 55 cents per MMBtu, respectively. The savings to the state are \$1.25 billion and \$2.63 billion, respectively. Meanwhile, lower tariffs improve project economics for holders of both existing and yet to be discovered gas reserves, thereby increasing the likelihood that the project will commence sooner. The degree to which such savings are realized depends on how, absent AGIA's requirements, project tariffs would otherwise have been determined.

Third, AGIA's pipeline access provisions promise to increase competition for exploration and development of Alaska's gas resources, leading to earlier and more significant pipeline expansions. The value to the state of such expansions is scenario specific, and cannot be accurately predicted. That said, if AGIA's expansion provisions caused the pipeline to expand by 10% in year 3 of its operations, whereas without AGIA such an expansion would not occur, the increase in state royalty and taxes would be roughly \$3 billion in today's dollars. Even if the chances that such an expansion would otherwise not occur were only one in five the AGIA investment of \$500 million would more than pay for itself in this provision alone.

Finally, AGIA will directly ensure lower tariffs. The state's direct investment in up-front development costs would reduce the cost of moving gas to Alberta by roughly 4 cents. The present value royalty and tax benefits of this 4 cent tariff reduction come to \$183 million. Put differently, assuming \$5.50 gas prices, during pipeline operation the state will receive roughly 45% of the value of its contribution in increased royalty and production tax benefits. And at gas prices of \$7.50 or higher the state's up-front contribution actually generates more in royalty and tax benefits than it costs.

The state gas pipeline coordinator will help expedite the review and coordination of all state and federal permits and processes, ensure that all state and federal environmental requirements have been completed, and coordinate with the federal coordinator for natural gas transportation projects in Alaska. It is this position's responsibility to ensure that no steps have been missed that may slow down the construction of the pipeline and that the state's involvement in the Federal EIS process facilitates expeditious permitting.

The state gas pipeline coordinator is an exempt position (Range 26M \$209.0). To assist the state coordinator, four additional positions would be needed: a Pipeline Engineer (Range 26D \$150.9), a Natural Resource Specialist IV with knowledge of state and federal environmental regulations and administrative procedure (Range 21C \$108.9), a Natural Resource Specialist III to assist with title work (Range 18C \$91.1), and an Administrative Clerk II (Range 8 \$52.3). It is anticipated that the state coordinator and clerk would begin in FY 08. There will be travel associated with the functions of at least two of these positions. All of the positions will sunset one year after commencement of the gas pipeline commercial operations.

This fiscal note assumes that the FY07 Supplemental Appropriation for Gasline requested in HB138/SB82-Sec2(a&b) will be fully funded.

\* \$300,000,000 was appropriated last year (SLA2006/Ch13/Sec14) from the general fund to Alaska Housing Finance Corporation for the purpose of funding capital projects including financing expenses and may be available to partially fund the matching grant.

**SB**

**104**

**(FILE 3)**

**SFIN**

**FILE**

# STATE PRESENTATIONS

AGIA

4/23/07

The Palin-Parnell Administration presents

# AGIA

The Alaska Gasline Inducement Act

Senate Finance

4/23/2007

# AGIA Overview



The Alaska Gasline Inducement Act

## AGIA:

- Is a **commercial vehicle** that creates a competitive playing field
- Provides a **pipeline on Alaska's terms**
- Is a **transparent process**, with **transparent inducements**.

# Commercial Vehicle



- AGIA uses competitive bidding, not negotiation.
- Successful bidding process requires AGIA's inducements
  - Without inducements, no third-party bidders
  - Without third-party bidders, state has no ability to get a pipeline on its desired terms

# Commercial Vehicle



## AGIA's inducements:

- Midstream inducement of \$500 million:
  - *reduces licensee's project development risks, especially an independent pipeline licensee*
- Upstream tax and royalty inducements:
  - *coupled to the licensed midstream project to make license more valuable, by*
    - Encouraging open season participation
    - Ensuring that state will stick with its licensed partner
- Requirement to obtain pipeline certificate reduces overall project risks, improves state's strategic position

# A Project on the State's Terms



- By creating a more competitive playing field, state can specify some “must haves”
- State’s “must haves” focus on its future:
  - A pipeline sooner
  - A competitive and vibrant oil and gas industry
  - Jobs and careers, not only from the pipeline itself, but also from a competitive oil patch
  - Gas for Alaskans

# A Project on the State's Terms



- State's "must haves" all obtained through pipeline tariff and access terms that ensure a competitive oil and gas industry
  - Competitive oil and gas industry can flower if pipeline ownership gives no upstream competitive advantage
  - Jobs and careers for Alaskans will be maximized by ensuring a competitive upstream industry
  - Cheap gas for Alaskans will be enjoyed if pipeline regularly expands

# A Project on the State's terms

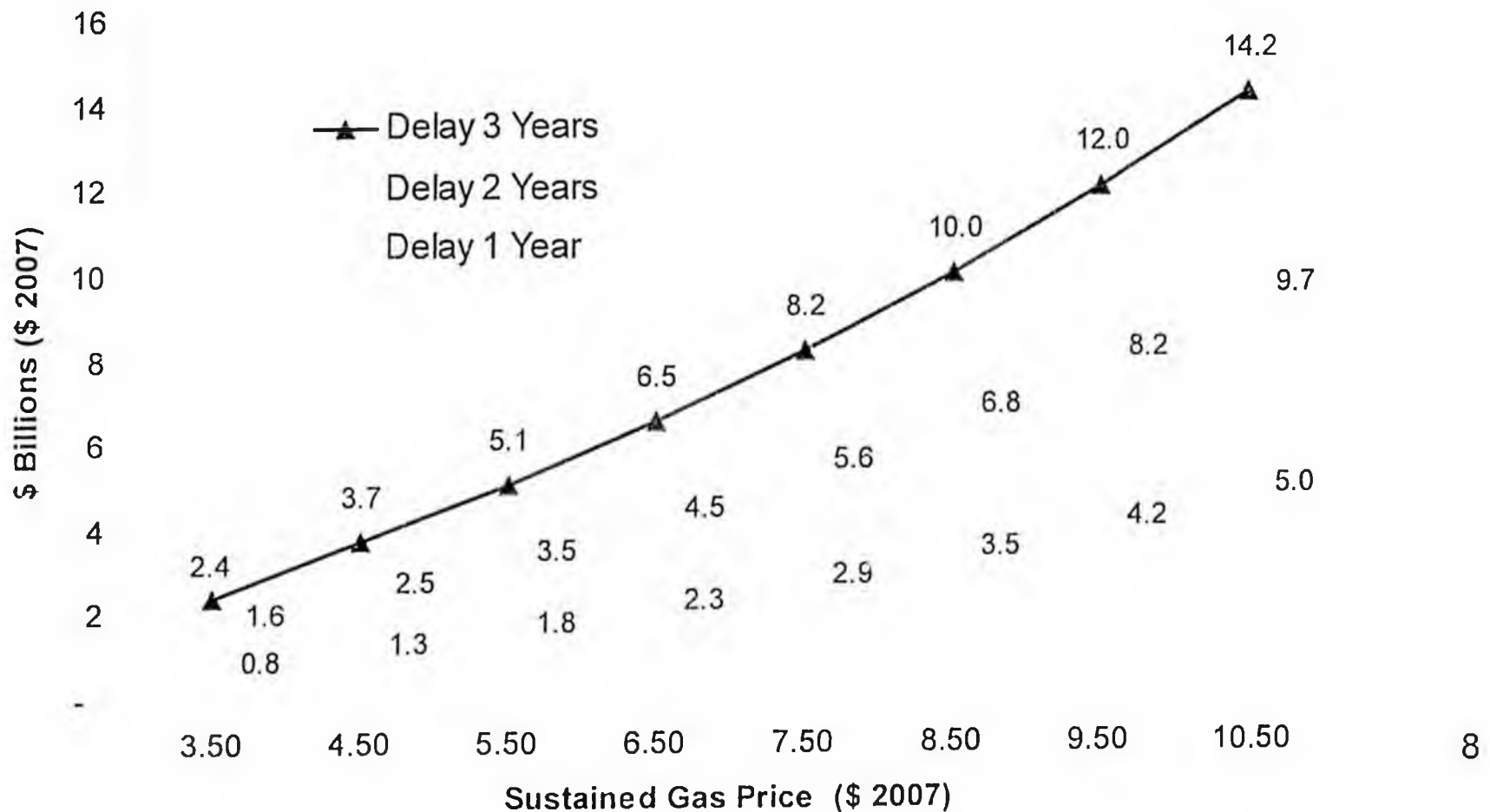


- A pipeline sooner
- Required minimum 70/30 debt/equity ratio ensures reasonable base tariffs
- Expansion requirements ensure that gas found by any party can access the pipeline
- Rolled-in rate requirements ensure that all parties have an economic incentive to explore for gas, competition for oil and gas, and all of Alaska's gas can get into the pipeline

# Gets a Pipeline Sooner



## Losses to State for Each Year Delay Discounted at 5% per Year



# Tariff and State Revenue Effects of Debt-Equity Structure



The Alaska Gasline Inducement Act

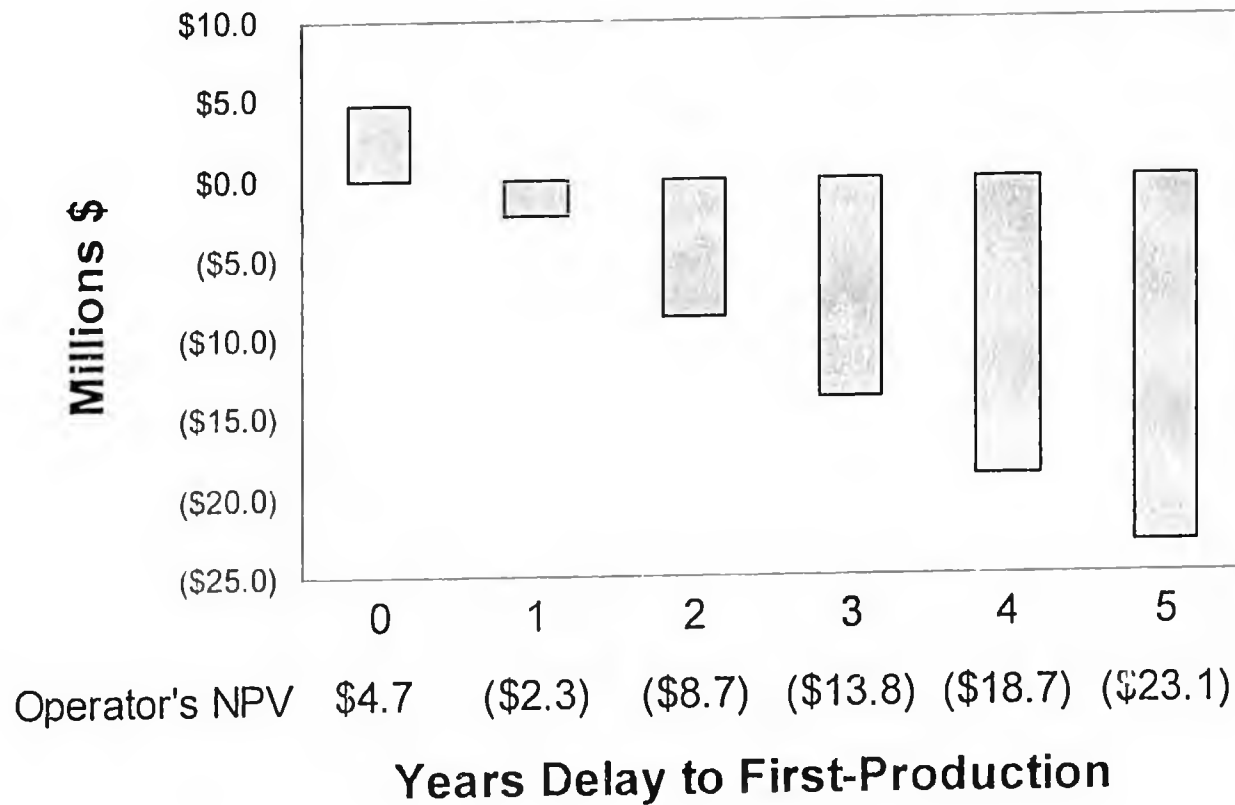
Debt%	Equity%	Tariff	Present Value State Revenue \$ Billions
80%	20%	\$1.47	37.4
75%	25%	\$1.56	36.9
70%	30%	\$1.65	36.3
65%	35%	\$1.74	35.7
60%	40%	\$1.84	35.1
55%	45%	\$1.95	34.5
50%	50%	\$2.06	33.8
45%	55%	\$2.18	33.1

AGIA protects the states interest in low tariffs. It ensures that no less than 70/30 will be used rather than 50/50, with associated tariff benefits of 41 cents and state revenue benefits of \$2.5 billion.

