

# HCR

# 12

<target><bill>HCR 12</bill><subject>HCR  
12</subject><comm>HENE26</comm></target>

**Representative Jay Ramras**  
**Chair, House Judiciary**  
**House Labor & Commerce**  
**House Oil & Gas**  
**House Military & Veteran**  
**Affairs**

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# Alaska State Legislature



While in Session  
**State Capitol, Room 118**  
**Juneau, Alaska 99801-1182**  
(907) 465- 3004  
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Toll Free: (877) 465-3004

**House District 10**

## House of Representatives

### Memo

To: Representatives Charisse Millet and Bryce Edgmon  
Co-Chairs House Special Committee on Energy

Cc: Jeff Turner, House Special Committee on Energy Committee Aide

From: Representative Jay Ramras

Date: March 12, 2009

Re: HCR 12 - URGING REEVALUATION OF AGIA LICENSE

Please schedule House Concurrent Resolution 12 - URGING REEVALUATION OF AGIA LICENSE, for a House Energy Committee hearing as soon as possible.

Attached to this memo please find the bill packet.

Margaret Dowling, 465-6841, in my office will be the staff person assigned to HCR 12

Thank you.

Representative\_Jay\_Ramras@legis.state.ak.us

26-LS0156C  
Bullock  
3.18.09

**CS FOR HOUSE CONCURRENT RESOLUTION NO. 12( )**  
**IN THE LEGISLATURE OF THE STATE OF ALASKA**  
**TWENTY-SIXTH LEGISLATURE - FIRST SESSION**

**BY**

**Offered:**  
**Referred:**

**Sponsor(s): REPRESENTATIVES RAMRAS, Johnson**

**A RESOLUTION**

1 **Requesting that the governor and the attorney general review and reevaluate the project**  
2 **proposed by TransCanada Alaska Company, LLC, and Foothills Pipe Lines Ltd., jointly**  
3 **as licensee, under the Alaska Gasline Inducement Act to determine whether the project**  
4 **proposed by the licensee fails to maximize the benefits to the people of the state or is**  
5 **uneconomic, taking into consideration economic changes affecting project financing, the**  
6 **availability of liquefied natural gas and natural gas from nonconventional sources, the**  
7 **state's risk of paying treble damages associated with an in-state gas pipeline, and the**  
8 **expected budget deficit; and requesting that the governor and the attorney general**  
9 **report the outcome of the review and reevaluation within six months.**

10 **BE IT RESOLVED BY THE LEGISLATURE OF THE STATE OF ALASKA:**

11 **WHEREAS** the state of the national and global economy has been officially declared  
12 a "recession," and current energy markets and credit markets are in turmoil, thereby creating  
13 new uncertainties for the economic feasibility of the large diameter gas pipeline contemplated

1 by the licensee under AS 43.90 (Alaska Gasline Inducement Act) as well as the ability of the  
2 licensee to finance the construction; and

3 **WHEREAS** aggressive developments of shale and other nonconventional gas  
4 resources in the Lower 48, such as the Barnett shale formation in Texas, estimated at  
5 30,000,000,000,000 cubic feet of recoverable gas; the Haynesville shale formation across East  
6 Texas, Louisiana, and Arkansas, estimated to have 20,000,000,000,000 to 35,000,000,000,000  
7 cubic feet; and the Marcellus shale formation stretching from West Virginia into upstate New  
8 York, with recoverable reserves estimated at 50,000,000,000,000 cubic feet, have brought  
9 substantial new domestic natural gas production to market and will continue to produce for  
10 years into the future; and

11 **WHEREAS** technological advancements in the field of shale gas recovery have  
12 lowered costs and prompted increased production, adding to the competition for a long-  
13 distance, large diameter pipeline; and

14 **WHEREAS** shale gas in the continental United States is closer to large markets and  
15 already enjoys thousands of miles of pipe and transmission lines where the construction of  
16 risk and cost have already been mitigated; and

17 **WHEREAS** the cost of incremental production gains in shale gas are less costly and  
18 less risky than a multibillion-dollar large diameter pipeline; and

19 **WHEREAS** increased availability of liquefied natural gas from points around the  
20 world also present growing competition in the United States market for a gas pipeline from  
21 Alaska; and

22 **WHEREAS** there is significant capacity available at existing, expanded, new, and  
23 proposed liquefied natural gas receiving terminals to serve the United States market; and

24 **WHEREAS** new liquefied natural gas production facilities are coming online  
25 worldwide, in search of a market, with the United States being the largest natural gas market  
26 in the world; and

27 **WHEREAS** the commissioner of revenue and the commissioner of natural resources,  
28 acting jointly, determined that the joint application of TransCanada Alaska Company, LLC,  
29 and Foothills Pipe Lines Ltd. proposed a natural gas pipeline project that will sufficiently  
30 maximize the benefits to the people of the state and merits issuance of a license under  
31 AS 43.90 (Alaska Gasline Inducement Act); and

1           **WHEREAS** the commissioner of revenue and the commissioner of natural resources,  
2 acting jointly, published a notice of intent to issue a license to TransCanada Alaska Company,  
3 LLC, and Foothills Pipe Lines Ltd., jointly, under AS 43.90 (Alaska Gasline Inducement Act)  
4 and forwarded the published notice along with the findings, supporting documentation, and  
5 determination to the presiding officer of each house of the Alaska State Legislature; and

6           **WHEREAS** the Alaska State Legislature approved the issuance of the license to  
7 TransCanada Alaska Company, LLC, and Foothills Pipe Lines Ltd., jointly as licensee, by  
8 passing HB 3001 during the Fourth Special Session of the Twenty-Fifth Alaska State  
9 Legislature; and

10           **WHEREAS** the commissioner of revenue and the commissioner of natural resources,  
11 acting jointly, have issued the license approved by the Alaska State Legislature; and

12           **WHEREAS** AS 43.90.440 entitles TransCanada Alaska Company, LLC, and  
13 Foothills Pipe Lines Ltd., jointly as licensee, to a payment from the state of an amount equal  
14 to three times the total amount of the expenditures incurred and paid by the licensee that are  
15 qualified expenditures for the purposes of AS 43.90.110 that the licensee incurred in  
16 developing the licensee's project if, before the commencement of commercial operations,

17           (1) the state extends to another person preferential royalty or tax treatment or  
18 grant of state money for the purpose of facilitating the construction of a competing natural gas  
19 pipeline project in this state; and

20           (2) the licensee is in compliance with the requirements of the license and with  
21 the requirements of state and federal statutes and regulations relevant to the project; and

22           **WHEREAS** the people of the state have a present need for natural gas produced from  
23 the North Slope, and it is in the best interests of the state to pursue a means for delivering  
24 natural gas produced from the North Slope to the people of the state before the  
25 commencement of commercial operations of the project proposed by TransCanada Alaska  
26 Company, LLC, and Foothills Pipe Lines Ltd., jointly as licensee; and

27           **WHEREAS** the development of a project for the delivery of natural gas from the  
28 North Slope before the commencement of commercial operations of the project proposed by  
29 TransCanada Alaska Company, LLC, and Foothills Pipe Lines Ltd., jointly as licensee, may  
30 require the state to consider fiscal issues related to facilitating the construction of a natural gas  
31 pipeline; and

1       **WHEREAS** current revenue projections for Alaska indicate that Alaskans will be  
 2 facing a budget deficit in the years ahead, further jeopardizing the state's ability to pay treble  
 3 damages to the licensee should the state become liable to the licensee for violating the  
 4 assurance to the licensee in AS 43.90.440; and

5       **WHEREAS** the licensee's ongoing work, including field work, continues to increase  
 6 the state's liability for reimbursing the licensee; and

7       **WHEREAS** a project other than the project proposed by TransCanada Alaska  
 8 Company, LLC, and Foothills Pipe Lines Ltd., jointly as licensee, that receives preferential  
 9 royalty or tax treatment or a grant of state money may be considered a competing natural gas  
 10 pipeline project to the project pursued under the license issued to TransCanada Alaska  
 11 Company, LLC, and Foothills Pipe Lines Ltd., jointly as licensee; and

12       **WHEREAS** it is in the best interest of the state that the state have maximum  
 13 flexibility to take any action necessary to develop its natural gas and to meet the energy needs  
 14 of the people of the state; and

15       **WHEREAS** the entitlement of TransCanada Alaska Company, LLC, and Foothills  
 16 Pipe Lines Ltd., jointly as licensee, to a payment by the state of an amount equal to three  
 17 times the total amount of certain qualified expenditures incurred and paid by the licensee  
 18 handicaps the state from pursuing reasonable alternatives for the development of a project to  
 19 deliver natural gas from the North Slope to the people of the state or for export from the state  
 20 for the benefit of the people of the state; and

21       **WHEREAS** it is in the best interest of the state to eliminate the risk of a payment of  
 22 an amount equal to three times the total amount of certain qualified expenditures incurred and  
 23 paid by the licensee so that the state may pursue all reasonable means for the development of  
 24 the state's natural gas and to meet the energy needs of the people of the state; and

25       **WHEREAS** the dilemma for Alaska is whether or not a large diameter gas pipeline  
 26 into a North American hub market is commercially viable; and

27       **WHEREAS** it is unclear if there is a value for the state to spend up to \$500,000,000 to  
 28 create competition when it is uncertain, even if there are two or more competing projects,  
 29 whether or not those projects will ultimately be commercially viable;

30       **BE IT RESOLVED** that the Alaska State Legislature requests that the governor and  
 31 the attorney general review and reevaluate the project proposed by TransCanada Alaska

1 Company, LLC, and Foothills Pipe Lines Ltd., jointly as licensee, under AS 43.90 (Alaska  
2 Gasline Inducement Act) to determine whether the project proposed by the licensee fails to  
3 maximize the benefits to the people of the state or is uneconomic, taking into consideration  
4 economic changes affecting project financing, the availability of liquefied natural gas and  
5 natural gas from nonconventional sources, the state's risk of paying treble damages associated  
6 with an in-state gas pipeline, and the expected budget deficit; and be it

7 **FURTHER RESOLVED** that the governor and the attorney general are requested to  
8 report the outcome of their review and evaluation within 180 days after this resolution is  
9 passed by the legislature.

## CHANGES FROM HCR 12 TO CS FOR HCR 12 (ENE)

### TITLE CHANGE:

#### FROM:

Requesting that the governor and the attorney general review and reevaluate the license issued to TransCanada Alaska Company, LLC, and Foothills Pipe Lines Ltd., jointly as licensee, under the Alaska Gasline Inducement Act to determine whether the project proposed by the licensee sufficiently maximizes the benefits to the people of the state and merits continuing the license, taking into consideration economic changes affecting project financing, the availability of liquefied natural gas and natural gas from nonconventional sources, the state's risk of paying treble damages associated with an in state gas pipeline, and the expected budget deficit; and requesting that the governor and the attorney general report the outcome of the review and reevaluation within six months.

#### TO:

Requesting that the governor and the attorney general review and reevaluate the project proposed by TransCanada Alaska Company, LLC, and Foothills Pipe Lines Ltd., jointly as licensee, under the Alaska Gasline Inducement Act to determine whether the project proposed by the licensee fails to maximize the benefits to the people of the state or is uneconomic, taking into consideration economic changes affecting project financing, the availability of liquefied natural gas and natural gas from nonconventional sources, the state's risk of paying treble damages associated with an in-state gas pipeline, and the expected budget deficit; and requesting that the governor and the attorney general report the outcome of the review and reevaluation within six months.

### SECOND "WHEREAS" CHANGED FROM:

**WHEREAS** aggressive developments of shale and other nonconventional gas resources in the Lower 48, such as the Barnett shale formation in Texas, thought to be the largest onshore natural gas field in the United States, with some experts estimating that it contains up to 30 trillion cubic feet of gas, and the Bakken shale formation of the Williston Basin Province, Montana and North Dakota, which is thought to contain 1.85 trillion cubic feet of associated/dissolved natural gas, and 148,000,000 barrels of natural gas liquids, have brought substantial new domestic natural gas production to market; and

#### TO:

**WHEREAS** aggressive developments of shale and other nonconventional gas resources in the Lower 48, such as the Barnett shale formation in Texas, estimated at 30,000,000,000,000 cubic feet of recoverable gas; the Haynesville shale formation across East Texas, Louisiana, and Arkansas, estimated to have 20,000,000,000,000 to

35,000,000,000,00 cubic feet; and the Marcellus shale formation stretching from West Virginia into upstate New York, with recoverable reserves estimated at 50,000,000,000,000 cubic feet, have brought substantial new domestic natural gas production to market and will continue to produce for years into the future; and

**THIRD WHEREAS CHANGED FROM:**

**WHEREAS** technological advancements in the field of shale gas recovery have called into question the economic viability of a long distance, large diameter pipeline; and

**TO:**

**WHEREAS** technological advancements in the field of shale gas recovery have lowered costs and prompted increased production, adding to the competition for a long distance, large diameter pipeline; and

**FIFTH WHEREAS:** Deleted

**NEW WHEREAS' :**

**5) Whereas** the cost of incremental production gains in shale gas are less costly, and less risky, than a multibillion-dollar large diameter pipeline; and

**6) Whereas** increased availability of liquefied natural gas from points around the world also present growing competition in the U.S. market for a gas pipeline from Alaska; and

**7) Whereas** there is significant capacity available at existing, expanded, new and proposed LNG receiving terminals to serve the U.S. market; and

**8) Whereas** new LNG production facilities are coming online worldwide, in search of a market, with the U.S. the largest natural gas market in the world;

**FIFTEENTH WHEREAS FROM:**

**WHEREAS** the development of a project for the delivery of natural gas from the North Slope before the commencement of commercial operations of the project proposed by TransCanada Alaska Company, LLC, and Foothills Pipe Lines Ltd., jointly as licensee, may require the state to extend to another person preferential royalty or tax treatment or grant of state money for the purpose of facilitating the construction of a natural gas pipeline; and

**TO:**

**WHEREAS** the development of a project for the delivery of natural gas from the North Slope before the commencement of commercial operations of the project proposed by TransCanada Alaska Company, LLC, and Foothills Pipe Lines Ltd., jointly as

licensee, may require the state to consider fiscal issues related to facilitating the construction of a natural gas pipeline; and

**TWENTIETH WHEREAS CHANGED FROM:**

**WHEREAS** the entitlement of TransCanada Alaska Company, LLC, and Foothills Pipe Lines Ltd., jointly as licensee, to a payment by the state of an amount equal to three times the total amount of certain qualified expenditures incurred and paid by the licensee handicaps the state from pursuing **all** reasonable alternatives for the development of a project to deliver natural gas from the North Slope to the people of the state or for export from the state for the benefit of the people of the state; and

**TO:**

“all” deleted

**BE IT RESOLVED CHANGED FROM:**

**BE IT RESOLVED** that the Alaska State Legislature requests that the governor and the attorney general review and reevaluate the license issued to TransCanada Alaska Company, LLC, and Foothills Pipe Lines Ltd., jointly as licensee, under AS 43.90 (Alaska Gasline Inducement Act) to determine whether the project proposed by the licensee sufficiently maximizes the benefits to the people of the state and merits continuing the license, taking into consideration economic changes affecting project financing, the availability of liquefied natural gas and natural gas from nonconventional sources, the state's risk of paying treble damages associated with an in-state gas pipeline, and the expected budget deficit;

**TO:**

**BE IT RESOLVED** that the Alaska State Legislature requests that the governor and the attorney general review and reevaluate the project proposed by TransCanada Alaska Company, LLC, and Foothills Pipe Lines Ltd., jointly as licensee, under AS 43.90 (Alaska Gasline Inducement Act) to determine whether the project proposed by the licensee fails to maximize the benefits to the people of the state or is uneconomic, taking into consideration economic changes affecting project financing, the availability of liquefied natural gas and natural gas from nonconventional sources, the state's risk of paying treble damages associated with an in-state gas pipeline, and the expected budget deficit;

# State of Alaska Oil and Gas Lease Sales

## *North Slope Areawide 2009*

## *North Slope Foothills Areawide 2009*

Call for New Information  
March 3, 2009

Alaska Department of Natural Resources  
Division of Oil and Gas

The Alaska Department of Natural Resources (ADNR), Division of Oil and Gas (DO&G), is requesting new information regarding its proposal to offer all available state acreage in the North Slope and North Slope Foothills Areawide 2009 oil and gas lease sales. Through this request for new information, DO&G provides an opportunity for interested parties to submit new information to DO&G that has become available since the issuance of the most recent best interest findings for these areas. The current North Slope Areawide final best interest finding was issued on July 15, 2008. The current North Slope Foothills Areawide final best interest finding was issued on February 7, 2001. A supplement to this finding was issued in January of 2002. These documents are available on DO&G's website: [www.dog.dnr.state.ak.us](http://www.dog.dnr.state.ak.us). ADNR will either issue a supplement to the findings or a decision of no substantial new information for these sales.

### What is a Call for New Information?

Before an oil and gas lease sale, ADNR issues a call for new information that has become available since the most recent best interest finding for the sale area. Agencies and the public are given an opportunity for comment. Based on the comments received, ADNR will determine whether there is "substantial new information" that justifies a supplement to the finding. Either a supplement to the finding, or a "decision of no substantial new information," will be issued not later than 90 days before the sale. Any person that has commented during the comment period will have the reconsideration and appeal rights as described in AS 38.05.035.

North Slope Areawide 2009	opens	closes
North Slope Foothills Areawide 2009		
Call for New Information	3/03/09	5/04/09
Supplement to the best interest finding or decision of no substantial new information	July 2009	
Proposed Sale	October 2009	

Mitigation measures developed in the current North Slope and North Slope Foothills Areawide best interest findings will be carried on leases sold during the 10-year life of the findings unless, as a result of substantial new information, ADNR deems it necessary to change or add measures through a supplement to the finding. A new coastal management consistency review is done whenever the commissioner determines that new information or conditions suggest the proposed lease sale may no longer be consistent with ACMP standards.

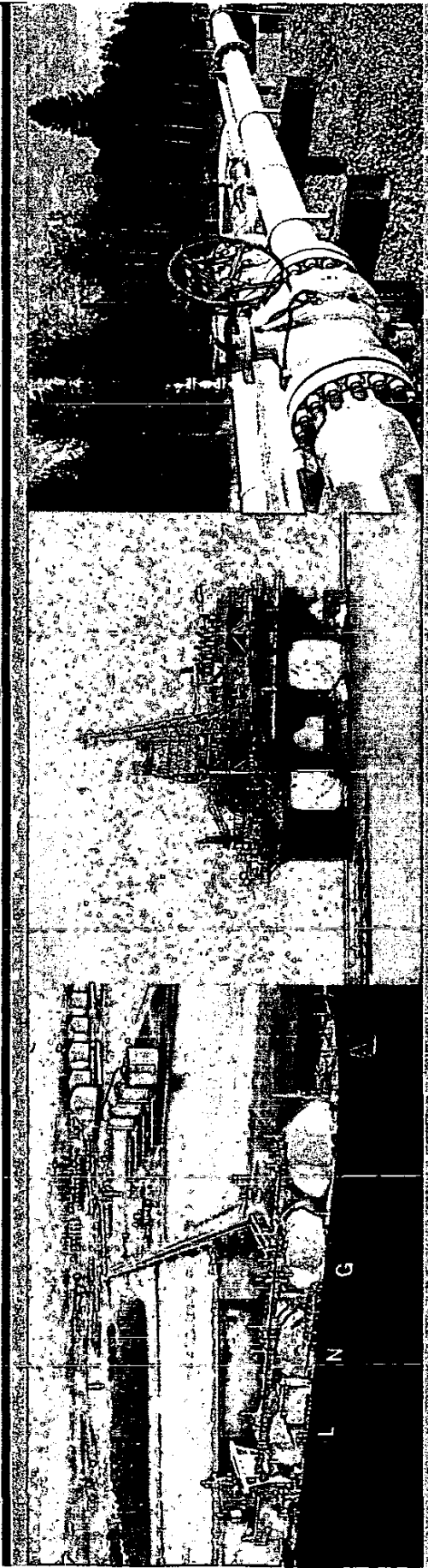
#### DO&G is requesting new information concerning:

- fish and wildlife species and their habitats in the area;
- current and projected uses in the area, including uses and value of fish and wildlife such as subsistence and recreation;
- potential geophysical hazards within the proposed sale area;
- reasonably foreseeable cumulative effects of exploration, development, production, and transportation for oil and gas on the sale area, including effects on subsistence uses, fish and wildlife habitat and populations and their uses, and historic and cultural resources;
- lease stipulations and mitigation measures, including any measures to prevent and mitigate releases of oil and hazardous substances, to be included in the leases, and a discussion of the protections offered by these measures;
- reasonably foreseeable fiscal effects of the lease sale and the subsequent activity on the state and affected municipalities and communities, including the explicit and implicit subsidies associated with the lease sale, if any;
- air and water quality;
- reasonably foreseeable effects of exploration, development, production, and transportation involving oil and gas on municipalities and communities within or adjacent to the lease sale area.

Hyundai S Korea

# NARUC Winter Meeting LNG in a Renewable World

February 17, 2009



**J. Mark Robinson, Director**

OFFICE OF ENERGY PROJECTS  
FEDERAL ENERGY REGULATORY COMMISSION

# Why Natural Gas

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- ⇒ It is doable
- ⇒ Issues with Coal, Nuclear, Renewables

# Coal: Carbon Capture and Sequestration (CCS)

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- ⇒ It's the S
- ⇒ CO<sub>2</sub> is a colorless, odorless gas which is lethal to humans in a concentration of 10-11%.
- ⇒ To sequestrate CO<sub>2</sub>
  - ⇒ Many miles of pipe are needed.
    - Up to 23,000 miles of CO<sub>2</sub> pipeline will be needed between 2010 and 2050 for CCS. (PNNL)
  - ⇒ Permanent, non-cycling storage sites must be found.
- ⇒ Regulatory Environment Does Not Exist
  - ⇒ Current CO<sub>2</sub> pipes are for enhanced oil recovery
  - ⇒ Regulatory regime for large scale CO<sub>2</sub> pipeline siting would need to consider: environmental impacts, safety, eminent domain, landowner impacts with the added concern of CO<sub>2</sub> as an asphyxiant gas.

## Nuclear Power: Time

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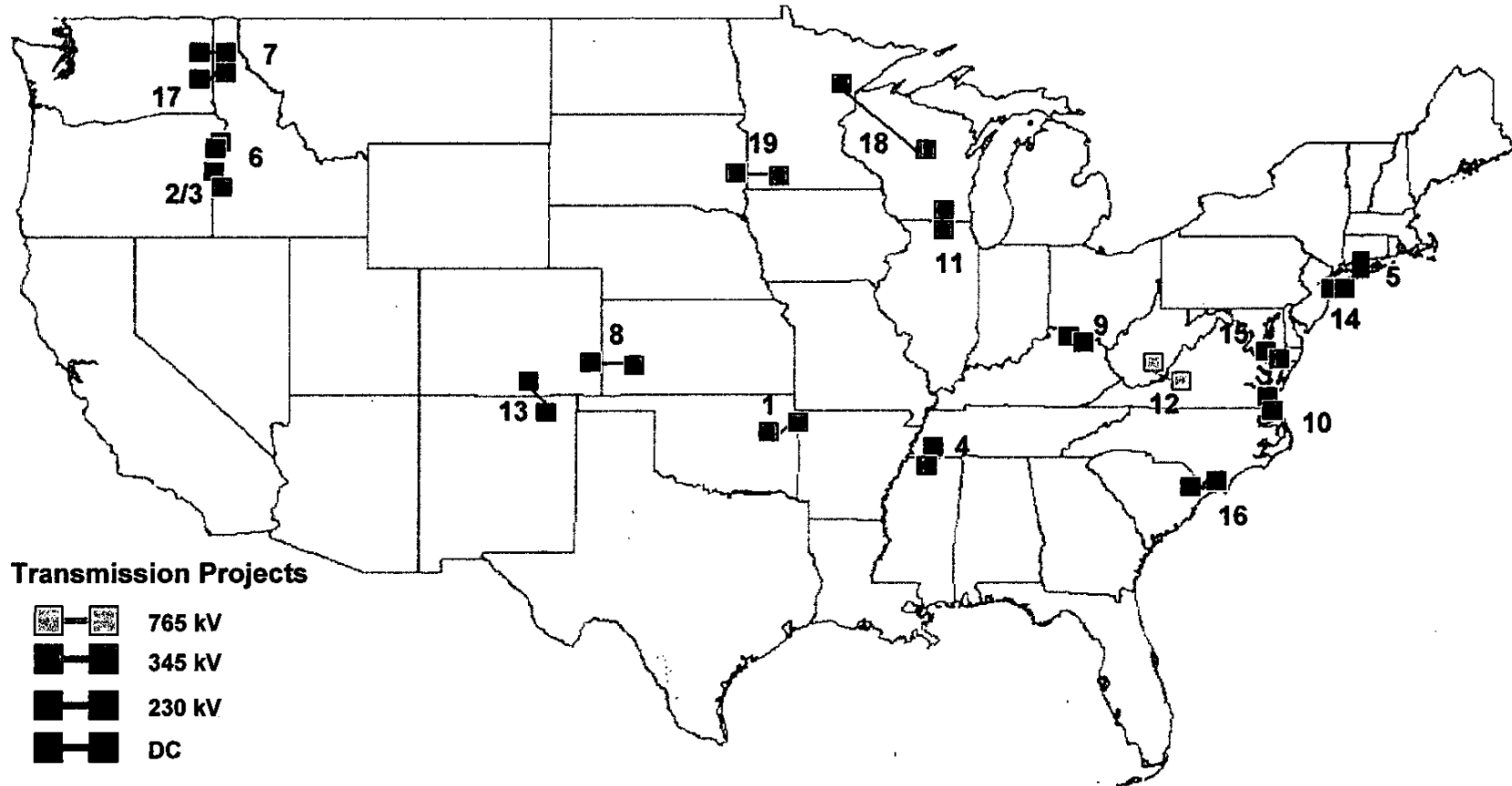
- EIA analysis of the Climate Security Act of 2007 estimated a need for 200 new nuclear plants by 2030.
  - ⇒ The NRC expects to receive 23 new nuclear power plant applications representing 34 units between 2007-2010.
- The NRC's new licensing process for nuclear power plants takes about 10 years to complete.
- The capital cost to build a new nuclear plant is conservatively estimated to range from \$4,000/kW to \$6,000/kW.
- The United States currently has 56,000 metric tons of spent nuclear fuel from nuclear reactors. By the year 2035 it is expected to have 119,000 metric tons.
  - ⇒ Yucca Mountain statutory capacity limit is 77,000 metric tons. The country's waste inventory will exceed this limit by 2010.

