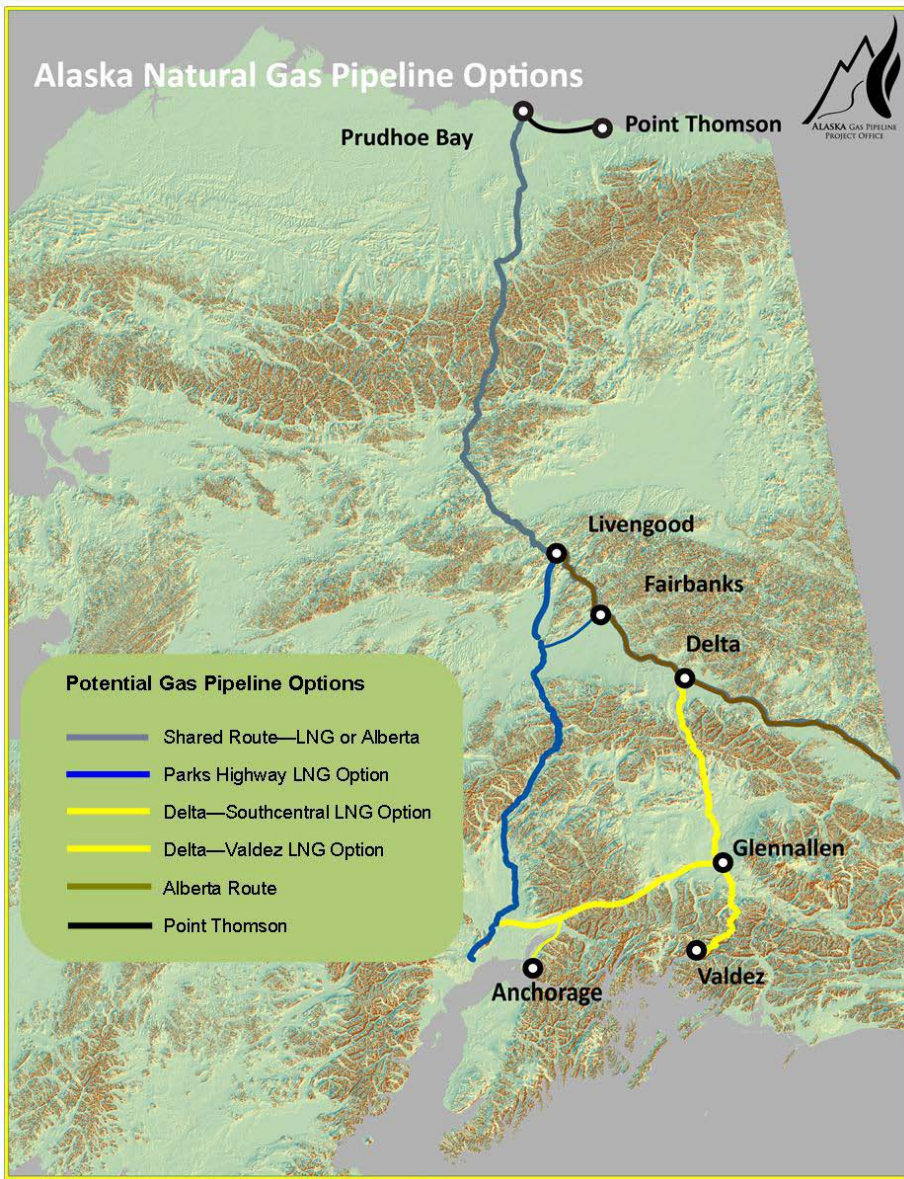




# Alaska Gas Pipeline Project Office: FY2014 Overview & Budget Review

Joe Balash, Deputy Commissioner - Alaska Dept. of Natural Resources - February 25, 2013





# Overview

- Mission & Core Services
- Accomplishments
- GPPO Current Activities – Project Status
- Challenges and Results for FY14

# Mission & Core Services



Facilitate permitting for an Alaska natural gas pipeline under AS 43.90, coordinate action by multiple state agencies to ensure prioritization of the natural gas pipeline project, and ensure compliance of the licensee under the Alaska Gasline Inducement Act.