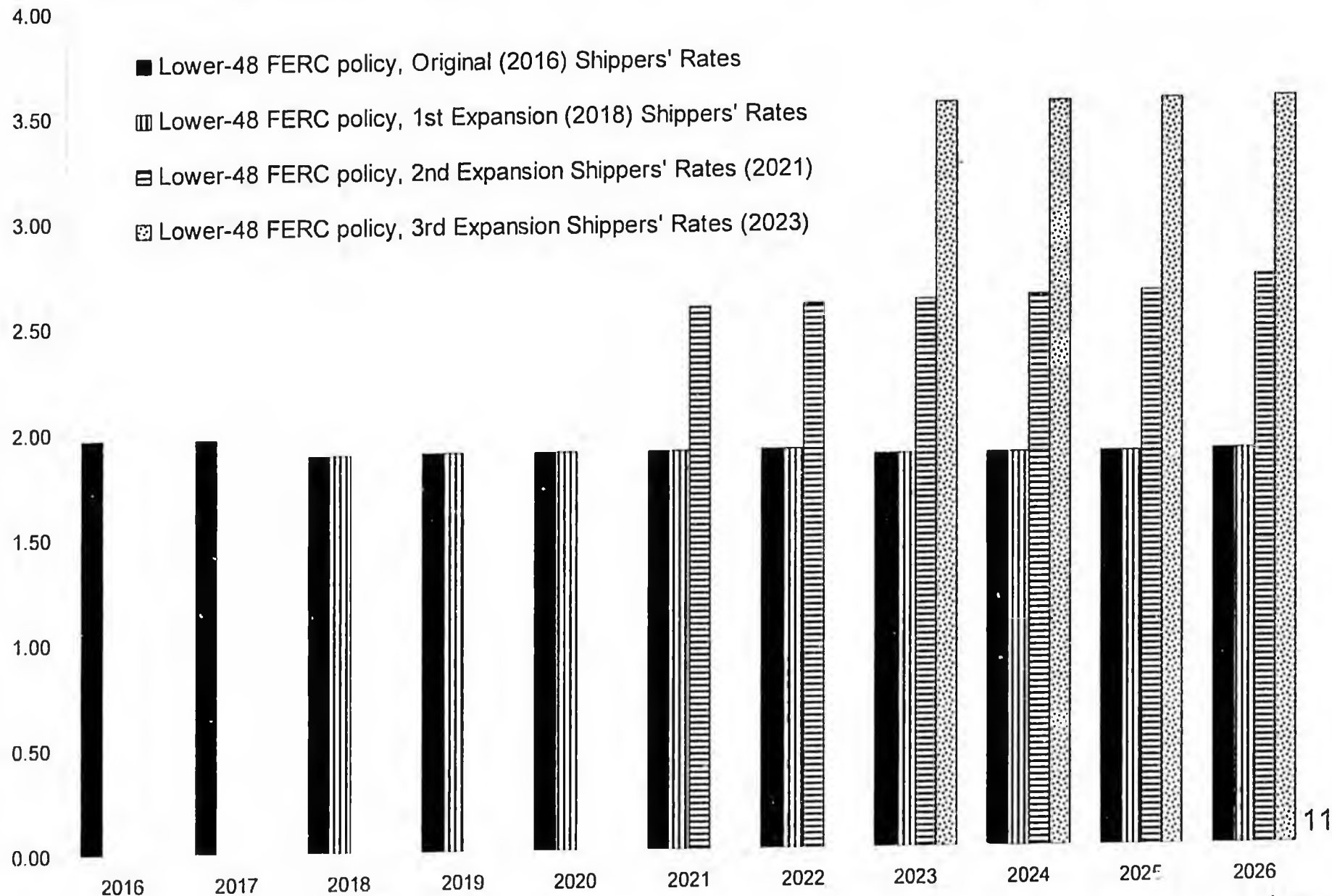
# Expansion Provisions Cost-of-Delay To Explorer



**Expected Net Present Value (NPV 12)**  
Generic North Slope Prospect



# FERC Lower 48 Expansion rate policy

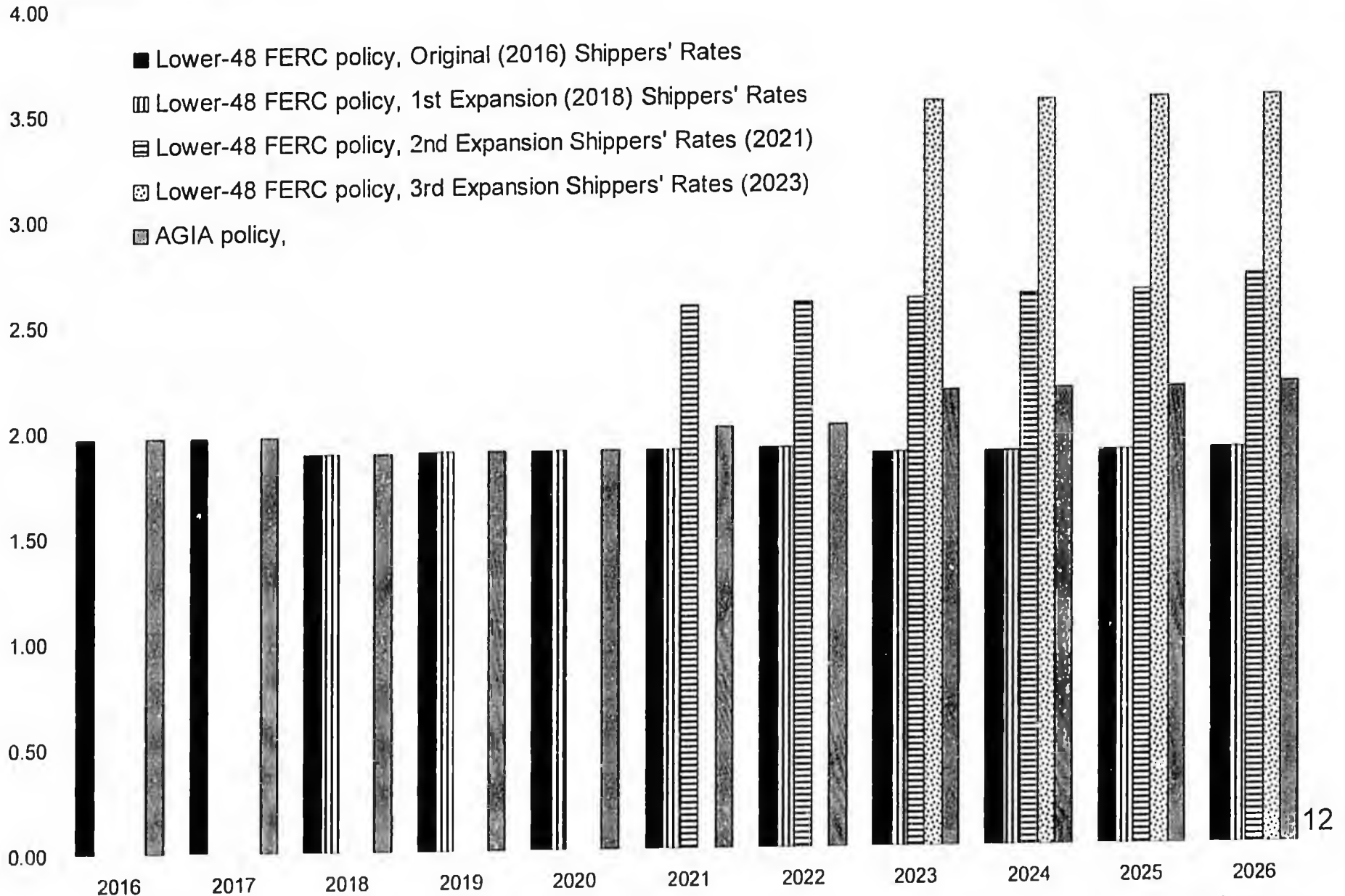


# AGIA

## Expansion rate policy

# AGIA

The Alaska Gasline Inducement Act



# Rolled-in Rates Encourage Exploration



## Examples:

Scenario 1: Add 1 Bcf/day with compression (from 4.5 to 5.5 Bcf/day)

<i>Rolled-in</i>	<i>Incremental</i>
<b>\$6.0 million</b>	<b>\$6.5 million</b>

Scenario 2: Add 1 Bcf/day with compression (from 5.5 to 6.5 Bcf/day)

<i>Rolled-in</i>	<i>Incremental</i>
<b>\$4.3 million</b>	<b>-\$5.4 million</b>

Scenario 3: Add 700 MMcf/day with looping (from 6.8 to 7.5 Bcf/day)

<i>Rolled-in</i>	<i>Incremental</i>
<b>\$ .9 million</b>	<b>-\$25.5 million</b>

# Transparent Public policy



- AGIA creates a competitive process, not a negotiated process
- Bids will be submitted, commented upon by the public, and evaluated
- A winner will be chosen by the Commissioners
- The Commissioners' decision will be reviewed by the Legislature

# Transparent Public policy



- The value of AGIA's inducements are up front and transparent
- Contrast: AGIA's \$500 million versus SGDA contract \$10 billion+
  - Much of SGDA contract value was hidden and unquantifiable
  - AGIA's benefits are explicit and quantifiable

# Summary



- Without competition, and the forward movement that AGIA provides, Alaskans will have to wait, and watch, until the Producers do the pipeline on their timeline and on their terms.
- AGIA changes the playing field.
- AGIA is a **commercial vehicle** that creates a competitive playing field, provides a **pipeline on Alaska's terms**, in a **transparent manner**.

OIL + GAS

INCENTIVES

4/25/07



# Oil and Gas Incentives\*

## ■ Royalty Reduction (DNR)

- AS 38.05.180(j) allows reduction to as low as 5 percent royalty for new production or as low as 3 percent for producing or shut-in fields.
- Reduction in royalties to as low as 5 percent for oil produced from certain Cook Inlet platforms should production fall below specified levels (AS 38.05.180(f)(6)).

## ■ Exploration Incentive Credits (DNR)

- AS 38.05.180(i) allows up to 50 percent of drilling costs on conventional leases; up to 50 percent of seismic costs on unleased state land.
- AS 41.09.010 allows up to 50 percent of drilling and seismic costs on unleased and licensed lands; up to 25 percent on federal and private lands.

## ■ Discovery Royalty (DNR)

- AS 38.05.180(f)(4) Cook Inlet Sedimentary Basin. Five percent royalty for 10 years.
- AS 38.05.180(f)(5) applies to the following Cook Inlet fields: Falls Creek, Nicolai Creek, Starichkof, North Fork, Redoubt Shoals, and West Forelands. Five percent royalty on first 25 MM bbls for 10 years or 5 percent royalty on first 35 BCF for 10 years.

## ■ Exploration Incentive Credits; AS 43.55.025 (DOR)

- Tax credit on wells drilled >25 miles from existing unit boundary (N. Slope\*); up to 20%
- Tax credit on wells drilled >3 miles from any existing oil or gas well (N. Slope\*); up to 20%
- Tax credit on wells drilled >3 miles from any existing oil or gas well *and* >25 miles from an existing unit boundary (N. Slope\*); up to 40%
- Tax credit on seismic exploration activity; up to 40%

## ■ PPT (DOR)

- AS 43.55.023(a) provides for tax credit for Alaska capex (reinvestment) at 20% rate (may be transferred or carried-forward)
- AS 43.55.023(b) provides for tax credit for 20% of net losses (may be transferred or carried-forward)
- AS 43.55.024 provides a tax credit up to \$12 million for small volume producers, phases out on a sliding scale for large volume producers (not transferable)

\*Cook Inlet requirements vary

<u>CURRENT INCENTIVES</u>	<u>CONVENTIONAL LEASES</u>	<u>UNLEASED STATE LAND</u>	<u>LICENSED LAND</u>	<u>SNG LEASES</u>	<u>FEDERAL &amp; PRIVATE LAND</u>
<b>Exploration Incentive Credits (EIC)</b> AS38.05.180(i)	up to 50% of drilling costs	up to 50% of seismic costs	N/A	up to 50% of drilling costs	N/A
AS41.09.010 -- expires 7-1-2007	N/A	up to 50% of drilling & seismic costs	up to 50% of drilling & seismic costs	N/A	up to 25% of drilling & seismic costs
<b>Exploration Tax Credit</b> AS43.55.025 (03.185) Expires 7-1-2007 for NS (C-5-286) Expires 7-1-2010 for non-NS	As much as 40% of drilling costs, or As much as 40% of seismic costs	As much as 40% of drilling costs, or As much as 40% of seismic costs	As much as 40% of drilling costs, or As much as 40% of seismic costs	As much as 40% of drilling costs, or As much as 40% of seismic costs N/A	As much as 40% of drilling costs, or As much as 40% of seismic costs
AS43.20.043 -- expires 1-1-2013 (03.61) for below 68° latitude*** (see note at bottom)	10% of capital investment 10% of annual cost	10% of capital investment 10% of annual cost	10% of capital investment 10% of annual cost	10% of capital investment 10% of annual cost	10% of capital investment 10% of annual cost
<b>Royalty Reduction</b> AS38.05.180(j) (03.28)	as low as 5% if new production as low as 3% if producing or shut-in	N/A	(Applies after conversion to Lease) (Applies after conversion to lease)	as low as 5% if new production as low as 3% if producing or shut-in	N/A
AS38.05.180(f)(6) (03.185)	As low as 5% for oil production from CI platforms if production falls below specified levels	N/A	N/A	N/A	N/A
<b>Discovery Royalty</b> AS38.05.180(f)(4) for Cook Inlet only	5% royalty for 10 yrs	N/A	In limited area after conversion: T18N	(Applies to limited area: T18N)	N/A
Pre-1969 leases only, statewide	5% royalty for 10 yrs	N/A	N/A	N/A	N/A
AS38.05.180(f)(5) for following fields only: Falls Creek, Nicolai Creek, Starichkof, North Fork, Redoubt Shoals, & West Foreland field must be in production by 1-1-2004	5% on 1st 25 MM bbls for 10 yrs 5% on 1st 35 BCF for 10 yrs	N/A	N/A	N/A	N/A
<b>Economic Limit Factor based Ceiling--</b> AS43.55.011(j)(k)	Yes	N/A	(Applies after conversion to Lease)	Yes	Yes
<b>Contract Gas Price With a Utility vs Royalty Value -- AS38.05.180(aa)</b>	Value of state's royalty share equals gas contract price	N/A	(Applies after conversion to Lease)	Value of state's royalty share equals gas contract price	Value of state's royalty share equals gas contract price
<b>Value of state's royalty gas used for ag products -- AS38.05.180(cc) (03.57)</b>	Negotiated Value	N/A	(Applies after conversion to Lease)	Negotiated Value	Negotiated Value
*** If requesting this credit, not eligible for any other tax credits or royalty modifications					

<u>CURRENT INCENTIVES</u>	<u>CONVENTIONAL LEASES</u>	<u>UNLEASED STATE LAND</u>	<u>LICENSED LAND</u>	<u>SNG LEASES</u>	<u>FEDERAL &amp; PRIVATE LAND</u>
Qualified CapEx Credits (PPT) -- AS 43.55.023(a) <i>transferrable</i> credit against PPT	up to 20% of capital expenditures	N/A	up to 20% of capital expenditures	up to 20% of capital expenditures	up to 20% of capital expenditures
Loss Carry-Forward Credits (PPT) -- AS 43.55.023(b) <i>transferrable</i> credit against PPT	up to 20% of capital expenditures	N/A	up to 20% of capital expenditures	up to 20% of capital expenditures	up to 20% of capital expenditures
Transition Investment Expenditure Credits (PPT) -- AS 43.55.023(i) <i>non-transferrable</i> credit against PPT Expires at the end of 2013	up to 20% of 2001-2006 capital expenditures	N/A	up to 20% of 2001-2006 capital expenditures	up to 20% of 2001-2006 capital expenditures	up to 20% of 2001-2006 capital expenditures
Frontier Basin Production Credit -- AS 43.55.023(a) <i>non-transferrable</i> credit against PPT (for production south of 68 latitude and outside Cook Inlet basin) Expires at the end of 2016	up to \$6MM	N/A	(Applies after conversion to Lease)	up to \$6MM	up to \$6MM
Small Producer Credit -- AS 43.55.023(c) <i>non-transferrable</i> credit against PPT (\$12 MM for production <50,000 BOE/day, declining on a sliding scale to \$0 for production >100,000 BOE/day)	up to \$12MM	N/A	(Applies after conversion to Lease)	up to \$12MM	up to \$12MM
<b><u>INCENTIVES AS PART OF A PROGRAM</u></b>	<b><u>CONVENTIONAL LEASES</u></b>	<b><u>UNLEASED STATE LAND</u></b>	<b><u>LICENSED LAND</u></b>	<b><u>SNG LEASES</u></b>	<b><u>FEDERAL &amp; PRIVATE LAND</u></b>
Exploration Licensing AS38.05.132	N/A	N/A	Up to 500,000 acres per license One-time \$1/acre license fee No bonus bid No annual rental sole right to convert to O & G leases	N/A	N/A
Nonconventional Gas Incentive-- AS 38.05.180(n)(2) (04.531)	reduced rental 6.25% royalty if no competition with 12.5% leasee	N/A	(Applies after conversion to Lease)	N/A	

