

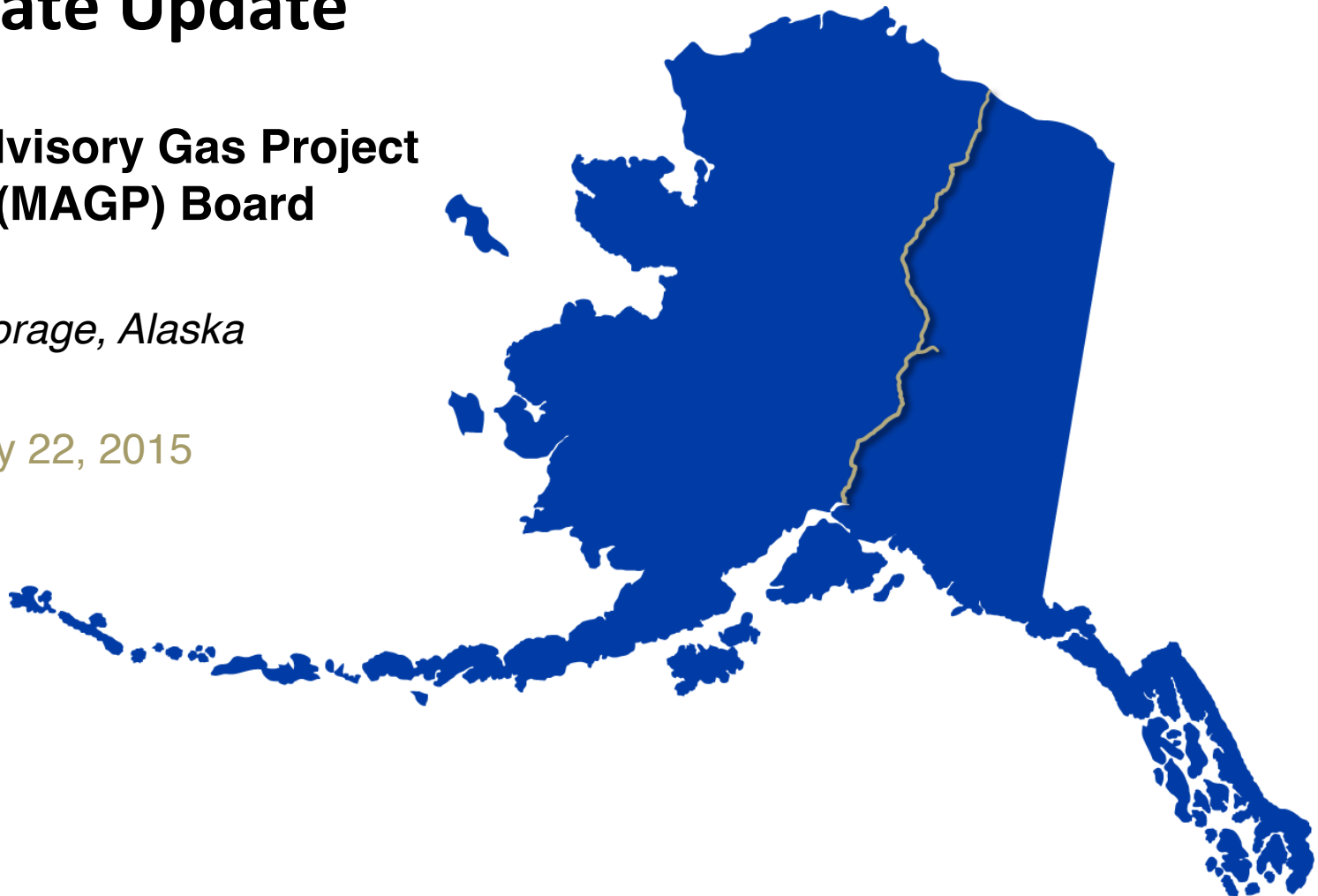


# Corporate Update

## Municipal Advisory Gas Project Review (MAGP) Board

*Anchorage, Alaska*

July 22, 2015



# State's Objectives

- Secure a stable, affordable, long-term energy supply for Alaskans
- Commercialize Alaska's enormous North Slope gas resource
- Maximize the value of state's royalty and tax gas
- Generate revenue, jobs and economic growth
- Facilitate further oil and gas development



# AGDC Origins

- Initially, AGDC created as a public response to concerns over declining Cook Inlet gas supplies
- Brown out drills; Long-term utility contracts from Cook Inlet uncertain beyond 2018
- High energy costs persist in the Interior
- Fairbanks air quality crisis due to wood and coal combustion – health and environmental concern
- Collectively, this created new sense of urgency to get North Slope natural gas to Alaskans