# Accomplishments & Current Activities

- ✓ Facilitate project alignment & concept selection
- ✓ Refine knowledge specific to LNG projects
- ✓ Monitor project progress & reimbursements to ensure terms of AGIA are met
- ✓ Provide project information to public and government agencies
- ✓ Work with APP to ensure orderly suspension of Alberta work while LNG option evaluated



# Project Monitoring



- Continue to work with APP to develop midstream assets as part of an overall LNG Project
- Participate in monitoring meetings with APP and ANS Producers
- Coordinate and assist the Dept. of Revenue in review process re. the AGIA reimbursement

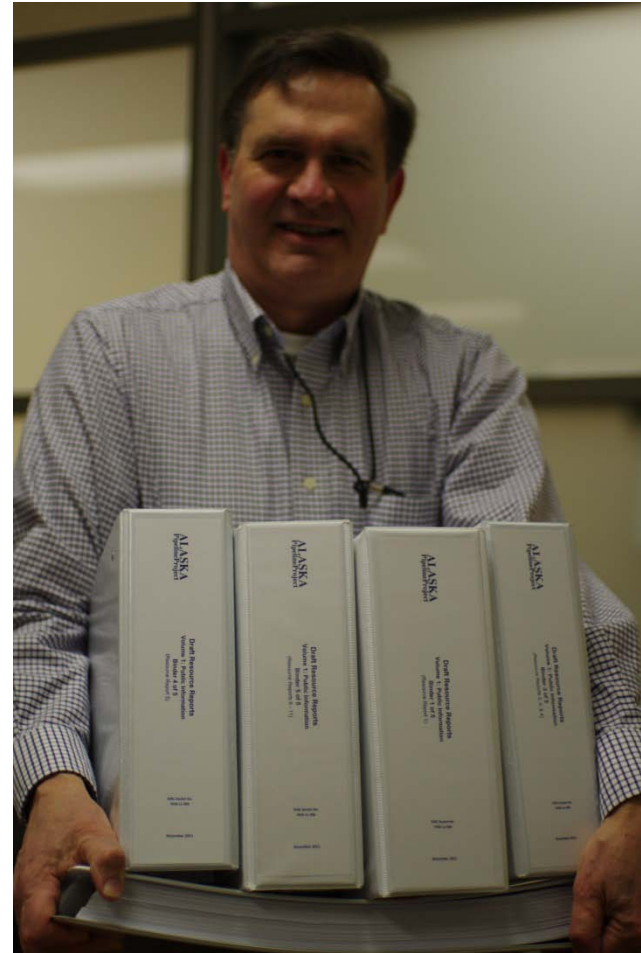
# Refine knowledge on LNG Projects

- Work with DNR, Div. of Oil & Gas to analyze & increase understanding of an LNG Project in Alaska
- AK LNG Project = pipeline + liquefaction
- Integrating LNG export option under AGIA

