

# **Given Today's World Gas Markets, the Biggest Risk Alaska is Taking is Remaining in AGIA**

**Senate Resources Committee**

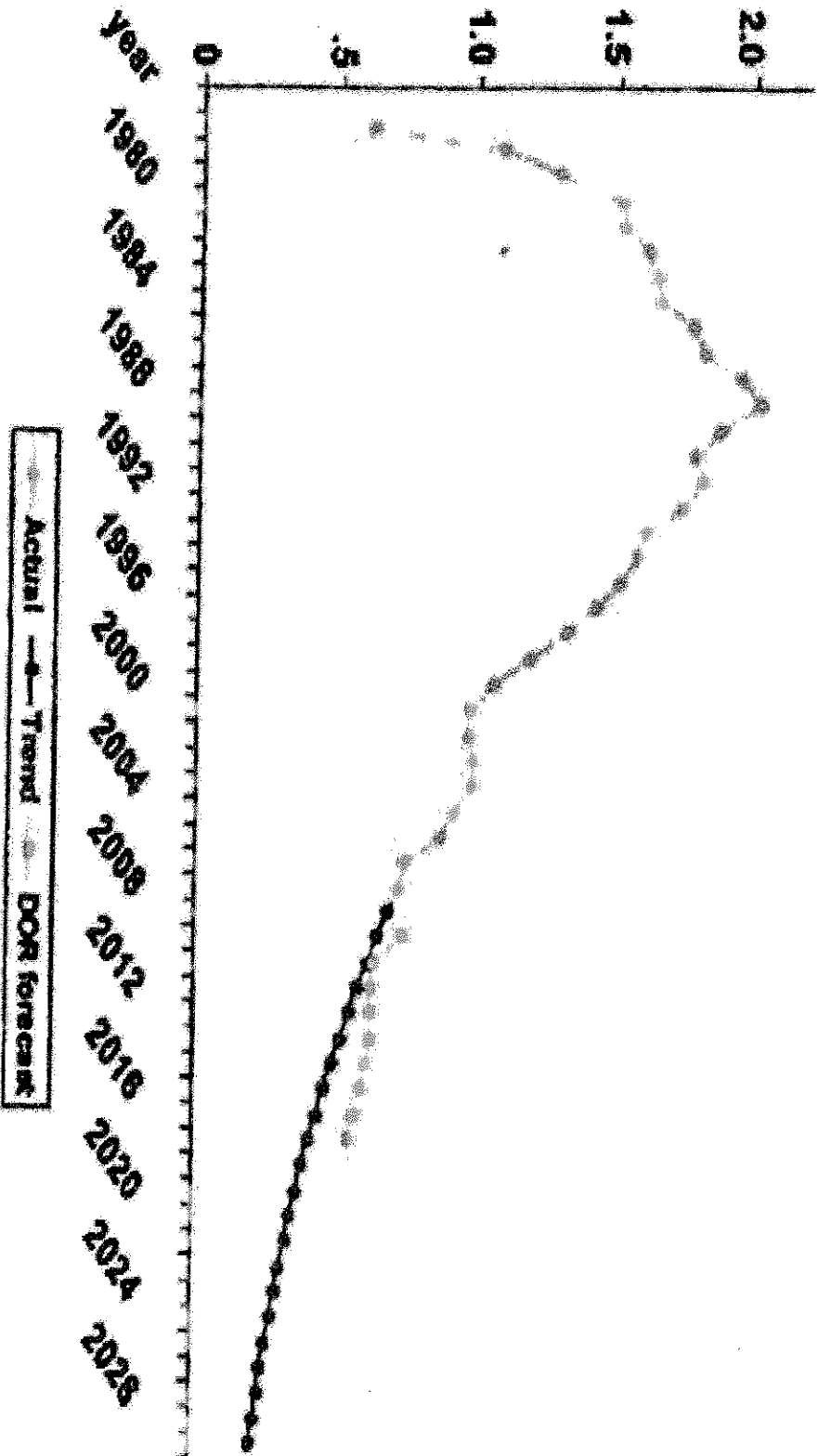
**August 17, 2011**

**Anchorage, Alaska**

Trans Alaska Oil Pipeline (TAPS) in decline  
which funds 90% of State Revenues



## Declining TAPS Throughput



Production on left shown in million barrels per day

# Alaskan LNG Exports Competitiveness Study

Alaska Gasline Port Authority (AGPA)