# Wind and Solar Energy: Transmission and Land Use

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- ⇒ Renewables sources are not near the market
  - ⇒ Electric transmission must be built.
- ⇒ Reliability?
  - ⇒ Wind energy available, on average, 30% to 45% of the time.
  - ⇒ Conversion efficiency of Solar PV cells range between 8% and 17%
- ⇒ Land use for a 500 MW plant
  - ⇒ Natural Gas: 20 to 40 acres
  - ⇒ Wind: 25,000 to 37,500 acres, 250 to 500 acres are under concrete
  - ⇒ Solar: approximately 3,500 acres

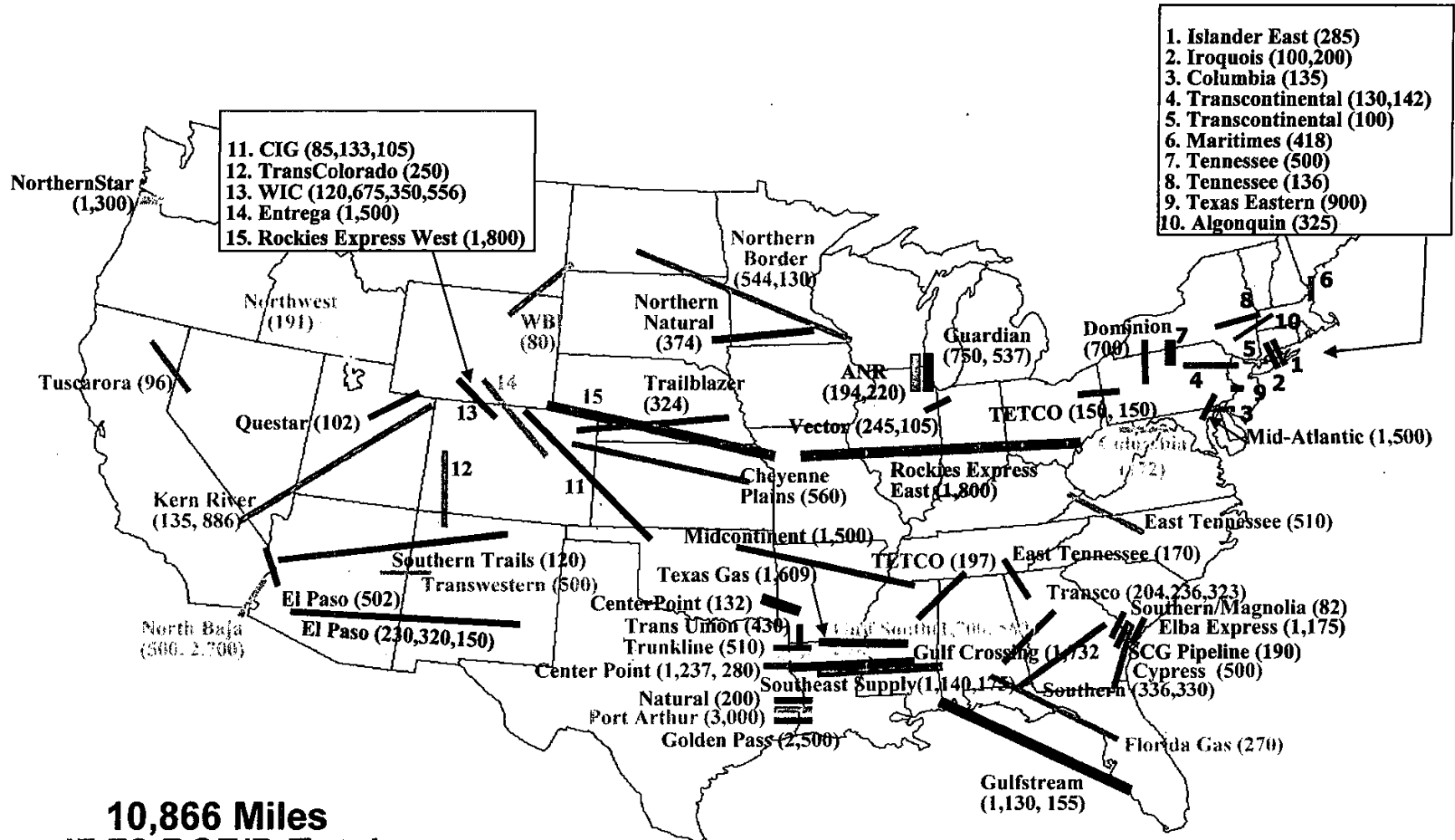
# Since 2000, 19 transmission lines have been built that physically cross state borders



**1,004 Miles  
230 kV and higher**

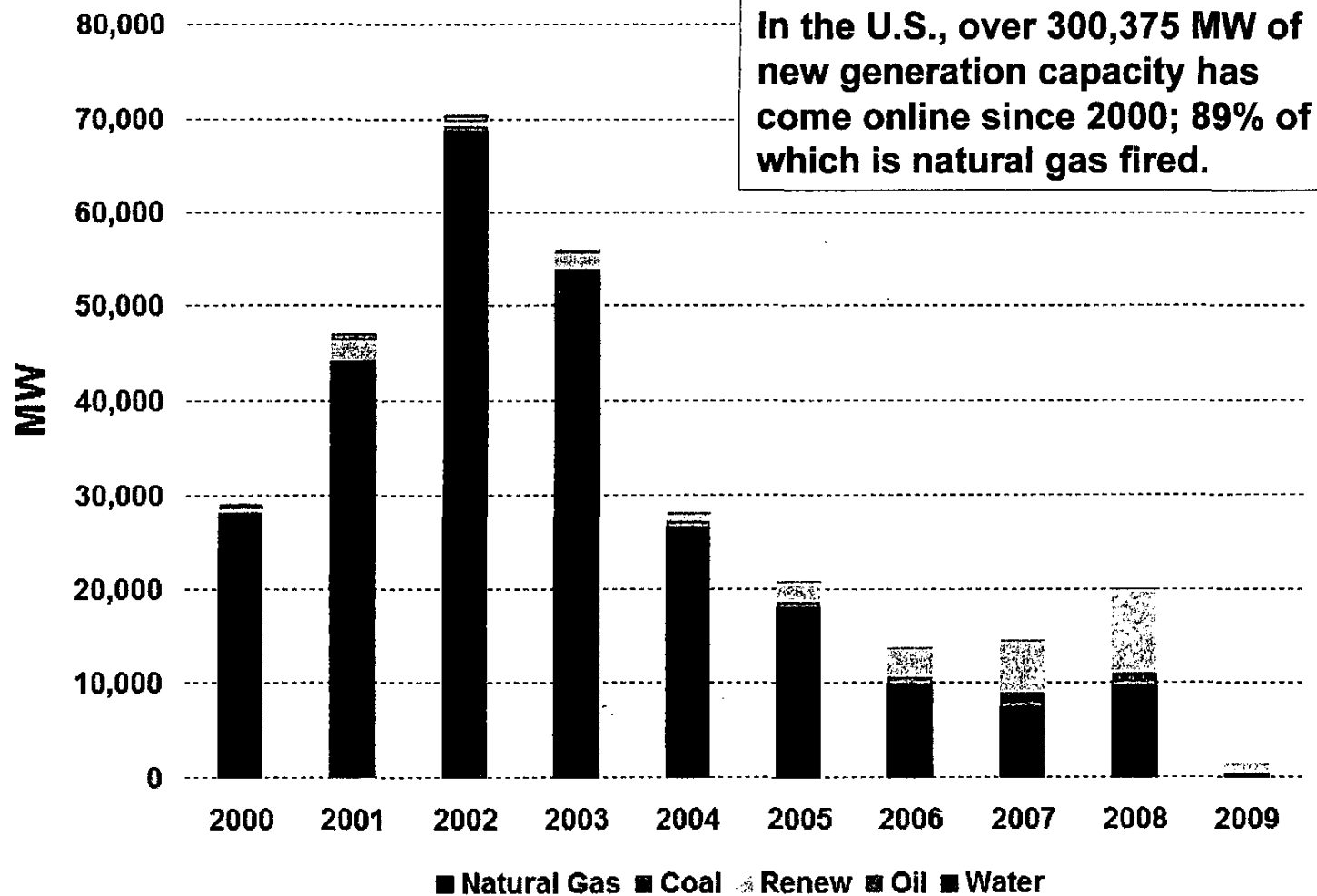
Sources: Derived from Ventyx Velocity Suite, the C Three Group's U.S. Electric Transmission Database and FERC's Transmission Database

# Since January 2000, 84 natural gas pipeline projects have been certified that physically cross state borders.



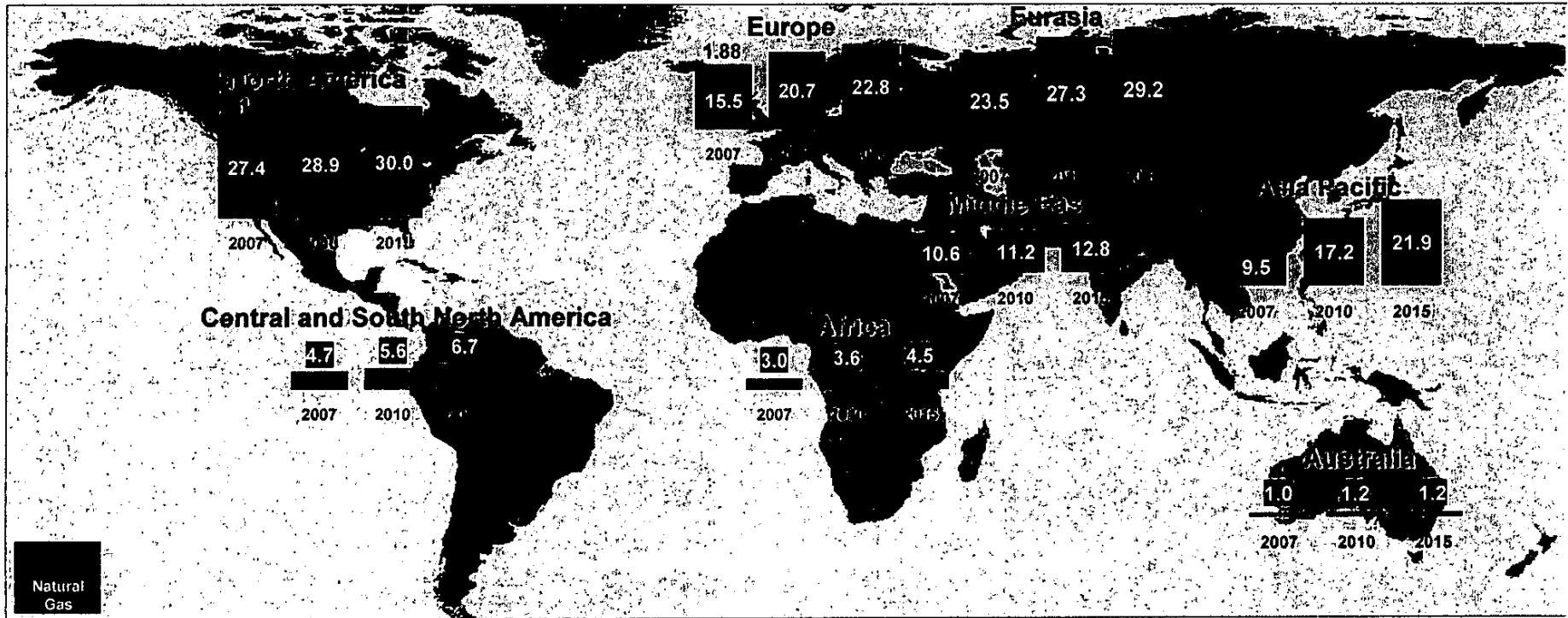
Sources: FERC's Database

## Gas-fired generation has dominated recent U.S. expansion of generation capacity



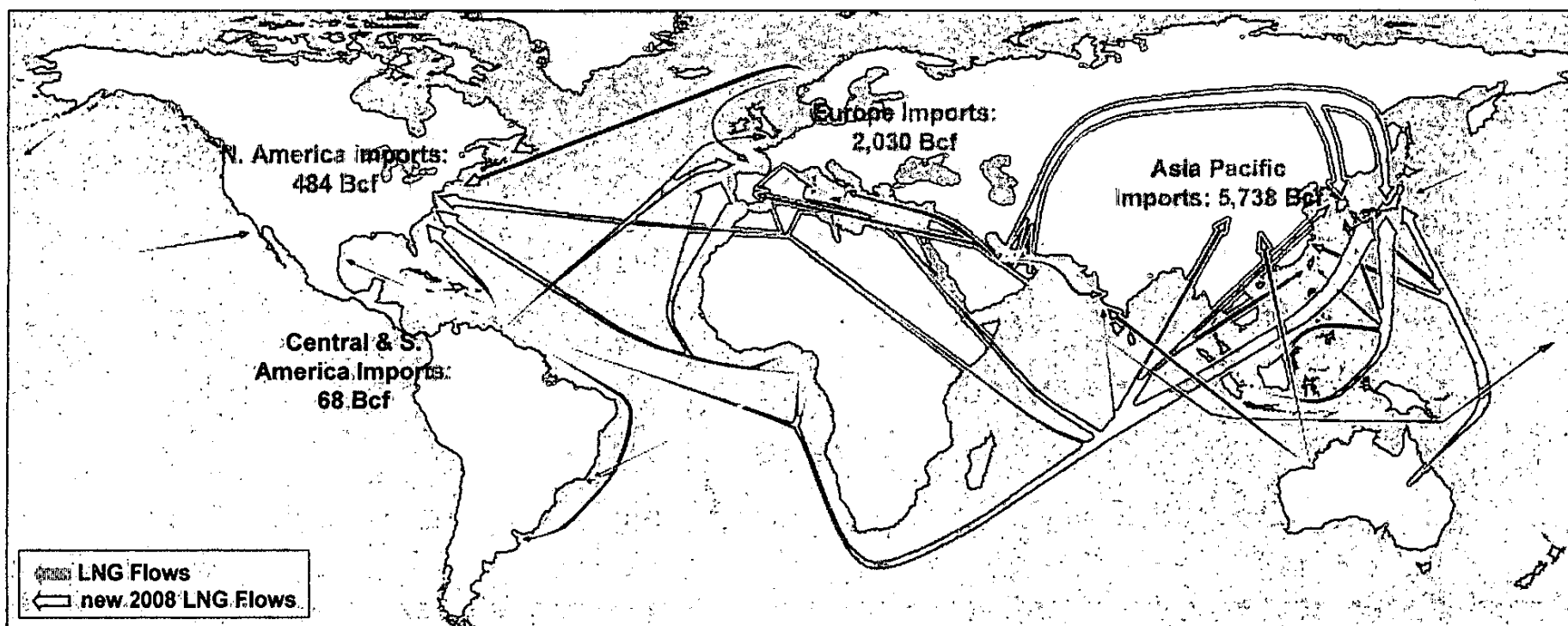
Source: Based on data from Ventyx Global Energy, LLC, Velocity Suite, February 2009.

# World Gas Consumption (in Tcf)



Source: Based on data from BP Natural Gas Consumption 2007, EIA's International Energy Outlook 2008, Table A6, and Ventyx Global Decision LLC, Velocity Suite.

# 2008 LNG Flow Movements



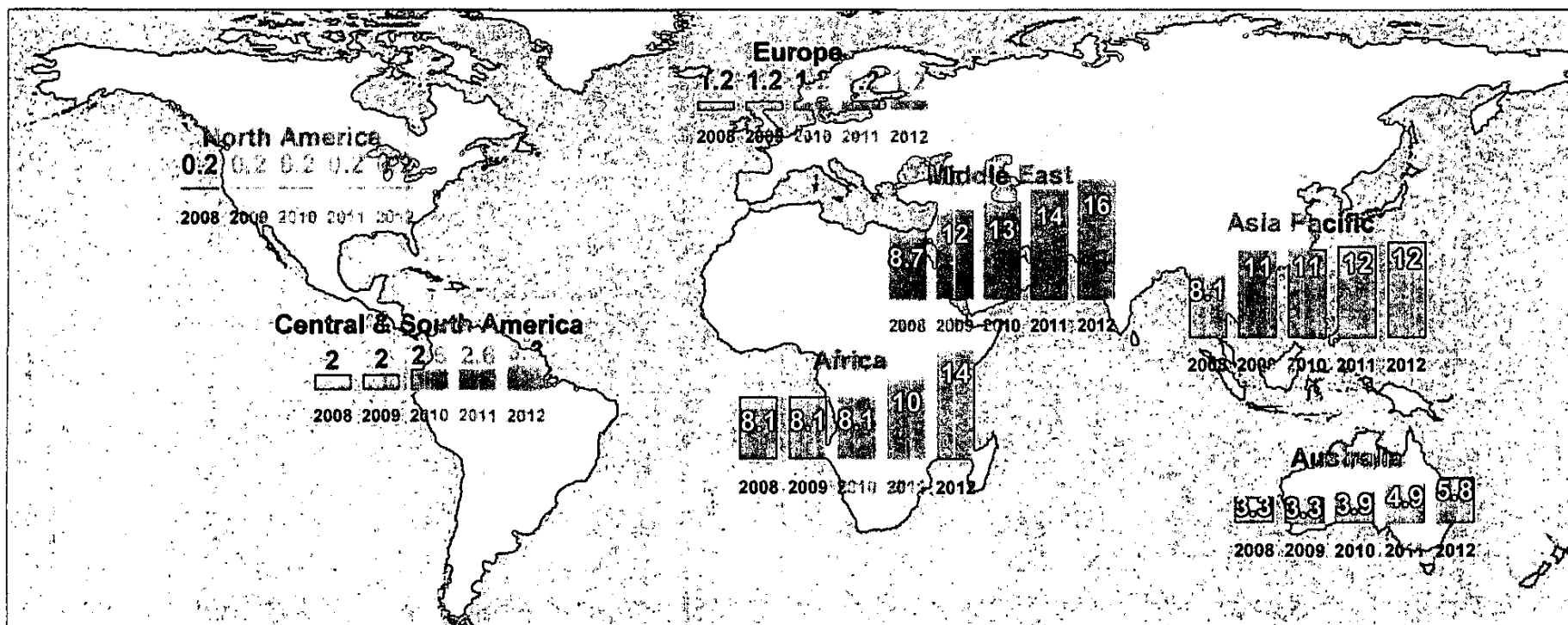
Source: Based on data from CERA Global LNG Balance, February 2009, and Ventyx Global Decision LLC, Velocity Suite.

## Variables Affecting LNG Movement

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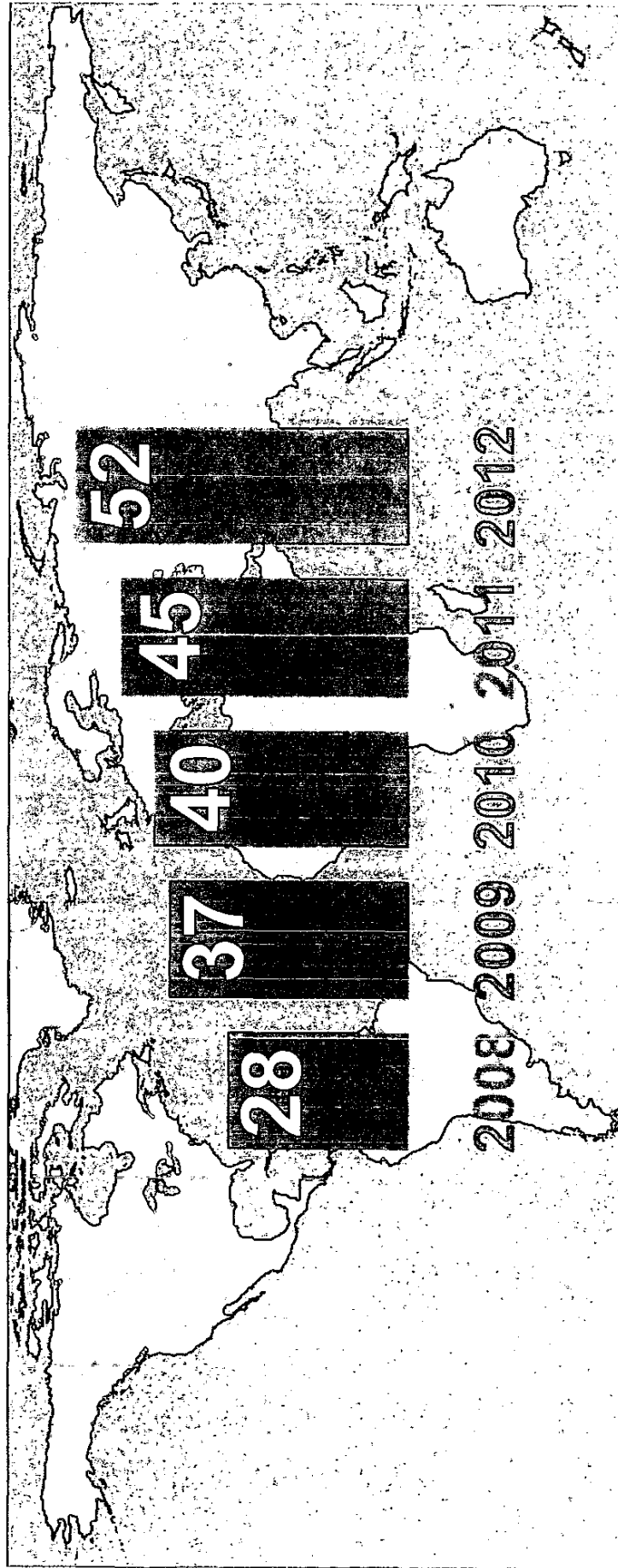
- ⇒ Market Structure
- ⇒ Domestic Supplies
- ⇒ Liquefaction Capacity
- ⇒ Storage

# LNG Liquefaction Capacity by Region (Bcf/d)



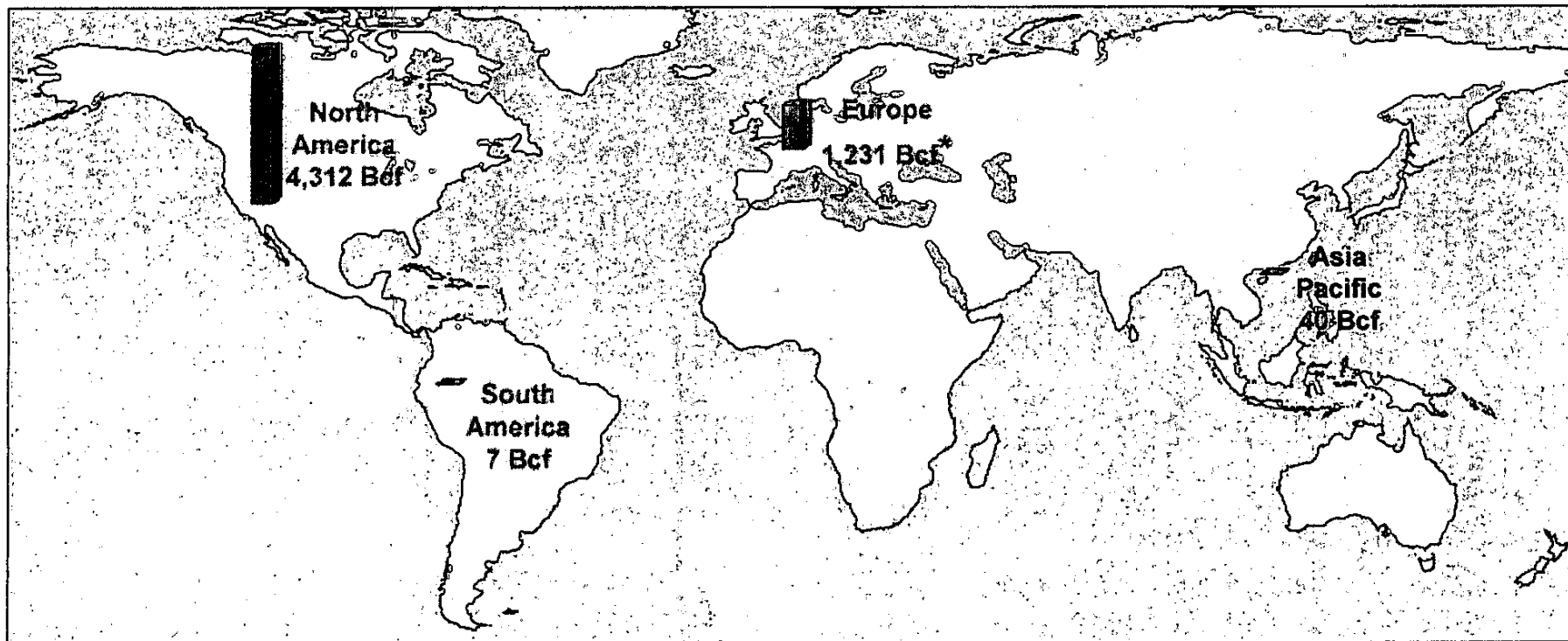
Source: Based on data from Platts LNG Daily's Terminal Trackers, Ventyx Global Decision LLC, Velocity Suite.

# Global LNG Liquefaction Capacity (Bcf/d)



Source: Based on data from Platts LNG Dally's Terminal Trackers, Ventyx Global Decision LLC, Velocity Suite.