# NATURAL RESOURCES

GAS

RESERVES

4/26/07

# Alaska Department of Natural Resources



Briefing for  
**Senate Finance**  
Current Gas Reserves & Resource Estimates  
ANS & Offshore

Robert Swenson  
State Geologist & Acting Director  
Division of Geological & Geophysical Surveys

*<http://www.dggs.dnr.state.ak.us>*  
*<http://akgeology.info>*

April 26, 2007

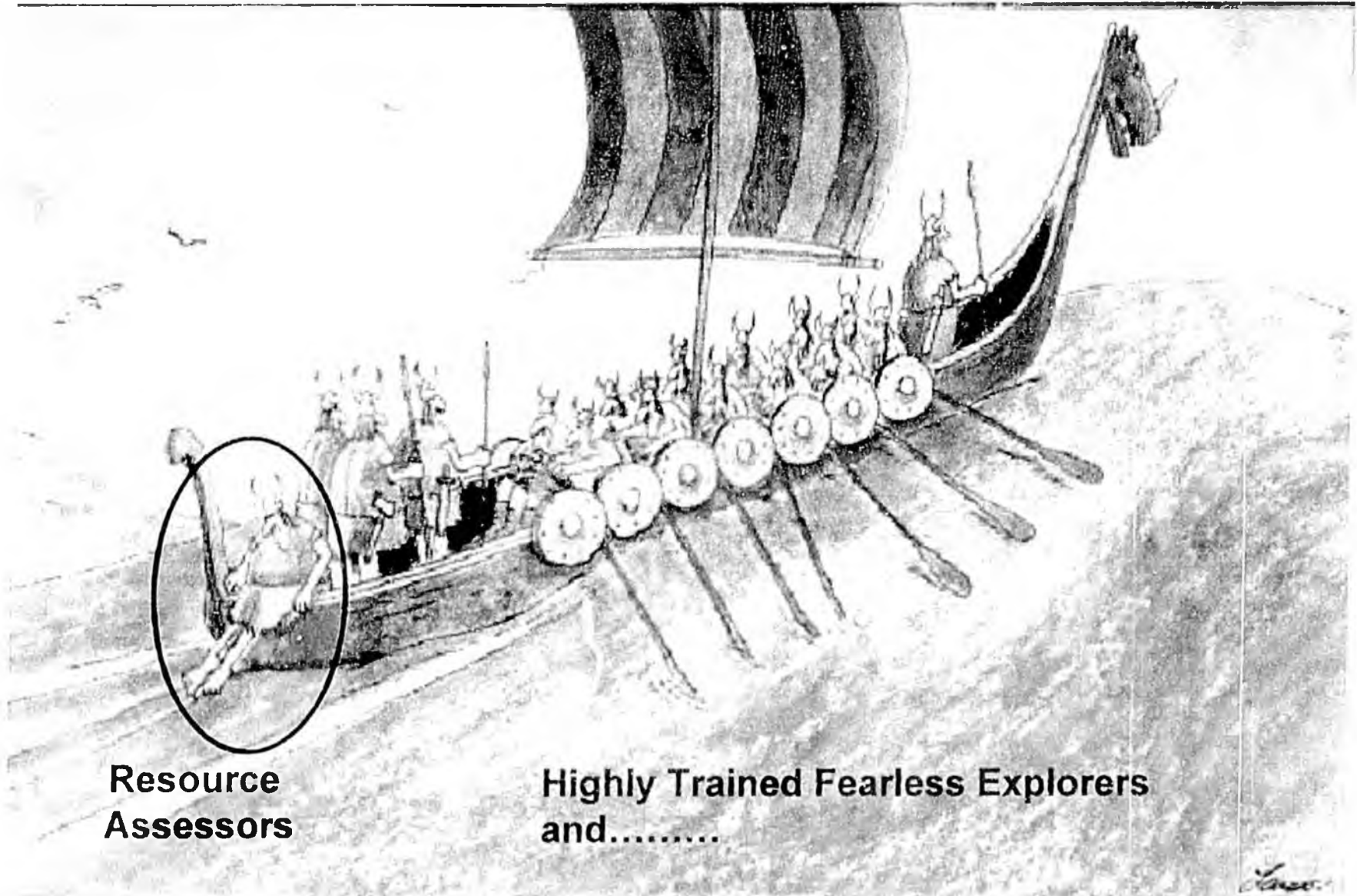


# Overview



- The State of Alaska does not perform quantitative, probabilistic resource assessments, but works closely with the agencies that do
- All numbers presented here are from US Geological Survey & MMS resource assessments published between 1999 and 2005.
- All estimates provided are based on rigorous analysis of all available data, geology, existing accumulations, and basin analogies
- All non-reserve estimates are presented as technically recoverable resources (as contrasted with economically recoverable or gross in-place estimates).
- Resource estimates used represent the mean of a probabilistic distribution with associated P5 & P95

# Oil & Gas Resources Team

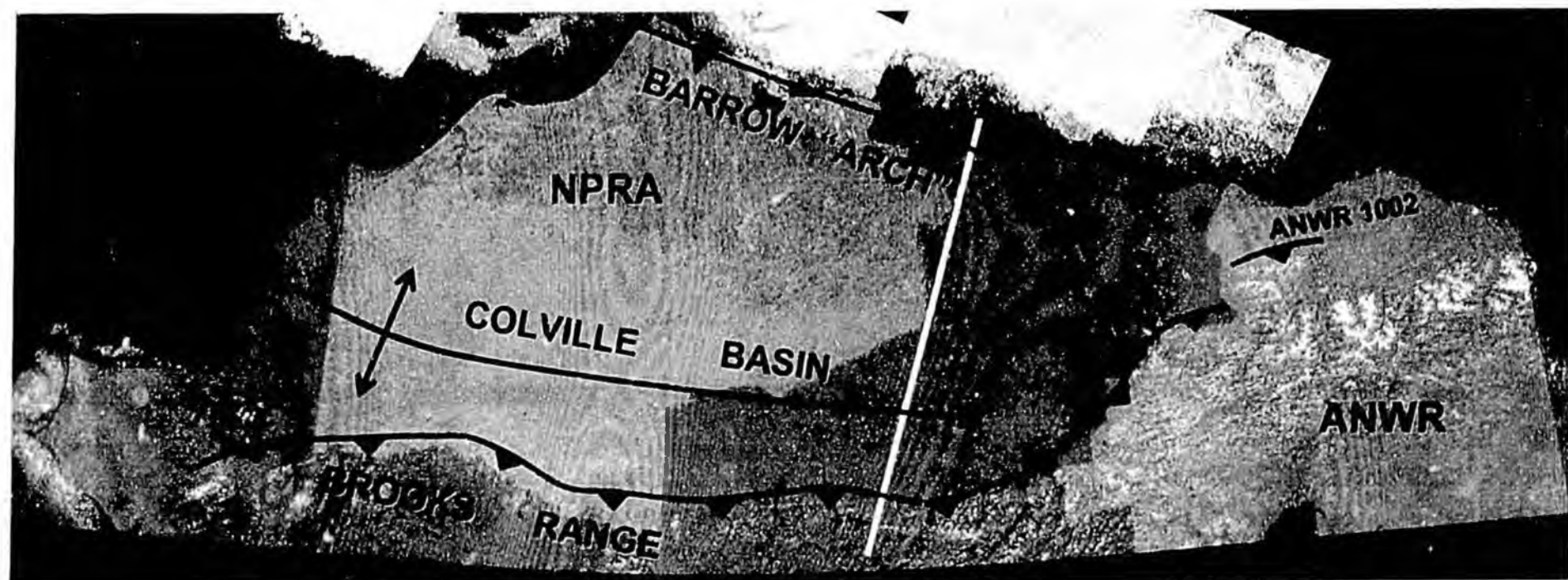


**Resource  
Assessors**

**Highly Trained Fearless Explorers  
and.....**

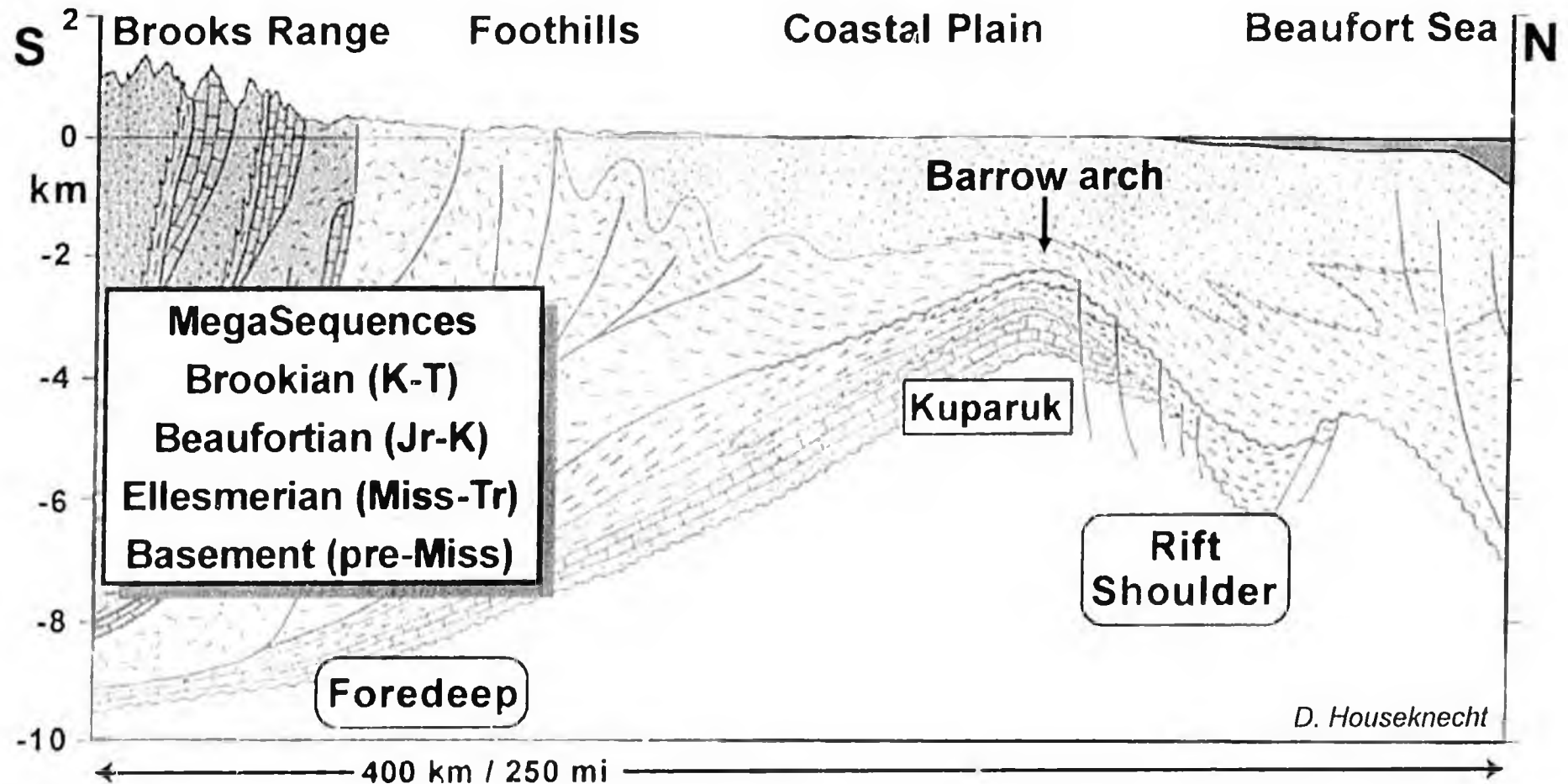
# *North Slope*

## Overview of Regional Geology



# Overview of Regional Geology

## Central North Slope



- Late Devonian-Triassic south-facing passive continental margin
- Jurassic-Hauterivian extensional episode superimposed on older passive margin succession

- Jurassic-Barremian arc-continent collision resulting in Cret. foreland basin
- Latter two tectonic settings overlap

# North Alaska Stratigraphy & Petroleum Plays

As used in USGS NPRA  
Assessment

Play definitions will vary  
slightly among  
assessment provinces...

