



Commercializing North Slope Gas

An Introduction to the HOA, SB 138 and AO 269

August 5, 2014

Department of Revenue

Michael Pawlowski
Deputy Commissioner

AKLNG – Project Concept Description

Liquefaction Plant

- Capacity: 15 – 18 million tonnes per annum (MTA)
3 trains (5-6 MTA / train)
- Potential areas: 22 sites were assessed in Cook Inlet, Prince William Sound and other Southcentral sites; Nikiski is currently the preferred site.
- Footprint: 400 - 500 acres
- Peak Workforce: 3,500 - 5,000 people
- Required Steel: 100,000-150,000 tons



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 PBU/PTU can generate marketable LNG product
- Peak Workforce: 500 – 1,500 people



Storage / Loading

- LNG Storage Tanks, Terminal
- Dock; 1 - 2 Jetties
- Design based on 15– 20 tankers
- Peak Workforce: 1,000-1,500 people



Gas Treating

- Located at North Slope
- 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

Pipeline

- Large diameter: 42" - 48" operating at >2,000 psi
- Capacity: 3 - 3.5 billion cubic feet per day
- Length: ~800 miles (similar to TAPS)
- Peak Workforce: 3,500 - 5,000 people
- Required Steel: 600,000 - 1,200,000 tons
- State off-take: ~5 points, 300-350 million cubic feet per day, based on demand



Estimated Total Cost: \$45 – \$65+ Billion

Peak Construction Workforce: 9,000 – 15,000 jobs

Operations Workforce: ~1000 jobs in Alaska

Descriptions and costs are preliminary in nature and subject to change. Cost range excludes inflation.

Guidance Documents & SB 138

Heads of Agreement (HOA)

- Describes roadmap to advance project through phased process.
- Describes understanding and consensus on key terms.

Memorandum of Understanding (MOU)

- Describes agreement to transition from AGIA License to a more traditional commercial relationship.
- Describes key commercial terms for that relationship.

HOA and MOU
Described how SB
138 would be used.

Senate Bill 138

- **Participation** in the AKLNG Project.
- **Percentage** of State Gas Share and Participation in the AKLNG Project.
- **Process** for development of Project Enabling Contracts and **Legislative oversight and approval** of future contracts.



Legislature
decided to
advance with a
vote of 52 - 8.

Key provisions in SB 138 - AGDC

- State Participation – defined “who” will participate:
 - AGDC was given the “primary responsibility” for developing (1) natural gas pipelines (ASAP) and (2) an Alaska Liquefied Natural Gas Project (AKLNG).
 - AGDC Board was given flexibility to determine the best and most efficient manner to progress both projects in the interests of Alaskans.
 - AGDC was given direction to assist DNR and DOR to maximize the value of the state’s royalty and tax gas.
 - AGDC will be the entity representing the State in the project, but will consult with the DNR and Revenue since the “State” will retain ownership of the gas.

Key provisions in SB 138 – The “25%”

- Percentage – set the State’s share of the project.
 - Established a production tax of 13% of the gross value of gas produced **after** Jan. 1, 2022.
 - Established a mechanism to allow production from certain leases (modified by DNR) to pay production tax with 13% of the gas produced.
 - Allowed DNR to modify certain leases to fix sliding scale and net profit share leases so long as the value remains the same.

Royalty + Production Tax = ~ 25% = State Share

Key Provisions of SB 138: The Process

- Process – created a process for developing project enabling contracts.
 - Empowered the Commissioner of DNR to develop contracts and agreements to enable the project.
 - Examples: gas offtake and balancing agreements, disposition or marketing agreements, and transportation or shipping contracts.
 - DNR will consult with Revenue and AGDC.
 - A contract with a duration of more than 2 years must be authorized by the Legislature.
 - Contracts must be submitted publicly 90 days before a contract is effective.