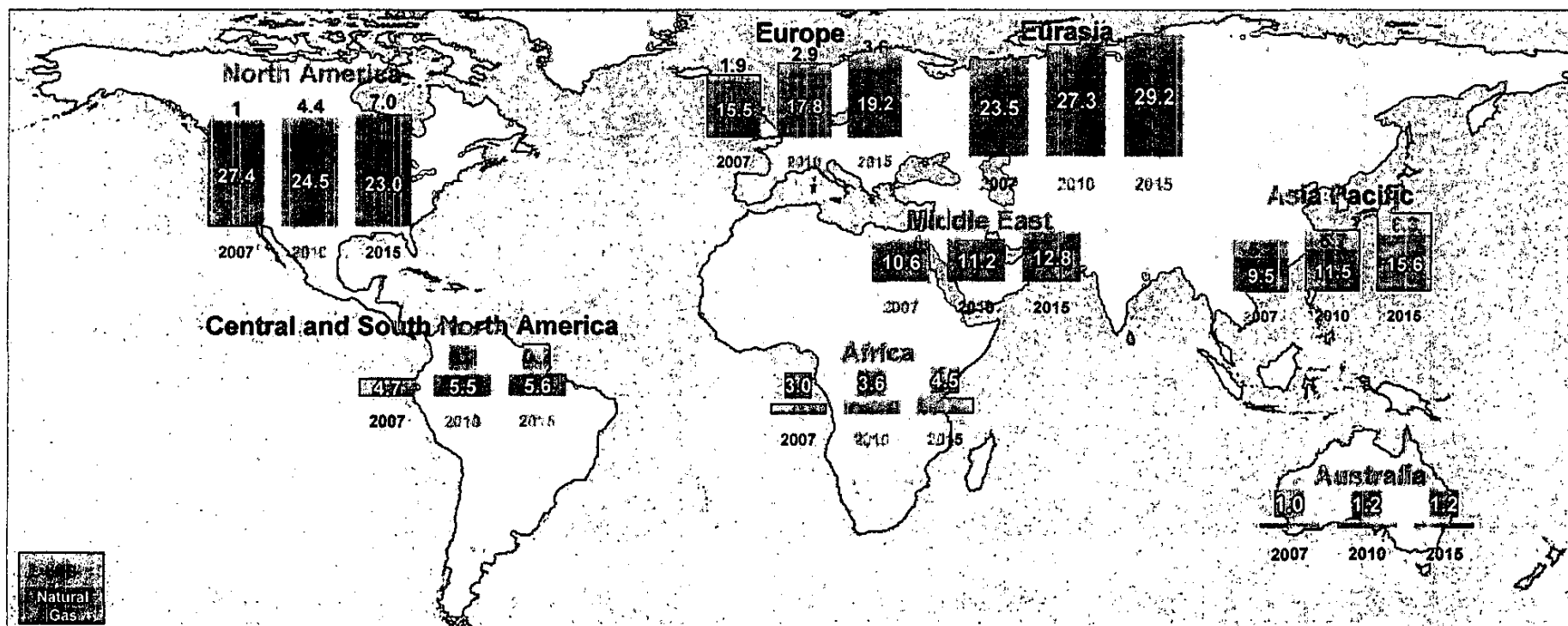
# Worldwide Working Gas Storage Capacity



\* This represents those European countries that have regasification facilities.

Source: Based on data from IGU 23<sup>rd</sup> World Gas Conference-WGC 2006, EIA's Estimate of Peak Underground Working Gas Storage Capacity in the US, and Ventyx Global Decision LLC, Velocity Suite.

# World Gas Consumption by 2015 (Tcf)



Source: Based on data from BP Natural Gas Consumption 2007, EIA's International Energy Outlook 2008, Table A6, CERA's Global Demand Outlook and Ventyx Global Decision LLC, Velocity Suite.

# 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

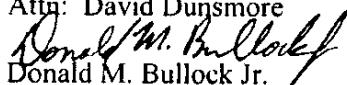
State Capitol  
Juneau, Alaska 99801-1182  
Deliveries to: 129 6th St., Rm. 329

## MEMORANDUM

March 17, 2009

**SUBJECT:** Request by HCR 12 that the governor and the attorney general review and reevaluate the license issued under the Alaska Gasline Inducement Act (AS 43.90) (Work Order 26-LS0156'S)

**TO:** Representative Pete Petersen  
Attn: David Dunsmore

**FROM:**   
Donald M. Bullock Jr.  
Legislative Counsel

HCR 12 requests the governor and the attorney general to review and reevaluate the license issued to TransCanada Alaska Company, LLC and Foothills Pipe Lines, Ltd. (licensee) to determine whether the project proposed "maximizes the benefits to the people of the state and merits continuing the license[.]" You asked whether any authority exists for the state to unilaterally revoke or modify the terms for the license, whether the state would be exposed to any liability if the state unilaterally revoked or modified the license, and whether there are any other potential legal consequences of revoking or modifying the license.

The license issued under AS 43.90 (Alaska Gasline Inducement Act (AGIA)) is a contract between the state and the licensee. Under the contract, the state commits to make matching contributions of up to \$500,000,000 for qualified expenditures incurred by the licensee and to provide the benefits of the Alaska Gasline Inducement Act coordinator.<sup>1</sup> The state also granted the licensee the assurances in AS 43.90.440 that the inducements provided to the licensee would not also be given to a competing natural gas pipeline; if the state provides inducements to a competing pipe line, the licensee is entitled to the payment described in AS 43.90.440(a). In return for the state's commitment, the licensee agrees to the conditions and commitments in AS 43.90.130, the requirements generally referred to as the "must haves" during the consideration of AGIA. Because the license is a contract, if the state unilaterally revokes or modifies the contract, the state would be liable for damages resulting from the breach.

I will not speculate on the amount of the damages for which the state would be liable if the state breaks the contract. However, the amount of damages may be significant based on the fact that AS 43.90.440 entitles the licensee to a payment by the state of three times the total amount of the qualified expenditures incurred and paid by the licensee if the

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<sup>1</sup> AS 43.90.110.

Representative Pete Petersen  
March 17, 2009  
Page 2

state violates the contract by providing inducements to a competing gas pipeline. If the state makes the payment under AS 43.90.440, the project is deemed to be abandoned under AS 43.90.240(d).

Within AGIA, there are provisions that allow for the abandonment of the license or a modification of the project. Under AS 43.90.240, the project may be abandoned if it is found to be uneconomic. AS 43.90.240(a) addresses the situation where the licensee and the commissioner of revenue and the commissioner of natural resources all agree that the project is uneconomic. That subsection reads as follows, with emphasis added:

*(a) If the commissioners and the licensee agree that the project is uneconomic*, the project shall be abandoned, the inducement provided for in AS 43.90.110 shall be terminated, and, except for requirements imposed on the licensee under (e) of this section and AS 43.90.220, the state and the licensee no longer have an obligation under this chapter with respect to the license.

AS 43.90.240(b) and (c) address the situation where the commissioners and the licensee disagree that the project is uneconomic. AS 43.90.240(b) and (c) read as follows, with emphasis added:

**(b) If the commissioners or the licensee determines that the project is uneconomic and the other party disagrees**, the disagreement shall be settled by arbitration administered by the American Arbitration Association under the substantive and procedural laws of this state, and judgment on the award rendered by the arbitrators may be entered in superior court in the state. In the event of arbitration, each party shall select an arbitrator from the American Arbitration Association's National Roster, and the two arbitrators shall appoint a third arbitrator from the American Arbitration Association's National Roster who shall serve as the chair of the three-member arbitration panel. If the arbitration panel determines that the project is

(1) uneconomic, the state and the licensee no longer have an obligation under this chapter with respect to the license, except for requirements imposed on the licensee under (e) of this section and AS 43.90.220; or

(2) not uneconomic, the obligations of the licensee and the state continue as provided under this chapter and the license.

(c) The arbitration panel in (b) of this section shall make a determination that the project is uneconomic only if the panel finds that the party claiming the project is uneconomic has proven by a preponderance of the evidence that the

(1) project does not have credit support sufficient to finance construction of the project through firm transportation commitments, government assistance, or other external sources of financing; and

Representative Pete Petersen  
March 17, 2009  
Page 3

(2) predicted costs of transportation at a 100 percent load factor, when deducted from predicted gas sales revenue using publicly available predictions of future gas prices, would result in a producer rate of return that is below the rate typically accepted by a prudent oil and gas exploration and production company for incremental upstream investment that is required to produce and deliver gas to the project.

As you can see, if the licensee and commissioners disagree on whether the project is uneconomic, the dispute is resolved through an arbitration process.

Many of the facts presented in HCR 12 relate to whether the project proposed by the licensee is uneconomic. The administration could avail itself of AS 43.90.240(a) - (c) and explore whether the project is uneconomic and decide its next course action.

The licensee also has the option of seeking an amendment or modification of its project plan under AS 43.90.210. That section reads as follows:

Subject to the approval of the commissioners, a licensee may amend or modify its project plan if the amendment or modification improves the net present value of the project to the state, is necessary because of an order or requirement by a regulatory agency with jurisdiction over the project or by the Alaska Oil and Gas Conservation Commission, or is necessary because of changed circumstances outside the licensee's control and not reasonably foreseeable before the license was issued. An amendment or modification approved under this section must be consistent with the requirements of AS 43.90.130 and, except for an amendment or modification required because of an order or requirement of a regulatory agency with jurisdiction over the project or by the Alaska Oil and Gas Conservation Commission, may not substantially diminish the value of the project to the state or the project's likelihood of success.

Although the grounds for modification or amendment are limited, the facts alleged in HCR 12 may constitute "changed circumstances outside the licensee's control and not reasonably foreseeable before the license was issued" that necessitate a change in the project. If so, the commissioners and the licensee could work together to reach agreement on acceptable modifications and amendments. This approach would not end the project and but would allow the project to continue with changes and modifications.

The requests to the governor and to the attorney general in HCR 12 do not address abandonment as uneconomic or modification of the project. Instead, the resolution asks the administration to reconsider the decision made by the commissioners before the licensee was recommended for approval to the legislature. Specifically, on page 4, lines 25 - 26, HCR 12 requests the governor and the attorney general to "determine whether the project proposed by the licensee sufficiently maximizes the benefits to the people of the state and merits continuing the license[.]" This provision could be read to encourage

Representative Pete Petersen  
March 17, 2009  
Page 4

a unilateral revocation outside of the contract termination provisions within AGIA. If the contract is unilaterally terminated by the state, the state could be found by a court to be liable for damages to the licensee arising out of the state's breach.

If I may be of further assistance, please advise.

DMB:ljw  
09-161.ljw

FEDERAL ENERGY REGULATORY COMMISSION  
WASHINGTON, D.C. 20426

OFFICE OF ENERGY PROJECTS

In Reply Refer To:  
OEP/DG2E/Gas 1  
Denali - Alaska Gas Pipeline LLC  
Docket No. PF08-26-000

June 25, 2008

Bud E. Fackrell, President  
Denali – Alaska Gas Pipeline LLC  
MB 4-3  
PO Box 196612  
Anchorage, AK 99519

**Re: Approval of Pre-Filing Request**

Dear Mr. Fackrell:

Thank you for your letter, filed June 16, 2008, requesting use of the Federal Energy Regulatory Commission's (FERC or Commission) pre-filing review process for Denali - Alaska Gas Pipeline LLC's (Denali) planned Denali Project. We encourage natural gas pipeline companies to use this voluntary process because we believe that beginning the Commission's review of most proposals prior to the receipt of the application will greatly improve our ability to identify issues early and address them in our environmental review document. Because an Alaska natural gas transportation project will likely require multiple field seasons to develop an application, use of the pre-filing process will ensure completion of the environmental impact statement (EIS) within the legislated timeframe. Therefore, I am granting Denali's request and instructing staff to begin working on your proposal.

Denali plans to construct an Alaska natural gas transportation system, as defined by Section 103 of the Alaska Natural Gas Pipeline Act, which would consist of a 48- to 52-inch-diameter pipeline system between the Alaska North Slope and Alberta, Canada, capable of transporting about 4.0 billion cubic feet per day of natural gas. Denali also plans to construct a new gas treatment plant on the Alaska North Slope.

Your letter states your intention to file an application in August 2011. The complexity of this project calls for initiating the Commission's pre-filing process as early in the development of the application as possible. Commission staff and stakeholder involvement early in the process should help to identify issues and study needs that would

otherwise potentially delay submittal of the application. Therefore, I am waiving the filing requirements and timelines stipulated in section 157.21(d) and (f).<sup>11</sup> During the pre-filing process, we will work with Denali and all stakeholders to resolve issues as they arise, ensure the collection of necessary information, and develop the appropriate timeframes for the submittal of that information and the application.

When Denali files its application with the Commission, we will evaluate the progress made during the pre-filing process, based in part on our success in resolving the issues raised during scoping. Once we determine that your application is complete we will establish a schedule for issuance of the EIS, consistent with Section 104 of the Alaska Natural Gas Pipeline Act, and for the issuance of all other federal authorizations.

Denali has committed to fund a third-party contractor to assist the Commission in the development of the EIS. Our staff will notify Denali when it requires the assistance of a contractor. At that time, we will select a third-party contractor to work under the direct supervision and control of the Commission staff. If you have any questions, please contact Michael Boyle at (202) 502-8839.

Sincerely,

J. Mark Robinson  
Director  
Office of Energy Projects

cc: Public File, Docket No. PF08-26-000

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<sup>1</sup> Under section 375.308 (z) of the Commission's regulations, the Director of the Office of Energy Projects can make modifications to and grant waivers of the pre-filing procedures on a case-specific basis.

**adn.com**

Anchorage Daily News

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## Lynn Canal road to receive cost analysis

The Associated Press

(02/06/09 00:25:37)

JUNEAU -- State transportation officials say they will get an outside cost analysis for a prospective road project along Lynn Canal.

Transportation Commissioner Leo von Scheben says the Federal Highway Administration's Western Federal Lands Division will conduct the study.

The review will cost about \$300,000.

State estimates peg the project at about \$350 million. With \$24 million already spent on the project, the costs could be \$374 million.

Gov. Sarah Palin has not signed off on the project yet because she wants legal issues surrounding it resolved first.

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**Prison costs raise concern****MAT-SU FACILITY: Lawmakers take new look at privatizing amid budget crunch.**By SEAN COCKERHAM  
scockerham@adn.com

(03/15/09 04:59:31)

JUNEAU -- Legislators are cringing at the cost of the planned new jumbo state prison in the Matanuska-Susita Borough and want to look at turning it into a private prison. That's a topic that in the past proved to be one of the most contentious in Alaska politics.

State representatives are also reluctant to pony up an additional \$20 million the Palin administration has requested for the \$240 million project. Enthusiasm for the project isn't what it used to be before oil prices plummeted, dragging state revenues down with them.

Fairbanks Republican Rep. Mike Kelly took over the corrections budget in the state House this year and said that -- if he could -- he would slow the project down. But the bonds for construction have already been sold. That's left lawmakers with few options.

One is to privatize operations of the prison when it opens. So Kelly put language in the budget that passed the House on Friday asking the corrections department to investigate doing just that.

"The intent says, hey, take a look at what we might save in this (expensive) hill to climb and see if we have a private operator -- if that would make sense," Kelly said.

Private prisons have been hugely controversial in Alaska.

"They've figured prominently into a lot of the problems we've had," said Eagle River Republican Rep. Bill Stoltze, an influential supporter of keeping the project in state hands.

The ongoing federal corruption investigation, which has resulted in indictments or guilty pleas from 12 lawmakers, lobbyists and others, began with inquiry into a push to build a private prison in the state. Bill Weimar, once king of Alaska's private halfway houses, pleaded guilty to corruption charges last year after funneling \$20,000 in 2004 to help a state legislative candidate, knowing that if elected the candidate would support his interest in building a private prison.

**NUMBER OF PRISONERS DOWN**

Political battles over private prisons in Alaska kept the state's jail-building efforts on hold for a decade. In the meantime, the lack of space in Alaska's correctional system has the state sending hundreds of Alaska prisoners to a private prison in Arizona.

Using both raw political muscle and arguments about saving money and bringing Native prisoners home, backers of the private prisons won legislative support for successive plans aimed at facilities in Anchorage, Delta Junction, Kenai and Whittier. Among the members of the consortium that pushed for private prisons was Veco, the now-defunct construction firm that is at the heart of Alaska's political corruption scandal. But each private plan eventually died in the face of local opposition, resistance from prison guard unions and skepticism from governors of both parties.

The prison fight appeared to be over after Senate President Lyda Green, who is now retired, pushed through the new state prison to be built in her home area of the Mat-Su. The planned Goose Creek Correctional Center, about nine miles north of Point Mackenzie, will be the largest prison in Alaska at 1,536 beds. The Mat-Su Borough sold the \$240 million in construction bonds for it earlier this year.

The state is to lease the prison for 25 years, covering the borough's bond payments.

Fairbanks Rep. Kelly said the number of Alaska prisoners is down, at least for the moment, and it would have been a lot cheaper for the state to leave the prisoners in Arizona. But that's not going to happen, with the Mat-Su construction going ahead.

The top budget writer in the state House, Rep. Mike Hawker, also supports a privatization study.

"It's something that always has to be considered as we look at declining state revenues and an inability to meet our spending levels," the Anchorage Republican said.

#### REPORT DUE BACK IN 2010

The Mat-Su prison is estimated to have over 350 staff jobs after it opens in 2012. Hawker said that's going to be a problem unless state government figures out a way to deal with its gap between expenses and income as oil production steadily declines.

"Adding and keeping those employees on the state is not something we're going to be able to sustain into the very near term future here," Hawker said. "Whether it's operated on a (private) contract basis or operated on a state-owned basis, we frankly don't have the money to do either one in the future for very long."

Corrections officials are asked to report back with their findings on privatization by next spring.

State corrections officials have never been big fans of privatizing their work. Deputy Corrections Commissioner Dwayne Peebles said officials haven't come up with a position on the potential of privatizing the Mat-Su prison. But he said any savings would "probably be fairly marginal." Costs of the construction bonds, the utilities and food would all be basically the same whether it is a private or public prison, he said.

"The only cost difference you would really have would be in staff operating. And that's really hard to come up with what the private sector could do versus the state," he said.

He said the only way to get good cost numbers would be to put the contract out to bid and then sit down and negotiate. "Because everybody off the cuff will spin you theories and cost estimates and everything else that are probably meaningless until you sit down and say 'hey you've got to sign the contract and actually do it,'" he said.

Peebles said he hasn't figured out exactly how he's going to do the privatization study other than "do some literature research and say, this is what the literature says."

Rep. Kelly said he knows it's difficult but plans to work with Peebles to figure out how to get meaningful information. He said the cost to the state of paying the bonds and running the Mat-Su prison is going to combine for around \$30 million a year.

Kelly also put language in the budget limiting the state spending on the project. Peebles said that looks to impede the Palin administration from getting up to \$20 million it has requested to deal

with higher interest rates in the project. That's not going to stop construction, he said, but could pose a problem depending on cost overruns.

The governor could still get the additional \$20 million through the separate state House construction budget, which is being crafted by Rep Stoltze of Chugiak -- a prison supporter. The state Senate also has not had its crack at the budget yet this year.

Sean Cockerham is covering the legislative session from Juneau. Read more on our Alaska Politics blog at [adn.com/alaskapolitics](http://adn.com/alaskapolitics).

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**Federal Energy Regulatory Commission  
Docket Sheet  
Docket PF08-26 (ALL Subdockets)**

**Applicant(s)/Docket:** Denali - The Alaska Gas Pipeline LLC

**Sub Docket: 000**

**Docket Description:** request for approval to use the pre-filing procedures pursuant to 18 CFR 157.21(b0 and consistent with 157.21(d) and (f) as otherwise specified by FERC. rm

**Issued By:** SECRETARY OF THE COMMISSION, FERC

**Filed Date:** 1/4/2008

**Accession No:** 20080104-3033

**Description:** Notice of technical conference and request for a statement of interest re an Alaska Natural Gas Transportation Project under AD08-3 et al.

**Source:** eLibrary

**Federal Register Citation:** 73 FR 2244 Date: 1/14/2008

**Issued By:** ENERGY PROJECTS, OFFICE OF

**Filed Date:** 1/29/2008

**Accession No:** 20080129-4004

**Description:** Agenda and sign-in sheet (see FILE list) from the 1/29/08 technical conference regarding Alaska Natural Gas Transportation Project under AD08-3 et al.

**Source:** eLibrary

**Issued By:** ENERGY PROJECTS, OFFICE OF

**Filed Date:** 2/25/2008

**Accession No:** 20080225-4018

**Description:** Letter responding to State of Alaska's questions concerning FERC's process for evaluating a proposal for an Alaska Natural Gas Transportation Project under AD08-3 et al.

**Source:** eLibrary

**Filed By:** DENALI - THE ALASKA GAS PIPELINE LLC

**Filed Date:** 6/16/2008

**Accession No:** 20080617-0080

**Description:** Denali - The Alaska Gas Pipeline LLC requests approval to use the pre-filing procedures re their initial consultation on the Denali Project under PF08-26.

**Source:** eLibrary

**Issued By:** ENERGY PROJECTS, OFFICE OF

**Filed Date:** 6/25/2008

**Accession No:** 20080625-3024

**Description:** Letter order granting Denali - Alaska Gas Pipeline LLC's request for use of the pre-filing review process and instructing staff to begin working on their proposal under PF08-26.

**Source:** eLibrary

**Issued By:** ENERGY PROJECTS, OFFICE OF

**Filed Date:** 7/25/2008

**Accession No:** 20080725-3072

**Description:** Letter informing Denali -The Alaska Gas Pipeline LLC's to file a complete response within 10 days re Data Request Regarding Resource Data-Gap Analysis under PF08-26.

**Source:** eLibrary

**Filed By:** Denali - The Alaska Gas Pipeline, LLC

**Filed Date:** 8/5/2008

**Accession No:** 20080805-5015

**Description:** Supplemental Information Request/ Response of Denali - The Alaska Gas Pipeline, LLC under PF08-26.

**Source:** eLibrary

**Issued By:** ENERGY PROJECTS, OFFICE OF

**Filed Date:** 8/19/2008

**Accession No:** 20080819-3034

**Description:** Letter to Dot Lake Native Corporation and list of recipients re the Pre-filing Process for Denali-the Alaska Gas Pipeline LLC's planned Denali Pipeline Project under PF08-26.

**Source:** eLibrary

**Issued By:** ENERGY PROJECTS, OFFICE OF  
**Filed Date:** 8/19/2008  
**Accession No:** 20080819-4005  
**Description:** Letter to the Native Village of Tetlin IRA establishing contact to begin open dialogue re the review of the Denali Pipeline Project under PF08-26.

**Source:** eLibrary

**Issued By:** ENERGY PROJECTS, OFFICE OF  
**Filed Date:** 8/19/2008  
**Accession No:** 20080819-4006  
**Description:** Letter to the Native Village of Tanacross IRA establishing contact to begin open dialogue re the review of the Denali Pipeline Project under PF08-26.

**Source:** eLibrary

**Issued By:** ENERGY PROJECTS, OFFICE OF  
**Filed Date:** 8/19/2008  
**Accession No:** 20080819-4007  
**Description:** Letter to the Tanana Chiefs Conference establishing contact to begin open dialogue re the review of the Denali Pipeline Project under PF08-26.

**Source:** eLibrary

**Issued By:** ENERGY PROJECTS, OFFICE OF  
**Filed Date:** 8/19/2008  
**Accession No:** 20080819-4008  
**Description:** Letter to the Native Village of Stevens IRA establishing contact to begin open dialogue re the review of the Denali Pipeline Project under PF08-26.

**Source:** eLibrary

**Issued By:** ENERGY PROJECTS, OFFICE OF  
**Filed Date:** 8/19/2008  
**Accession No:** 20080819-4009  
**Description:** Letter to Qinuyang Limited discussing FERC's pre-filing process and review of

Denali - The Alaska Gas Pipeline, LLC's planned Denali Pipeline Project under PF08-26.

Source: eLibrary

Issued By: ENERGY PROJECTS, OFFICE OF

Filed Date: 8/19/2008

Accession No: 20080819-4010

Description: Letter to Ugashik Native Corporation discussing FERC's pre-filing process and review of Denali - The Alaska Gas Pipeline, LLC's planned Denali Pipeline Project under PF08-26.

Source: eLibrary

Issued By: ENERGY PROJECTS, OFFICE OF

Filed Date: 8/19/2008

Accession No: 20080819-4011

Description: Letter to Yak-Tat Kwaan, Incorporated discussing FERC's pre-filing process and review of Denali - The Alaska Gas Pipeline, LLC's planned Denali Pipeline Project under PF08-26

Source: eLibrary

Filed Date: 8/19/2008

Accession No: 20080819-4012

Description: Letter to Cantwell Yedatene-Na Corporation discussing FERC's pre-filing process and review of Denali - The Alaska Gas Pipeline, LLC's planned Denali Pipeline Project under PF08-26

Source: eLibrary

Issued By: ENERGY PROJECTS, OFFICE OF

Filed Date: 8/19/2008

Accession No: 20080819-4020

Description: Letter to Village of Red Devil and list of recipients discussing FERC's pre-filing process and review of The Alaska Gas Pipeline, LLC's Denali Pipeline Project under PF08-26.

Source: eLibrary

**Filed By:** OFFICE OF THE FEDERAL COORDINATOR  
**Filed Date:** 11/19/2008  
**Accession No:** 20081119-4015  
**Description:** Alaska Natural Gas Transportation Projects, Office of the Federal Coordinator submits their request for Draft Implementation Plans under PF08-26.

**Source:** eLibrary

**Issued By:** ENERGY PROJECTS, OFFICE OF  
**Filed Date:** 12/17/2008  
**Accession No:** 20081217-4003  
**Description:** Response to Office of the Federal Coordinator's 11/19/08 request for agency draft implementation plans under PF08-26.

**Source:** eLibrary

**Filed By:** Denali - The Alaska Gas Pipeline, LLC  
**Filed Date:** 12/22/2008  
**Accession No:** 20081222-5007  
**Description:** Denali - The Alaska Gas Pipeline, LLC submits its Denali Field Study Plan under PF08-26.