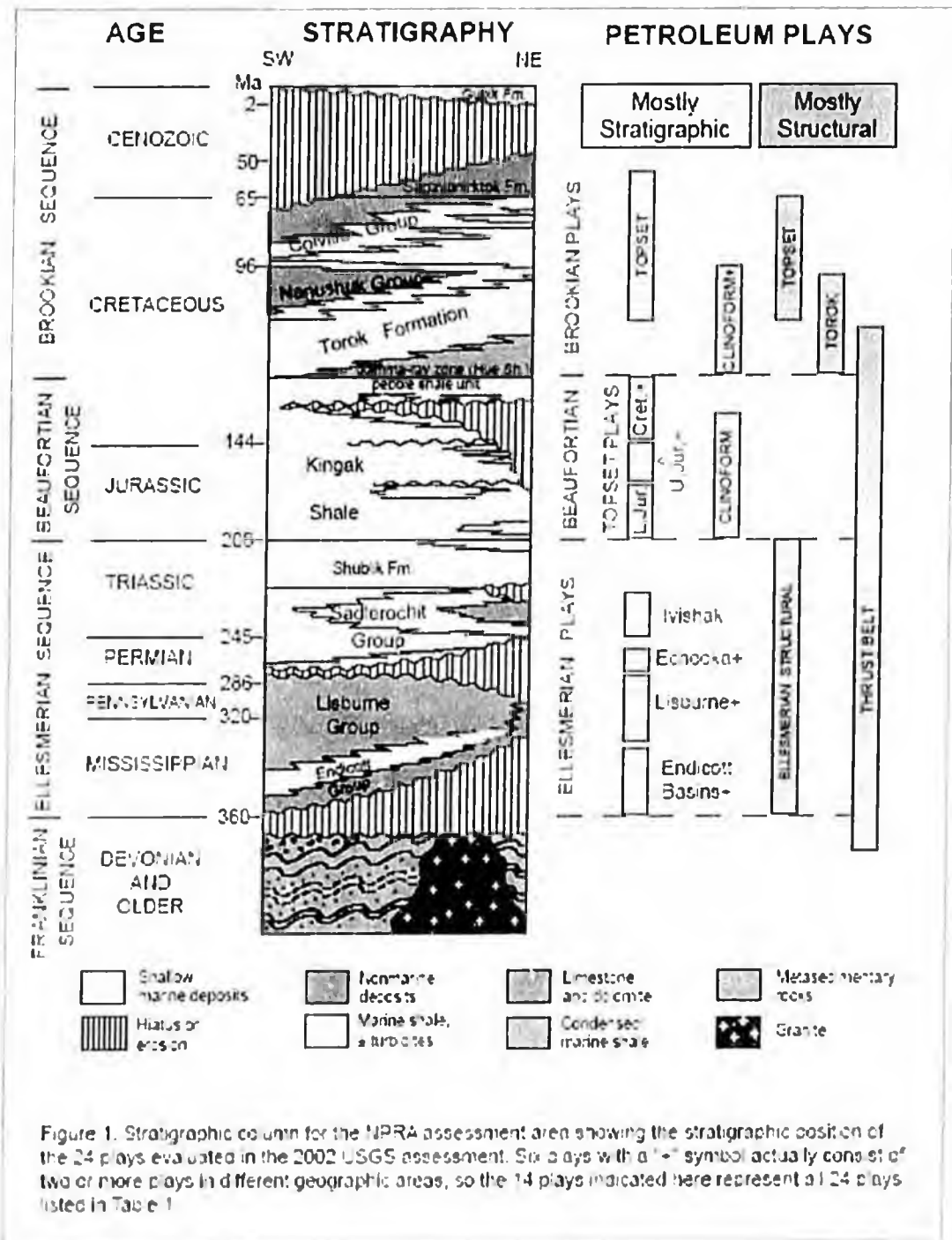
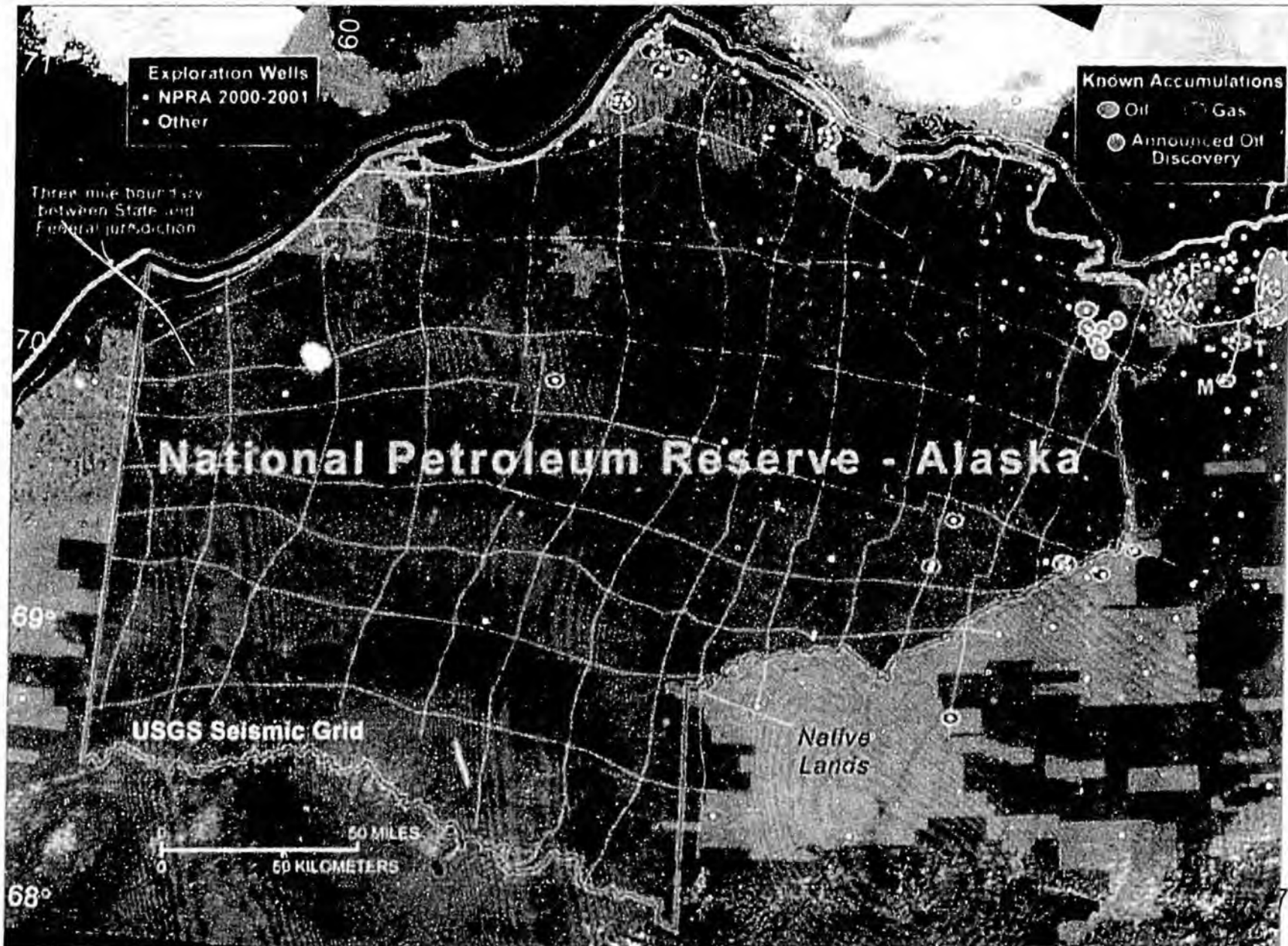
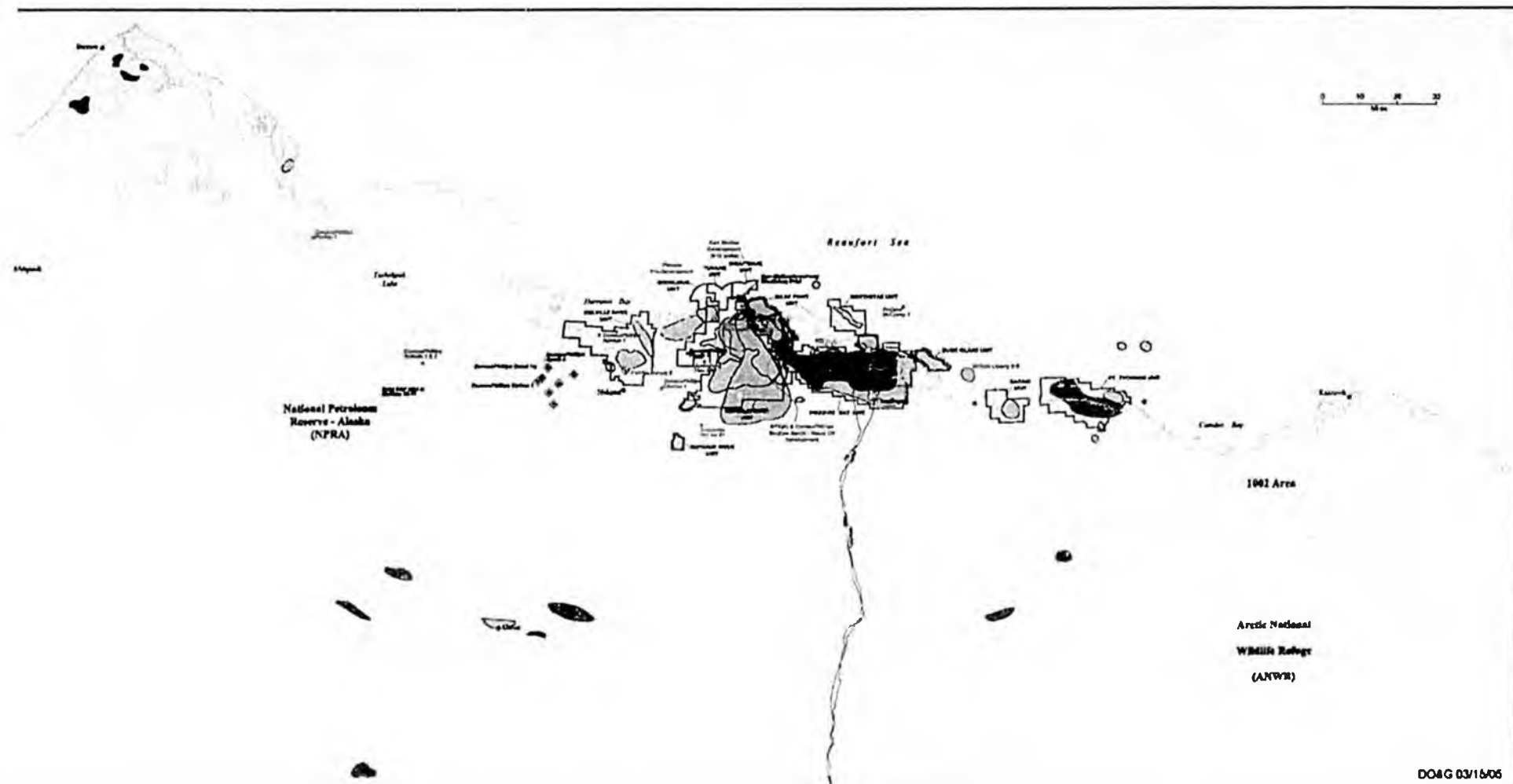


Figure 1. Stratigraphic column for the NPRA assessment area showing the stratigraphic position of the 24 plays evaluated in the 2002 USGS assessment. Six plays with a "+" symbol actually consist of two or more plays in different geographic areas, so the 14 plays indicated here represent a total of 24 plays listed in Table 1.

# NPRA Assessment Area





DO&G 03/16/05

# North Slope Oil & Gas Activities & Discoveries March 2005

**Map Legend**

	Oil Accumulations*		Units
	Gas Accumulations*		Road
	Recent Discoveries		Trans-Alaska Pipeline
	2003 Exploration Wells		
	2004 Exploration Wells		
	2005 Exploration Wells & Activities		

\*Oil and Gas Accumulations are Approximate

Map Location

DO&G 03/05

# Proven Gas Reserves

## Does not Include Probable

( reserves growth through continued development)

*(BCF)*

### North Slope

Badami Unit	0
Barrow	34
Colville River Unit	400
Duck Island Unit	843
Kuparuk River Unit	1150
Milne Point Unit	14
North Star	450
Prudhoe Bay Unit	24,526
Other Undeveloped	<u>8,000</u>
<b>TOTAL North Slope</b>	<b>35,417</b>
<b>Cook Inlet</b>	<b>1,650</b>
<b>TOTAL STATE</b>	<b>37,067</b>



**Explanation**  
Sedimentary Basins  
Assessment Boundaries  
USGS  
MMS

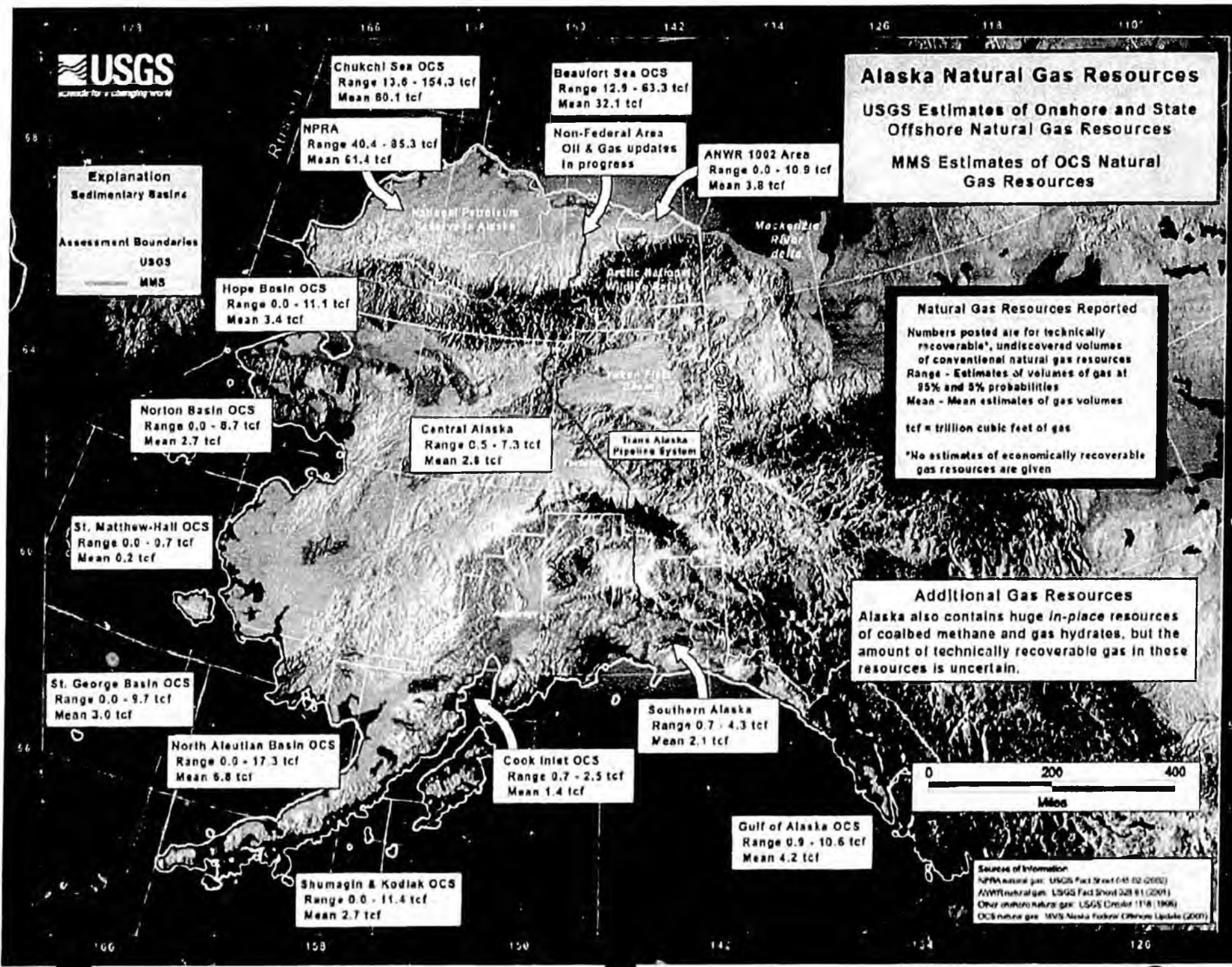
# Alaska Natural Gas Resources

USGS Estimates of Onshore and State Offshore Natural Gas Resources  
MMS Estimates of OCS Natural Gas Resources

**Natural Gas Resources Reported**  
Numbers posted are for technically recoverable, undiscovered volumes of conventional natural gas resources  
Range - Estimates of volumes of gas at 95% and 5% probabilities  
Mean - Mean estimates of gas volumes  
tcf = trillion cubic feet of gas  
  
\*No estimates of economically recoverable gas resources are given

**Additional Gas Resources**  
Alaska also contains huge *in-place* resources of coalbed methane and gas hydrates, but the amount of technically recoverable gas in these resources is uncertain.