Other Key Provisions of SB 138

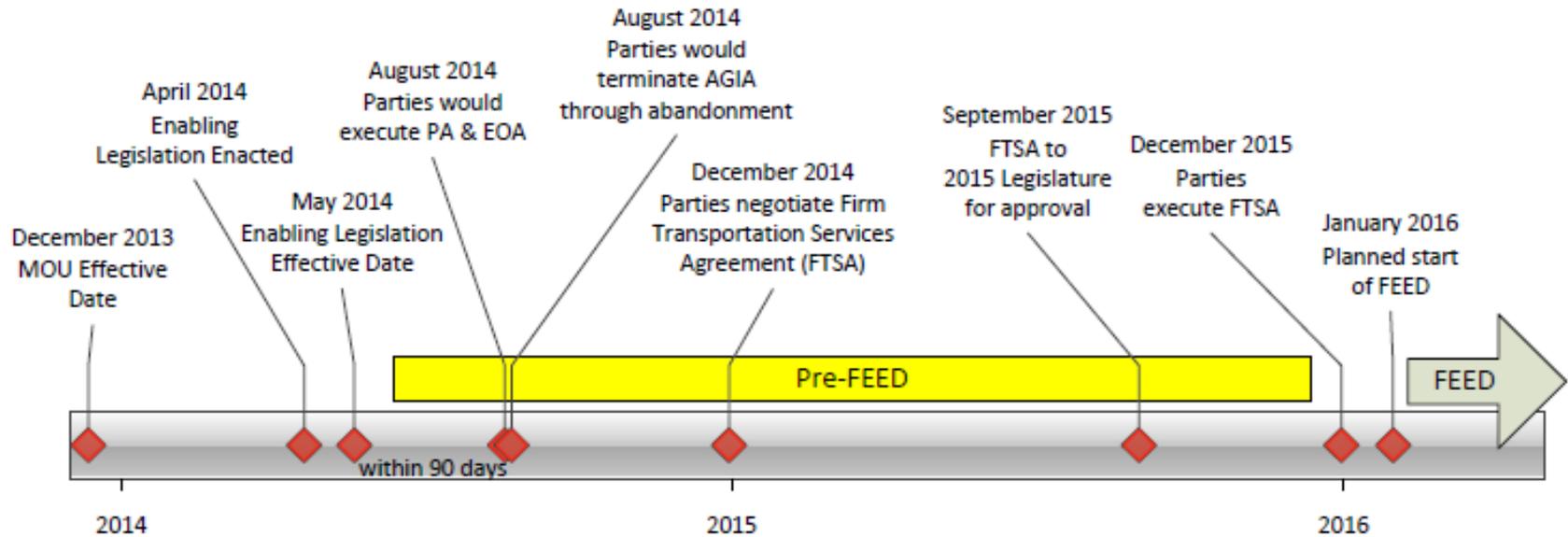
- Created the *Alaska Affordable Energy Fund* to provide resources for energy infrastructure for areas of the State that are not expected to have direct access to a gas pipeline.
 - 20% of royalty revenues after payments to the permanent fund.
 - AEA in consultation with AGDC, will lead regional planning effort in the interim to continue to prepare and develop options for affordable energy.

- Tasked the Alaska Oil and Gas Competitive Review Board with providing:
 - Recommendations on the state's tax structure for Non-North Slope basins by January 15, 2017 regarding:
 - *Taking into account the unique economic circumstances of*
 - *Recommendations for a Gross Value Reduction (GVR).*