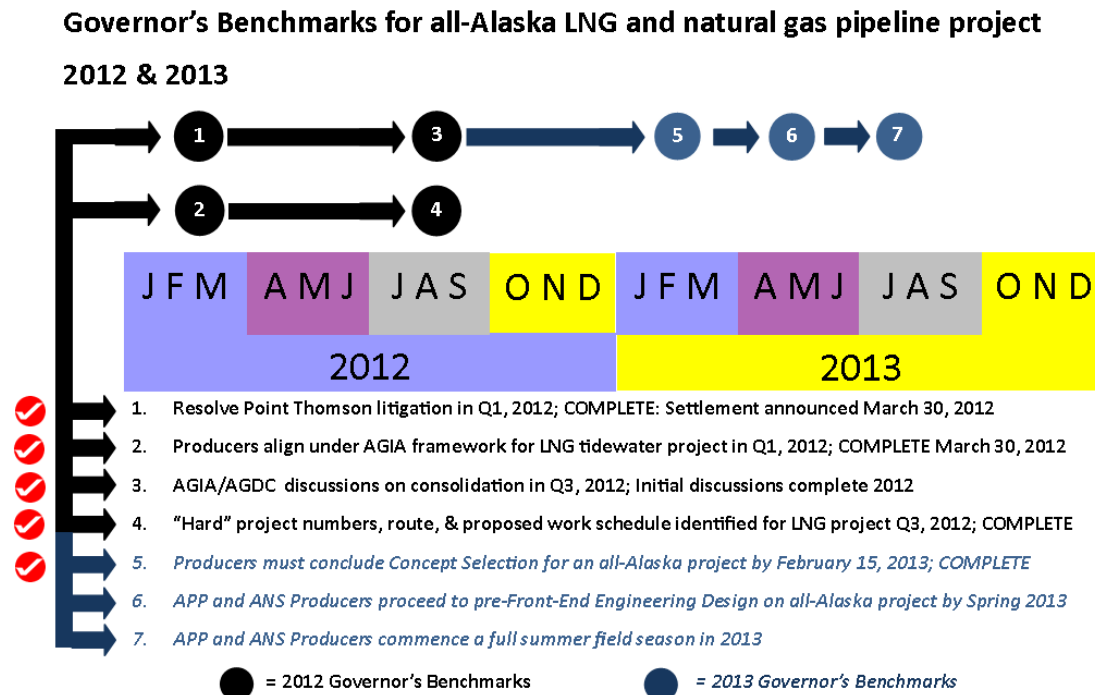


# Preserve project data

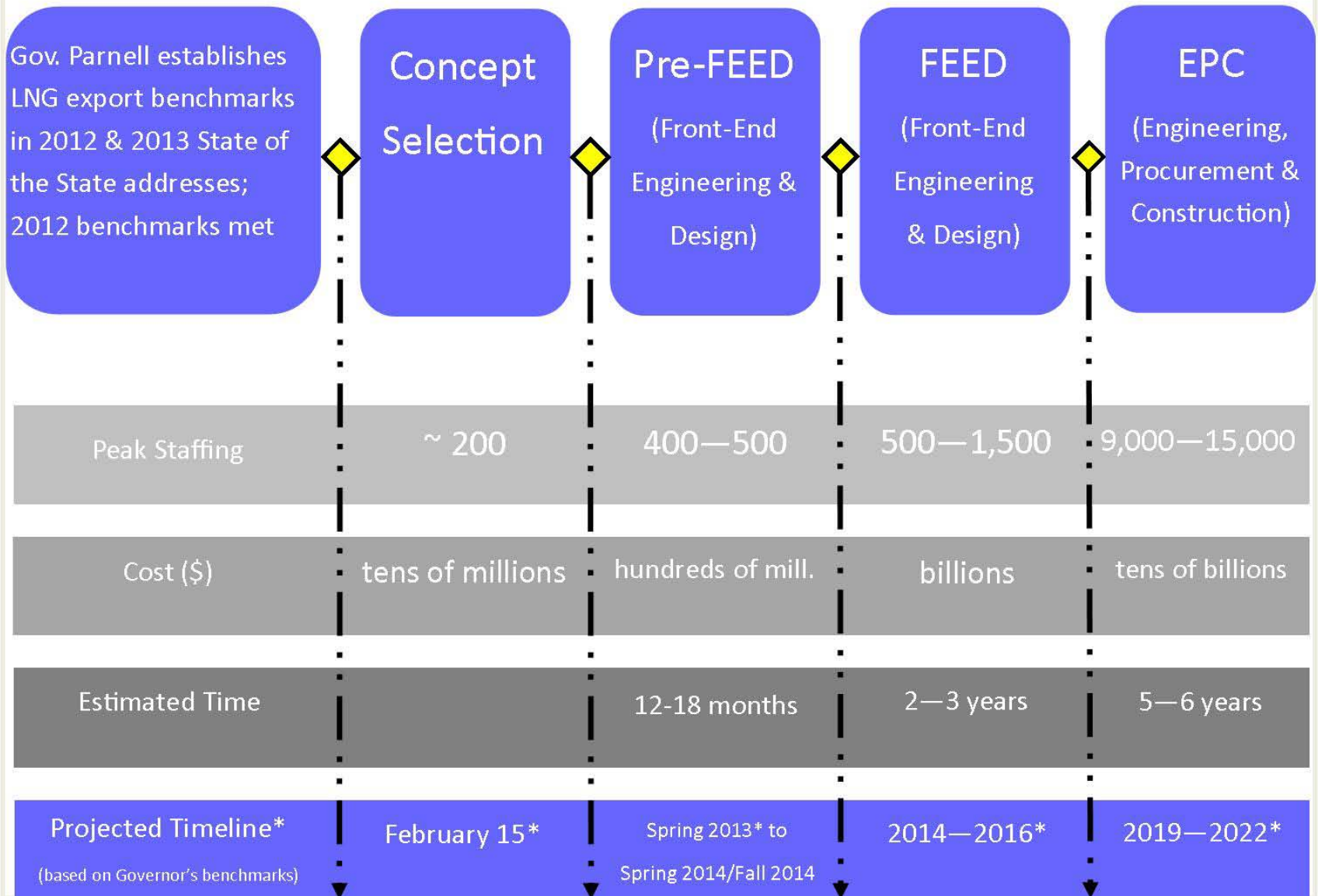
- Monitor APP's efforts to close-out remaining work on Alberta option
- Preserve APP Draft Resource Reports and other data, acquired to date, applicable to an LNG project
- Ensure that option remains “shelf-ready” to preserve project optionality