*Estimated North Slope Gas Resource – 33+ Trillion Cubic Feet*



# Corporate Initiatives

- AGDC is now progressing two alternatives for commercializing Alaska's North Slope gas resources
- Either project is capable of delivering gas to Alaskans – *but vary significantly in size, scope and cost*

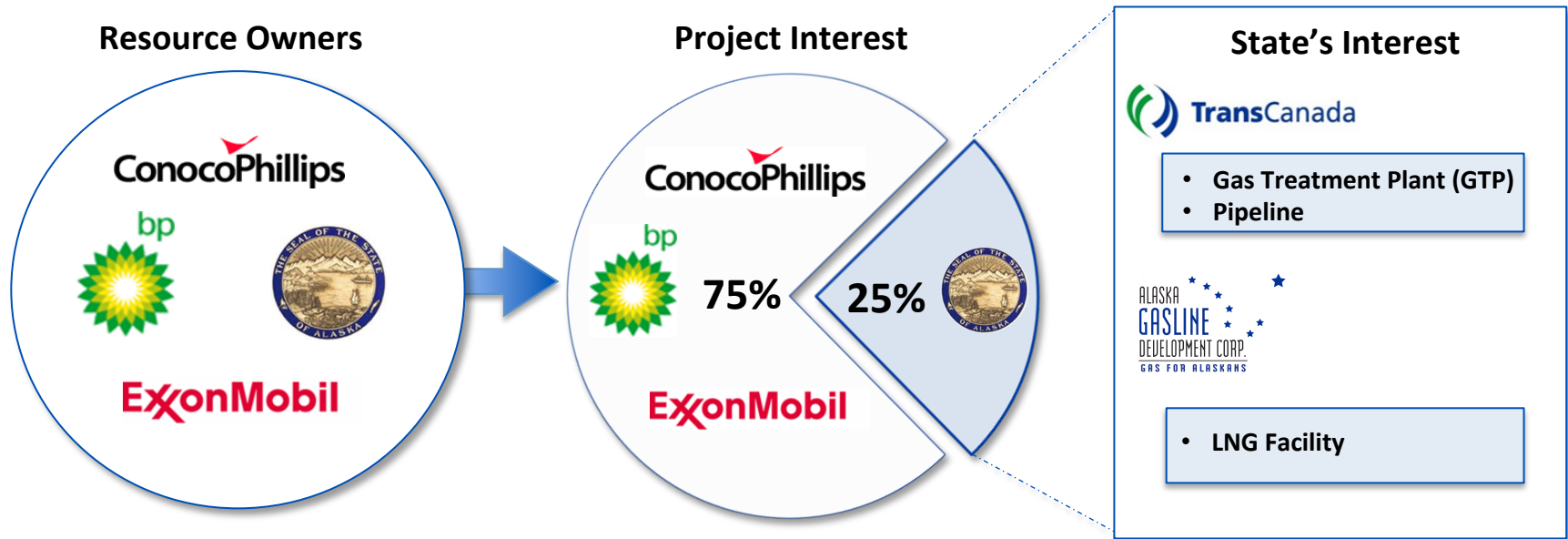
## Alaska LNG

- State's priority project
- \$45-\$65 billion, integrated liquefied natural gas (LNG) project, designed principally for the Asian export market
- 99% of North Slope resource owners represented in the project
- State of Alaska 25% equity; will ship and market its royalty and tax gas
- Treatment at Prudhoe; 800-mile, 42" pipeline; intermediate compression; LNG plant and marine facilities at Nikiski terminus

## ASAP

- State's back-up plan
- \$10 billion, in-state gas pipeline, shipping utility grade natural gas, currently designed for domestic market
- Currently 100% state owned and funded; \$250 mill public investment to date (*\$400 mill less \$157 million recent reappropriation*)
- Treatment at Prudhoe; 730-mile, 36" pipeline terminating near Big Lake; 30-mile lateral into Fairbanks

# Alaska LNG Project Participation



- AGDC holds State's interest in LNG Facility sited in Nikiski
- TransCanada holds State's interest in GTP (Prudhoe Bay) & Pipeline
- State's initial 25% financial commitment through AGDC ~ \$70 mill and TransCanada ~\$108 million

# Near-Term Corporate Priorities

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- Working with the Administration and Legislature to increase Alaska's leverage and options
- Building on existing work to avoid duplication and to maximize available public funds
- Exchanging historical data and work product between all parties
- Representing the State's interest in commercial negotiations with other Alaska LNG parties
- Increasing public communication and engagement