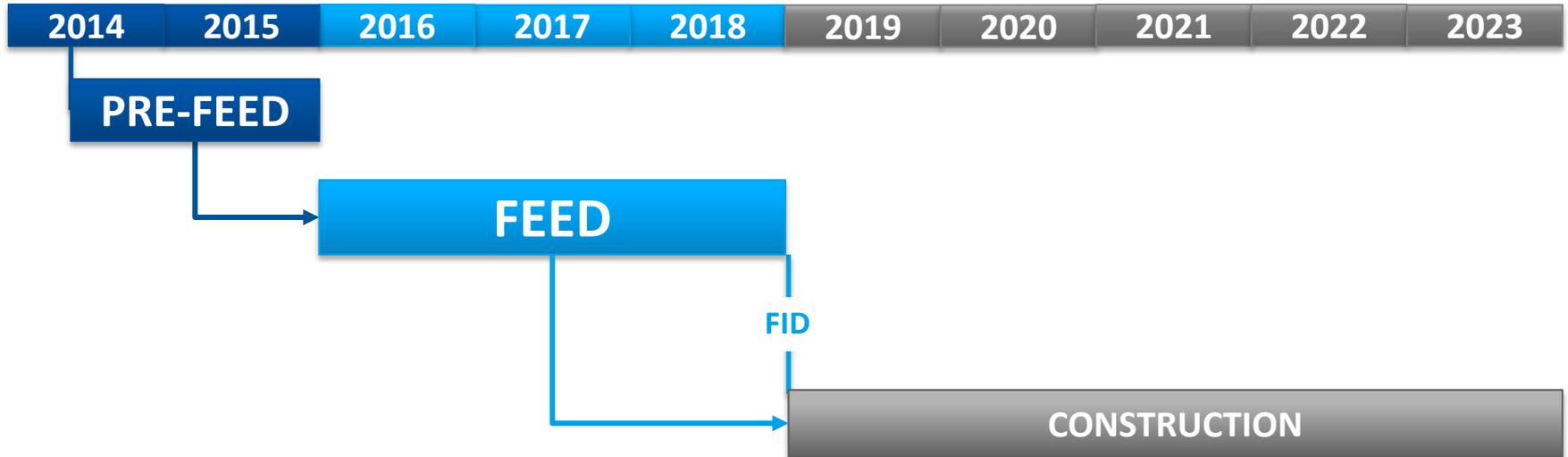
What SB 138 Enables: Pre-FEED

- Pre-FEED: *Pre-Front End Engineering & Design*
- The purpose of Pre-FEED is to progress technical work that would provide each of the Alaska LNG Parties with sufficient information for evaluating the technical, cost and schedule aspects of the Alaska LNG Project.
 - Pre-FEED is the **diligence** necessary to advance to FEED.
- Heads of Agreement “During Pre-FEED, each of the Producer Parties and the State would initiate preliminary, individual LNG or gas sales or shipping efforts.”
 - For the first time the State and Producers will begin engaging the market around an aligned project.
- Development of the commercial terms for the Pro-Expansion Principles in the HOA (appendix A).

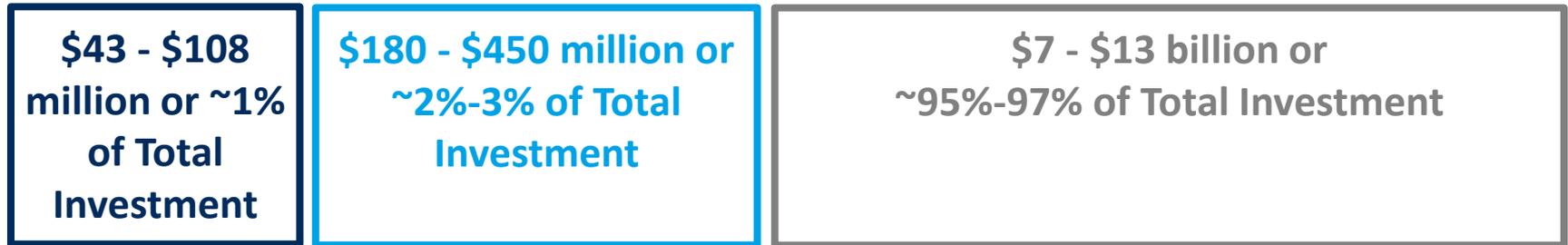
Next Steps – “Near Term” Timeline



THE HOA & SB 138 IN CONTEXT OF AKLNG TIMELINE



STATE INVESTMENT



HOA lays out principles to advance the project to pre-FEED and enter into commercial agreements