**Source of Information**  
NPRA natural gas: USGS Fact Sheet 645 (2-2000)  
ANWR natural gas: USGS Fact Sheet 328 (1-2001)  
Other onshore natural gas: USGS Circular 1118 (1996)  
OCS natural gas: MMS Alaska Federal Offshore License (2001)



# Technically Recoverable ANS Reserve Estimates

Does not include economic thresholds

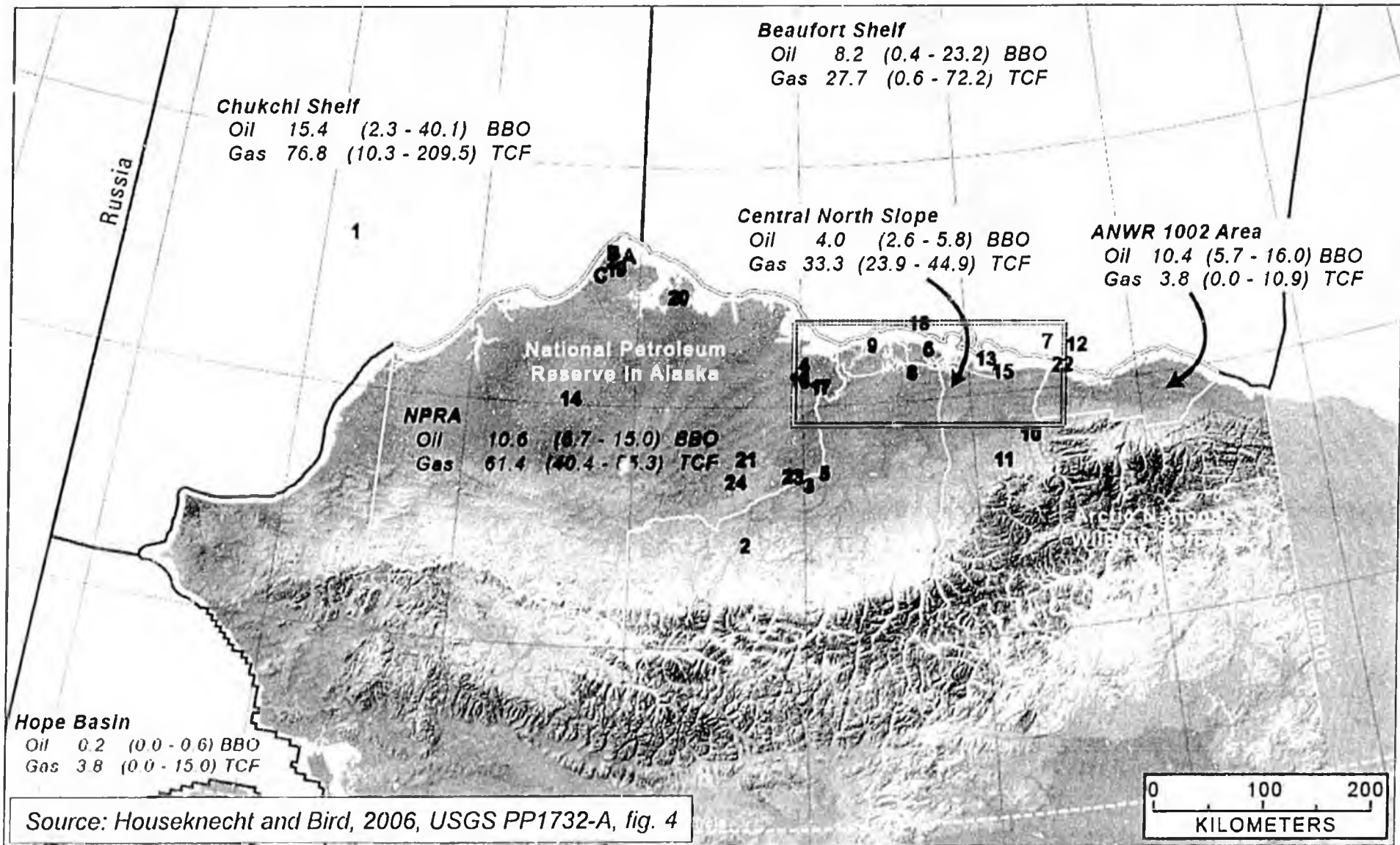
## North Alaska Assessments of Undiscovered, Technically Recoverable Gas<sup>1</sup>

<u>USGS Assessment Segment</u>	<u>Year</u>	<u>F95</u>	<u>Mean</u>	<u>F05</u>
State Lands oil-associated gas, BCF	2005	2,681	4,198	6,092
State Lands non-associated gas, BCF	2005	23,939	33,318	44,873
NPRA non-associated gas, BCF	2002	40,372	61,351	85,317
ANWR non-associated gas, BCF	1999	0	949	3,660
<b>Total Arctic Onshore</b>		-- <sup>2</sup>	<b>99,816</b>	-- <sup>2</sup>
<u>MMS Assessment Segment</u>				
Chukchi Shelf gas, BCF	2006	10,320	76,770	209,530
Beaufort Shelf gas, BCF	2006	650	27,650	72,180
Hope Basin gas, BCF	2006	0	3,770	14,980
<b>Total Arctic OCS</b>	2006	<b>16,410</b>	<b>108,190</b>	<b>183,530</b>
<b>Total Onshore &amp; OCS</b>		-- <sup>2</sup>	<b>208,006</b>	-- <sup>2</sup>

**Notes:**

<sup>1</sup> All numbers are probabilistic estimates of undiscovered, technically recoverable gas in billions of cubic feet (BCF). Because these estimates include gas resources in small, non-economic accumulations, these mean volumes of gas are unlikely to ever be produced.

# Arctic Alaska Province Resource Estimates Summary



Numbers for each assessment province include mean and range (95- to 5-percent-confidence-level volumes) of undiscovered oil (in billions of barrels [BBO]) and gas (in trillions of cubic feet [TCF]). Red numbers correspond to discovered accumulations.<sup>1,2</sup> Central North Slope assessment figures include both foothills and coastal plain areas, not just area within dashed rectangle.

**Table 4.** Estimated mean volumes of undiscovered, technically recoverable petroleum in conventional accumulations for areas in the Arctic Alaska Petroleum Province.

[Estimates for onshore and State offshore areas versus Federal offshore area are listed separately because of differences in the assessment methods used by the U.S. Geological Survey and U.S. Minerals Management Service. See figure 4 for 95- and 5-percent-confidence-level volumes. ANWR, Arctic National Wildlife Refuge; NPRA, National Petroleum Reserve in Alaska]

	Oil and natural-gas liquids (billion bbl)			Natural gas (trillion ft <sup>3</sup> )		
	Crude oil	Natural- gas liquids	Total liquids	Nonassociated gas	Associated gas	Total gas
Onshore and State offshore areas						
NPRA <sup>1</sup>	10.56	1.43	11.99	61.35	11.68	73.03
Central North Slope <sup>2</sup>	3.98	0.48	4.46	33.32	4.20	37.52
ANWR, 1002 Area <sup>3</sup>	10.36	0.19	10.55	3.84	4.76	8.60
Subtotal	24.90	2.10	27.00	98.51	20.64	119.15
Federal offshore area						
Chukchi Shelf <sup>4</sup>	--	--	15.38	--	--	76.77
Beaufort Shelf <sup>4</sup>	--	--	8.22	--	--	27.65
Hope Basin <sup>4</sup>	--	--	0.15	--	--	3.77
Subtotal	--	--	23.75	--	--	108.19
Arctic Alaska Petroleum Province onshore and offshore areas						
Total	--	--	50.75	--	--	227.34

<sup>1</sup>Bird and Houseknecht (2002).

<sup>2</sup>Bird and others (2005).

<sup>3</sup>Bird and Houseknecht (2001).

<sup>4</sup>U.S. Minerals Management Service (2006).

**+ 35.42 (known fields)**

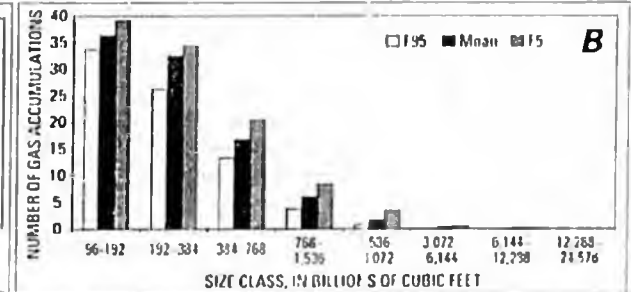
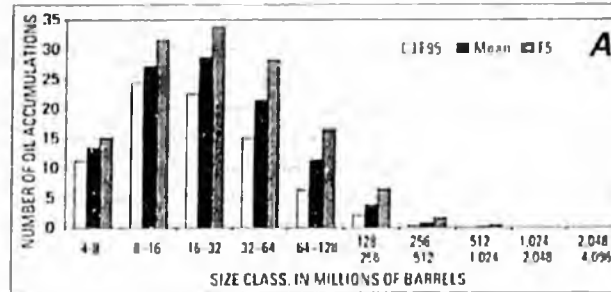
**262.74 TCF total**

13

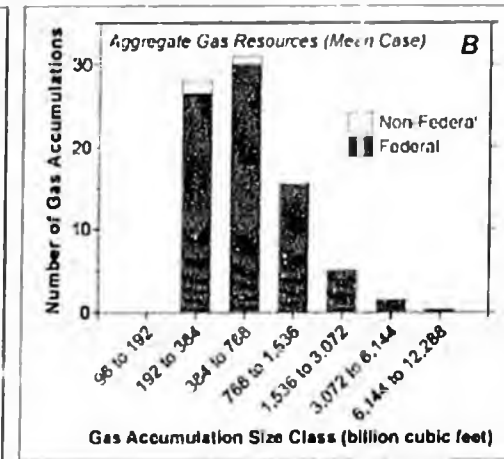
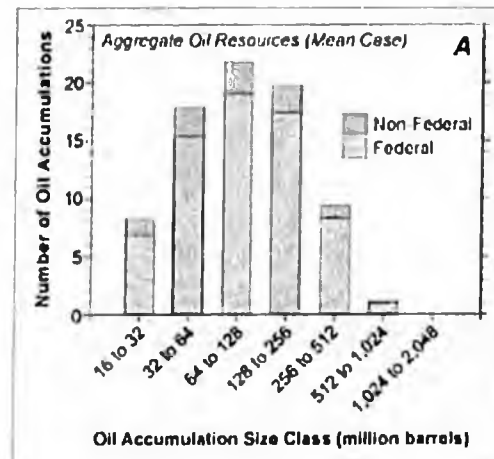
Source: Houseknecht and Bird, 2006, USGS PP1732-A

# Undiscovered Mean Field Size Distributions - USGS

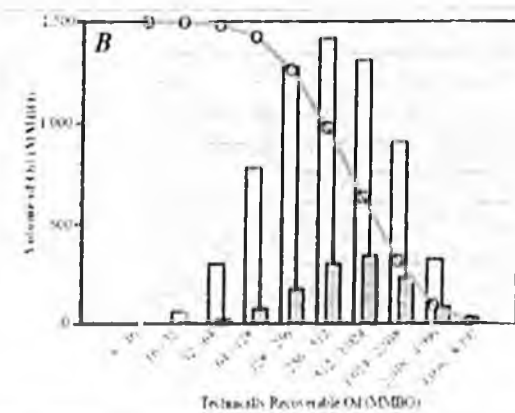
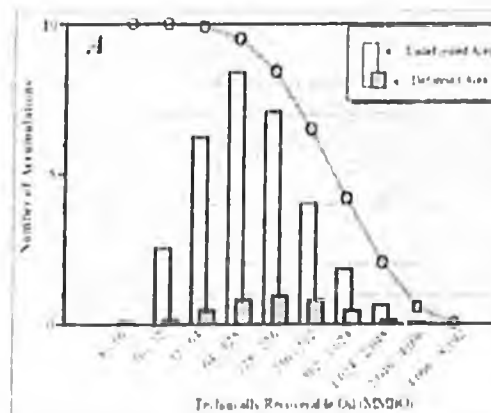
**State Lands:** ~1 undiscovered oil accumulation > 250 MMBO recoverable. ~ 2 undiscovered gas accumulations > 1.5 TCF recoverable.



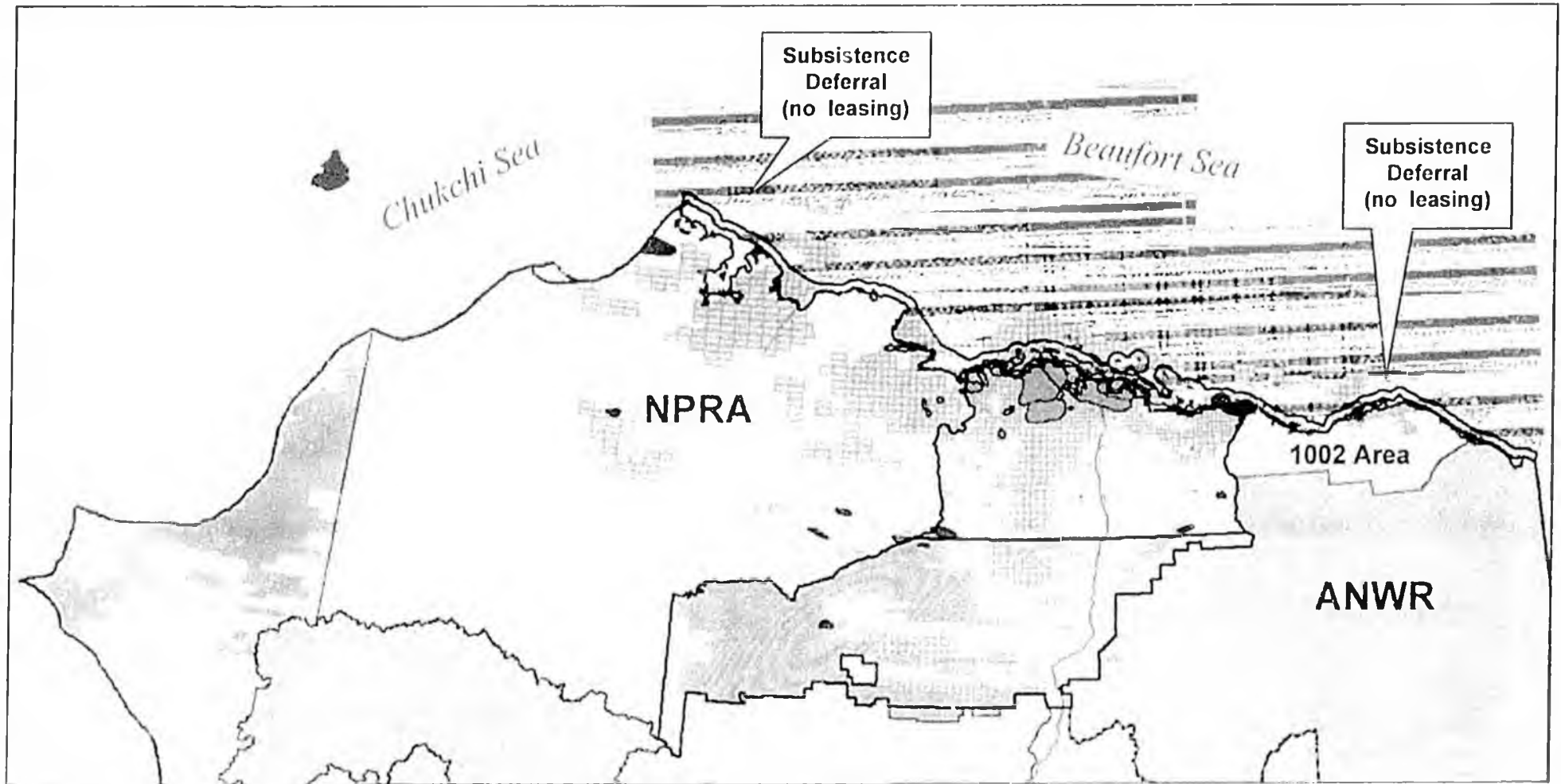
**NPRA:** ~11 undiscovered oil accumulations > 250 MMBO recoverable. ~7 undiscovered gas accumulations > 1.5 TCF recoverable.