# Project Activity

## Alaska LNG

- Entering 2<sup>nd</sup> year of Preliminary Front-End Engineering & Design
- \$500+ mill commitment by all parties - following a stage gate approach to development
- FERC environmental permitting (NEPA) process initiated
- DOE export approval granted for both Free Trade and Non-Free Trade countries; 20 million metric tons per year (2.55 Bcf/d); 30-year period
- Export approvals conditioned on completion of NEPA process
- Contractual agreements being worked by all parties: gas supply, lifting/balancing, governance, marketing, project financing, in-state gas and fiscal terms
- Pre-FEED is expected to be concluded by mid-2016 with FEED decision coming within a year



# Project Activity



- ASAP remains the State's back-up plan if Alaska LNG doesn't progress
- Several year head start on the Alaska LNG project – much further along in its development
- Project schedule and timeline have now been adjusted to correspond with Alaska LNG's next major policy decision – go/no-go on FEED
- Concluded FEED in December 2014; Construction ready – Class 3 estimate of \$10 billion (+/- 20%)
- Commercial activities – tariff filing and open season on hold
- Progressing U.S. Army Corps of Engineer's Supplemental EIS process so that federal permits and right-of-way can be secured



# In-State Gas Work

- Completed in-state gas demand analysis
- Developed preliminary engineering estimate for various sized off-take facilities
- Developing process for determining locations of in-state access points and off-take facilities
- Coordinating with DNR and AEA regarding policy and infrastructure issues associated with increasing in-state gas access



