

**09 / 09 / 15**  
**ALASKA**  
**LNG**  
**PROJECT**  
**UPDATE**

<TARGET><BILL></BILL><SUBJECT>09-09-15 ALASKA LNG  
PROJECT UPDATE</SUBJECT><COMM>SRES29</COMM></TARGET>

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THE STATE  
of **ALASKA**  
GOVERNOR BILL WALKER

**Department of Natural Resources**  
NORTH SLOPE GAS COMMERCIALIZATION OFFICE  
AKLNG PROJECT OFFICE  
550 W 7<sup>th</sup> Ave, Suite 1400  
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September 9, 2015

The Honorable Cathy Giessel  
Chair of the Senate Resources Committee  
Alaska State Capitol  
Juneau, Alaska 99801-1182

The Honorable Benjamin Nageak and Dave Talerico  
Co-Chairs of the House Resources Committee  
Alaska State Capitol  
Juneau, Alaska 99801-1182

Dear Senator Giessel and Representatives Nageak and Talerico:

The Department of Natural Resources (DNR) in consultation with the Department of Revenue (DOR) submits the following written report in accordance with Section 77 of Senate Bill 138 (SB138), Chapter 14 SLA 14. This report provides an update to the amount of money the state may be obligated to pay TransCanada for the work they are undertaking on the State's behalf through the Precedent Agreement (PA).

Since the previous report provided on July 16, 2015, the Alaska LNG Project has continued to progress technical work relating to the pre Front End Engineering and Design (pre-FEED) phase of the project. With the submission of the initial draft Resources Reports to the Federal Energy Regulatory Commission (FERC) in February 2015, work continues on NEPA pre-filing activities and TransCanada continues to provide inputs to the second draft of the Resources Reports for anticipated submission in 1Q16. TransCanada continues to participate in project technical reviews during pre-FEED.

Additionally, TransCanada has led the Alaska LNG Project's evaluation of the integrated design basis for the midstream component, which included a pipeline route review workshop with federal and state agencies, Waterway Suitability Assessment Workshop with the US Coast Guard and has worked with the federal Pipeline and Hazardous Materials Safety Administration (PHMSA) to align on permitting plans. Technical work continues on pipeline material design and testing, with evaluation of welding procedures and alternative coating designs. Per the State's request, evaluation of a 48-inch pipeline system has also begun.

Negotiations for certain commercial agreements continued in 2Q15 including on operating model, legal structure and other long-term governance terms for the Front-End Engineering and Design (FEED) phase, upstream gas supply and balancing discussions with the State and other AKLNG parties. TransCanada also provided input to the State of Alaska on proposed expansion framework and terms.

#### **Estimated Project Spending to Date**

TransCanada has reported to the State actual spends for January 1, 2014 through June 30, 2015, totaling approximately \$37.0 million, broken down as follows:

- a. A total of \$35.9 million on a cash basis, which amounts to an additional \$10.8 million expended for work related to the Alaska LNG Project in 2Q15.
- b. A carrying cost of \$1.1 million, of which \$0.5 million was expended in 2Q15.

**Total Reimbursable Costs to TransCanada through March 31, 2015**

	CSA (Jan. 1- Jun 30, 2014)	PRE-FEED (July 1, 2014-March 31, 2015)	TOTAL
AKLNG Cash Calls and TC Development Costs	\$10.0	\$29.9	\$39.9
Less: AGIA Reimbursement	(\$4.0)		(\$4.0)
Carrying Cost			\$1.1
<b>TOTAL</b>			<b>\$37.0</b>

**Projected Total Project Spending**

The projected total project spending has not changed since DNR provided the committee with an updated projection in February 2015. TransCanada is still expected to incur approximately \$100 million associated with its work on the Alaska LNG Project, not including \$8 million in carrying costs<sup>1</sup>, through pre-FEED.