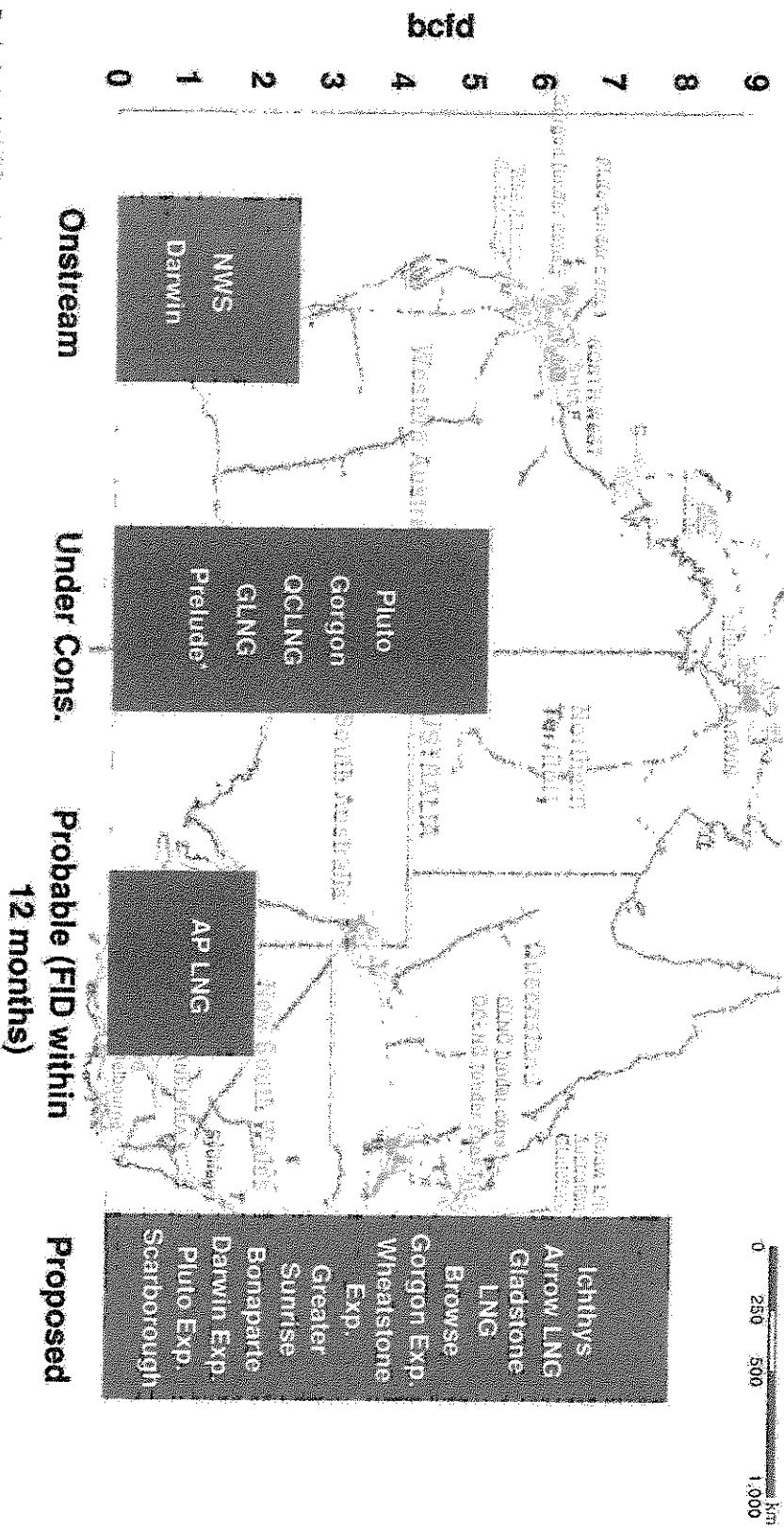
Final Report

July 27, 2011

consulting  
strategy



# Australia will help fill the Pacific supply gap with over 7 bcfd of capacity on-stream or currently under construction...



\* Prelude took FID in mid May  
Source: Wood Mackenzie, As of May 2011.