**ANWR 1002:** ~9 undiscovered oil accumulations > 250 MMBO recoverable (~65% of estimated total recoverable oil volume); gas resource not shown.



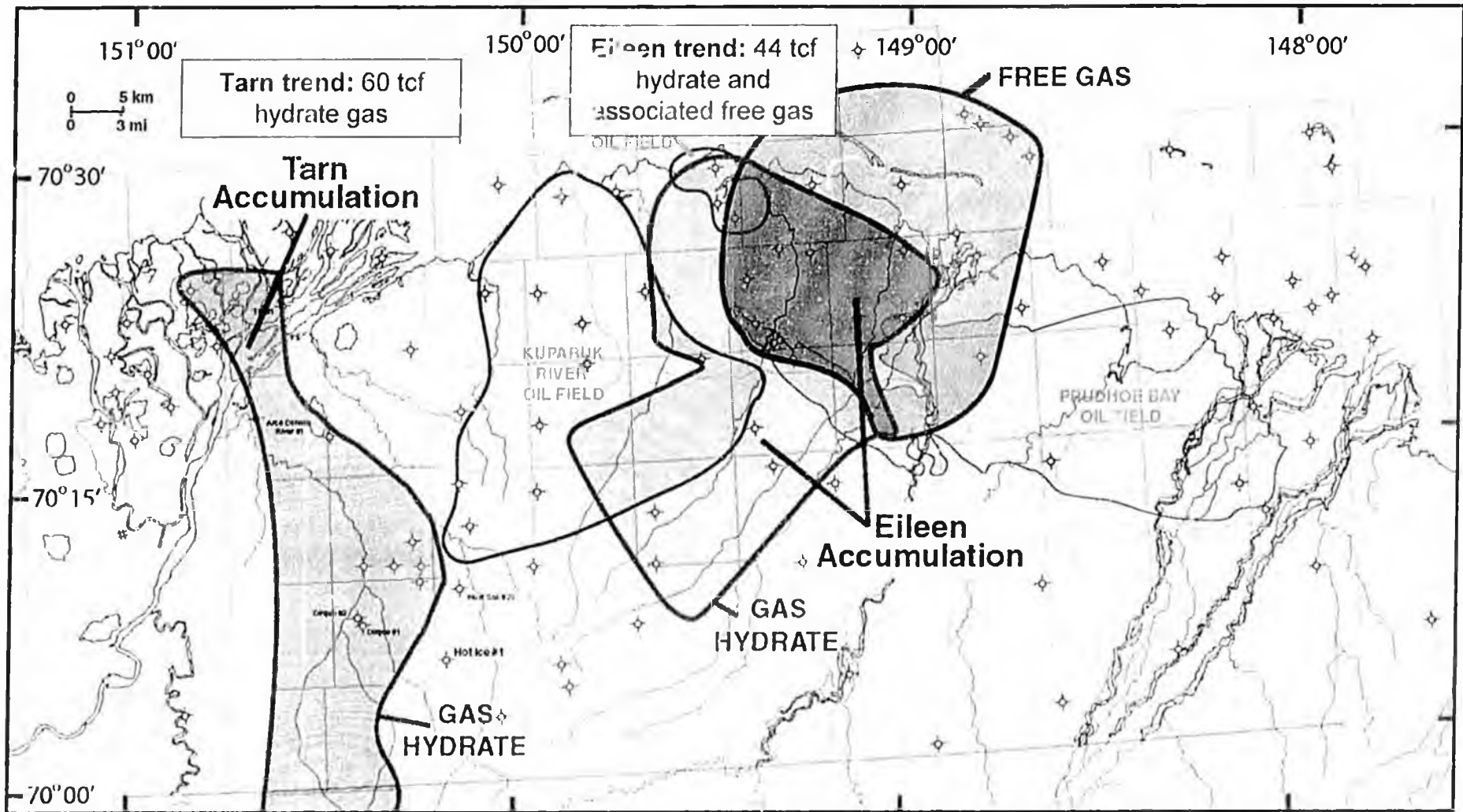
# Arctic Alaska Province Leased Acreage



- Existing leases in dark yellow
- High bid tracts from April 18, 2007 Beaufort Sea OCS sale shown in turquoise, orange, purple, etc.

# Unconventional Gas Potential

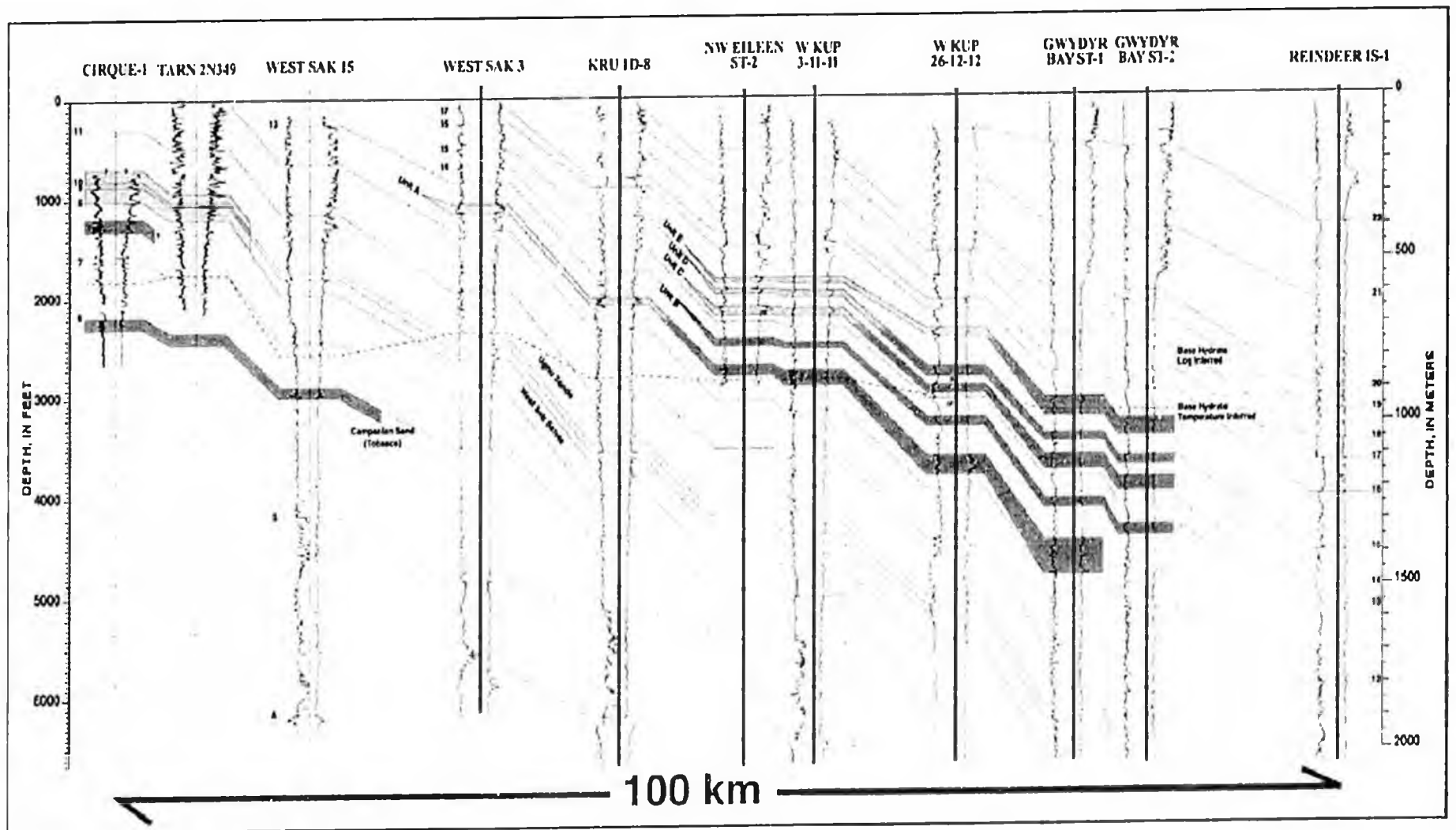
# Known Gas Hydrate Accumulations



Known gas hydrate accumulations (blue) and hydrate-associated free gas accumulations (orange) in the vicinity of the major North Slope oil fields (green). The USGS estimates up to 100 tcf in place of hydrate in the Eileen and Tarn trends combined. From T.S. Collett, 10/01 and Hunter and Collett, (2004).

Modified from T.S. Collett, USGS Open File Report 2004-1-152

# Eileen and Tarn Gas Hydrate Accumulations



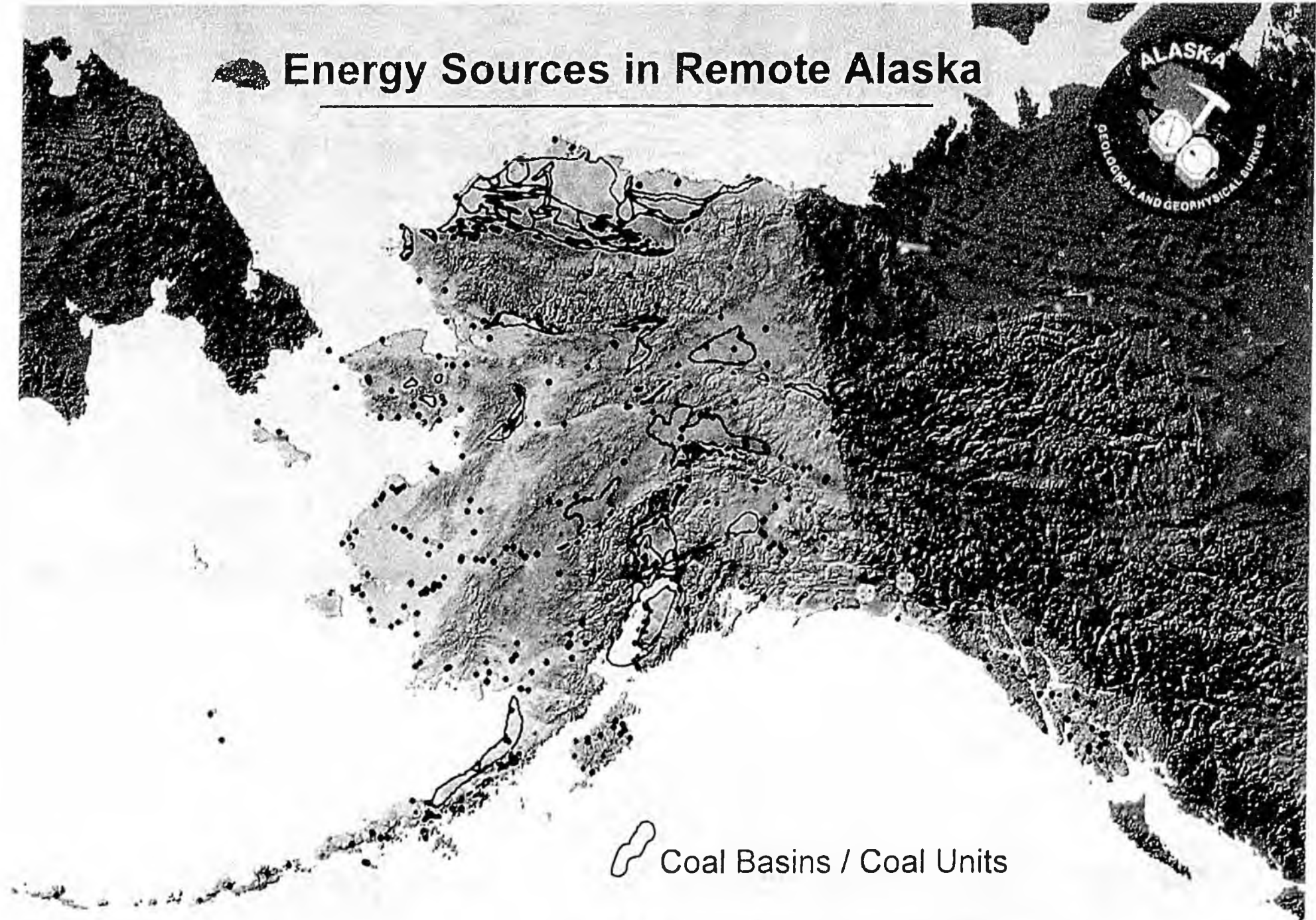
# ANS Potential Hydrates Resource

All Values Trillions of Cubic Feet (TCF)

- **32,965 Tcf** - Gas Hydrates In Place Resource<sup>3</sup>
- **104 Tcf** - Gas Hydrates In Place Prudhoe-Tarn area
- Technically Recoverable Numbers cannot be determined at this time

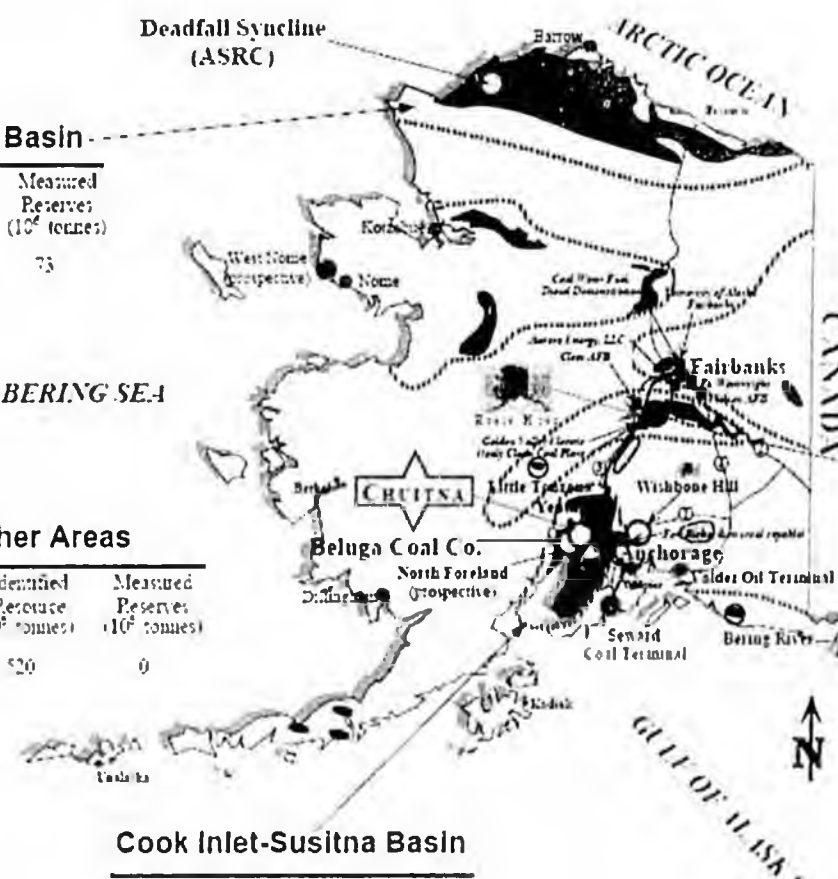
<sup>3</sup>Collett, personal communication, 11/26/04.