**Source:** eLibrary

# AGIA

**HCR 12 Presentation**

**March 19, 2009**

# Revisiting the AGIA Decisions

**AGIA**

The Alaska Gasline Inducement Act

- Has anything happened since the AGIA decisions to justify revisiting them?
  - Commissioners' Findings and Conclusions
  - Passage of AGIA Itself

# The World Today

# AGIA

The Alaska Gasline Inducement Act

- How have things changed since the legislature approved the AGIA license?
    - Global economic downturn
    - Continued development of new unconventional (shale) gas supplies
    - Continued development of LNG import capacity
- 
- Increased likelihood of carbon regulation
  - Decrease in project cost indexes

# Pipeline Project Today

# AGIA

The Alaska Gasline Inducement Act

## Before AGIA

*No active major gasline projects*

## After AGIA

*Two active major gasline projects*

# Revisiting the AGIA Decisions

# AGIA

The Alaska Gasline Inducement Act

- Has anything happened since the AGIA decisions to justify revisiting them?
  - Commissioners' Findings and Conclusions
  - Passage of AGIA Itself

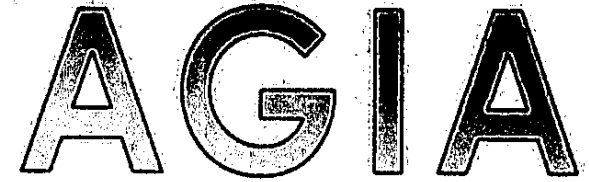
# Commissioners' Findings and Conclusions



The Alaska Gasline Inducement Act

- Does Issuing the AGIA License Sufficiently Maximize Benefits to Alaskans
  - Net Present Value of anticipated cash flows to the state from the Project
  - Project's Likelihood of Success

# AGIA Analysis



The Alaska Gasline Inducement Act

- Net Present Value (NPV)
  - Natural Gas Price Expectations (2018 – 2043)
    - Supply vs Demand
  - Pipeline Transportation Costs (Tariff)
  - Project Schedule
- Likelihood of Success
  - Project Economics
  - Technical Development Plan
  - Financing Plan

# Changes in Context

**AGIA**

The Alaska Gasline Inducement Act

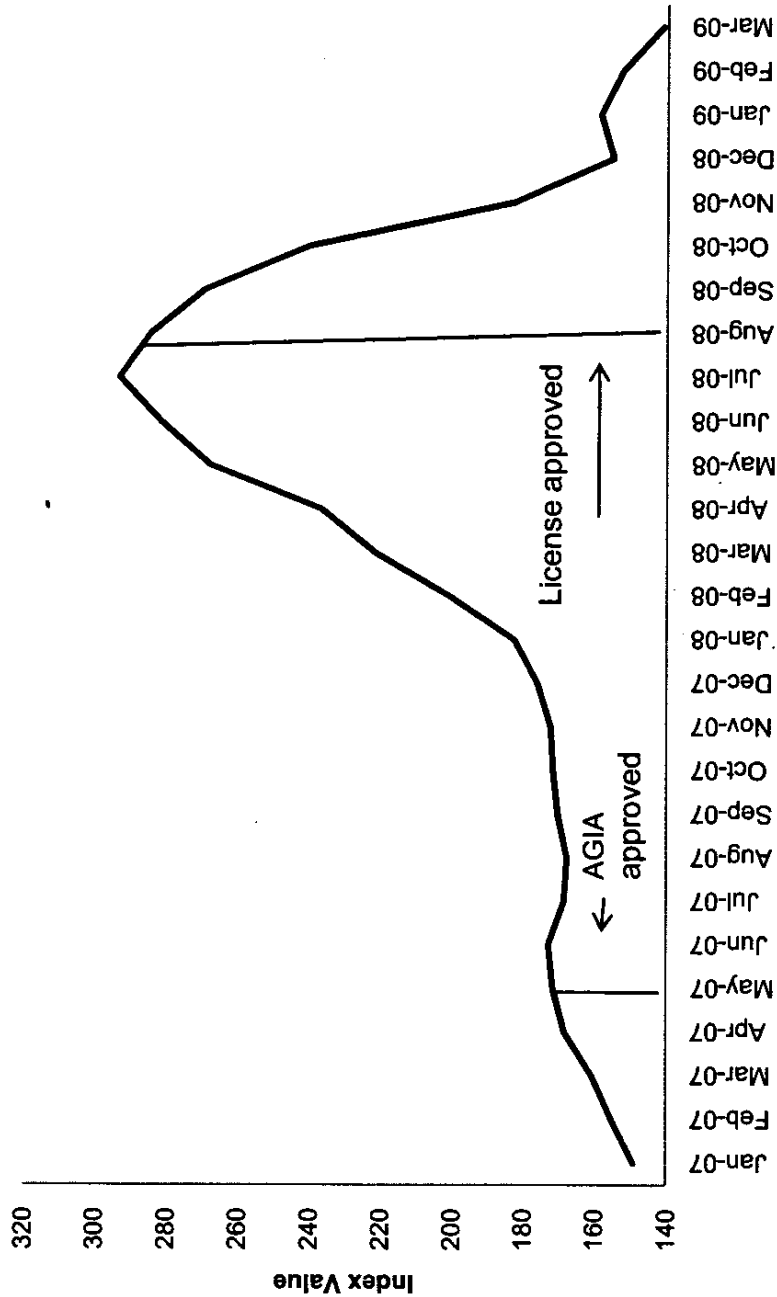
- How have things changed since the legislature approved the AGIA license?
    - Global economic downturn (Demand down in short term, financial markets tightened in short term)
    - Continued development of new unconventional (shale) gas supplies (supplies up?)
    - Continued development of LNG import capacity (supplies up?)
- 
- Increased likelihood of carbon regulation (demand up)
  - Decrease in project cost indexes (tariff down)

# Steel costs are falling

# AGIA

The Alaska Gasline Inducement Act

### Global Steel Price Index (CRU Price Index)



## Which of These Changes are Truly New and Relevant?

**AGIA**

The Alaska Gasline Inducement Act

- Additional shale and LNG supplies were factored into price assumptions.
- Alaska natural gas competes with both shale and LNG very well.
- Short term demand slow-down and tightened financial markets are currently not viewed as long term effects.
- Overall effect of changes is just as likely to be positive as negative.

## Findings - Development of New Unconventional Gas Resources

# AGIA

The Alaska Gasline Inducement Act

“US gas production ... is expected to grow in the near term at between 3 and 4 Bcfd from 2007 through 2011. This near-term growth and subsequent production gains stem from follow-on, unconventional plays in the Arkoma basin (gas shale) and in the Rockies and ArkLaTex basins (tight gas).”

- Findings and Determination; Appendix N – *Briefing paper on Wood Mackenzie Long Term Outlook (pg. 1)*

## Findings - Development of New Unconventional Gas Resources



The Alaska Gasline Inducement Act

“Black & Veatch expects near-term production growth in the Rockies and shale plays to offset declines in the Gulf Coast and other Lower 48 production basins.”

- AGIA Findings and Determination; Appendix G1 – *AGIA NPV Report* (pg. 88)

## Findings - Technological Advancement on Development of Shale and other Gas



The Alaska Gasline Inducement Act

Additional technological innovation was assumed as part of the AGIA analysis

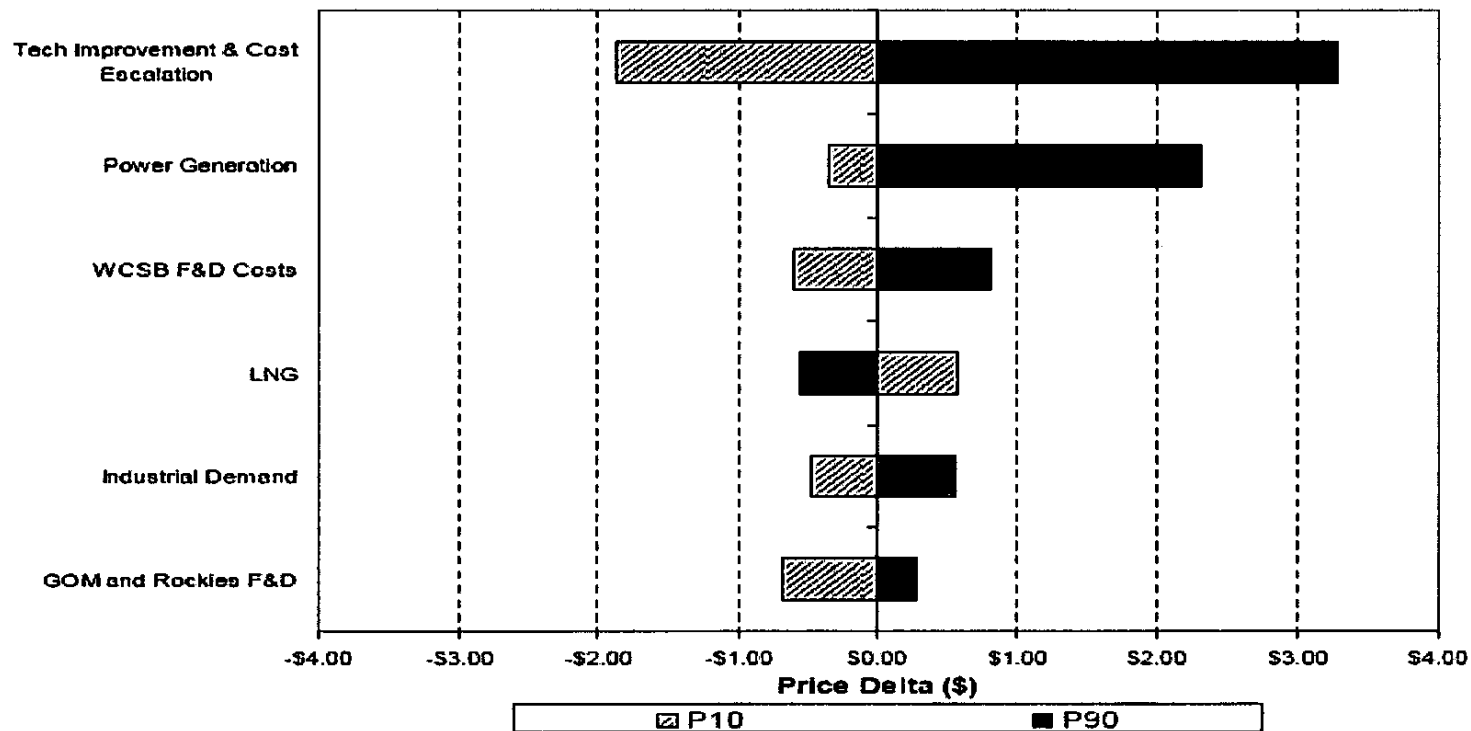
“Black & Veatch identified the following fundamental market factors and assumed an uncertainty range for each factor: F&D cost at WCSB, F&D cost at Rockies and GOM, LNG import volumes, power generation demand and industrial demand in the U.S. and Canada and ***technical innovation***. The uncertainty range of each factor is generated from a log-normal distribution.”

# Findings - Technological Advancement on Development of Shale and other Gas



The Alaska Gasline Inducement Act

Figure 4-28: Impact of Fundamental Drivers on AECO Price 2022 (Nominal \$)



Illustrates the P10 and P90 price impact of technological improvement and cost escalation, along with the comparable probabilistic outcomes resulting from new power generation, F&D costs, LNG imports, and changing industrial demand

Source: AGIA Findings and Determination; Appendix G1 – AGIA NPV Report

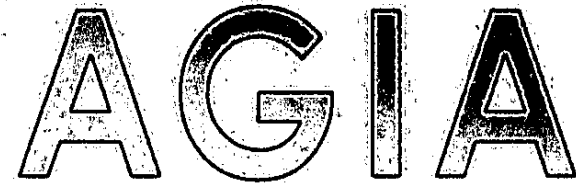
# Findings - LNG

# AGIA

The Alaska Gasline Inducement Act

- Extensive analysis on global LNG markets was presented in the Findings document.
  - Findings and Determination, Chapter 4
  - Appendix I
  - Appendix R2
  - Appendix R3
- Also, the North American price assumptions included the expectation of significant growth in LNG imports

# Findings – LNG Import Capacity Expansion

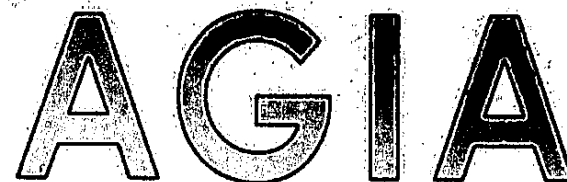


The Alaska Gasline Inducement Act

“Wood Mackenzie assumes twelve new LNG receiving facilities with aggregate capacity of 12 billion cubic feet per day (Bcfd) for North American imports will be in service between 2008 and 2017. LNG imports are assumed to grow at a strong average annual rate of 13%, rising from 2.1 Bcfd in 2008 to 17.0 Bcfd or about 23% of total US Demand in 2025. By 2017, the four existing receiving facilities currently serving North American LNG imports will account for only about 35% of total imported LNG.”

- Findings and Determination; Appendix N – *Briefing paper on Wood Mackenzie Long Term Outlook (pg. 2)*

## LNG – Import Capacity Does not Mean More Imports



The Alaska Gasline Inducement Act

LNG import volumes have experienced little net change since the legislature approved the AGIA license

### **Total US LNG Import Volumes**

July 2008: 31,019 mmcf

December 2008: 30,708 mmcf

## Which of These Changes are Truly New and Relevant?

**AGIA**

The Alaska Gasline Inducement Act

- Additional shale and LNG supplies were factored into price assumptions.
- Alaska natural gas competes with both shale and LNG very well.
- Short term demand slow-down and tightened financial markets are currently not viewed as long term effects.
- Overall effect of changes is just as likely to be positive as negative.

# Alaska Gas vs Shale

# AGIA

The Alaska Gasline Inducement Act

- Because Alaska Gas will likely have a lower cost basis when it gets to the North American market, it can be profitable at a lower price and displaces shale gas rather than the other way around.

## Which of These Changes are Truly New and Relevant?

**AGIA**

The Alaska Gasline Inducement Act

- Additional shale and LNG supplies were factored into price assumptions.
- Alaska natural gas competes with both shale and LNG very well.
- Short term demand slow-down and tightened financial markets are currently not viewed as long term effects.
- Overall effect of changes is just as likely to be positive as negative.

# Long-term vs Short term Outlook

# AGIA

The Alaska Gasline Inducement Act

**Jim Mulva, Chairman and CEO ConocoPhillips,**  
March 13, 2009 - *Petroleumworld.com*

*"Costs are coming down pretty dramatically," (Mulva) said. "When we say defer, we're not talking years, we're talking months, quarters, maybe up to a year."*

*Speaking about the Denali Alaska gas pipeline project, proposed last June by ConocoPhillips and BP, Mulva said President Barack Obama has identified the 4 Bcf/d project as a means of reducing US dependence on foreign oil.*

*The pipeline would bring North Slope gas down to a pipeline in Alberta for transport to the Lower 48 states. "We know it's going to get far more federal attention," he said. "Obviously, Alaska would like to see it go."*

*Mulva repeated the partners plan a 2010 open season for gas deliveries; first gas deliveries are eyed for 2019.*

*While current gas prices have led ConocoPhillips to cut back on its Canadian operations, Mulva discounted the low prices as a roadblock to the pipeline project's development.*

*"You can't look at gas prices today," he said. You have to look at prices 10 years from now."*

# Revisiting the AGIA Decisions

# AGIA

The Alaska Gasline Inducement Act

- Has anything happened since the AGIA decisions to justify revisiting them?
  - Commissioners' Findings and Conclusions (NO)
  - Passage of AGIA Itself

# Revisit AGIA Itself?

# AGIA

The Alaska Gasline Inducement Act

- Does AGIA Restrict the State's Ability to Meet In-State Gas Needs?
- Are the Underlying Purposes of AGIA still valid?

# Revisit AGIA Itself?

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# In-State Gas and AGIA Treble Damages

# AGIA

The Alaska Gasline Inducement Act

Nothing in AGIA prevents or restricts the legislature from providing preferential royalty or tax treatment, or from granting state money, for the purpose of facilitating the construction of a gasline that will serve in-state needs (Maximum expected to be needed is 250MMcf/d).

# In-state Gas and AGIA Treble Damages

# AGIA

The Alaska Gasline Inducement Act

- An in-state needs bullet line would not trigger the treble damages clause, even if it carried North Slope gas.
- 500 MMcf/day far exceeds any reasonable projections for total natural gas consumption in state during the foreseeable future.

# Revisit AGIA Itself?

# AGIA

The Alaska Gasline Inducement Act

- Does AGIA Restrict the State's Ability to Meet In-State Gas Needs? (NO)
- Are the Underlying Purposes of AGIA still valid?

# Purposes of AGIA



The Alaska Gasline Inducement Act

- Move the Project Forward with an Enforceable Timeline
- Obtain a Lower Tariff
- Obtain Open Access Provisions
  - Predictable Low-cost expansion for Explorers
- Provide Leverage for the State
  - Maximize Chance of Getting a Pipeline
  - Minimize Need to Provide Excessive Concessions

# Revisiting the AGIA Decisions



- Has anything happened since the AGIA decisions to justify revisiting them?
  - Commissioners' Findings and Conclusions (NO)
  - Passage of AGIA Itself (NO)

# Shale Gas and Carbon Emissions Regulation

**Mark Myers**

**March 19, 2009**

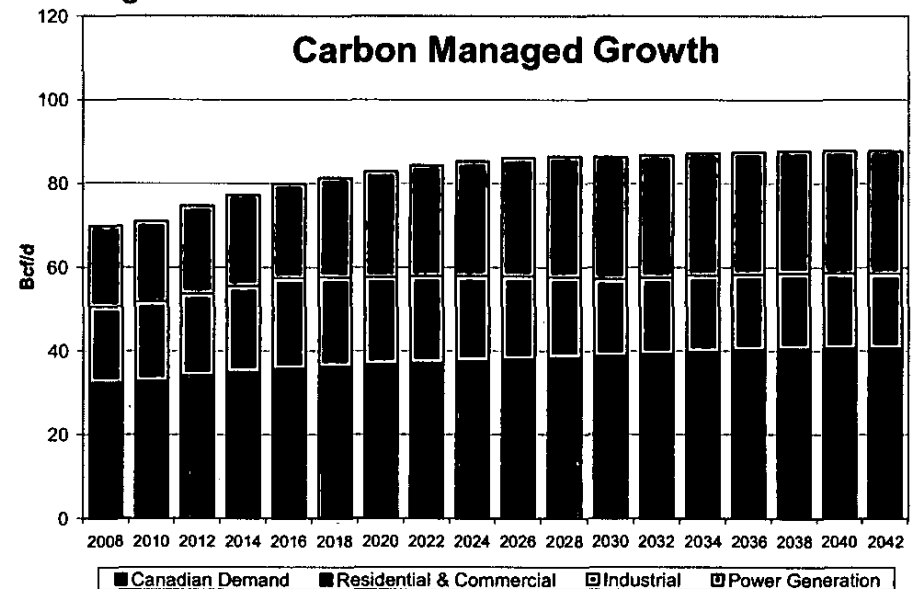
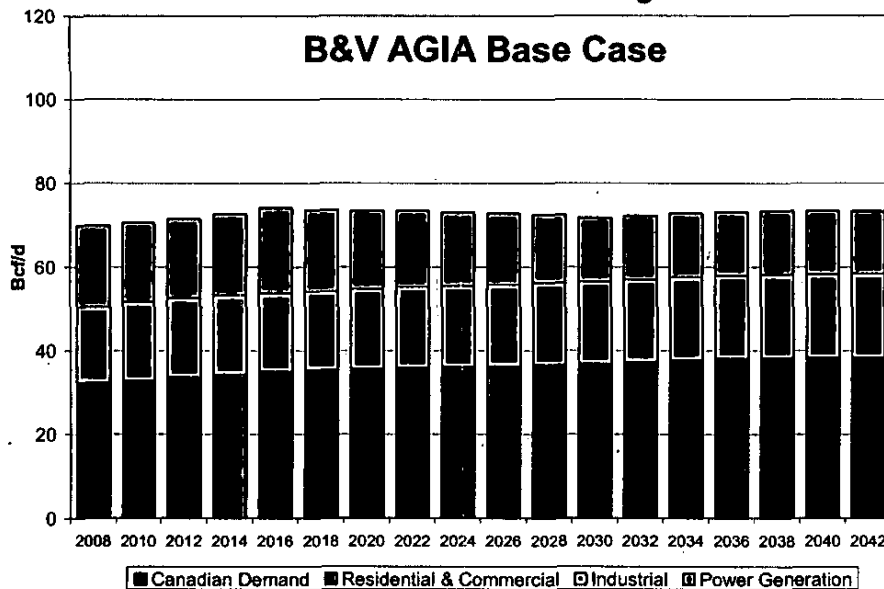
# Impact of Carbon Regulation on Natural Gas Demand



The Alaska Gasline Inducement Act

## In a Carbon Managed Growth case, demand is 14 Bcf/d more than the B&V AGIA Base Case

- Policies and legislations designed to curb Green House Gas could reduce dispatch and construction of coal-fired generation facilities in favor of natural gas fired facilities, resulting in demand increase from the power sector in the US
- All resources, including renewables, nuclear and IGCC with CCS and gas fired combined cycles are all needed to meet electric demand growth. Gas demand from the power sector will grow from 19 Bcf/d in 2008 to 29 Bcf/d by 2030, with a CAGR of 2%
- Total demand in US lower 48 states is 12.1 Bcf/d higher than BV's AGIA Base Case by 2042. Canada demand is 2.3 Bcf/d higher in the Carbon Managed Growth case



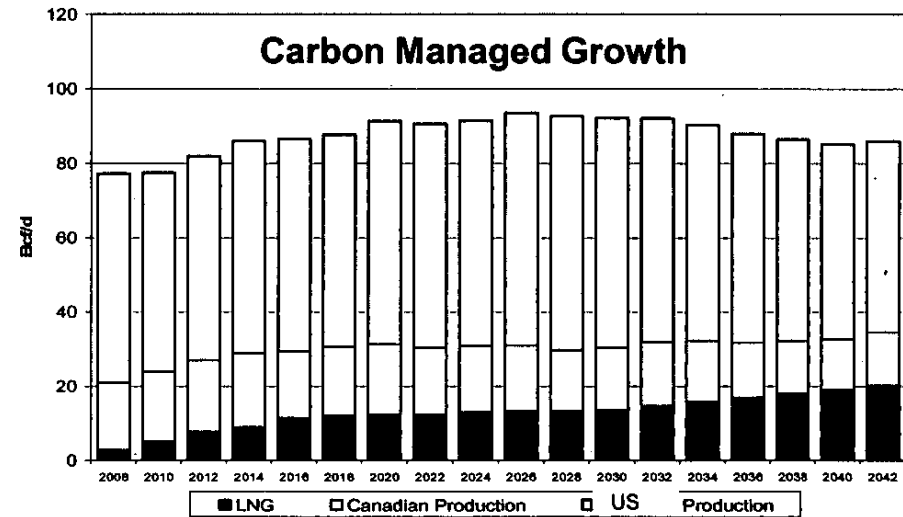
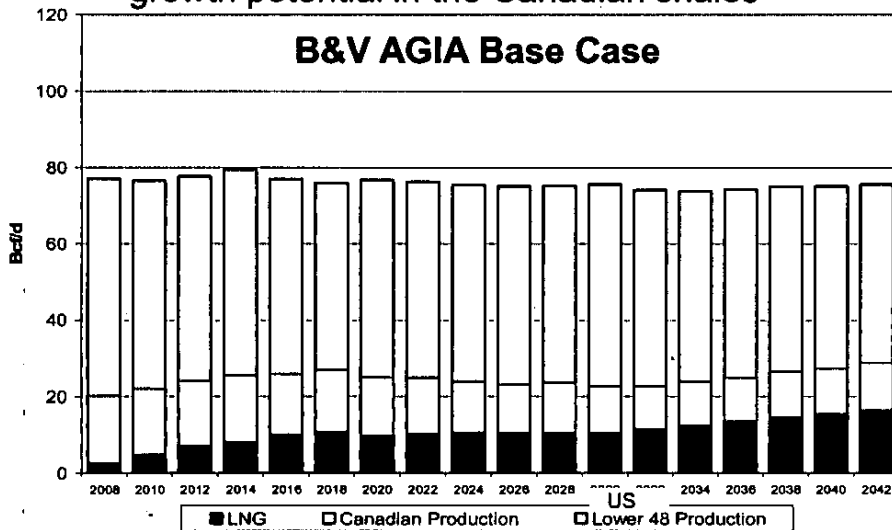
Source: Black & Veatch Analysis

# AGIA

The Alaska Gasline Inducement Act

## Additional LNG imports and more unconventional productions from the US lower 48 will meet demand growth

- Additional LNG imports will be needed to meet the demand growth; 6.4 Bcf/d by 2042 in the Carbon Managed Growth scenario
- US Production will average 58.3 Bcf/d from 2022-2042 in the Carbon Managed Growth case, which will be 7.8 Bcf/d higher than the B&V AGIA Base Case. Recent developments in shale discoveries in Haynesville and Marcellus indicate greater production potentials from these unconventional resources. The production growth can be considered as a proxy.
- Canadian production continues to decline in both cases. In the Carbon Managed Growth case, Canadian production is 3.7 Bcf/d higher than in the B&V AGIA Base Case, which may approximately reflect the growth potential in the Canadian shales