**Gas Imports - Pipeline & LNG**

**Legend:**

- Pipeline LNG Regs
- Operational
- Under Construction
- Planned
- LNG Liquefaction
- Operational
- Planned

**Callouts:**

- Douglas Channel Energy Partnership project** is a proposed 0.9 mtpa barge facility near Kitimat
- Kitimat LNG** is a proposed 5 mtpa facility (Apache/EOG/Encana) fed with shale gas from Horn River / Montney
- AGPA** is promoting a potential "All Alaska" pipeline and liquefaction project from Valdez
- Petronas and Progress Energy** have signed a strategic partnership to investigate an export facility fed with Montney unconventional gas
- Shell/Mitsubishi** (with PetroChina, KOGAS and several Japanese utilities), and Nexen/LNG Japan are reportedly considering similar schemes in the BC area

**Source: Wood Mackenzie**

Kilimat LNG is a proposed 5 mtpa facility (Apache/EOG/EnCana) fed with shale gas from Horn River / Montney

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**AGPA is promoting a potential "All Alaska" pipeline and liquefaction project from Valdez**

**Petronas and Progress Energy have signed a strategic partnership to investigate an export facility tied with Montney unconventional gas**

**Dominion has announced plans to add export capacity at the Cove Point regas facility**

**BG and Southern Union**  
have announced plans to  
add 2 bcf/d of export  
capacity at the Lake  
Charles regas facility

Cheniere is proposing to add 1.0 bcf/d of export capacity at the existing Sabine Pass LNG regas facility and has signed 6 non-binding MOUs for capacity

**Macquarie/Freeport are proposing to add 1.4 bctd of export capacity at the existing Freeport LNG regas facility**

## **North Slope Leaseholders Are Active Elsewhere with LNG Projects**



**North Slope leaseholders' LNG projects currently operating, under construction or in various stages of development bound for the Asian markets:**

- **ExxonMobil**
  - Gorgon (Australia)
  - Scarborough (Australia)
  - Papua New Guinea expansion
  - Qatargas 1
  - Qatargas 2
  - Ras Gas I, II, III
- **BP**
  - Northwest Shelf (Australia)
  - Browse (Australia)
  - Tangguh LNG train 3 (Indonesia)
  - Discussions with Gazprom re LNG project in Russia
- **ConocoPhillips**
  - Darwin (Australia)
  - Australia Pacific LNG
  - Greater Sunrise (Australia)
  - Freeport, Texas
  - Qatargas 3

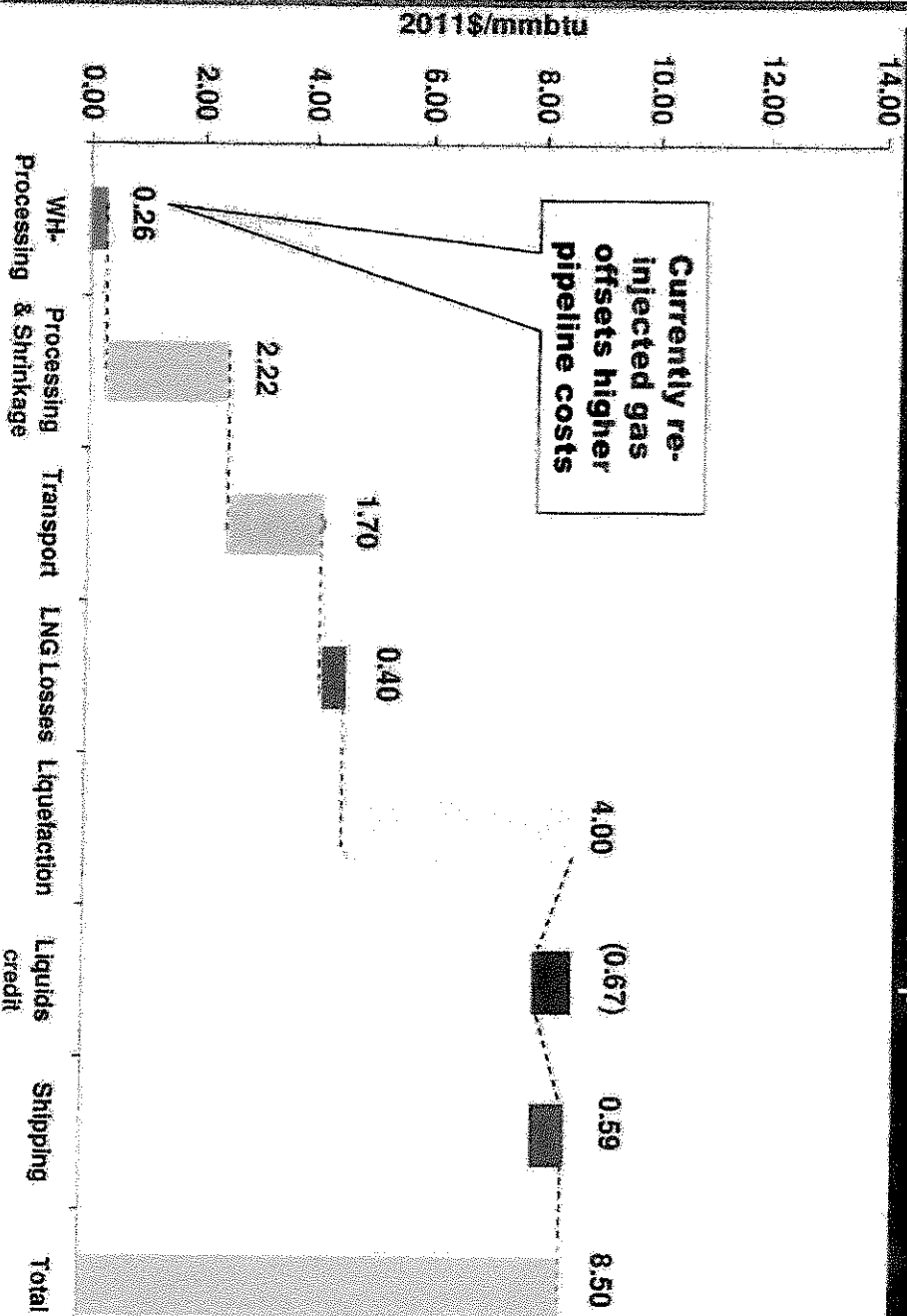
# Access to currently re-injected gas upstream puts the Alaska LNG liquefaction project in an economically competitive position relative to others....