# Energy Sources in Remote Alaska



 Coal Basins / Coal Units

 Villages/ Population Centers



- Exploration Prospective Phase
- Pre-Development Phase
- PRODUCING MINE
- Major Port
- Alaska Railroad
- |— Highways
- Coal Fired Power Plants & Coal Technology Projects

**Northern Alaska Basin**

Hypothetical Resource (10 <sup>9</sup> tonnes)	Identified Resource (10 <sup>6</sup> tonnes)	Measured Reserves (10 <sup>6</sup> tonnes)
3,650,000	136,100	73

**All Other Areas**

Hypothetical Resource (10 <sup>6</sup> tonnes)	Identified Resource (10 <sup>6</sup> tonnes)	Measured Reserves (10 <sup>6</sup> tonnes)
8,660	520	0

**Nenana Province**

Hypothetical Resource (10 <sup>9</sup> tonnes)	Identified Resource (10 <sup>9</sup> tonnes)	Measured Reserves (10 <sup>9</sup> tonnes)
15,320	7,800	227

**Key to Coal Rank**

- Bituminous
- Subbituminous
- Lignite

**Cook Inlet-Susitna Basin**

Hypothetical Resource (10 <sup>6</sup> tonnes)	Identified Resource (10 <sup>6</sup> tonnes)	Measured Reserves (10 <sup>6</sup> tonnes)
64,250	10,550	1,450

Major Basin Margins

REVENUE

FISCAL

OUTLOOK

4/26/07



STATE OF ALASKA  
DEPARTMENT OF  
**REVENUE**

# **Alaska's Long Run Fiscal Outlook**

Senate Finance Committee, April 25, 2007

Alaska Department of Revenue

Patrick Galvin, Commissioner and

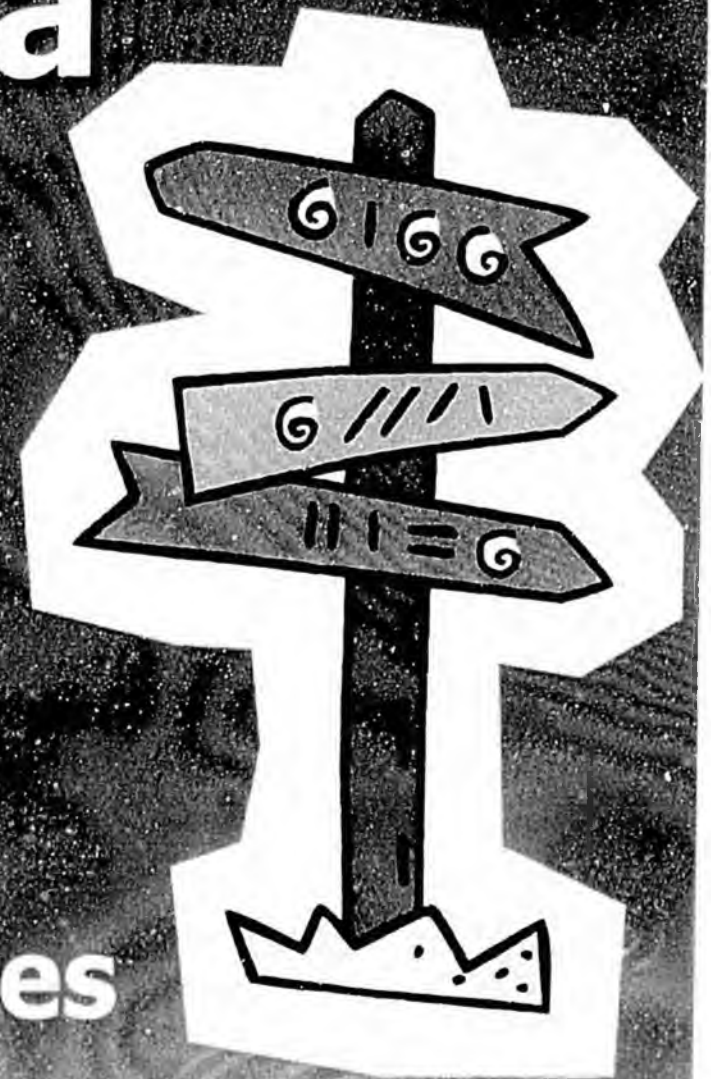
Michael D. Williams, Chief Economist

*Presented 4/26/07 PM*

# Agenda

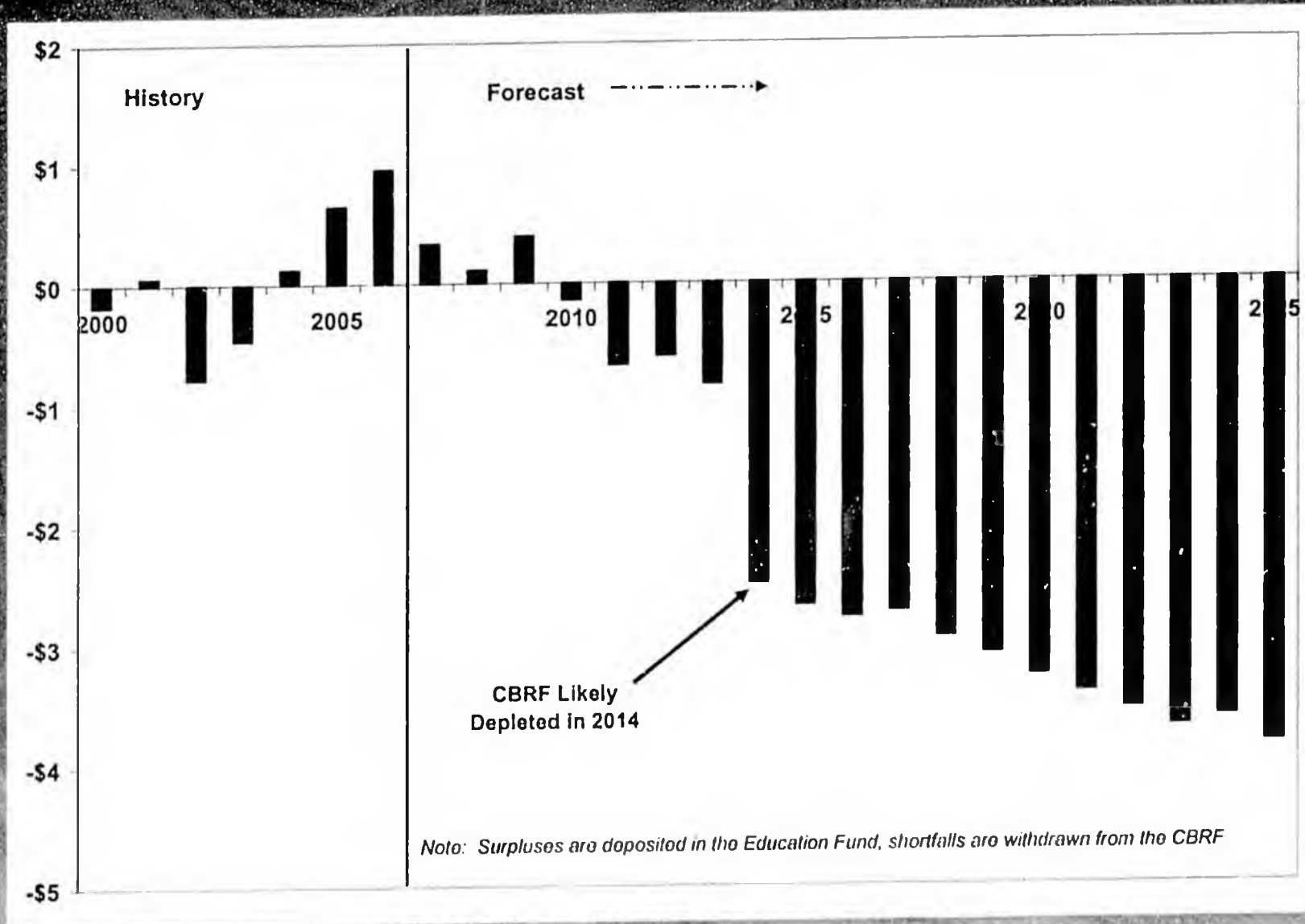
- **Surplus / Deficit**
- **State Oil Revenue**
- **Appropriations**
- **Revenue, Expenditures**