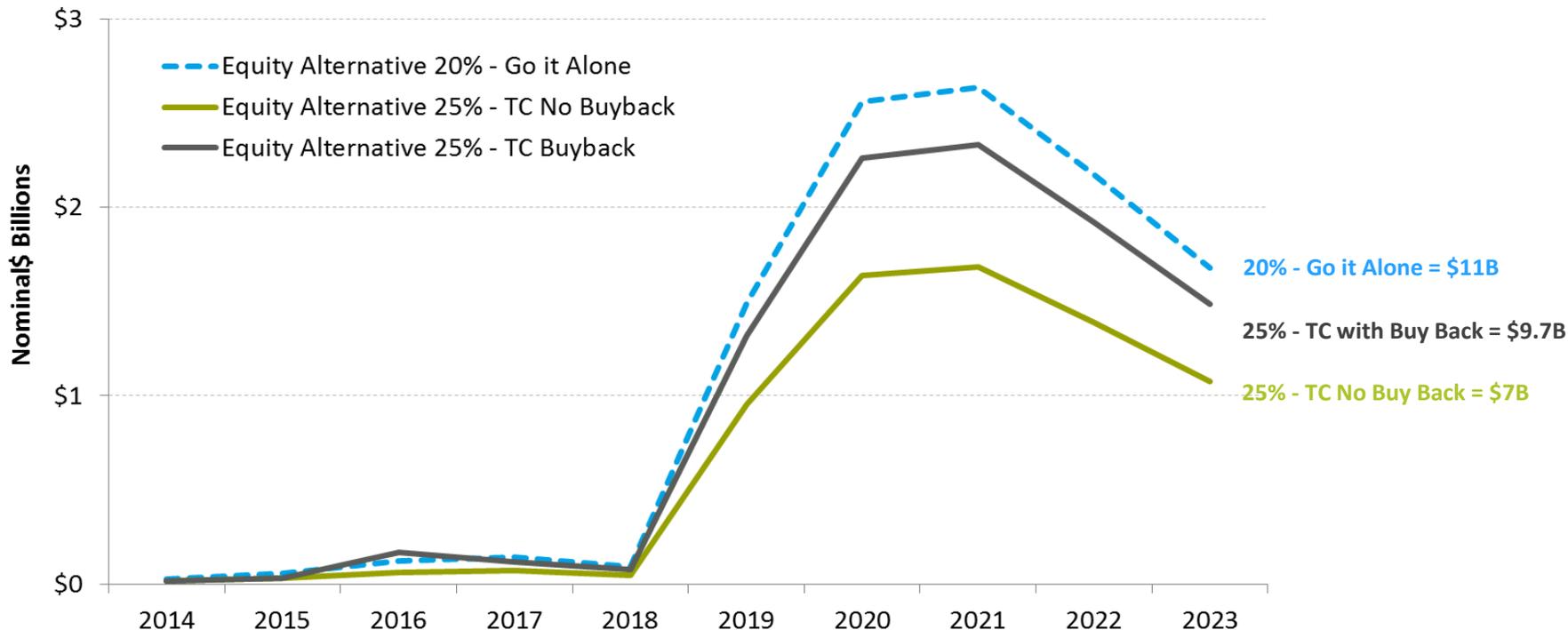
Note: BP, Exxon and ConocoPhillips will pay the remaining 75% of project costs; estimated to exceed \$40 - \$50 billion.