## Key Assumptions

- All data from "Transcanada XOM Alaska Pipeline Project Open Season Notice, 2010, Valdez LNG Case" except below items:
- Liquefaction:
  - CapEx: \$1,200/ton; est. rate covers CapEx, Opex, 12% nom. ROE.
  - Alaska LNG losses 9.65%
- Shipping Assumptions:
  - Ship: 155,000 m<sup>3</sup>
  - CapEx/ship: \$200 million
  - OpEx: \$15,000/day; 2.33% annual escalation
  - 8% ROE after tax
- LNG Processing Losses: estimated from AGIA NPV Report, Fig. 7.2
- Liquids credit determined using \$80/bbl netback price for LPG and volumes provided by AGPA (88,000 MMBtu/d; ~20,000 bpd)

## Greenfield Alaska LNG Cost Build Up

ESTIMATE



Source: Wood Mackenzie

**HOW DOES ALASKA COMPARE?**

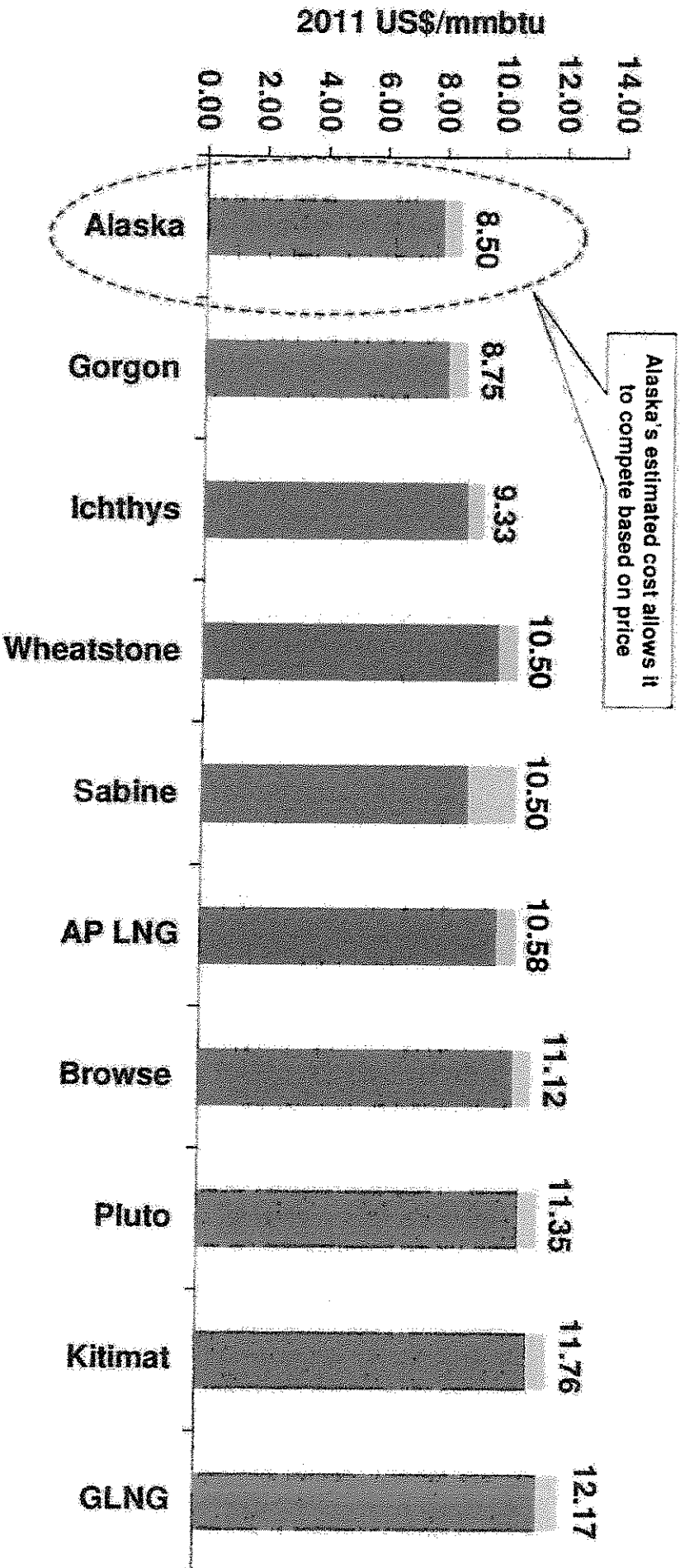