Source: Black & Veatch Analysis

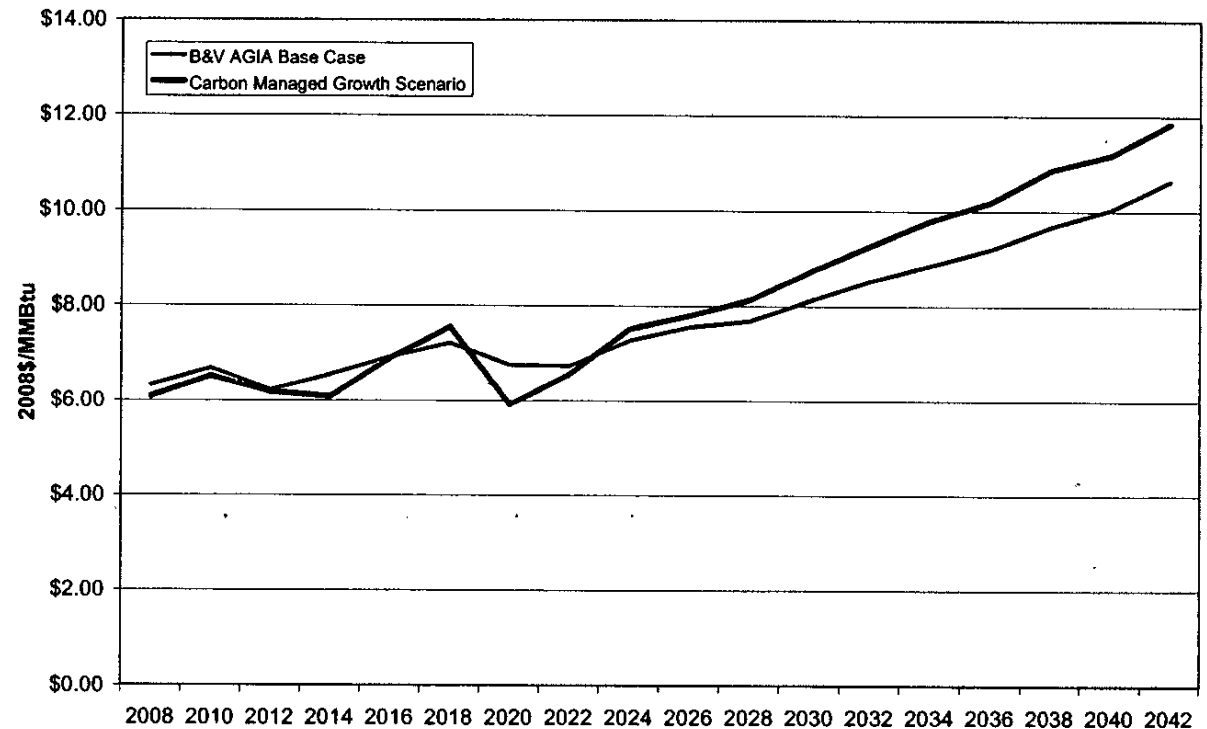
# Impact of Carbon Regulation on AECO Price Forecasts

# AGIA

The Alaska Gasline Inducement Act

- The Carbon Managed Growth case has sufficient supplies from North America to meet the high demand from both unconventional production and slightly higher additional LNG volumes
- North American gas price is projected to have a higher price path than in the AGIA base case

Price Comparison at AECO - B&V AGIA Base Case and Carbon Managed Growth Scenario



Source: Black & Veatch Analysis

# *How Horizontal Drilling & Fracturing Technologies Are Changing Natural Gas Markets*

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***Presented to:  
The Energy Council's  
2009 Federal Energy & Environmental Matters Conference***

***March 7, 2009***

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# ***Key Points***

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- **The Energy World has changed. Technology has unlocked unconventional gas resources.**
- **Natural gas should no longer be viewed as unavailable, unreliable or too expensive.**
- **Due to unconventional gas production, the US has become supply long, prices are falling and consumers will benefit.**
- **Burgeoning supplies are overwhelming the nation's pipeline capacity, driving prices even lower.**
- **The production growth creates an historic opportunity to use gas to quickly and significantly reduce our GHGs and reduce our consumption of oil and other high emission fuels.**

# ***Presentation Outline***

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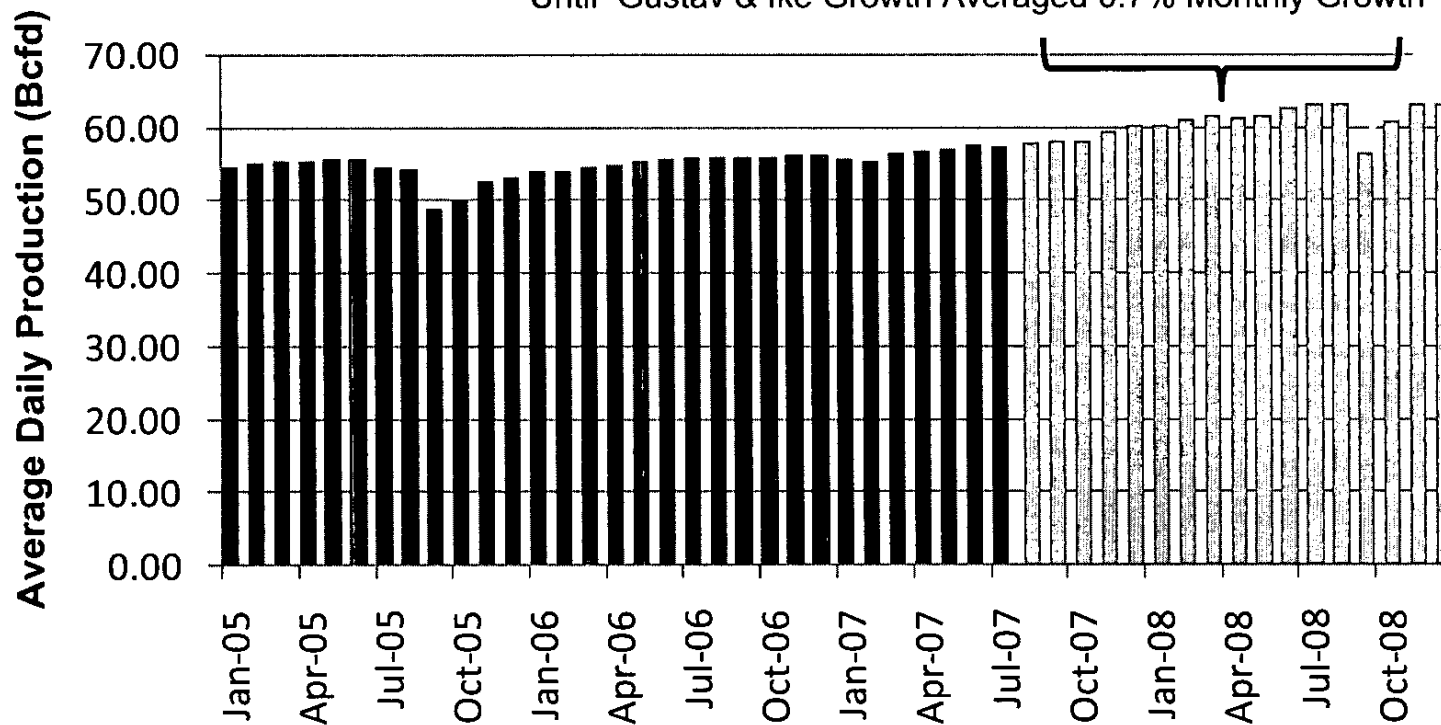
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- **Why It Happened: Impact of technology innovation**
- **What are the Impacts?**
- **Recent Activity**
- **Conclusions and Implications**

# Production Grew In 2008 By 4 Bcfd

08 Production Is Up 7% Over 07

Almost 4.0  
Bcfd lost to  
H'canes

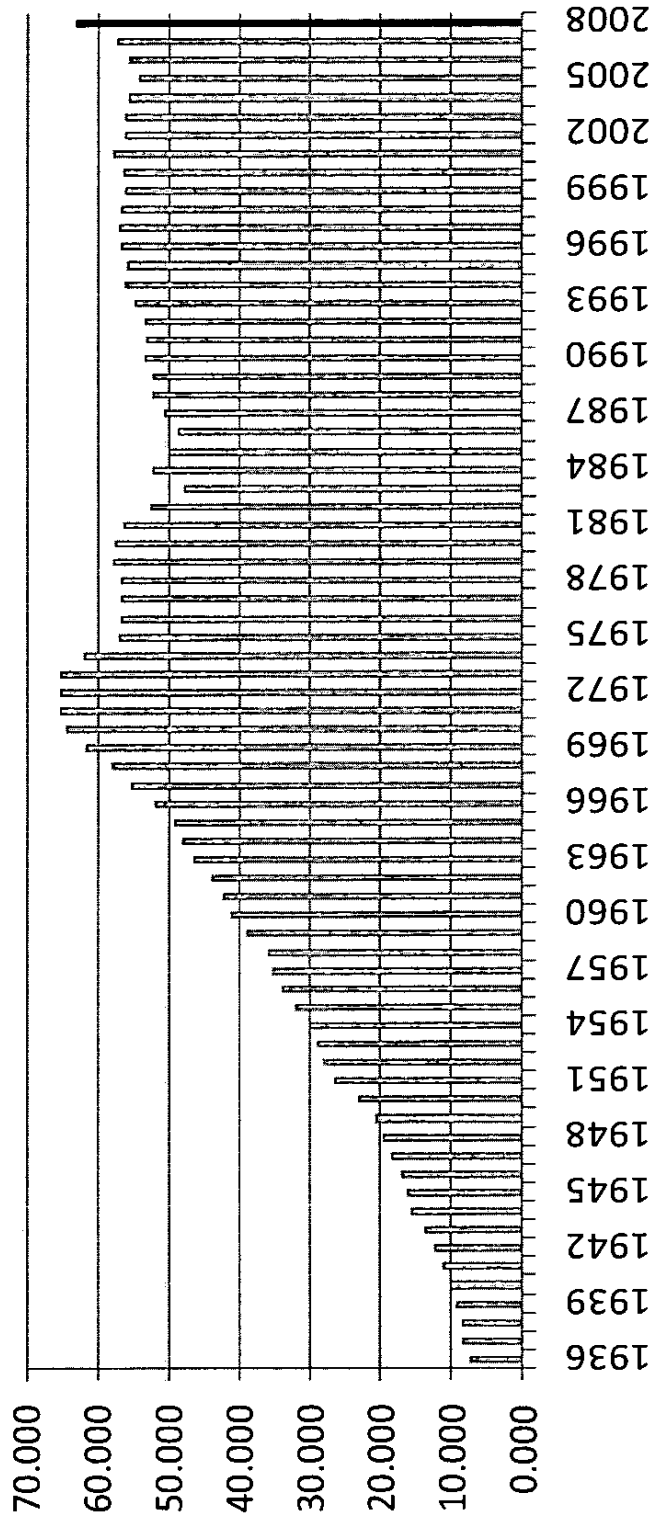
Until Gustav & Ike Growth Averaged 0.7% Monthly Growth



Source: EIA 914 Report  
(Gross Withdrawals)

# Production Is Nearing Historic Highs

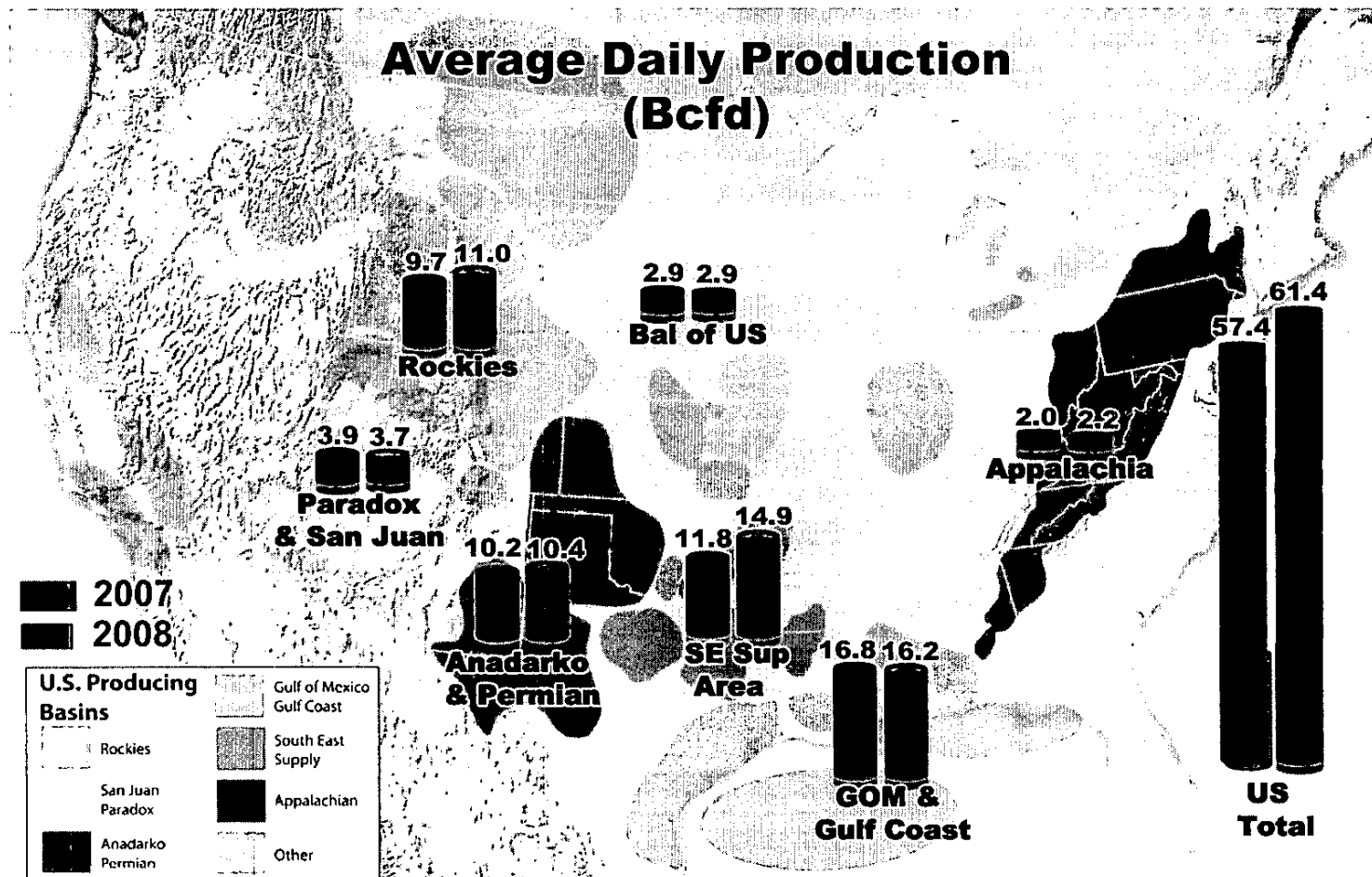
Lower 48 Gross Withdrawals  
(Bcfd)



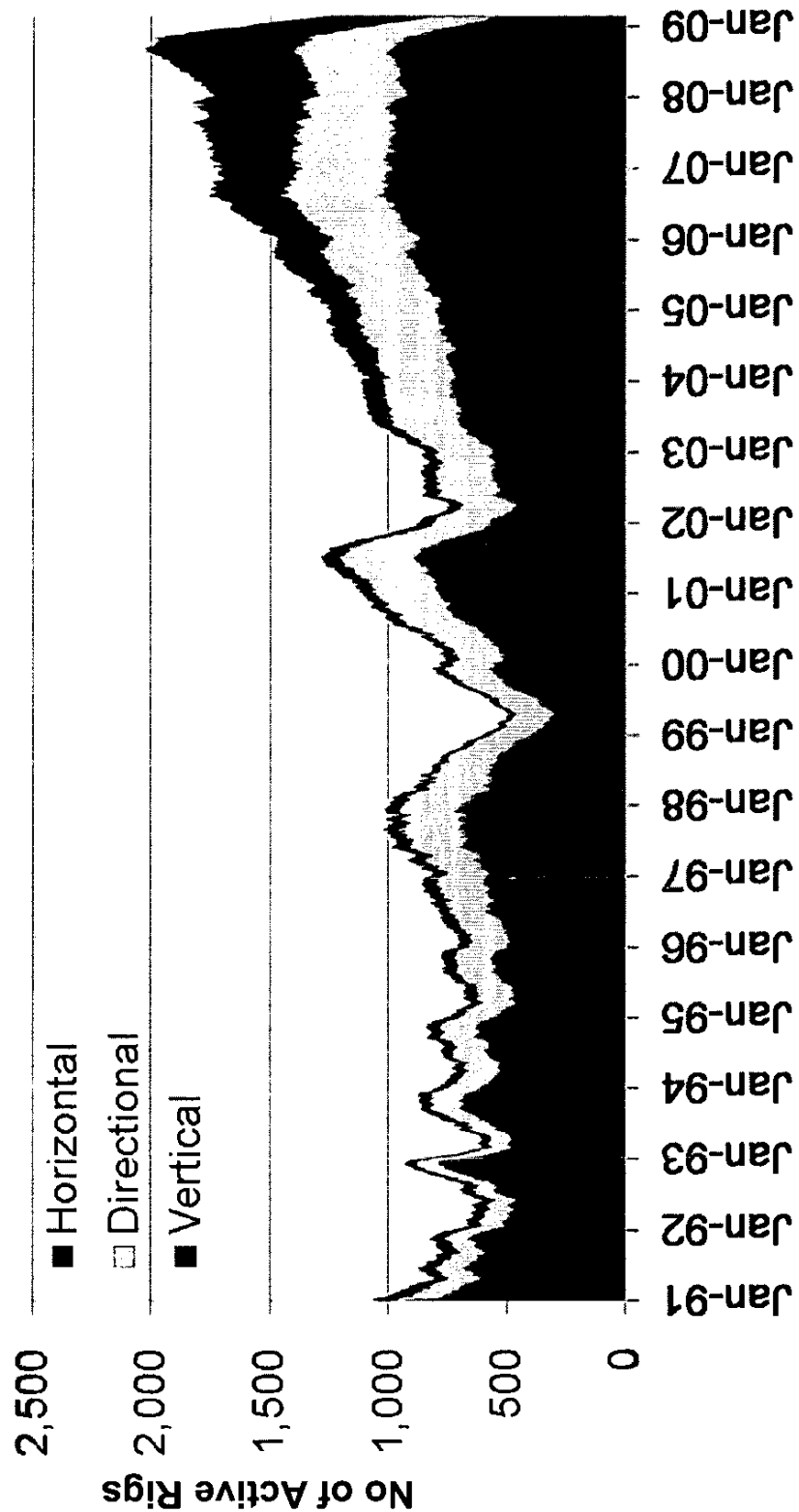
Source: EIA, BENTEK



# Growth Was Greatest In The Non-Conventional Supply Regions



# Drilling Reflects The Shift To Unconventional Production

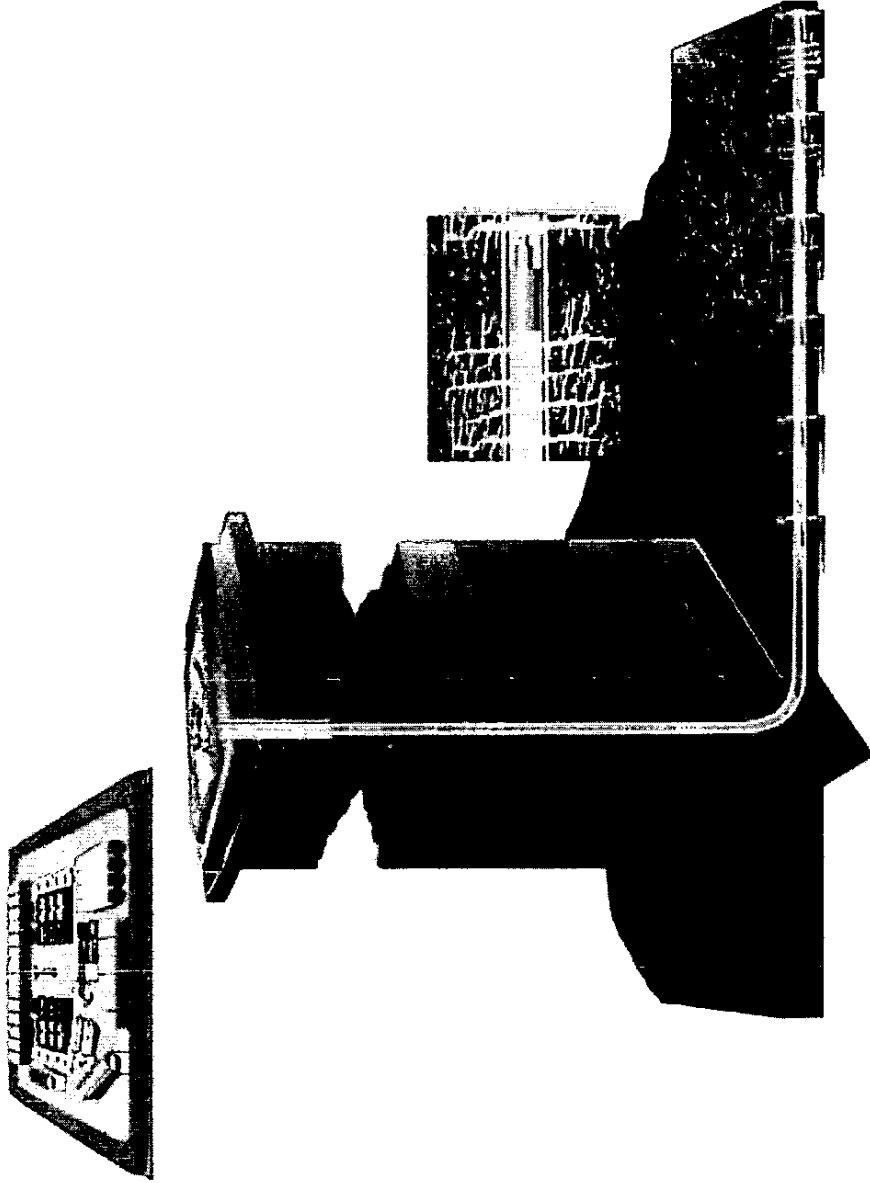


Source: Baker Hughes Direct



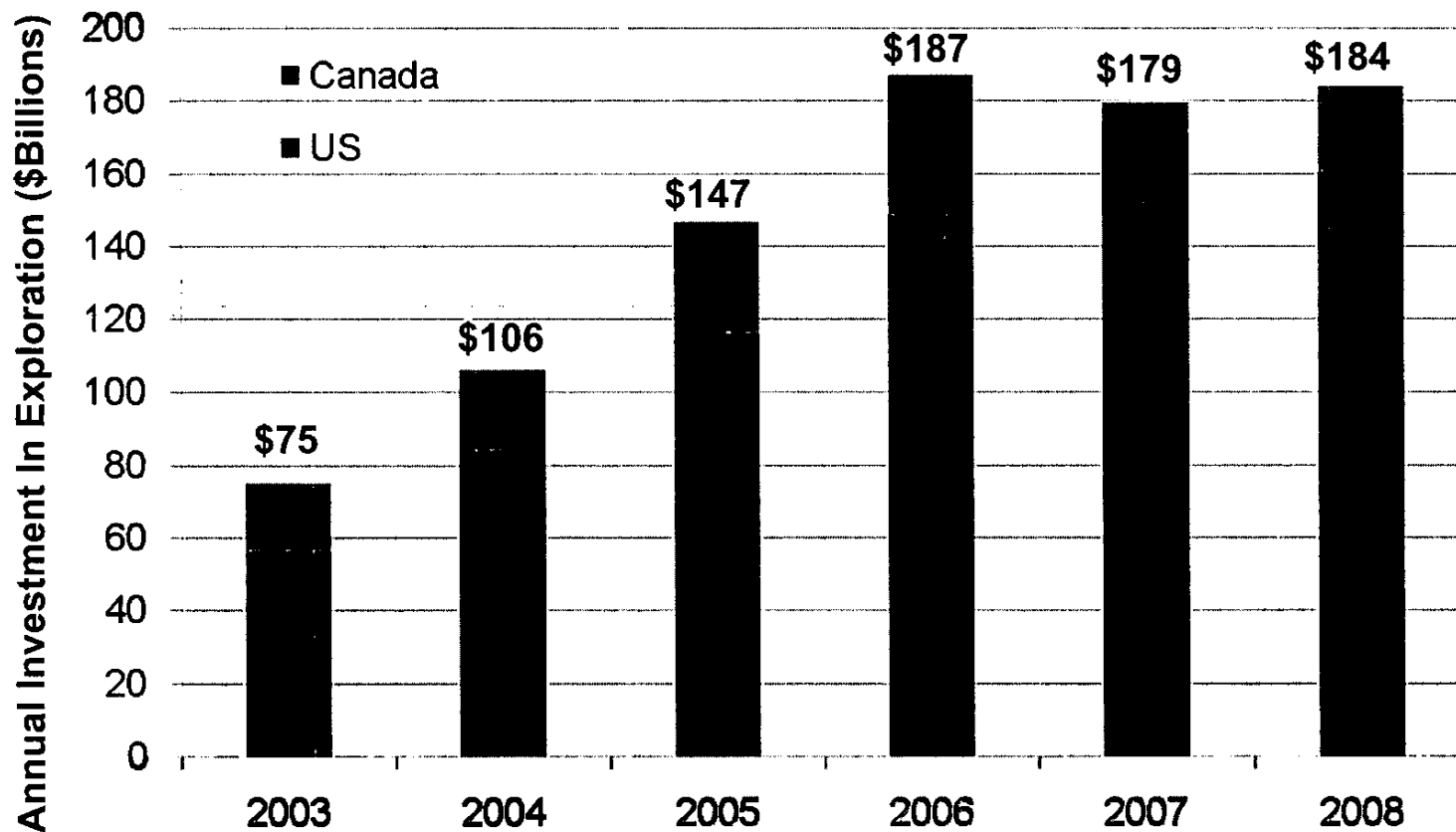
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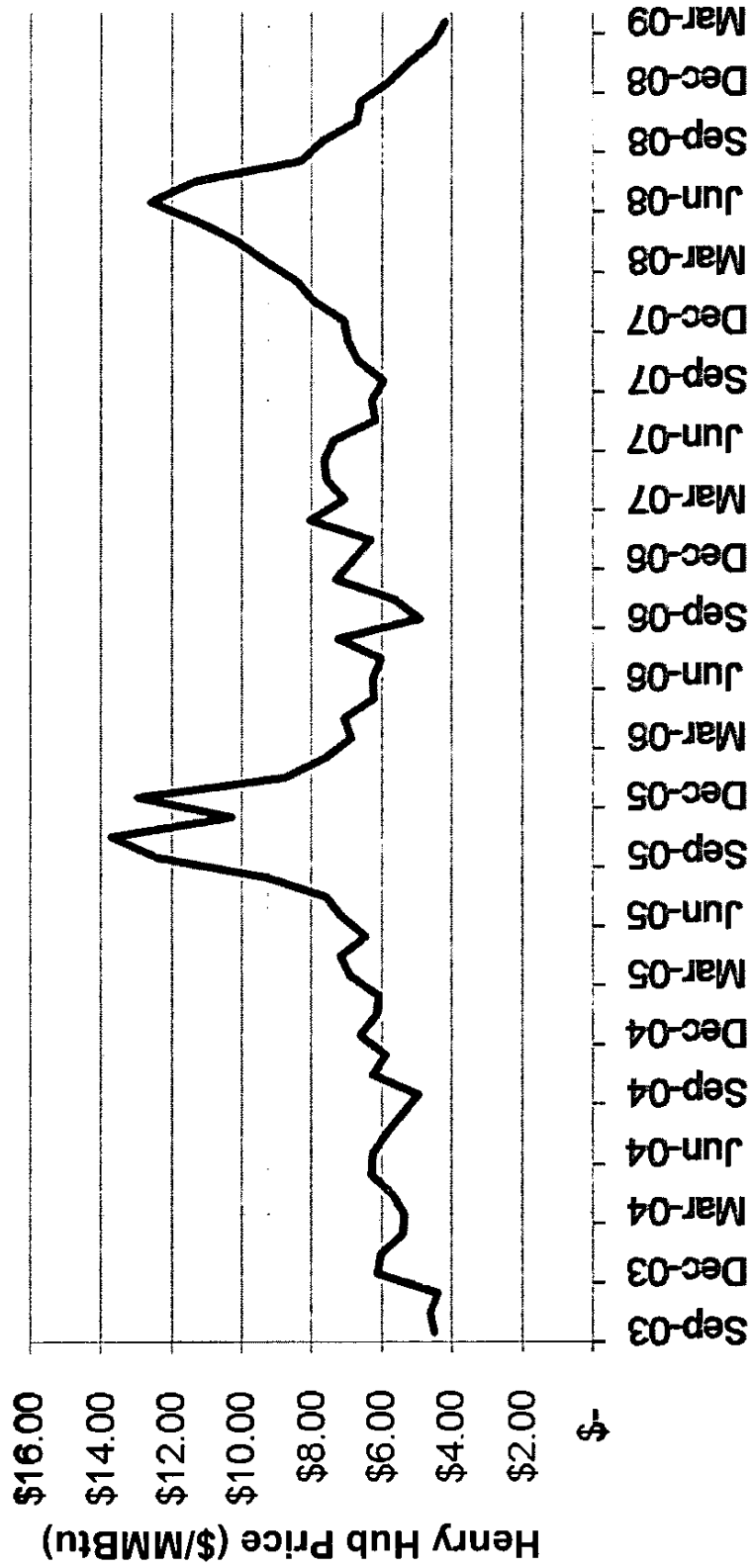