SOA INVESTMENT FOR A 25% OWNERSHIP WITH TC IS EXPECTED TO BE \$1.3-\$4B LOWER THAN FOR A 20% OWNERSHIP GOING ALONE



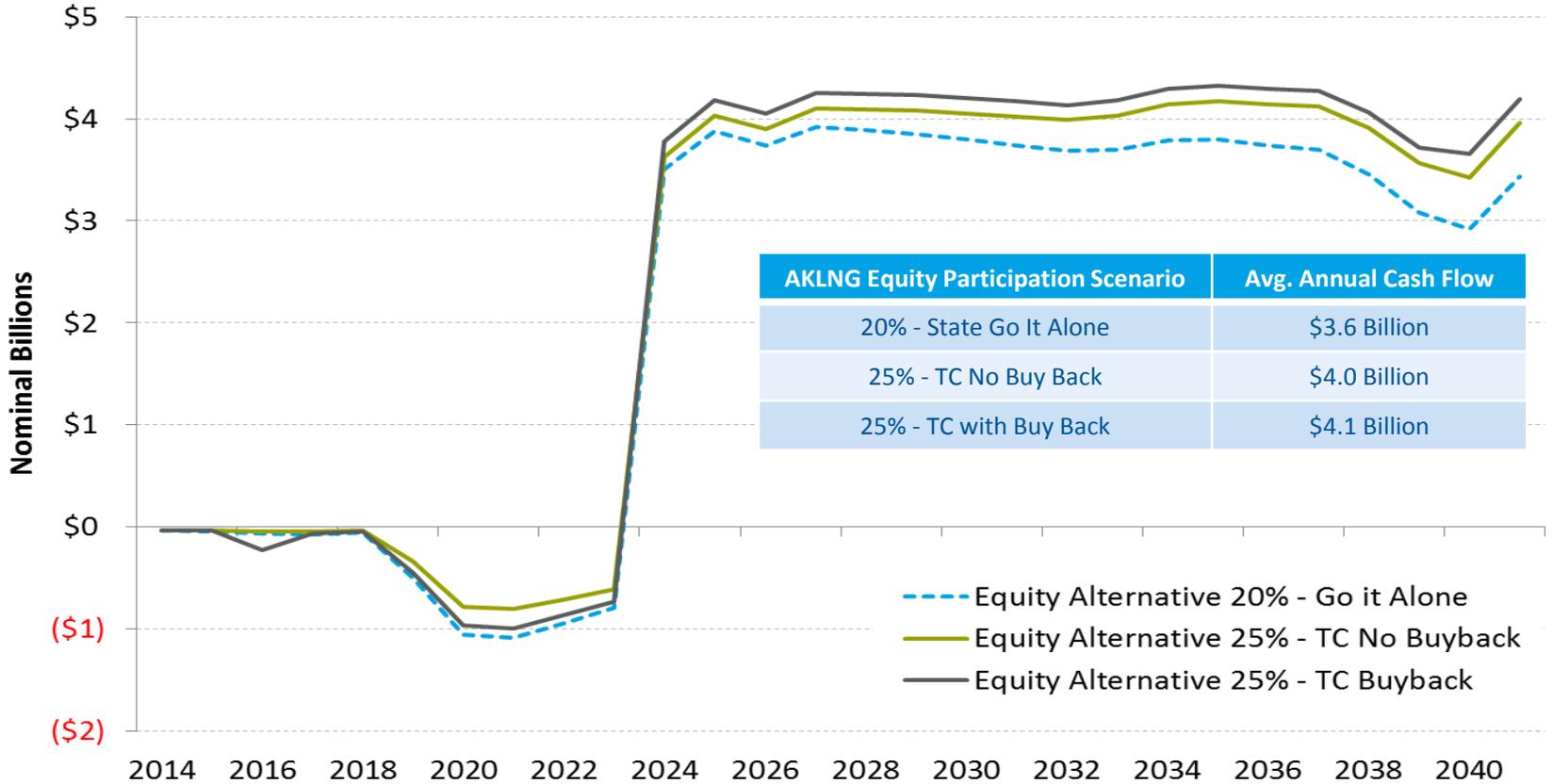
State of Alaska Investment Requirement (Unlevered)



SOA REVENUES FOR A 25% OWNERSHIP WITH TC ARE EXPECTED TO BE \$0.4-\$0.5B PER YEAR HIGHER THAN FOR A 20% OWNERSHIP GOING ALONE