**According to Wood Mac,  
here is how Alaska's  
LNG Project Compares  
to Other LNG Projects**

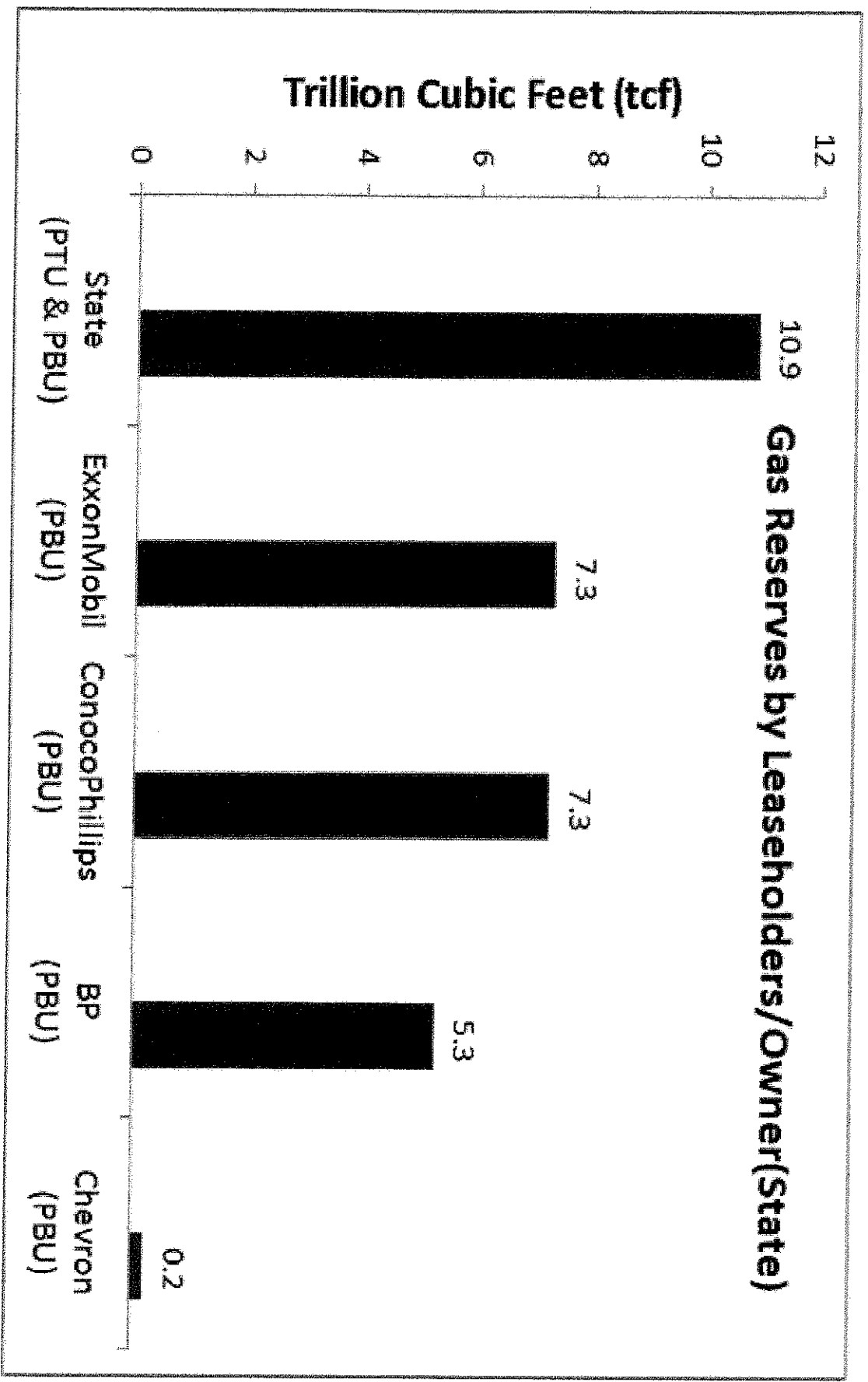


...and it competes favorably with both proposed Australian and other North American export facilities which have yet to reach FID

### DES Cost Stack Comparison



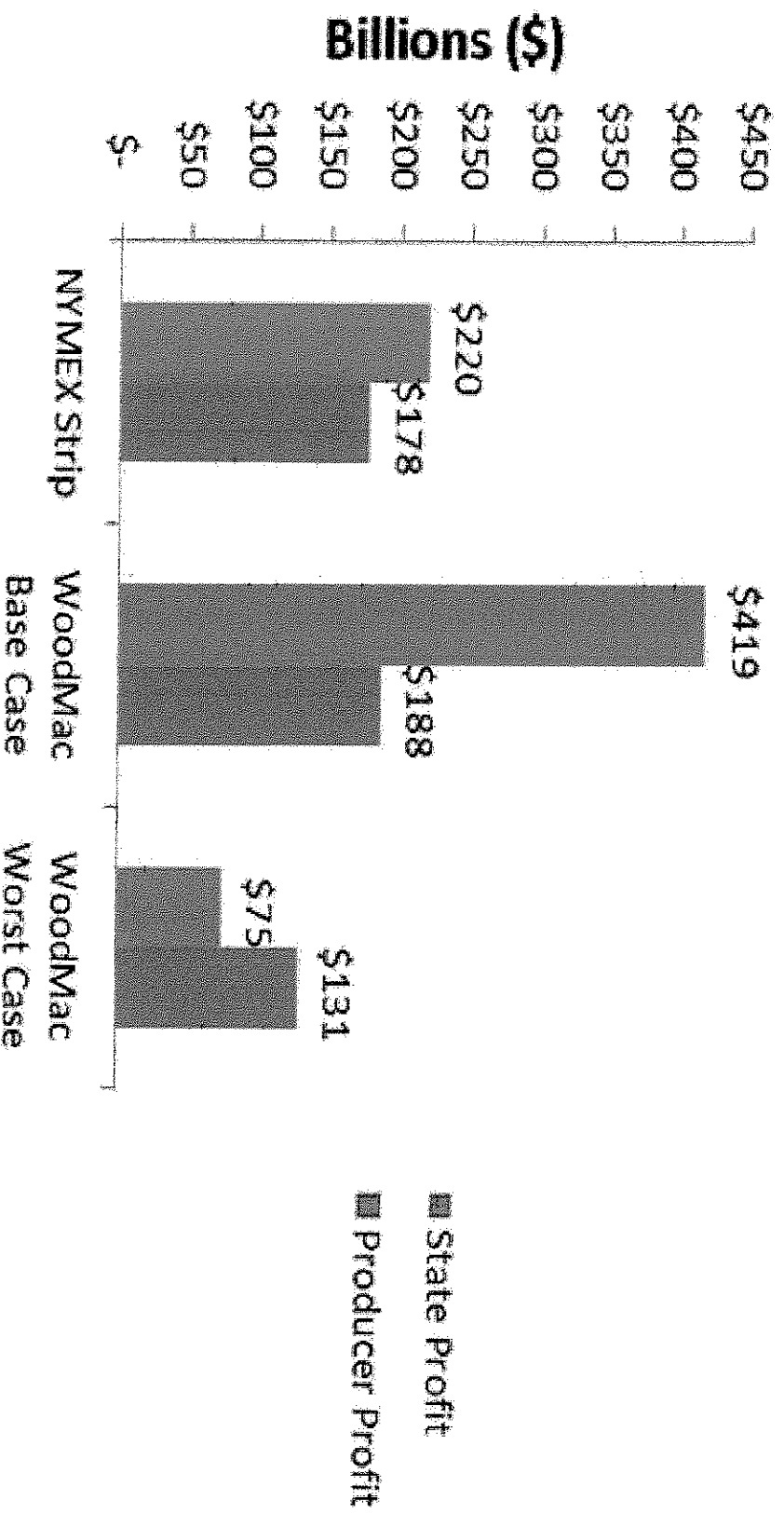
# Top 5 North Slope Gas Leaseholders/Owner (State)