Source: Hydraulic Fracturing Factsheet, prepared by  
Chesapeake Energy, February 2009

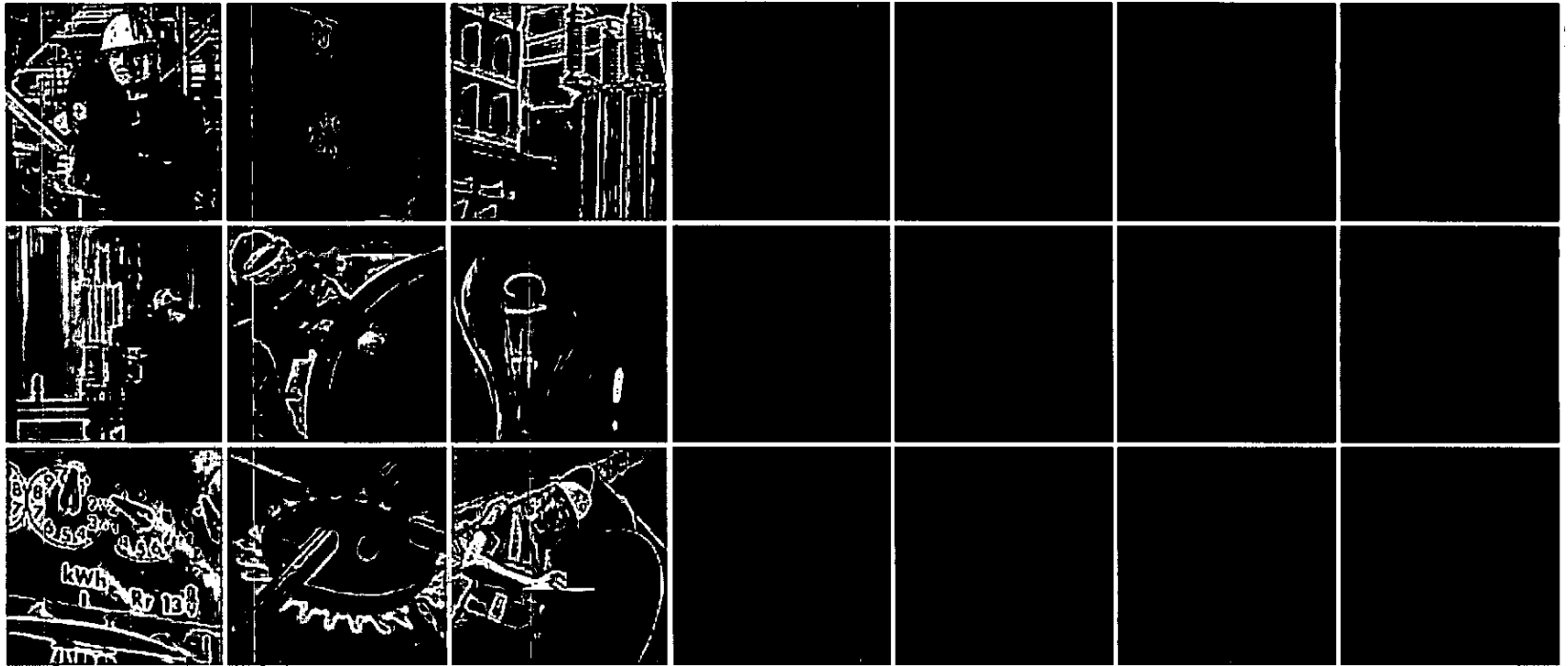
# ***Producers Have Invested Nearly \$1 Trillion On Exploration Since 03***



# Natural Gas Prices Are Falling Precipitously



Source: ICE

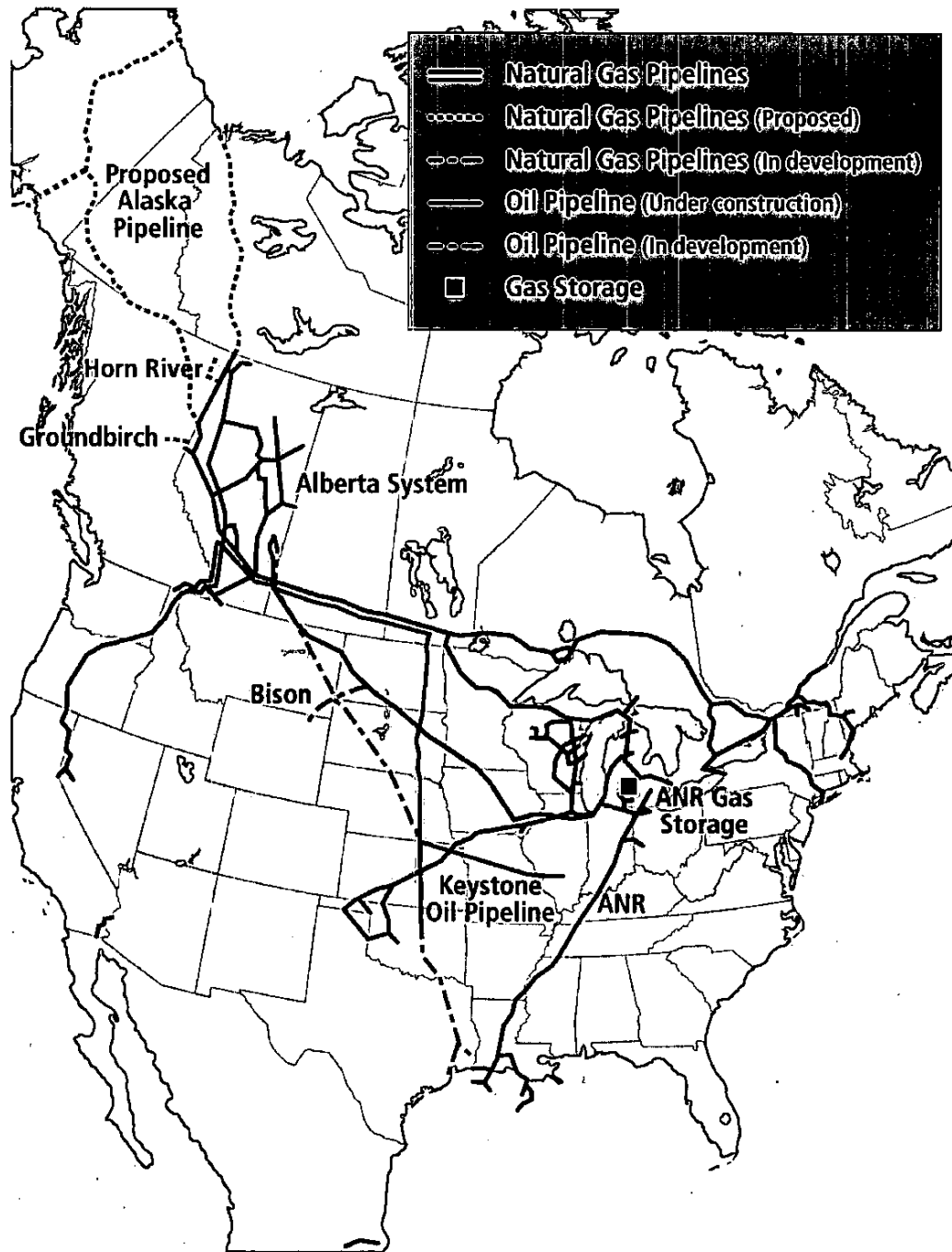


# TransCanada's Alaska Pipeline Project

Alaska Legislature  
House Energy Committee  
March 19, 2009

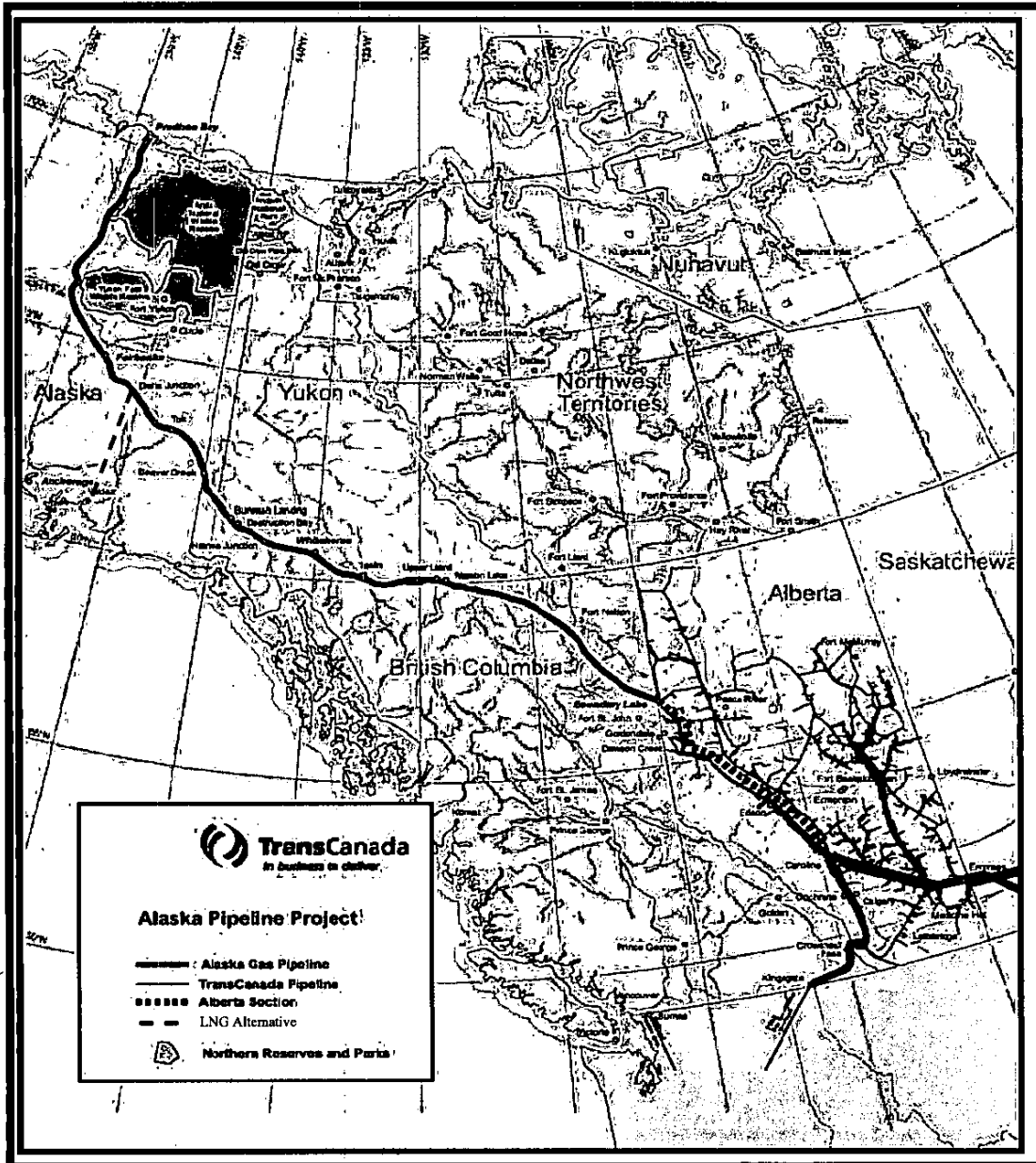


**TransCanada**  
*In business to deliver*



## 2008 Pipeline Accomplishments

- **Keystone Oil Pipeline**
  - Expanded system to 1.1 MMBbl/d, 83 per cent contracted
- **ANR Regulated Natural Gas Storage**
  - Increased capacity to 250 Bcf
- **Alberta System**
  - NCC under construction
  - Federal jurisdiction approved
- **Rockies Basin Initiatives**
  - Proceeding with Bison project
- **Alaska Pipeline Project**
  - AGIA license received
- **Northeast BC Shale Gas**
  - Proceeding with Groundbirch
  - Proceeding with Horn River



# TransCanada's Alaska Pipeline Project



## Elements of a Successful Project



- **Attractive project economics**

- Natural gas prices are volatile and difficult to forecast
- Conventional Lower 48 and WCSB, LNG, shale and coalbed methane all competing for market share
- Project supporters must focus on factors that affect tolls
  - Commercial terms
  - Commercial and regulatory risk management
  - Schedule
  - Cost control
- Current toll estimate of US\$2.76/MMBtu (nominal) in 2018 to Alberta Hub
  - Important to keep tolls under \$3/MMBtu (incl. fuel)

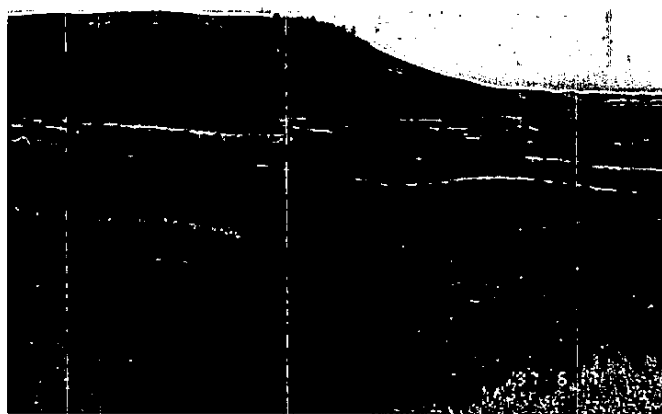
## Elements of a Successful Project



- **Government and community support**
  - U.S. / Canada
- **Commercial contracts with Shippers**
  - Discussions with potential shippers for deliveries:
    - within Alaska,
    - to Asia/Lower 48 via Valdez, &
    - to Lower 48 via Alberta Hub

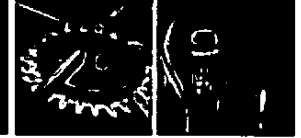


- **Project Execution**
  - Proven project developer
    - TransCanada has 50 year successful track record as developer of long-distance multi-jurisdictional pipeline projects



5 March 19, 2009

## Review of Project Economics



- Access to capital markets
- Pipe prices
- Crude oil price forecasts
- Natural gas price forecasts
- Impact on project economics

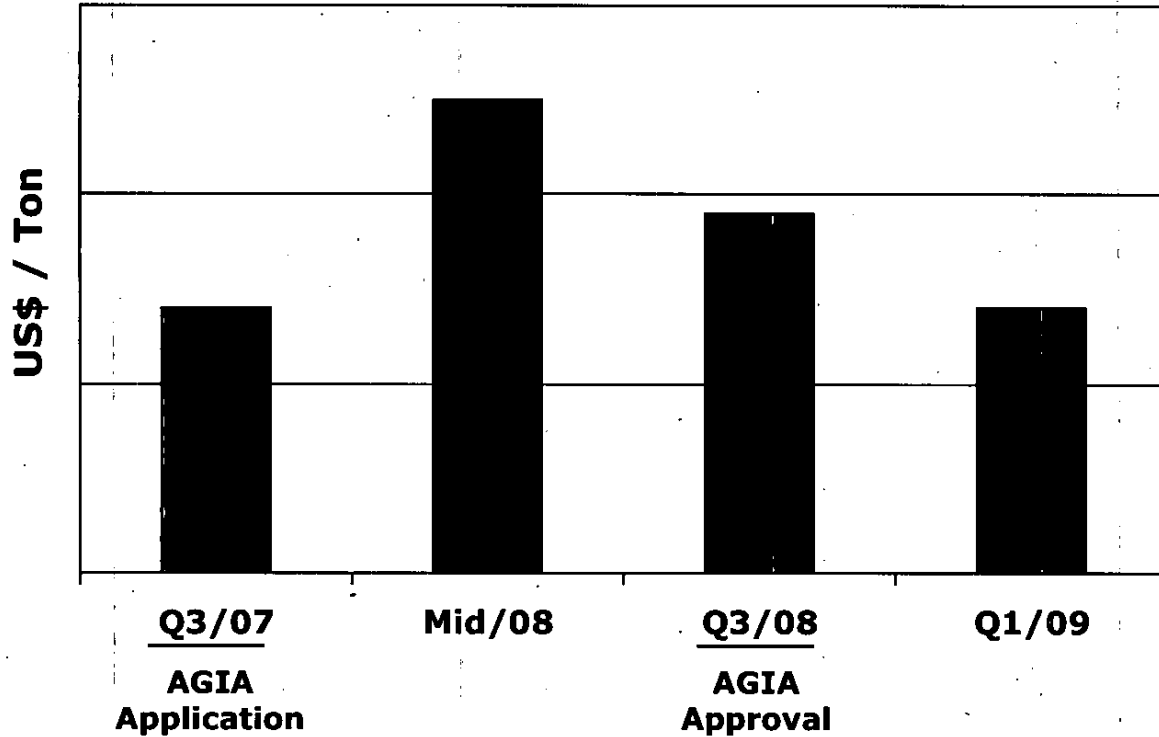


## TransCanada's Access to Capital Markets



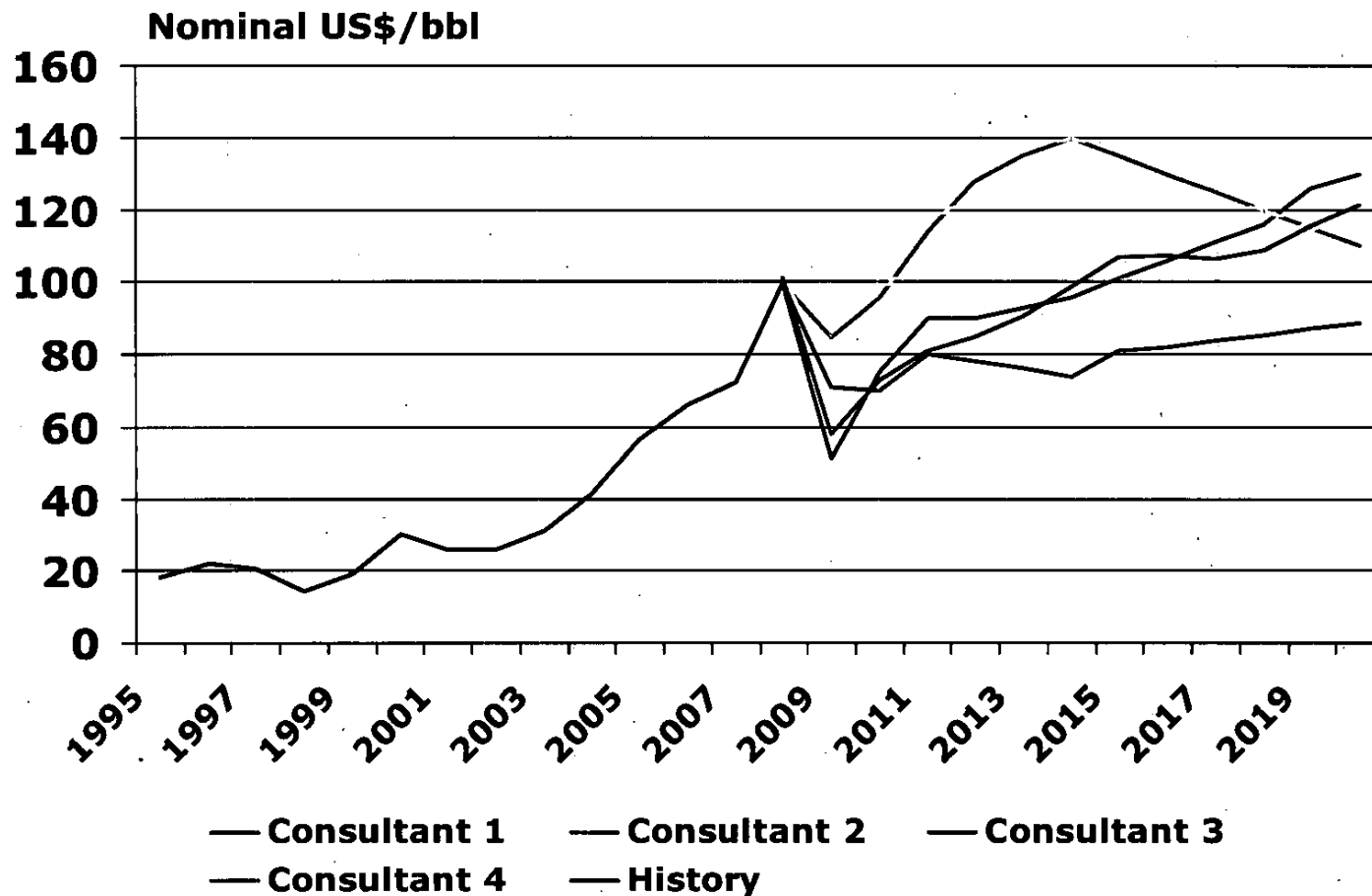
- Raised C\$5.5 billion in capital since November 2008
  - Raised C\$1.157 billion in common equity through a public offering
  - Issued US\$1.25 billion 30-year Senior Unsecured Notes at 7.625 per cent
  - Issued US\$750 million 10-year Senior Unsecured Notes at 7.125 per cent
  - Secured a US\$1.0 billion bank facility dedicated to funding the Keystone Pipeline system
  - Issued C\$400 million 30-year Medium Term Notes at 8.05 per cent
  - Issued C\$300 million 5-year Medium Term Notes at 5.05 per cent
- Alaska Pipeline Project will have access to US\$18 billion Federal Loan Guarantee
  - **Commence financing at decision to proceed (2014/15)**

# Pipe Prices

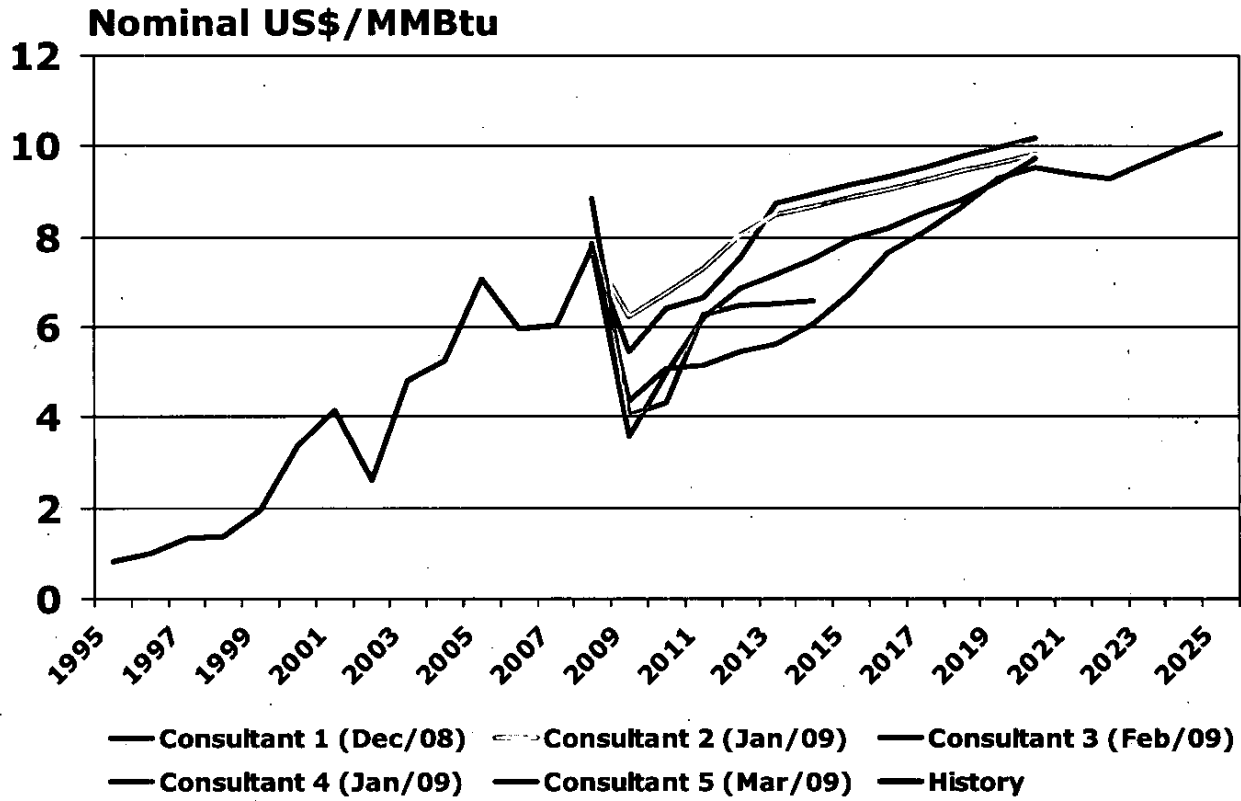
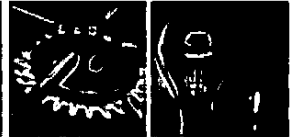