State of Alaska Gasline Impact Cash Calls & Revenues Forecast

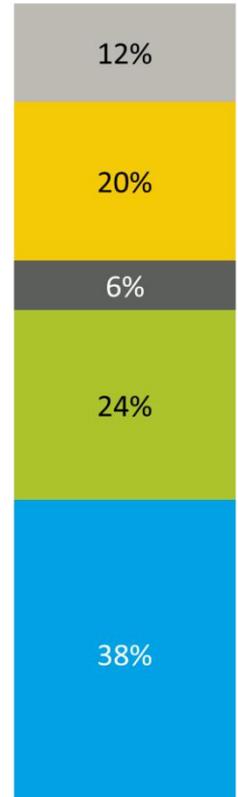
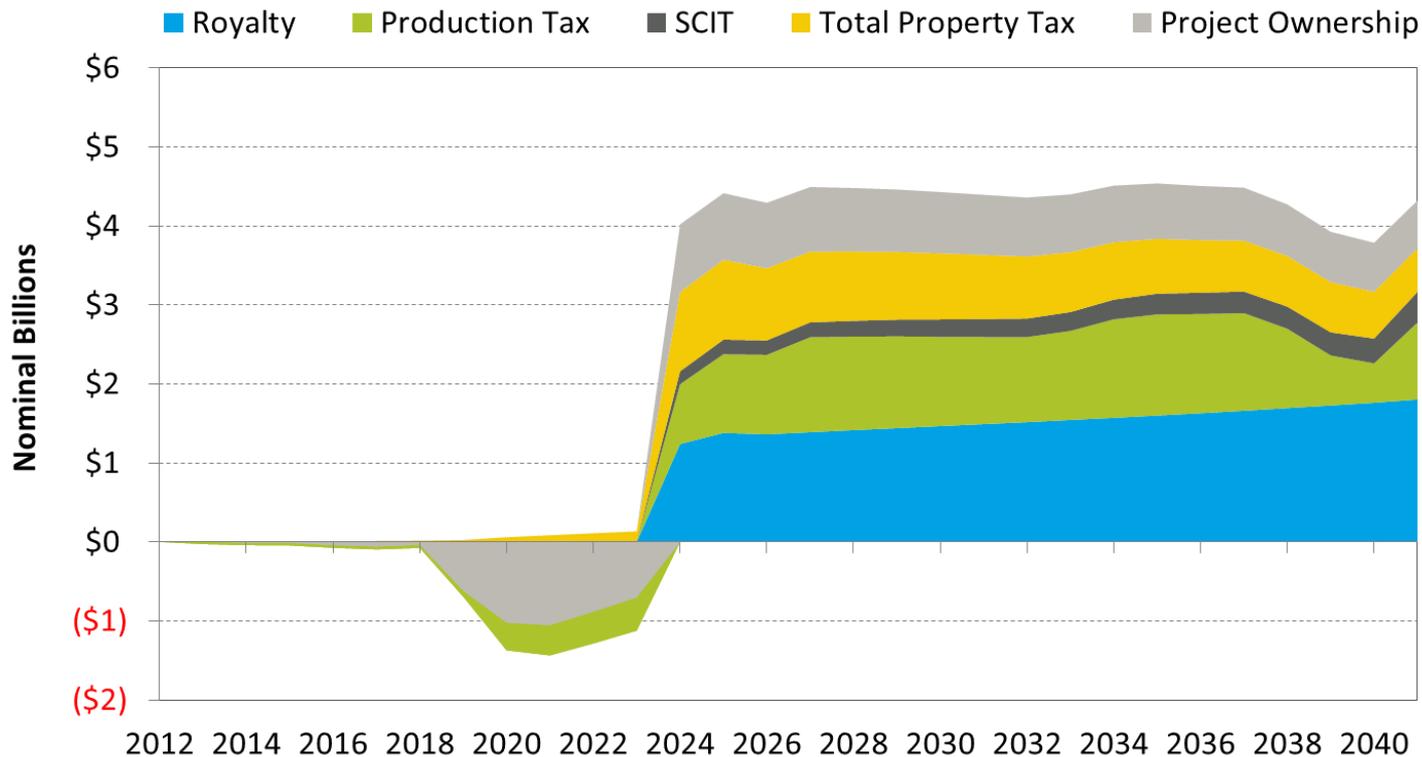