# Project status: progress on gas pipeline benchmarks



## Projected Project Timeline\*\*



# Alaska Southcentral LNG—Project Concept Description

## Producing Fields

- 35 TCF discovered North Slope resource
- Additional exploration potential
- Anchored by Prudhoe Bay and Pt. Thomson with ~20 years supply available
- Use of existing and new North Slope facilities
- Confirmed range of gas blends from PBUIPTU can generate marketable LNG product
- Peak Workforce: 500-1,500 people



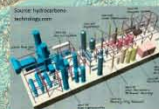
## Pipeline (location t/b/d)

- Large diameter: 42" - 48" operating at >2,000 psi
- Capacity: 3-3.5 bill. Cubic feet per day
- Length: ~800 miles (similar to TAPS)
- Peak Workforce: 3,600-5,000 people
- Required steel: 600,000-1,200,000 tons
- State off-take: ~5 points, 300-350 mill. Cubic feet per day, based on demand



## Liquefaction Plant (location t/b/d)

- Capacity: 15-18 million tonnes per annum (MTA)
- 3 trains (5-6 MTA / train)
- Potential areas: 22 sites assessed in Cook Inlet, Prince William Sound and other Southcentral sites
- Footprint: 400-500 acres
- Peak workforce: 3,500-5,000 people
- Required steel: 100,000-150,000 tons



## Gas Treating (location t/b/d)

- Located at North Slope or Southcentral LNG site
- Remove CO2 and other gases and dispose / use
- Footprint: 150-250 acres
- Peak workforce: 500-2,000 people
- Required steel: 250,000-300,000 tons
- Among largest in world



## Storage & Loading

- (location t/b/d)
- LNG Storage Tanks, Terminal
- Dock; 1-2 Jetties
- Design based on 15-20 tankers
- Peak workforce: 1,000-1,500 people