Q1 2009 pipe prices at same level as TransCanada's AGIA Application

# Recent Crude Oil (WTI) Price Forecasts – Jan/09



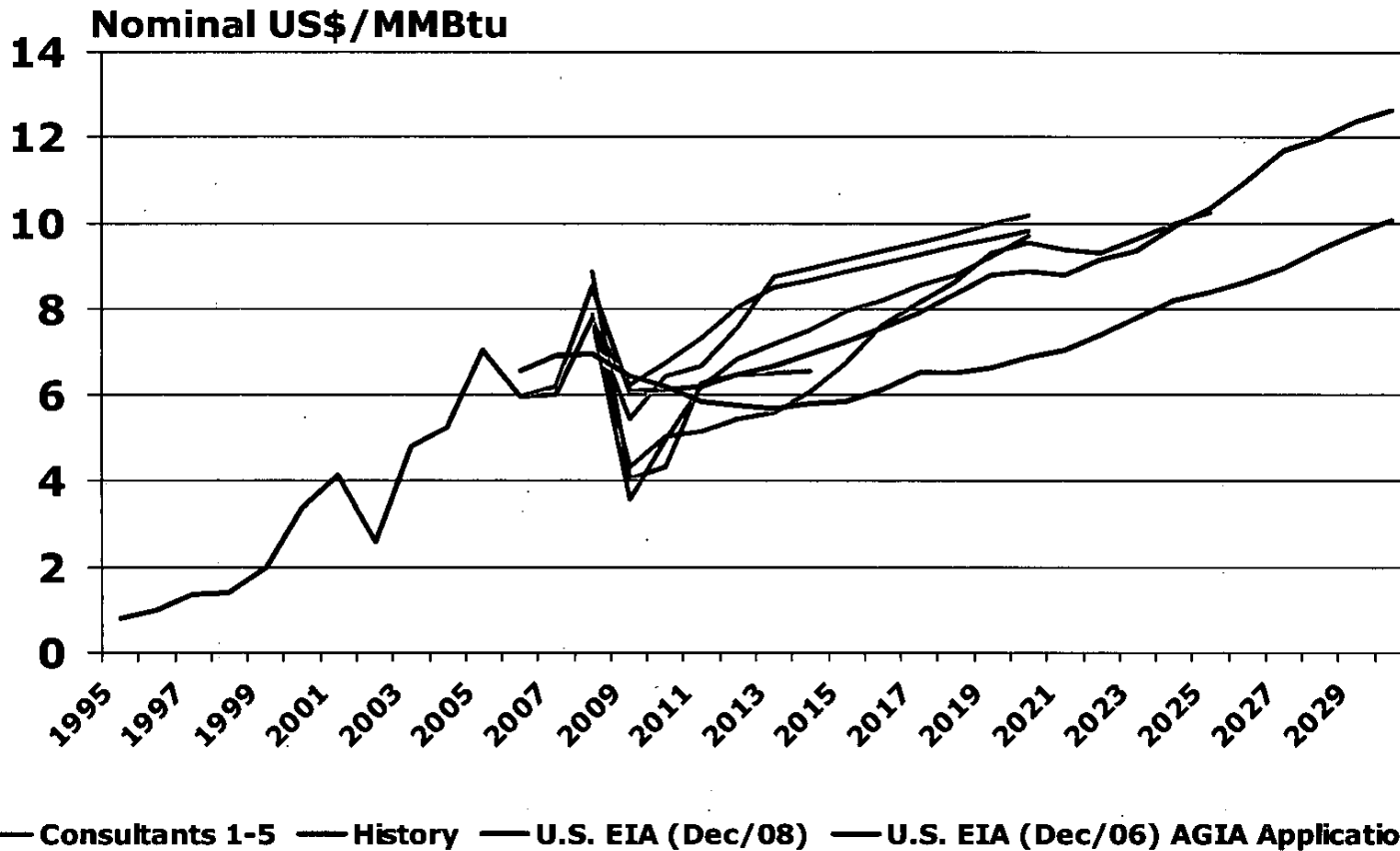
# Recent Alberta Hub Gas Price Forecasts



**Alaska Pipeline economics remain attractive based on recent forecasts (2018 and beyond)**



# U.S. EIA Alberta Hub Gas Price Forecasts



**Current EIA Forecast approx. \$2/MMBtu higher than projections used in TC's AGIA Application**

## Impact on Project Economics



	<u>AGIA Application</u>		<u>March 2009</u>	
	2018 1 <sup>st</sup> Yr	25-Yr Annual Avg	2018 1 <sup>st</sup> Yr	25-Yr Annual Avg
U.S. EIA Gas Price Forecast (\$/MMBtu)	\$6.53	\$9.92	\$8.37	\$12.43
Pipeline + GTP Tolls <sup>1</sup> (\$/MMBtu)	\$2.76	\$3.03	\$2.76	\$3.03
Netback (pre-tax) (\$/MMBtu)	\$3.77	\$6.89	\$5.61	\$9.40
Producer/Govts Total Revenue <sup>2</sup> (\$Billions)		\$350		\$475

**Current U.S. EIA forecast results in extra \$125 B to producers/governments**

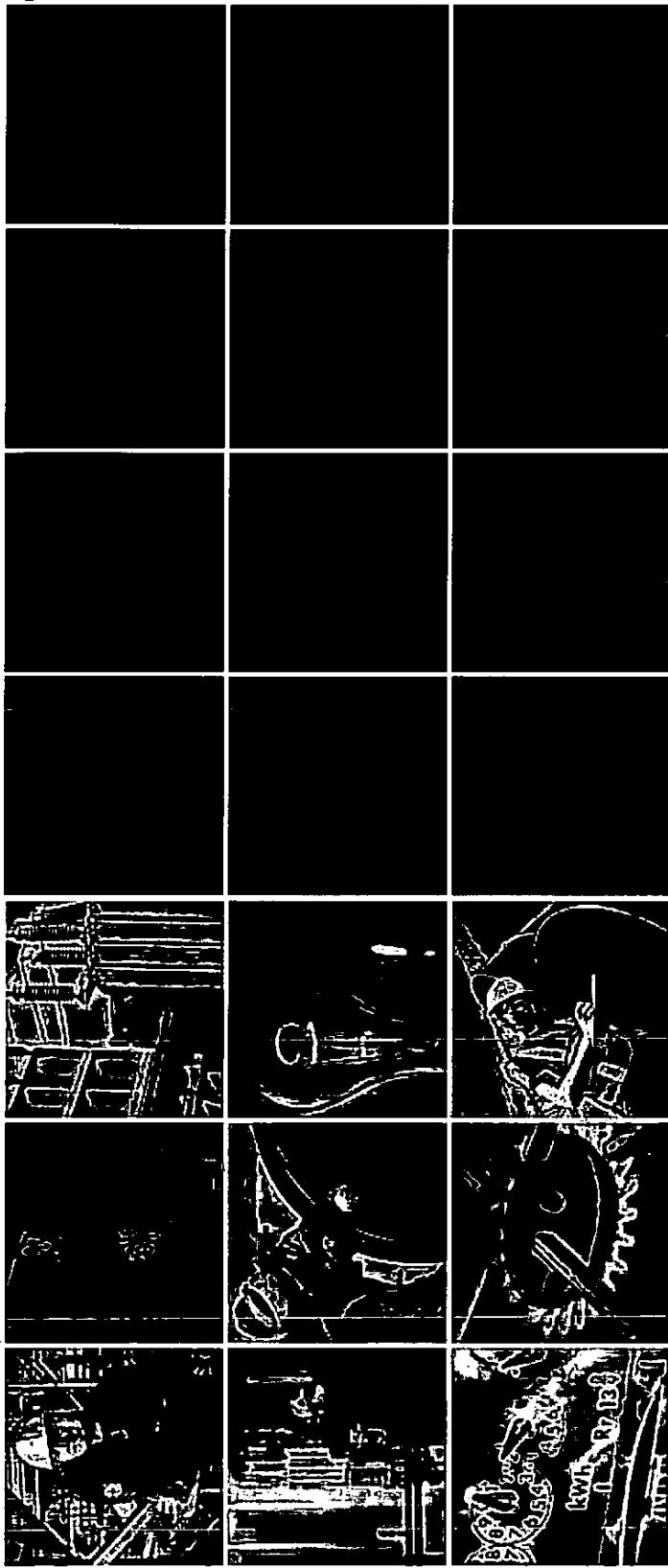
<sup>1</sup> Includes fuel

<sup>2</sup> Direct revenue only – no indirect impacts from additional E&P activity and spin-offs

## Summary



- AGIA Bill approved and License issued
- TransCanada aggressively advancing the project
  - Engineering / Cost Estimation, Environmental, Administrative
  - Commercial, Regulatory and First Nations
- Project activities and schedule unaffected by recent turbulence in financial markets
- TransCanada has solid access to capital markets
- Current gas price forecasts result in an increase of \$125 Billion revenue to producers/governments as compared to projections in TransCanada's AGIA Application
- Major projects like the Alaska Pipeline Project succeed or fail based on long-term project economics (i.e. 25-50 years commencing in 2018), not short-term swings in natural gas prices
- TransCanada will continue to focus on costs, schedule and attracting customers



**Thank You**



# *How Horizontal Drilling & Fracturing Technologies Are Changing Natural Gas Markets*

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***Presented to:  
The Energy Council's  
2009 Federal Energy & Environmental Matters Conference***

***March 7, 2009***

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# ***Key Points***

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- **Natural gas should no longer be viewed as unavailable, unreliable or too expensive.**
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# ***Presentation Outline***

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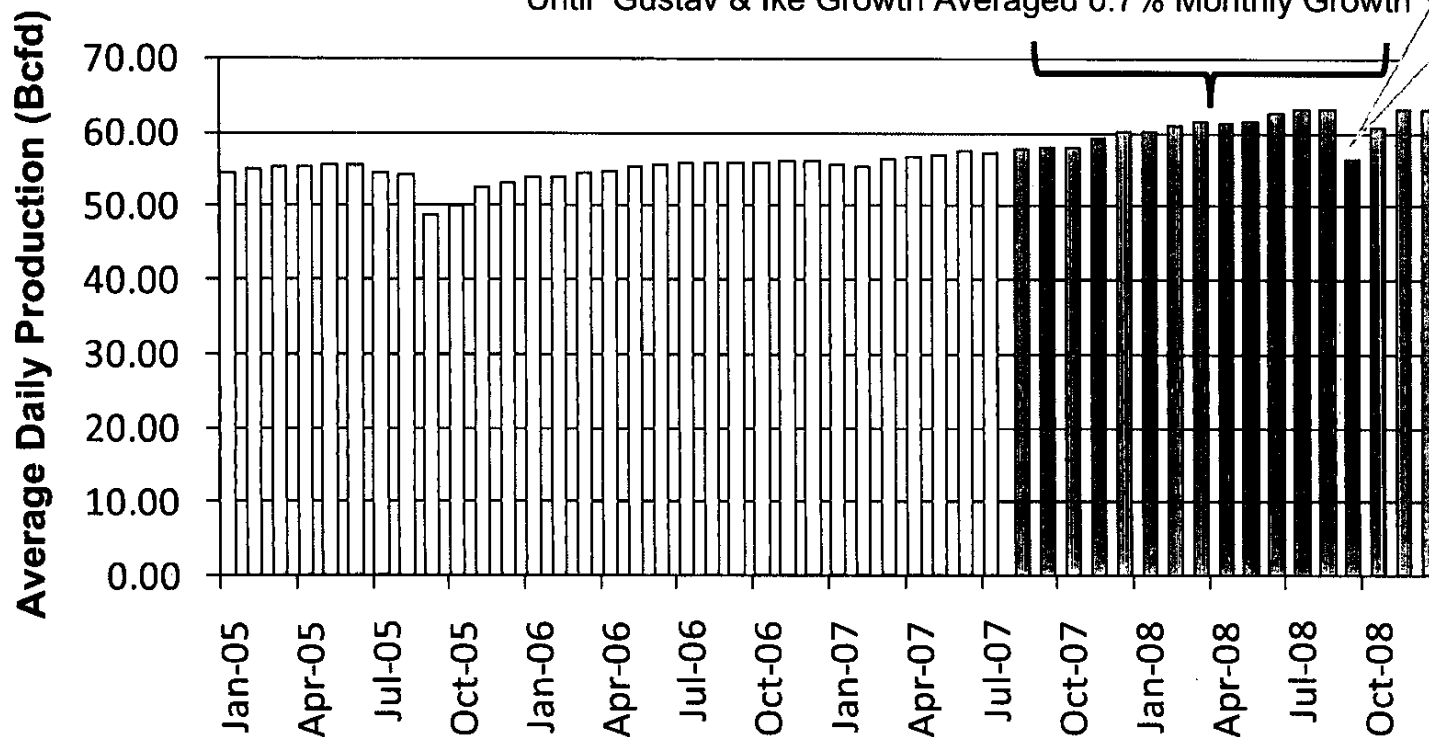
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08 Production Is Up 7% Over 07

Until Gustav & Ike Growth Averaged 0.7% Monthly Growth

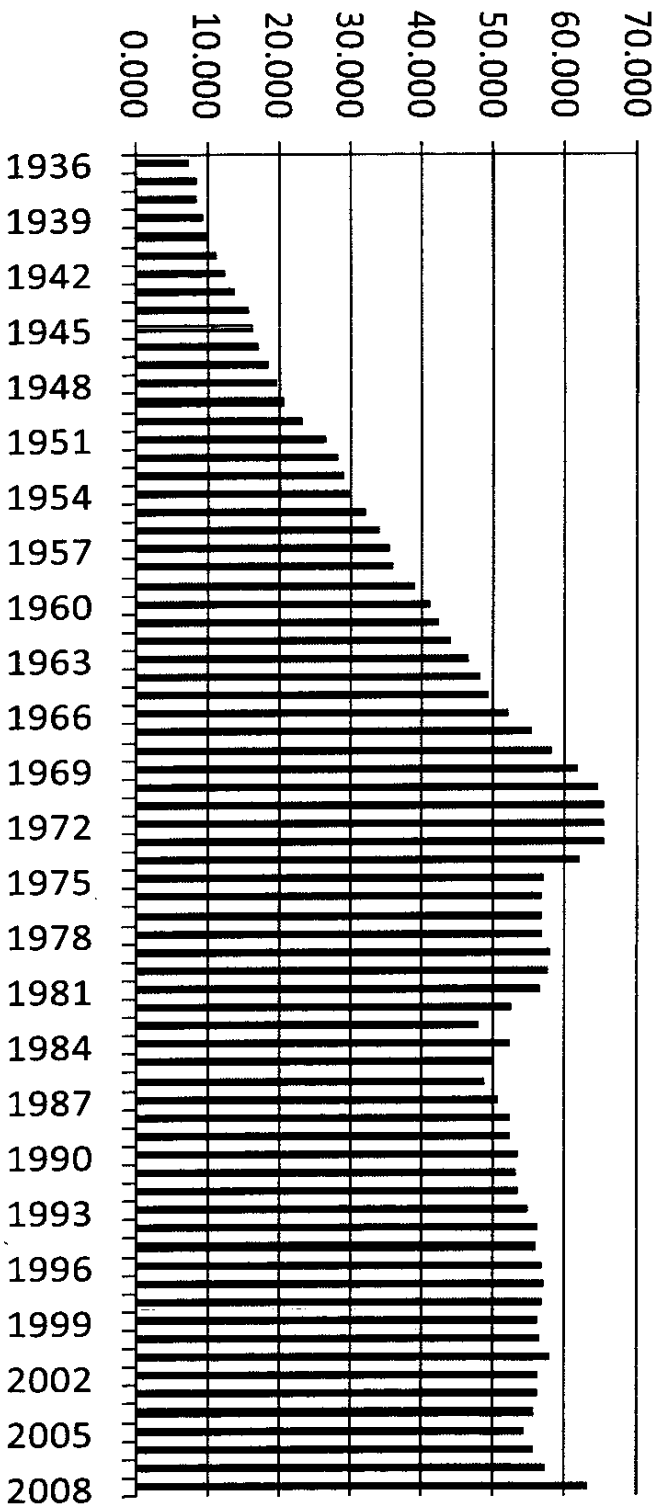
Almost 4.0 Bcfd lost to H'canes



Source: EIA 914 Report  
(Gross Withdrawals)

# Production Is Nearing Historic Highs

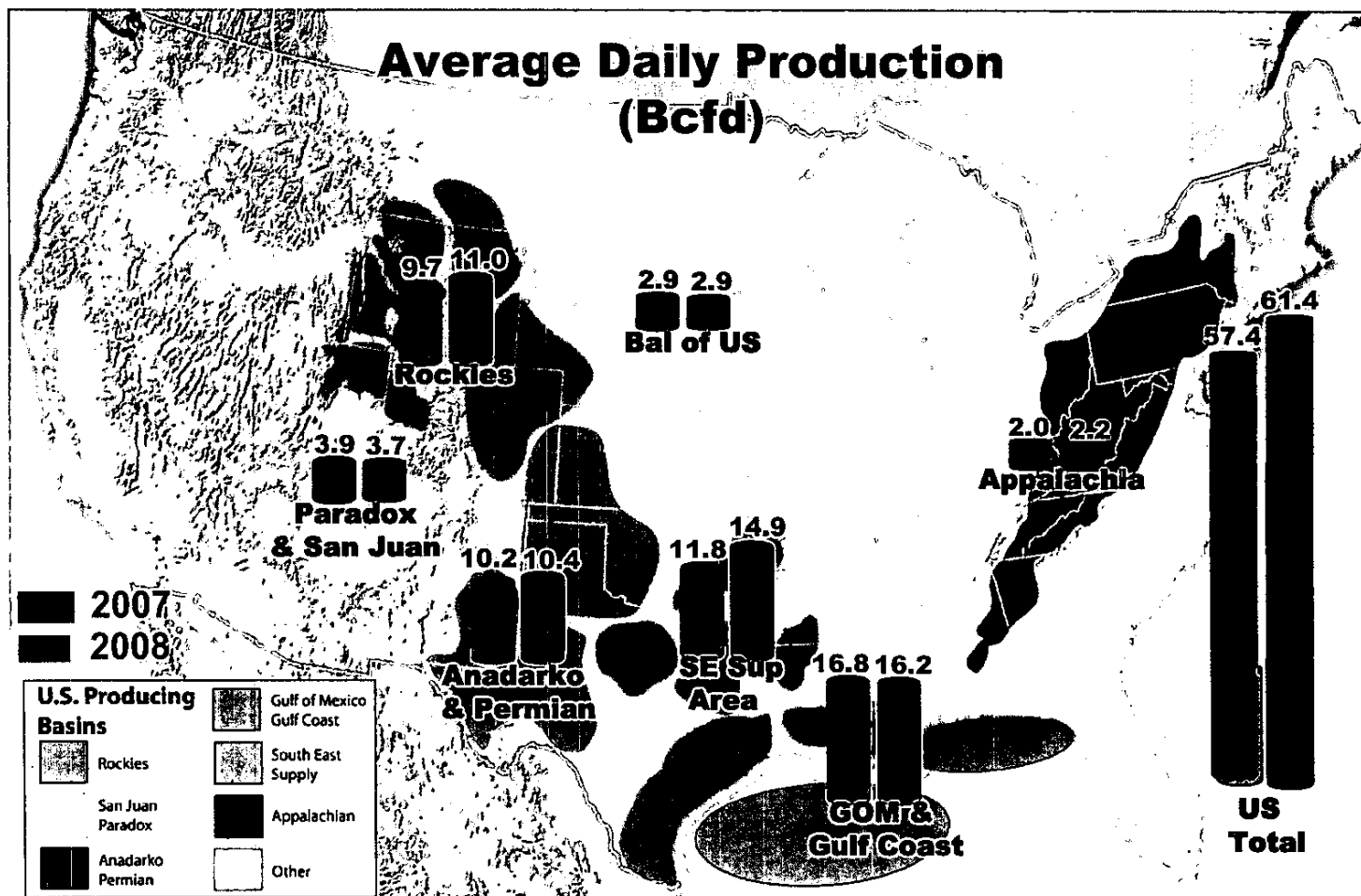
Lower 48 Gross Withdrawals  
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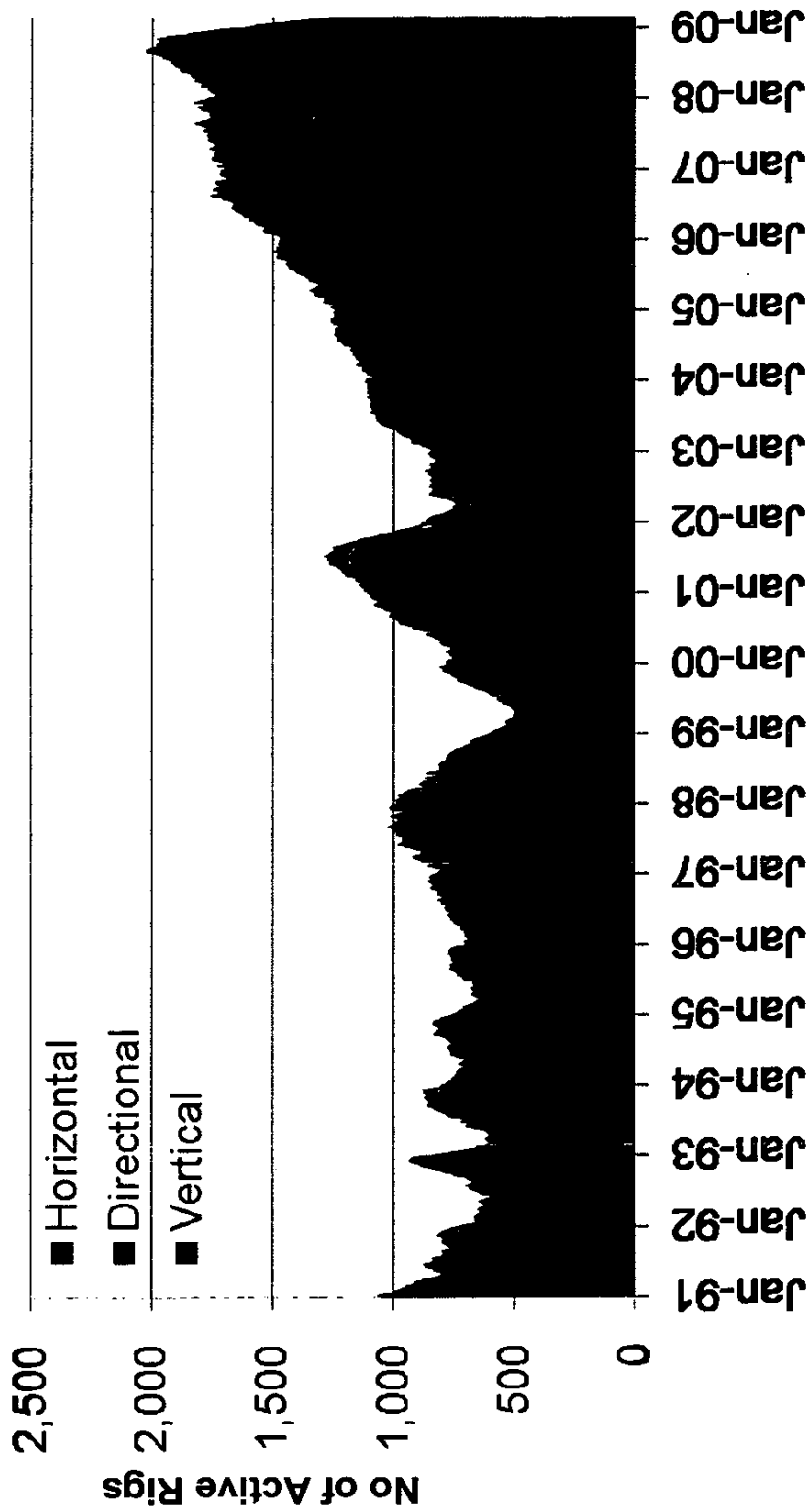
Source: EIA, BENTEK