PRESERVE VALUE TO STATE FROM ROYALTY & TAXES



VALUE TO SOA

State of Alaska 25% Equity Alternative Annual Cash Flow



- SCIT = State Corporate Income Tax
- Project Ownership = Return on the equity that the State invests in the AKLNG project

Total Cash Flow (Through 2041) = \$72 Billion



SB 138: Other reports prior to FEED

- SB 138 directs the agencies to prepare additional reports prior to the submission of contracts to support public and legislative reviews.
 1. Comprehensive plan of financing and evaluation of range of options available.
 - Includes plan for individuals, municipalities and regional corporations to invest in the project.
 2. Assessment of infrastructure needs and costs.
 3. Capacity, expansion and in-state delivery of gas.
 4. Municipal impacts and benefits (A.O.269).

A.O. 269

Municipal Advisory Gas Project Review Board

The Board will be comprised of Mayors or their designees from communities along the project's route and representatives from communities statewide.

The Board will consider the potential impacts and benefits of the project on communities.

The Board will also make recommendations on changes to the State's oil and gas property tax to facilitate development; including impact payments and payments in lieu of property tax.

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ADMINISTRATIVE ORDER NO. 269

I, Sean Parnell, Governor of the State of Alaska, under the authority of Article III, Sections 1 and 24 of the Alaska Constitution, and in accordance with AS 44.19.145(c), establish the Municipal Advisory Gas Project Review Board.

PURPOSE

The State has enjoyed many economic benefits due to the commercialization of North Slope oil, including employment in the oil and gas industry, production, income and property taxes and royalties, and development of infrastructure. The continuing bright future of oil and gas development in the state is of vital public interest, especially the development and commercialization of North Slope natural gas. In order to support success in the commercialization of North Slope natural gas, there is a need to understand the potential impact and benefits of a major natural gas project on communities throughout the state.

The purpose of the Municipal Advisory Gas Project Review Board is to develop a framework to evaluate the effects and issues that will arise in the future concerning development of the State's abundant North Slope natural gas resources and the newly created infrastructure to make those resources available to customers throughout the state and markets worldwide.

COMPOSITION AND CHAIR OF BOARD

The Municipal Advisory Gas Project Review Board consists of 12 members who are appointed by the Governor and serve at the pleasure of the Governor. Each member of the Board shall serve a term of one year and may be reappointed to the Board.

The members of the Municipal Advisory Gas Project Review Board shall include:

1. The Commissioner of the Department of Revenue or the Commissioner's designee;
2. The Commissioner of the Department of Natural Resources or the Commissioner's designee;
3. The Commissioner of the Department of Commerce, Community, and Economic Development or the Commissioner's designee;
4. Six public members consisting of the mayor, or the mayor's designee, one from each of the following areas: the North Slope Borough, the Fairbanks North Star Borough,

Summary

- The Heads of Agreement (HOA) and Memorandum of Understanding (MOU) provide guidance on how the powers provided in SB 138 will be used.
- At each stage in the project there are “on-ramps” and decision points for Legislative and public review.
- Commitments by the State will be made commensurate with progress by the project.

“While North Slope gas commercialization is challenging, working together, we can maintain the momentum toward our shared vision for Alaska.”



Source: Letter dated October 1, 2012 to Governor Parnell (Exhibit I-B of HOA)

THANK YOU

Please find our contact information below:

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Resources

<http://dor.alaska.gov/AKGasDocs.aspx>

<https://www.agdc.us/>