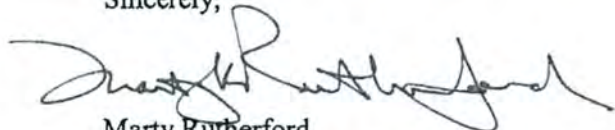
The projected numbers are as follows from January 1, 2014 through mid-June 2016:

- a. Alaska LNG Project cash calls made on the State's behalf: **~\$77 million;**
- b. Development costs, i.e. TC internal costs for pre-FEED period: **~\$18 million;**
- c. Concept Selection costs prior to entrance of pre-FEED (from January 1 to June 30, 2014), net of AGIA reimbursements: **\$6 million;** and
- d. Carrying Costs: **\$8 million.**

The total projected amount that the State of Alaska would be responsible for through pre-FEED is still estimated to be about \$108 million<sup>2</sup>, which includes the \$37.0 million spent from January 1, 2014 to June 30, 2015.

If we can be of further assistance, please do not hesitate to contact us directly.

Sincerely,



Marty Rutherford  
Deputy Commissioner, DNR

CC: Mark Myers, Commissioner, Department of Natural Resources  
Audie Setters, General Manager, State of Alaska Gas Team

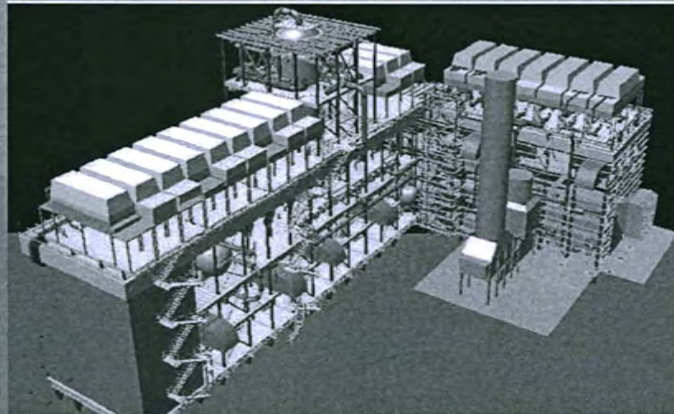
<sup>1</sup> Carrying costs are also referred to as "Allowance for Funds Used During Construction/AFUDC"

<sup>2</sup> The costs as reported above add together to equal \$109 million; however, the error is due to a reporting of forecasted numbers for Pre-FEED spending rounded up to the nearest million rather than down.

Randy Hoffbeck, Commissioner, Department of Revenue  
Dona Keppers, Deputy Commissioner, Department of Revenue  
Dan Fauske, President, Alaska Gasline Development Corporation  
Darwin Peterson, Legislative Director, Office of the Governor  
Marcia Davis, Deputy Chief of Staff, Office of the Governor  
Senator Pete Kelly, Co-Chair, Senate Finance Committee  
Senator Anna MacKinnon, Co-Chair, Senate Finance Committee  
Representative Mark Neuman, Co-Chair, House Finance Committee  
Representative Steve Thompson, Co-Chair, House Finance Committee

# Alaska LNG™

Fueling Alaska's Future



SEPTEMBER 2015

## Project Update

# Alaska LNG – Project Overview

Alaska LNG™

*An integrated liquefied natural gas export project providing access to gas for Alaskans*

### Gas Treatment Plant (GTP)

- 3.3 BCFD peak winter rate
- Three trains with compression, dehydration and chilling for gas conditioning (remove impurities)
- CO<sub>2</sub> removed and compressed for injection at PBU