# Growth Was Greatest In The Non-Conventional Supply Regions



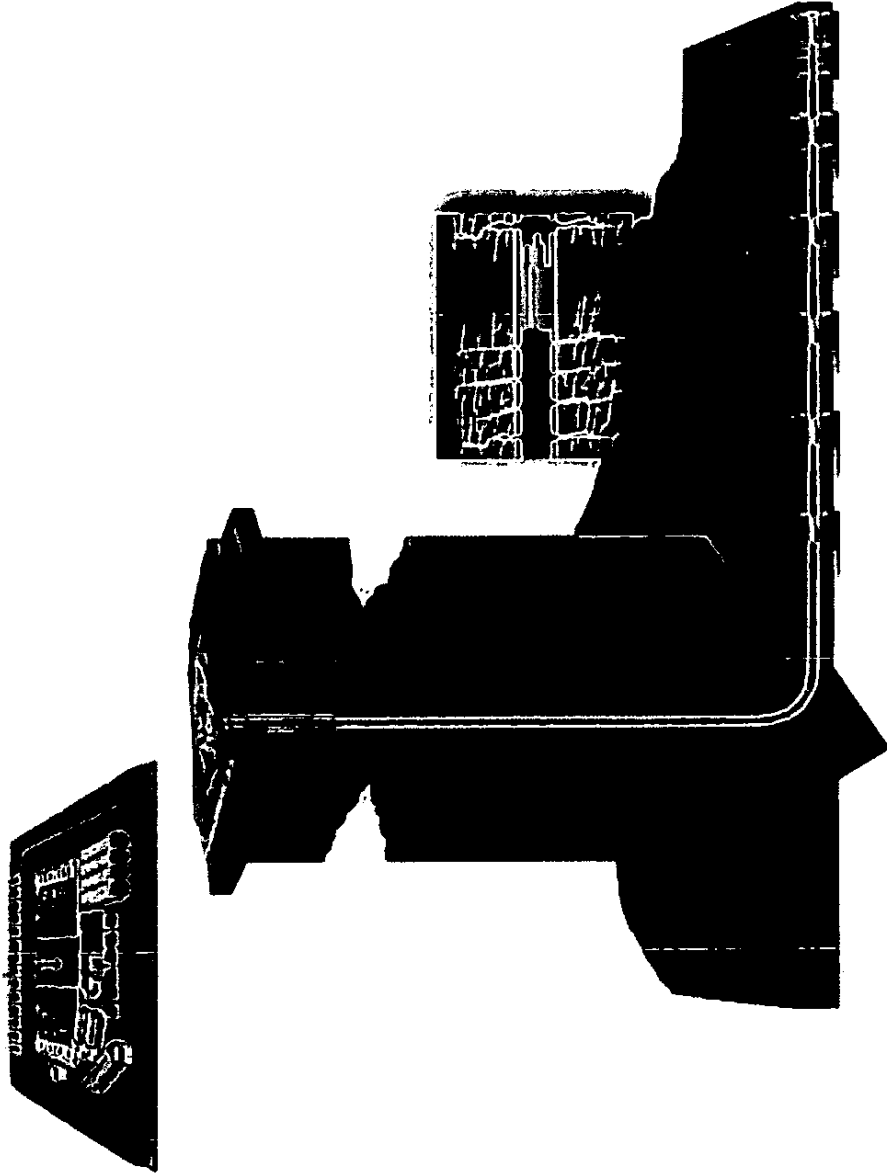
# Drilling Reflects The Shift To Unconventional Production



Source: Baker Hughes Direct

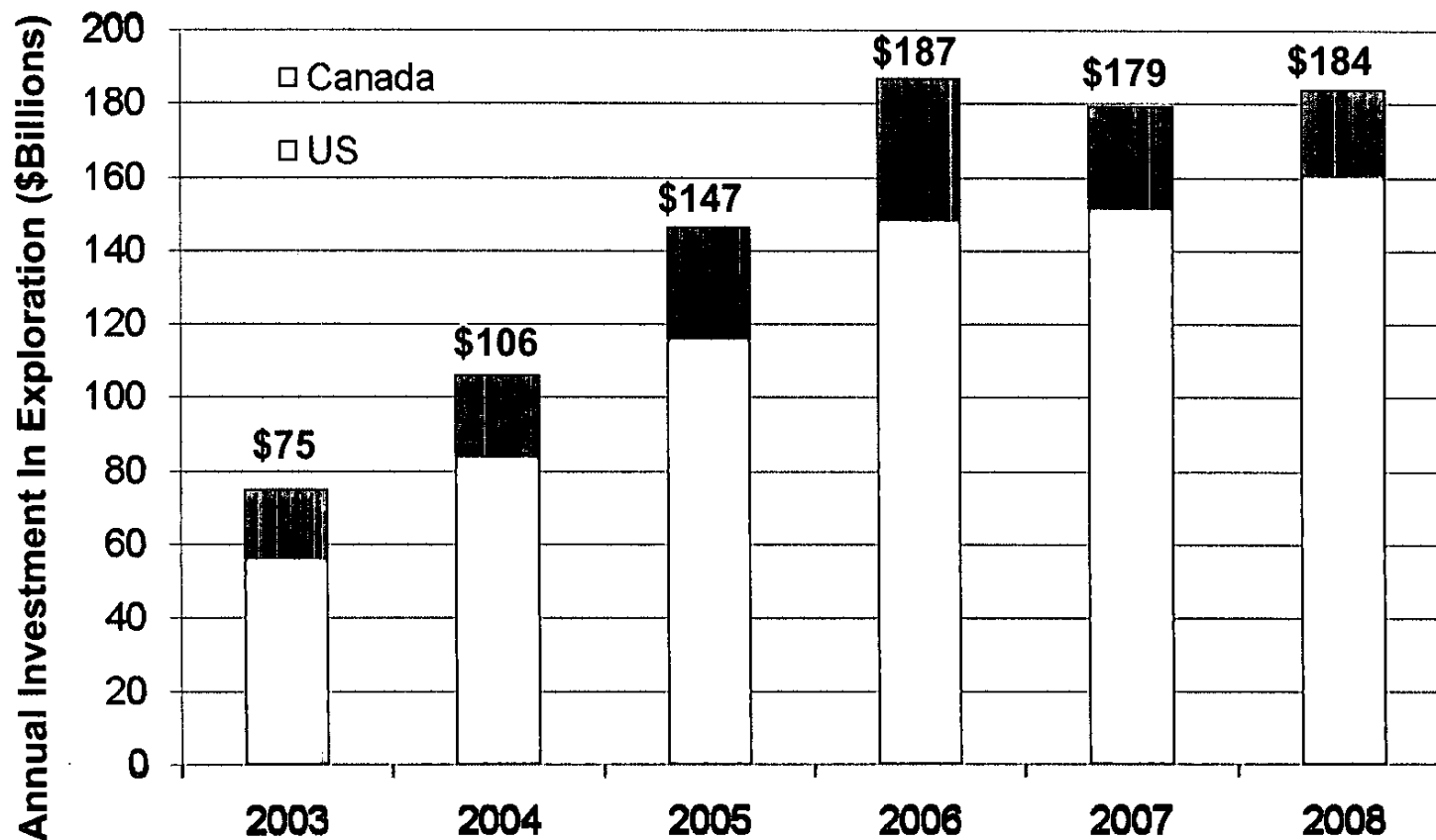
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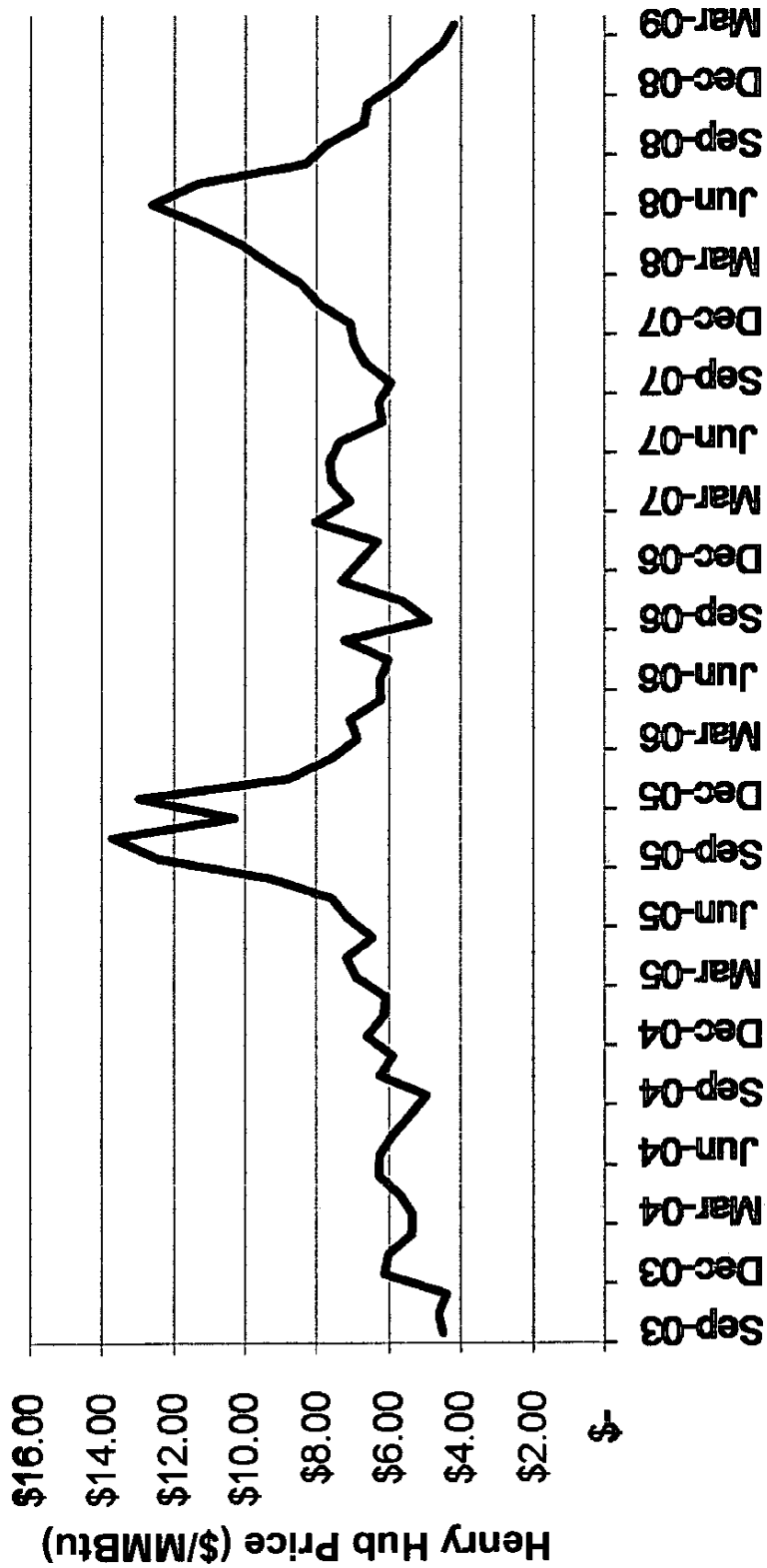
Source: *Hydraulic Fracturing Factsheet*, prepared by  
Chesapeake Energy, February 2009

# ***Producers Have Invested Nearly \$1 Trillion On Exploration Since 03***



Source: Oil and Gas Journal, Penwell Publications

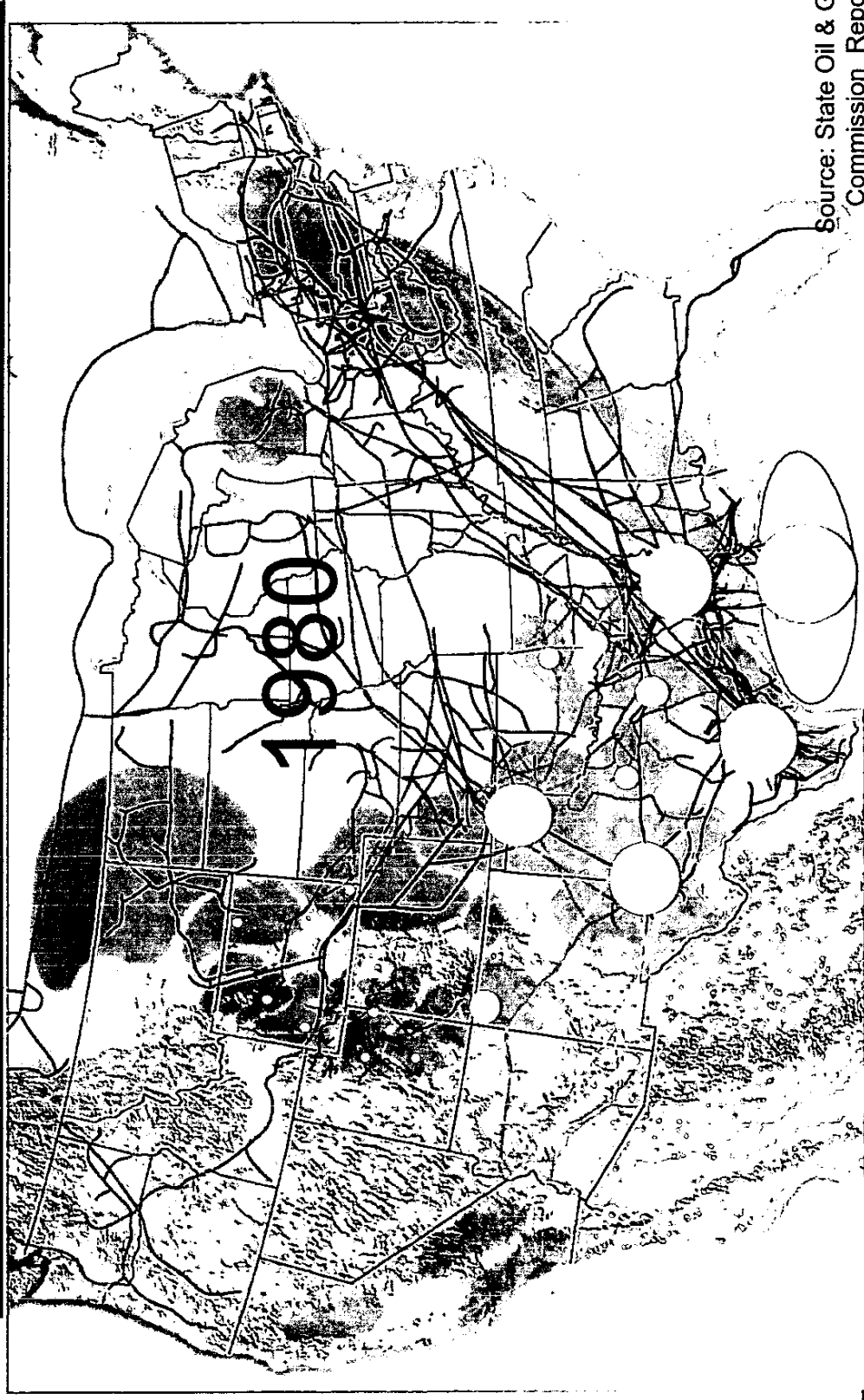
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Source: ICE



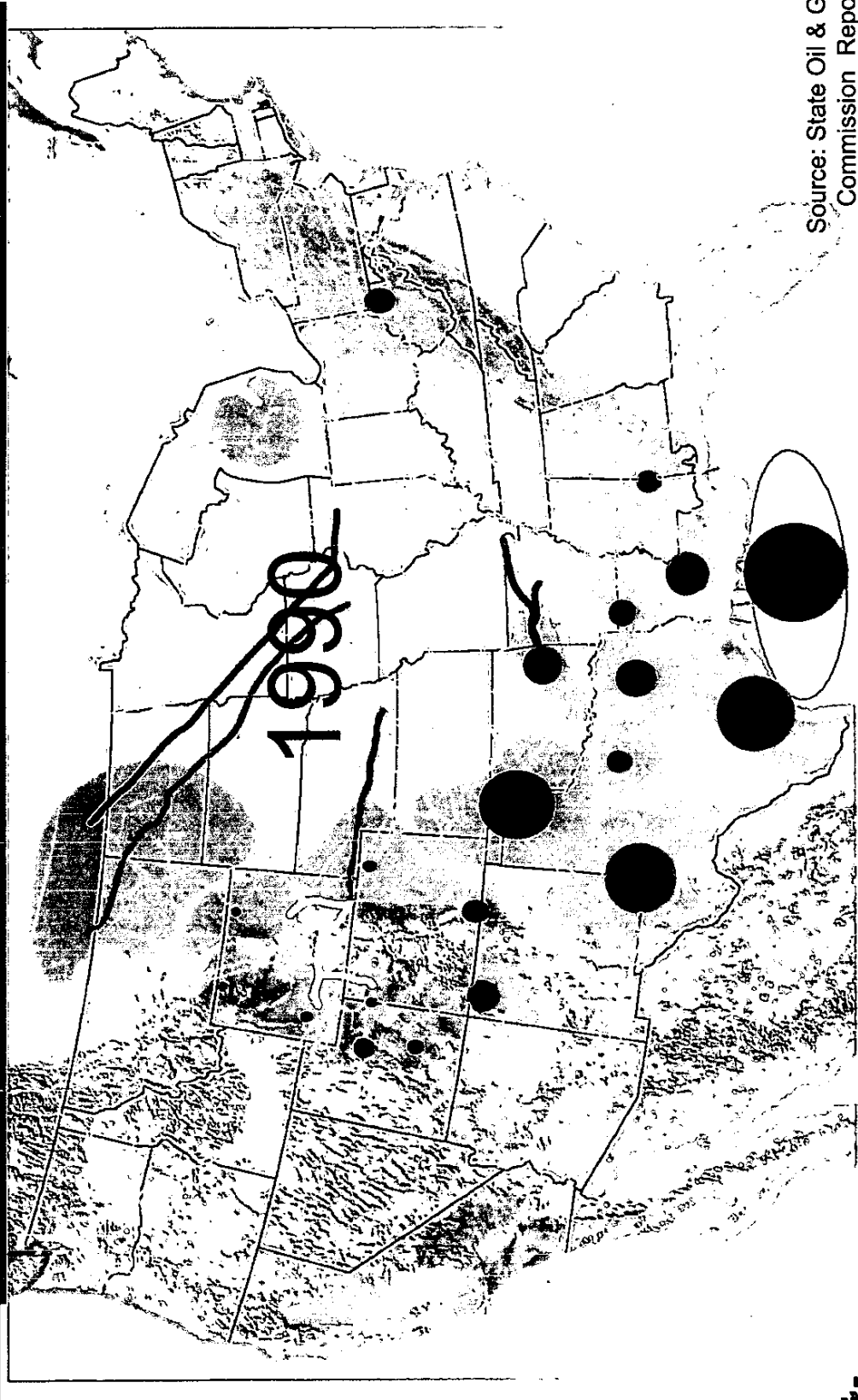
# *The Geography of Production Is Changing*



Source: State Oil & Gas  
Commission Reports

/11

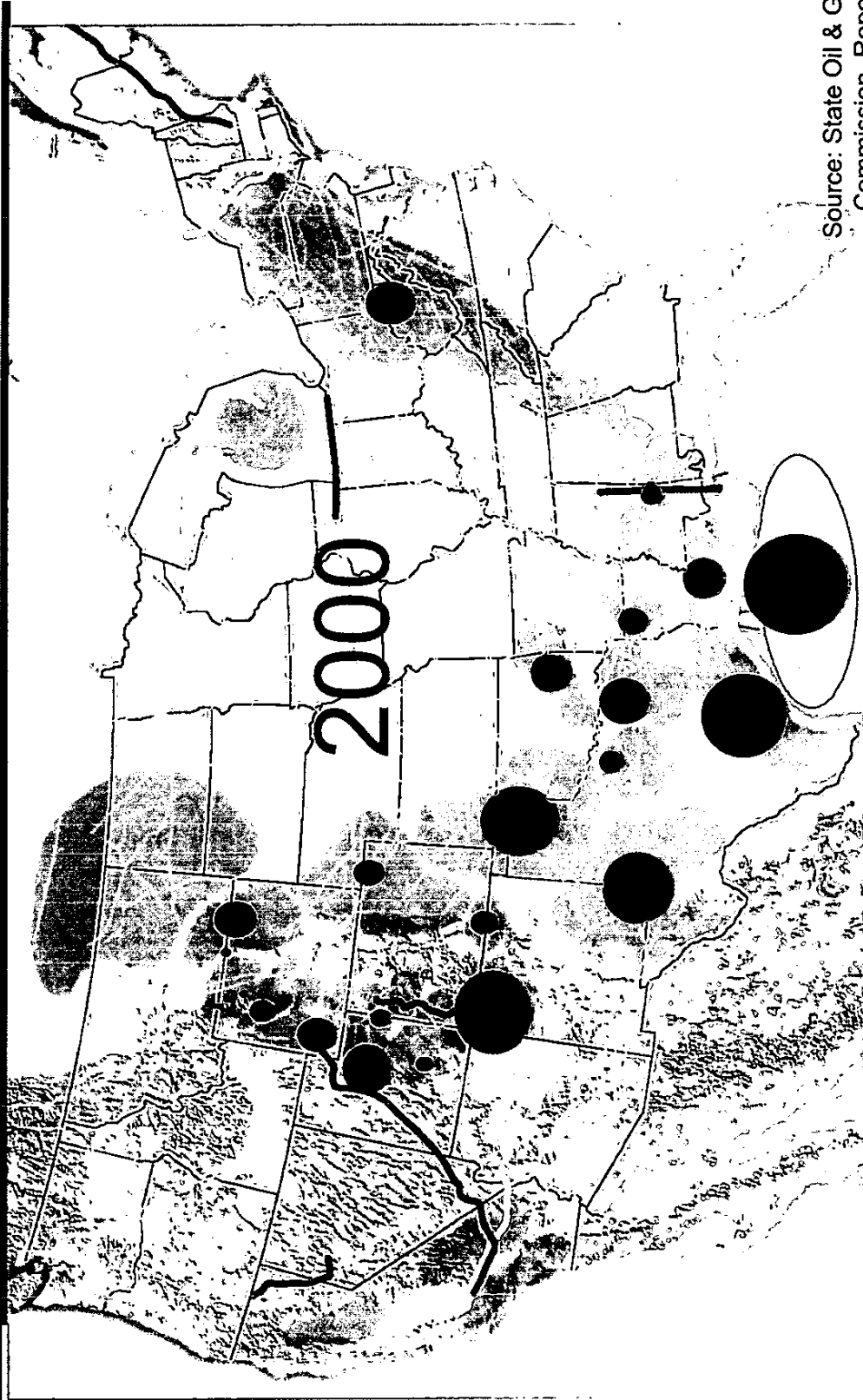
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Source: State Oil & Gas  
Commission Reports

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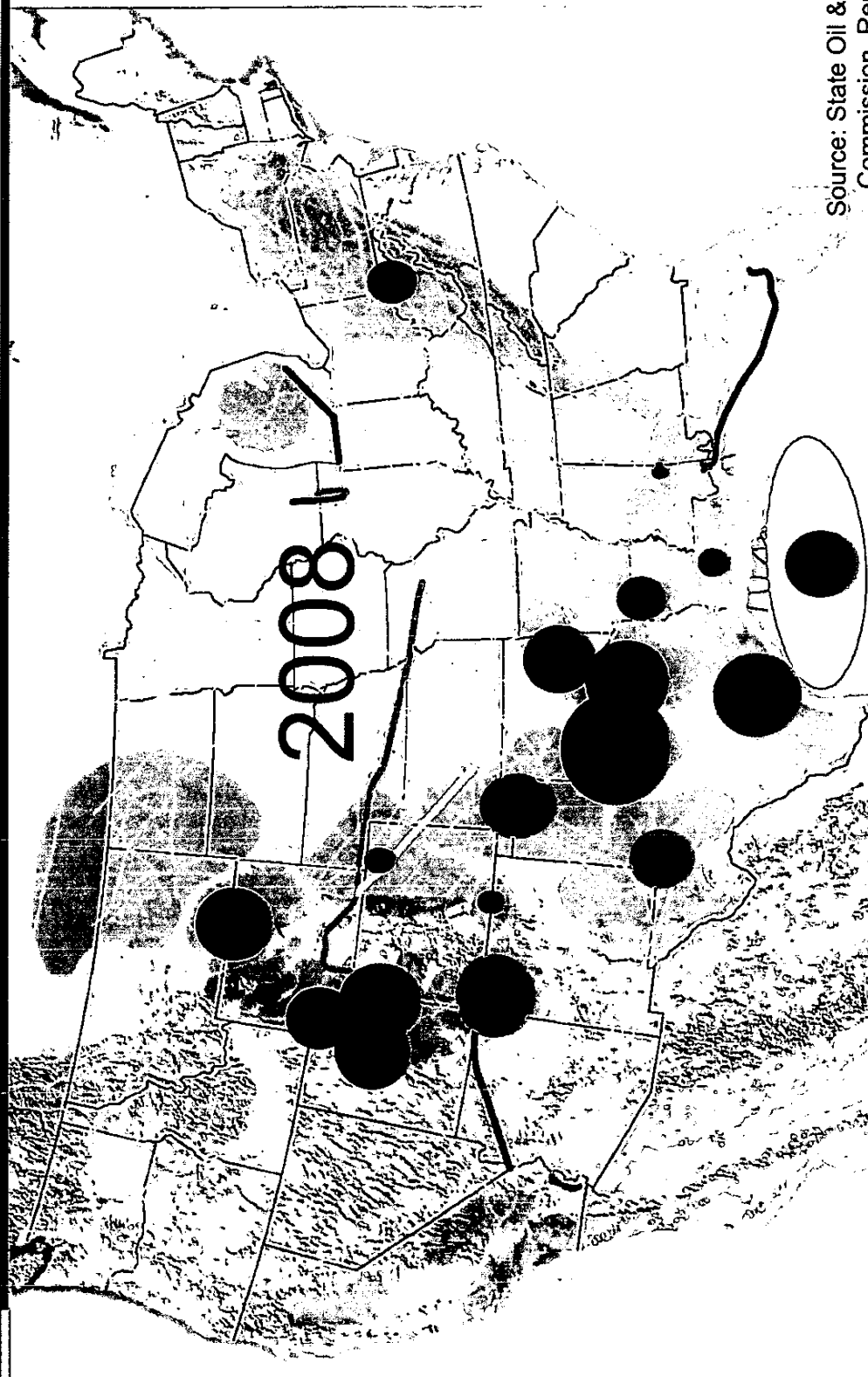
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Source: State Oil & Gas  
Commission Reports

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# The Geography of Production Is Changing



Source: State Oil & Gas  
Commission Reports

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