**and use of Balancing Funds**



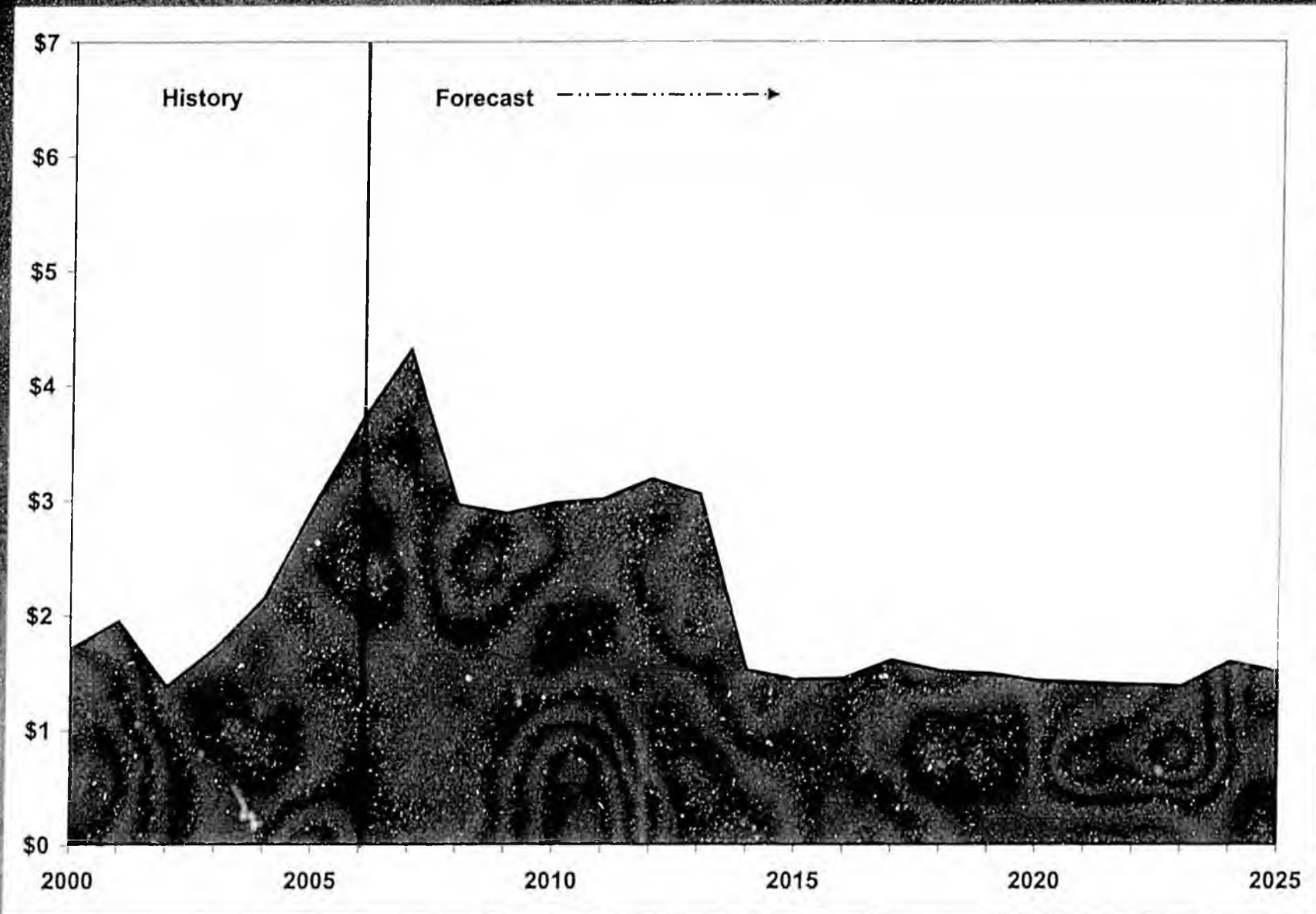
# State Surplus & Deficit

Unrestricted General Fund, Billions of Nominal Dollars



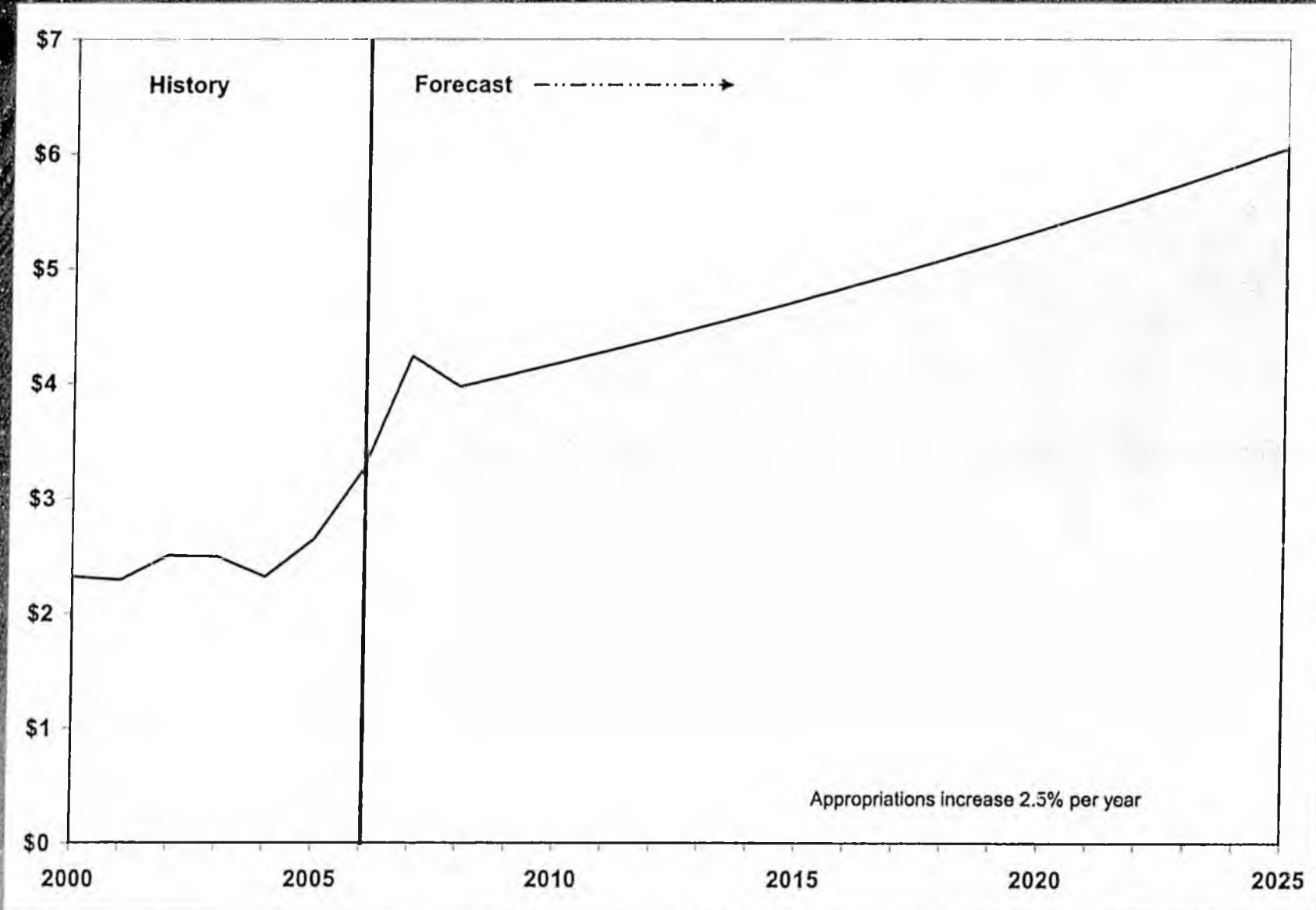
# State Oil Revenue

General Fund Unrestricted Revenue, Billions of Nominal Dollars



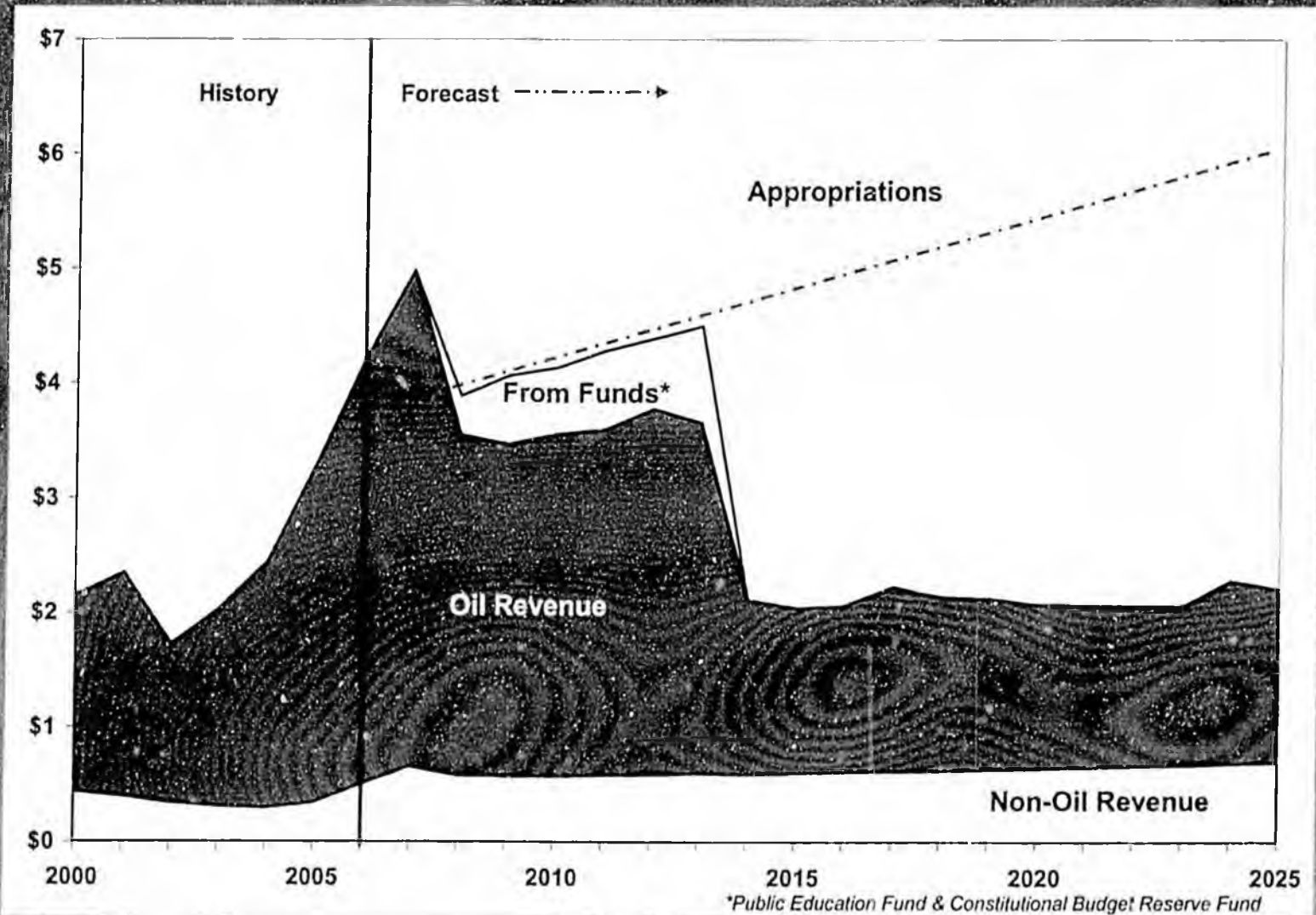
# General Fund Appropriations

Billions of Nominal Dollars



# Revenue, Appropriations & Monies from Special Funds

Billions of Nominal Dollars



\*Public Education Fund & Constitutional Budget Reserve Fund



STATE OF ALASKA  
DEPARTMENT OF  
**REVENUE**

**Patrick Galvin & Michael D. Williams**

[patrick\\_galvin@revenue.state.ak.us](mailto:patrick_galvin@revenue.state.ak.us) & [m\\_w@revenue.state.ak.us](mailto:m_w@revenue.state.ak.us)

**Alaska Department of Revenue**

NATURAL

GAS

PRICES

4/27/07

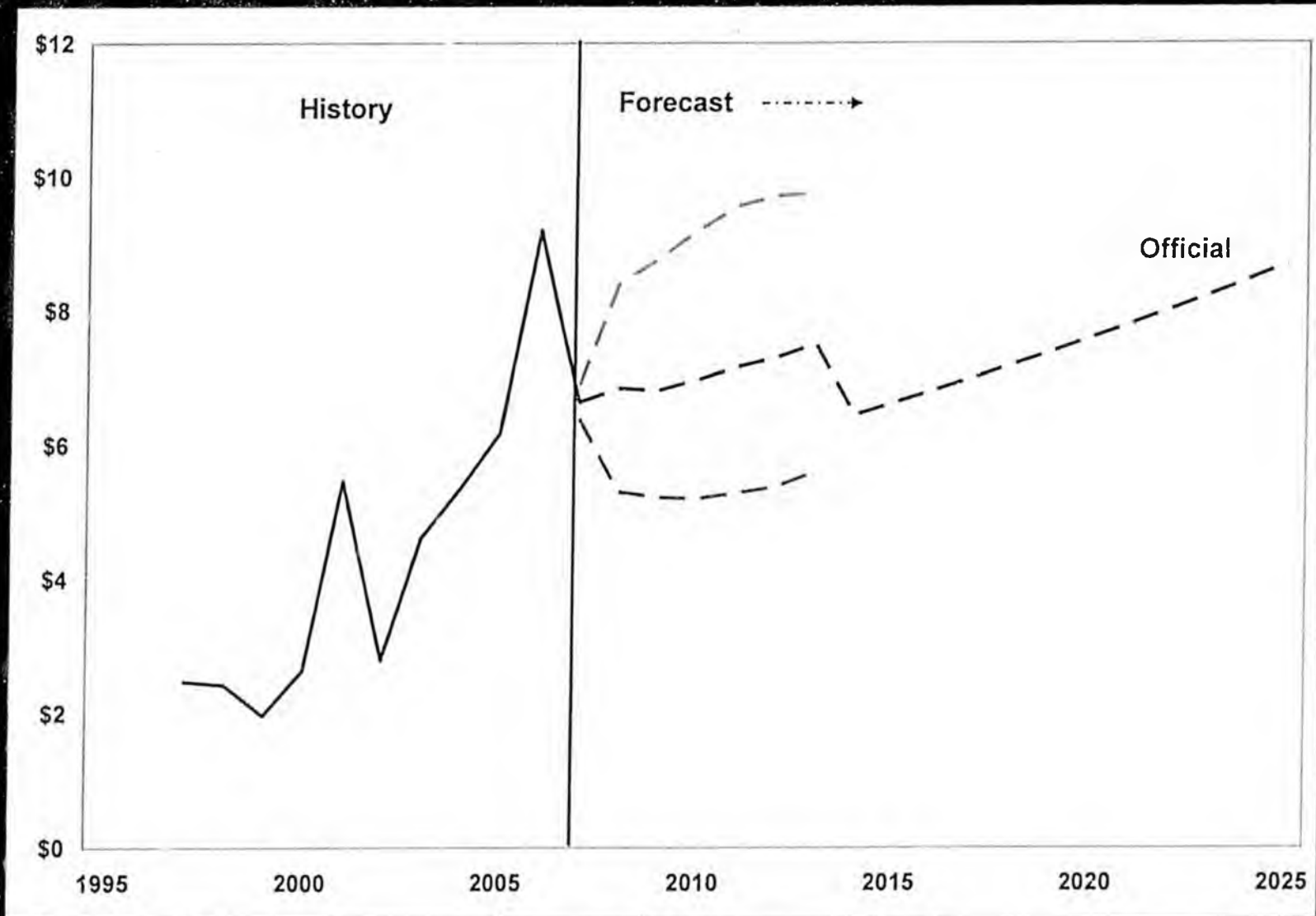
# Natural Gas Prices



**Senate Finance**  
**Department of Revenue, April 26, 2007**  
**Michael D. Williams, Chief Economist**

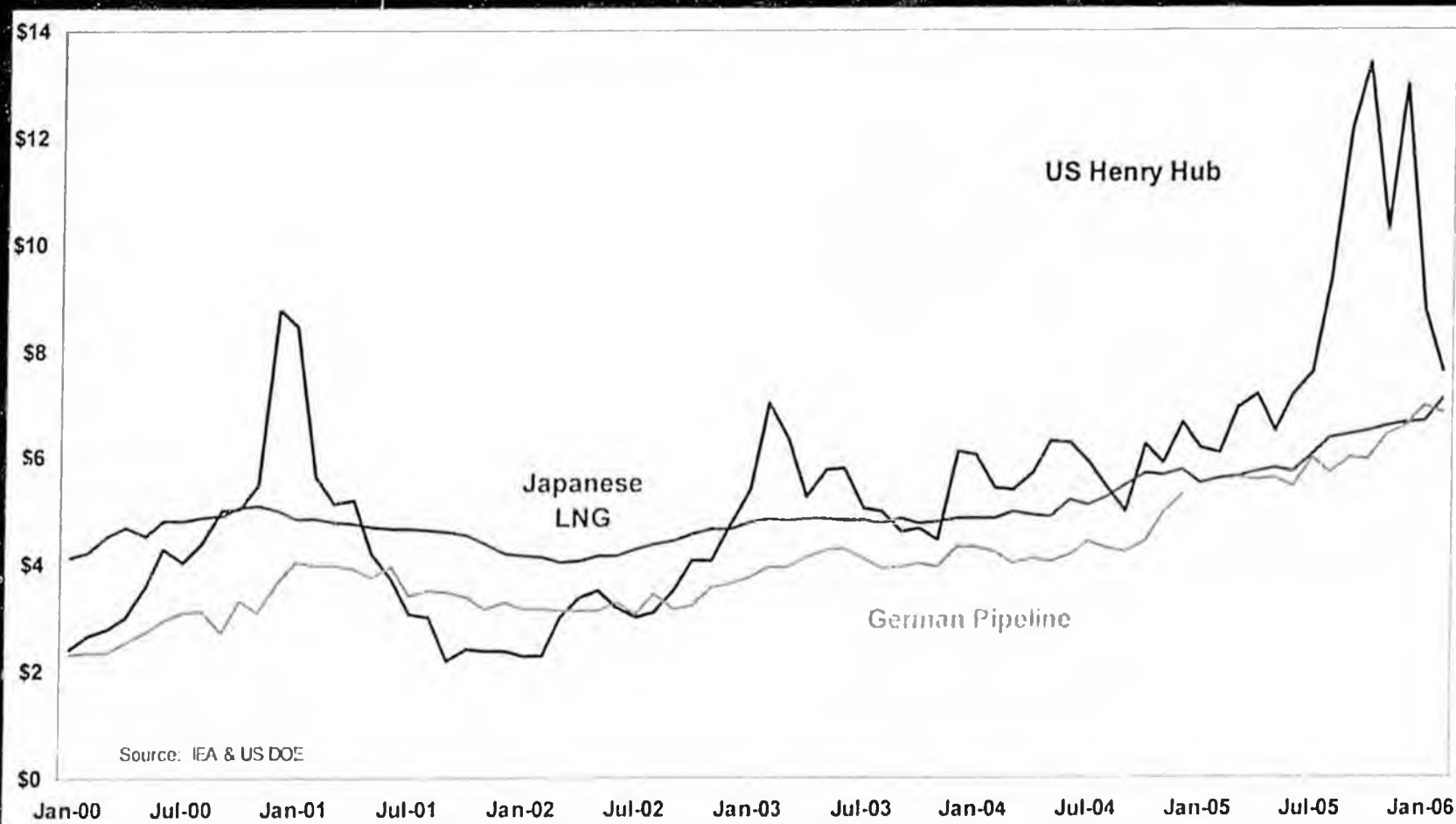
# Natural Gas Prices

Nominal Dollars per million BTU at Henry Hub



# Monthly International Gas Prices

US Dollars per Million British Thermal Units



ROLLED-IN

RATES

5/1/07

The Palin-Parnell Administration presents

# AGIA

The Alaska Gasline Inducement Act

**Rolled-in rates—from the FERC Perspective**  
**Senate Finance Committee**  
**5/01/07**