# LNG by the numbers



## Global LNG Projects that have reached Final Investment Decision (FID)\*\*

| FID  | LOCATION          | PROJECT           | COST (\$B) | MMTA     | INTEREST HOLDERS   |
|------|-------------------|-------------------|------------|----------|--|
| 2012 | Australia         | Ichthys           | \$34-43    | 8.4      | Inpex (66.07%), Total (30%), Tokyo Gas (1.575%), Osaka Gas (1.2%), Chubu Electric (0.735%), Toho Gas (0.42%)         |
| 2012 | US                | Sabine Pass       | \$5.6      | 9.0-18.0 | Cheniere (25%), Blackstone (75%)   |
| 2011 | Australia         | Gladstone         | \$18-30    | 7.8      | Santos (30%), Patronas (27.5%), Total (27.5%), Kogas (15%)   |
| 2011 | Australia         | Prelude           | \$11-13    | 3.6      | Shell (67.5%), Inpex (17.5%), Kogas (10%), CPC Corp. (5%)  |
| 2011 | Australia         | Australia-Pacific | \$23-37    | 9.0      | Origin (37.5%), ConocoPhillips (37.5%), Sinopec (25%)  |
| 2011 | Australia         | Wheatstone        | \$29-35    | 8.9      | Chevron (64.14%), Apache (13%), Kuwait (7%), Shell (6.4%), Kyushu (1.46%), Tokyo Electric (8%)                       |
| 2011 | Indonesia         | Donoggi-Senoro    | \$2.8      | 2.0      | Sulawesi LNG Development Ltd. (Mitsubishi (75%) Kogas (25%)), (59%), Pertamina (29%), PT Medco LNG Indonesia (11.1%) |
| 2010 | Australia         | Queensland-Curtis | \$20-34    | 8.5      | British Gas (93.75%), COOC (5%), Tokyo Gas (1.25%)   |
| 2009 | Papua, New Guinea | PNG               | \$15.7     | 6.6      | ExxonMobil (33.2%), Oil Search (29%), Santos (13.5%), Nippon Oil (4.7%), PNG (16.6%), MRDC (3%)                      |
| 2009 | Australia         | Gorgon            | \$47-57    | 20.8     | Chevron (47%), ExxonMobil (25%), Osaka (1.25%), Shell (25%), Tokyo Gas (1.0%), Chubu (0.4%)                          |

\*\* Project Data: Project data, other than that relating to capital costs, obtained on the LNG industry for the years 2006, 2010 and 2011 prepared by Groupe International des Importateurs de Gaz Naturel Liquéfié (GIIGL). Project cost ranges taken from Project websites or press releases and GPPO research.

## Southcentral Alaska LNG

### Key details at a glance:



- 3-3.5 billion cubic feet per day LNG export project to tidewater
- Five take-off points along pipeline, for in-state gas
- Three trains, exporting 15-18 million metric tons of LNG per year
- 15-20 tankers
- LNG & gas treating plant locations TBD (22 sites under review)
- Estimated project cost is \$45-\$65 billion (in 2011 dollars)
- Peak construction work force: 9,000 to 15,000
- Permanent work force: 1,000-plus
- One of the largest proposed LNG projects in the world

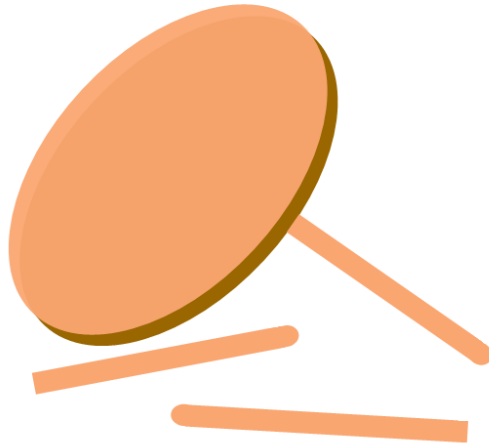


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# Three legs for a successful project

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The three legs for any successful project:

1. **Regulatory:** includes permitting & NEPA process
2. **Technical:** includes engineering & design
3. **Commercial:** includes producer alignment, interested customers, protecting important state interests, and fiscal stability

*A one-legged stool just doesn't stand.*

# What's new – ANS Producer Alignment



October 1, 2012

Governor Sean Parnell  
550 West 7<sup>th</sup> Avenue, Suite 1790  
Anchorage, Alaska 99501

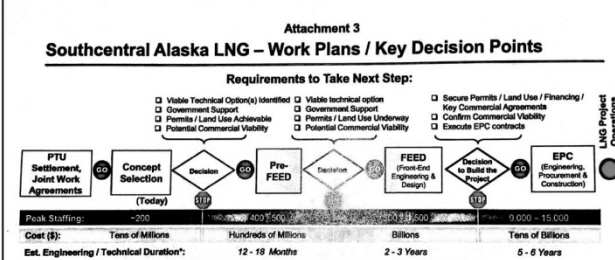
Dear Governor Parnell:

On March 30, 2012, ExxonMobil, ConocoPhillips and BP submitted a letter informing you of progress in working together on the next generation of North Slope resource development. Since that time, the three producer companies and TransCanada, through its participation in the Alaska Pipeline Project

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OCT 03 2012

Office of the Governor  
Anchorage



- Assessing use of existing and addition of new Prudhoe Bay field facilities
- Mapping multiple pipeline routing variations
- Assessing multiple pipeline sizes
- Providing for at least five in-state gas off-take points

Alaska's North Slope natural gas resources must compete in the global energy markets in order to deliver state revenues, in-state energy supplies, new job opportunities and other economic benefits to Alaskans. While North Slope gas commercialization is challenging, working together, we can maintain the momentum toward our shared vision for Alaska. We will continue to keep you advised of our progress and stand committed to work with the State to responsibly develop its considerable resources.

Sincerely,

Randy Broiles  
ExxonMobil  
Production Company

Trond-Erik Johansen  
ConocoPhillips Alaska, Inc.

John Mingé  
BP Exploration Alaska

Tony Palmer  
TransCanada

**ExxonMobil**



**ConocoPhillips**

We agree the next generation of North Slope resource development is achievable, working together with the APP parties, as well as with the State of Alaska. Thank you for your leadership and your confidence in us to take on these challenges. We join you in a vision of prosperity and promise. There is much work to do and opportunities yet to discover.

Sincerely,

Rex Tillerson

Jim Mulva

Bob Dudley



# What's different – Expressions of interest from South Korea & Japan

“Members of my administration and I have undertaken an aggressive advocacy campaign throughout Asia, where liquefied natural gas demand is expected to soar in the coming years. Our goal was to put Alaska on the map as a liquefied natural gas supplier – and that is exactly what we have done.

We recently welcomed a South Korea delegation representing the largest LNG purchaser in the world. We also held discussions with a consortium of Japanese companies.”

Governor Sean Parnell, State of the State address  
(January 19, 2013)



# Challenges and Results for FY14

- Ensure SOA & Licensee fulfill obligations
- Facilitate cooperation b/w APP & ASAP projects
- Coordinate activities with federal agencies w/ jurisdiction over LNG, natural gas, midstream facilities and export licensing
- Facilitate project alignment b/w NS Producers, APP, and AGIA licensee for an LNG project to tidewater
- Continue to ensure availability of information to the public and government personnel



# FY14 Requests

## FY13 Management Plan Budget

|  |                         |
|--|-------------------------|
| Operations Base Budget                                   | \$550.8                 |
| Staff & Operations (one time item)                       | \$1,290.0               |
| Contractors & Consultants (one time item)                | \$1,150.0               |
| <i><u>General Operations Budget</u></i>                  | <i><u>\$2,990.8</u></i> |
| Plus Estimated Carry-forward of Gasline ROW (multi-year) | \$1,147.5               |
|  | <b>\$4,138.3</b>        |

## FY14 Governor's Budget Request

|  |                         |
|--|-------------------------|
| Operations Base Budget                                   | \$550.8                 |
| Staff & Operations                                       | \$1,290.0               |
| Contractors & Consultants                                | \$1,150.0               |
| Salary/Health/Core Service Base Increase                 | \$7.0                   |
| <i><u>General Operations Budget</u></i>                  | <i><u>\$2,997.8</u></i> |
| Plus Estimated Carry-forward of Gasline ROW (multi-year) | \$1,147.5               |
|  | <b>\$4,145.3</b>        |



# FY14 Requests (Continued)

- Staff and Operations
  - Maintain the current staff level to adequately support and facilitate the permitting process for the Alaska Pipeline Project
- Contractors & Consultants
  - Retain outside experts and consultants for: continued gas pipeline analysis including acquisition of baseline data, pipeline engineering (practices and analysis) and design, engineering and operation, enforcement, remedies, and off-ramps for the licensee and state as well as technical licensee reimbursements audit support.



**Thank You!**  
<http://gasline.alaska.gov>