Gas Treatment Plant

### LNG Storage & Marine Terminal

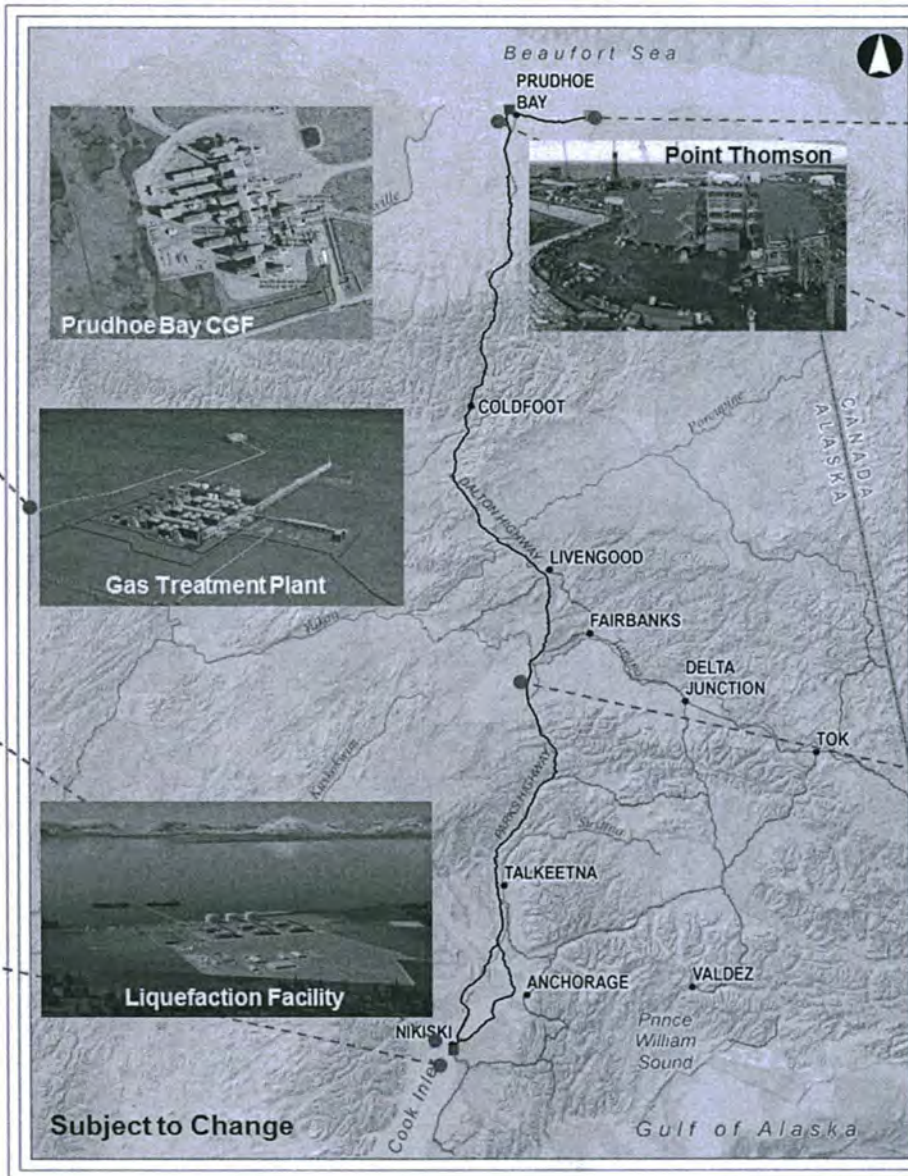
- LNG storage tanks
- Two jetties to accommodate 15-20 LNG carriers per month



Liquefaction Facility

### Liquefaction Facility

- Natural gas is cooled to -260 degrees to condense the volume 600 times
- 3 trains dehydrate, chill and liquefy gas to produce up to 20 million tons of LNG each year



Subject to Change

**Point Thomson Gas Expansion\***

- New wells
- New gas processing facilities

**Prudhoe Bay Tie-In\***

- Gas delivery to new gas treatment plant (GTP)
- Integration with existing CGF
- Injection of CO<sub>2</sub> from GTP

**Gas Pipeline**

- 800+ mile 42" diameter gas pipeline from gas treatment plant to liquefaction facility
- 3.3 BCFD capacity
- 8 compressor stations
- ~ 5 in-state off-take points

\* Prudhoe Bay and Point Thomson Modifications/New Facilities are managed by Prudhoe Bay Unit and Point Thomson Unit Operators, respectively, and are closely coordinated with the Alaska LNG Project.