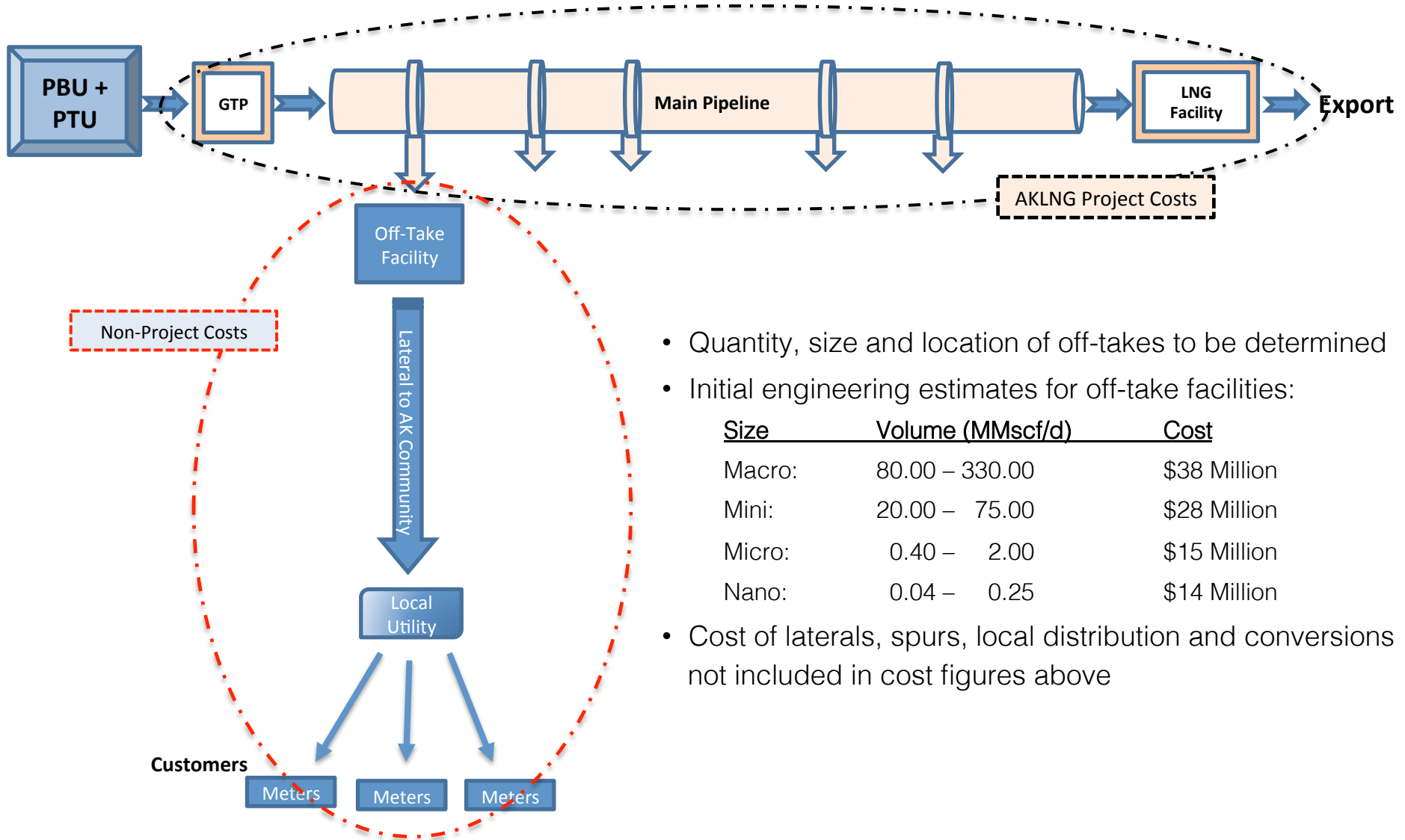
# Alaska: In-State Gas Demand

- Recently concluded in-state demand analysis:
  - Base Case 2040 demand – 333 MMscfd (122 Bcf per year)
  - High Case 2040 demand – 422 MMscfd (154 Bcf per year)
- Project volumes more than adequate to meet in-state demand growth and to serve export market
- Demand will be partially supplied from Cook Inlet during the forecast period

Demand by Segment	2014 Actual	2030	2040
<b>Existing Demand</b>			
Enstar, railbelt electrical utilities, and industrial users ( <i>excluding export</i> )	214	227	243
<b>Potential Demand</b>			
Interior heating and power utilities	2.5	51	56
Industrial operations (primarily mining)	0	31	31
Small communities – within 50 miles of alignment	0	3.2	3.4
<b>Total Base Case Demand:</b>	<b>217</b>	<b>312</b>	<b>333</b>

In-State Natural Gas Demand: Base Case Estimates (MMscfd)

# In-State Gas Access



- Quantity, size and location of off-takes to be determined
- Initial engineering estimates for off-take facilities:

Size	Volume (MMscf/d)	Cost
Macro:	80.00 – 330.00	\$38 Million
Mini:	20.00 – 75.00	\$28 Million
Micro:	0.40 – 2.00	\$15 Million
Nano:	0.04 – 0.25	\$14 Million

- Cost of laterals, spurs, local distribution and conversions not included in cost figures above

# State Policy Issues

Required to support a FEED decision:

- Commercial Terms & Agreements
  - Governance
  - Foundation Supply
  - Gas Lifting and Balancing
  - In-State Gas/Expansion
- Completing Pre-FEED project deliverables
- Property Tax & PILT Mechanisms (MAGP Work)
- Royalty-in-Kind (RIK) vs Royalty-in-Value (RIV); Lease modifications
- Fiscal Terms – durable and predictable
- Possible need for constitutional amendment
- Evaluating mechanisms for funding State's equity share

# AKLNG Project Timeline

Likely Special Legislative Session in the fall to finalize and approve public policy decisions

Key Milestones	Date
Pre-FEED Initiated	July 2014
Conclude Pre-FEED	2Q 2016
FEED Decision ( <i>NLT 1 year after Pre-FEED conclusion</i> )*	2016-2017
Conclude FEED ( <i>2-3 years</i> )	2019
Final Investment Decision (FID)	2019-2020
Construction ( <i>5-6 years</i> )	2020-2025
Project Complete/First Gas	2025-26



Pre-FEED: Preliminary Front-End Engineering and Design  
FEED: Front-End Engineering and Design

\* Sec 4.2 Heads of Agreement (HOA) anticipated a FEED decision within 36 months of Pre-FEED start

# Challenges

- By every standard – these are world class construction projects
- Alaska LNG is a giga-project: three mega-projects being executed simultaneously
- Regulatory and construction risks are higher when working in remote and engineering challenged areas of Alaska
- Low oil prices make large capital investments more difficult for producer partners

# Challenges

- Difficult to estimate long-term LNG demand and pricing
- Final Investment Decisions will be economically driven
- Competing against other LNG projects around the world – all looking to sell to the same buyers
- Balancing the risk/rewards of state equity participation in a challenging fiscal environment
- Balancing AGDC's dual mandate to deliver domestic gas at the lowest possible price – while maximizing revenue from a non-renewable state resource

# Critical Success Factors

- Maintaining alignment between State of Alaska and North Slope producers
- Timely completion of fiscal and commercial contract terms
- Ensuring SOA's ability to advance independent, economically viable alternative if Alaska LNG falters
- Ensuring complementary vs competitive orientation
- Maximizing State's financial and other resources to accelerate an Alaska LNG FEED decision
- Maintaining public trust and confidence

# Questions?

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