# Wood Mac's Forecast of State & Producer Profit (3 Price Scenarios)



**State & Producer Profit (3 Price Scenarios)**



**Premium market opportunities will be filled with LNG from either Australia, Qatar, PNG, British Columbia or the Lower 48 LNG projects if Alaska continues to remain on the sidelines.**

**Without question, a large volume  
gasline from the North Slope to  
Valdez with access to premium  
Asian markets will be the single  
largest stimulator for North  
Slope oil and gas exploration  
activity.**

- **Anchorage Daily News May 11, 2011 Headline:**

### **USGS SAYS NEW NPR-A EXPLORATION DEPENDS ON A VIABLE GAS LINE**

- **"And last week the agency followed up with the announcement of a new economic analysis of the reserve, characterizing the reserve as a GAS PROVINCE and essentially saying that viable development of both oil and gas in the reserve depends on the construction of a North Slope gasline to transport gas to market."**

**AGIA is Only a Permitting Process -- Not a Pipeline Project**



**"AGIA doesn't get you a pipeline; never did, never will, can't. Think of it as a building permit for a house."**

**Federal Gasline Coordinator to  
the Commonwealth North Board  
August 12, 2011**

**PERMITTING HAS NOT BEEN A CHALLENGE FOR AN  
ALL-ALASKA GASLINE    YPC obtained the following:**



1. Natural Gas Act Jurisdiction Over the TAGS Project (October 26, 1998)  
FERC Declaratory Order Regarding its TAGS Jurisdiction (May 27, 1987)
2. Presidential Finding Approving Export of Alaska Natural Gas (January 12, 1988)
3. Coastal Zone Consistency Determination (January 12, 1988)
4. TAGS Project-wide Final EIS (June 1988)
5. Ahtna Corporation Right-of-Way Agreement (October 14, 1988)
6. Federal Pipeline Right-of-Way Grant (October 17, 1988)  
Record of Decision for the Trans-Alaska Gas System (October 17, 1988)  
Amendment to Grant of Right-of-Way for Trans-Alaska Gas System (June 23, 1993)  
Joint Pipeline Office (JPO) Letter (July 29, 1996)
7. State of Alaska Conditional Right-of-Way Lease (December 10, 1988)  
Renewal of Conditional Right-of-Way Lease for Trans-Alaska Gas System (December 11, 1998)  
Amendment of Conditional Right-of-Way for Trans-Alaska Gas System (June 3, 1993)
8. DOE/OFE Authorization for Export of Natural Gas (Order 350) (November 16, 1989)
9. DOE/OFE Confirmation of Order 350 (March 8, 1990)
10. FERC Anderson Bay Final EIS (March 1995)
11. FERC Authorization for Siting LNG/MT Facility (May 22, 1995)  
FERC Extension Letter (April 17, 1998)
12. Anderson Bay LNG/MT Facility Air Quality (PSD) Permit (August 5, 1997)



### **Trans Canadian Gas Pipeline:**

- **Early 1950's Canadian Parliament takes control of the much studied gasline project from Alberta to Toronto and hires private sector to build the gasline.**
- **Government of Canada owned that Trans Canadian gasline for only one day following its completion. They sold it to TransCanada Pipeline Company.**

## Trans Alaska Oil Pipeline History



- **Oct. 1971 -- Governor Bill Egan summons chief executives of all potential pipeline owner companies to Juneau. He told them that he wanted Alaska to own the yet to be built Trans Alaska oil pipeline (TAPS).**
- **Mar. 1972 -- Governor Egan holds State Oil Pipeline Ownership Hearings.**
- **Oil companies object to state ownership alleging inability of fledgling and undercapitalized State to finance the project, but commit to start construction of the trans Alaska oil pipeline.**

## **AGIA Constricted Small Volume Line**



**Concerns with the AGIA Constricted/Small Volume Line Being Studied by AHFC/AGDC:**

- 1. Does not provide low cost energy to Alaskans.**
- 2. Does not put any additional oil into TAPS.**
- 3. Does not provide any income to the State to replace the gradual declining throughput in the oil line, which funds 90% of Alaska's revenue.**
- 4. Small volume line is revenue taker; whereas the large volume line, anchored in long term contracts in the Asian markets, is a revenue maker for Alaska.**
- 5. Only one gasline will be built in Alaska and it should be the one that benefits all Alaskans.**

## **Frequently Asked Questions About the All Alaska LNG Project**



- **Are there permits for a gasline from the North Slope to Valdez?**
- **Can Alaska get an export license?**
- **Why Valdez vs. Cook Inlet for an export port?**
- **Will a gasline cause there to be a pressure drop in Prudhoe Bay thereby stranding oil?**
- **How do we get the gas?**

**REASONS THE VALDEZ LNG OPTION WILL NOT BE ADDRESSED  
UNDER THE AGIA LICENSE (VER BATIM FROM FERC ORDER 350-A)**



- The AGIA license is with two companies, TransCanada Alaska Company, LLC and Foothills Pipe Lines Ltd. (Foothills)
- Here is what Foothills argued to FERC when opposing the YPC export license for LNG out of Alaska in 1992:
  - (a) North Slope gas somehow "belongs" to the ANGTS (Canadian pipeline project);
  - (b) North Slope reserves must remain in the ground forever, if need be, until ANGTS (Canadian pipeline route) sponsors are ready to secure financing for ANGTS;
  - (c) The sponsors of the ANGTS (Foothills and others) have an open ended right of first refusal on North Slope gas;
  - (d) Congress intended North Slope gas exclusively for the domestic market and prohibited its export.
- FERC rejected each of the above arguments raised by Foothills Pipeline in its legal challenge to the YPC export license from Valdez.
- Which route do you really think TransCanada/Foothills will advance?

## Accomplishments



**Foothills Pipe Lines Ltd. has  
accomplished through**

**AGIA what it was denied by**

**FERC ( 1992)re Alaska's Gas**

## Return on Investment



- State's investment into the All Alaska Gas Line =  
\$4 Billion (70/30 debt/equity ratio)
- The FERC allowed rate of return on Alaska's equity in gasline @12% =  
\$480 million/year revenue to Alaska

**A GAS PIPELINE IS JUST ANOTHER PIECE OF STATE OWNED INFRASTRUCTURE ( Built/Operated by Private Sector)**



**Examples of other Alaska owned infrastructure:**

- 1. Alaska Railroad (providing transportation for Alaska's coal resource to move to markets in-state and around the world)**
- 2. Alaska Marine Highway System**
- 3. Alaska Highway System (12):**
  - Parks Highway**
  - Richardson Highway**
  - Glenn Highway**
  - Seward Highway**
  - Steese Highway**
  - Alaska Highway**
  - Dalton Highway**
  - Haines Highway**
  - Elliot Highway**
  - Taylor Highway**
  - Denali Highway**
  - DeLong Mountain Transportation System (toll road for Red Dog Mine)**

**4. Airports**

**5. Harbors**



## Action Plan For Alaska's Future



- Exercise AS 43.90.240 (Abandonment clause) in AGIA.
- Work with TransCanada as the potential builder/operator and after built, possible purchaser of All Alaska Gasline
- Announce to the world that Alaska's gas will go to the Asian markets.
- Work with current North Slope leaseholders to market Alaska's gas to the Asian market.
- Begin working towards FID of the gasline/LNG project.
- Once long term gas contracts/financing is secured, begin construction.

## Conclusion



**Alaska must own the All- Alaska gas pipeline in order to:**

- **end the relentless cycle of negotiations over fiscal certainty;**
- **ensure gas is available to the gas line**
- **provide low cost energy to the maximum number of Alaskans; and**
- **ensure stable revenues now and for future generations.**

Thank you