Artists renditions of LNG and GTP



# Alaska LNG – Project Overview

Alaska LNG™

## Safety, Health and Environment Report:

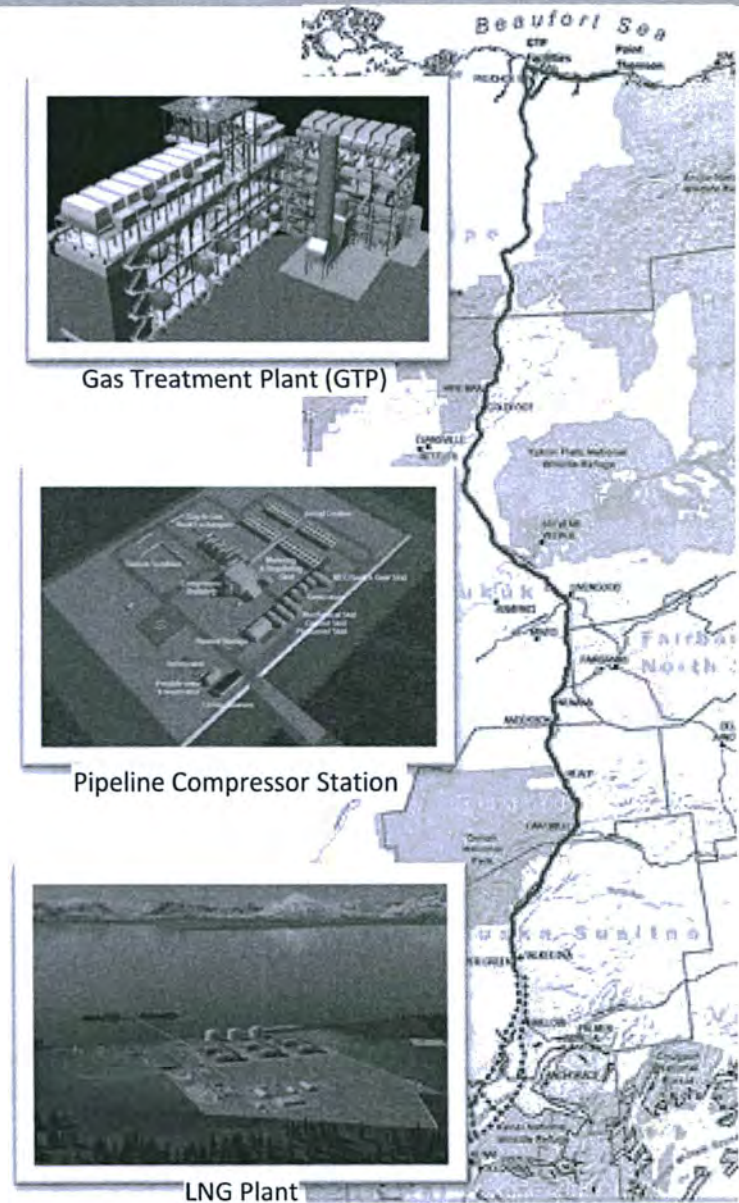
- \* Building culture of caring – tracking near misses and first aids

## Executive Summary:

- \* Spend: \$243M on pre-FEED through July 2015
- \* Initial design scope ~75% complete, 2015 field work ~50% complete
- \* Finalizing project design/execution basis (cost and schedule estimates)
- \* Ongoing collaboration with regulators at local, State and Federal levels
- \* Community open-house sessions continuing with FERC participation
- \* Progressing work to evaluate SoA request for a 48" pipeline system
- \* Developing 2016 Work Program and Budget

## Key Messages:

- \* Alaska LNG is an integrated LNG project – *plants plus pipeline*
  - Regulated under FERC Section 3; allows design integration
  - Integrated design includes ~ 5 off-take points for in-state supply
- \* Focus on lowest cost of supply to compete in a global market
- \* Alignment, risk and cost reduction (ARC) remain key to success



# LNG Plant and Marine Terminal Update **Alaska LNG™**

Initial design scope 72% complete through end of July

Actively acquiring land, purchased ~600 acres in Nikiski

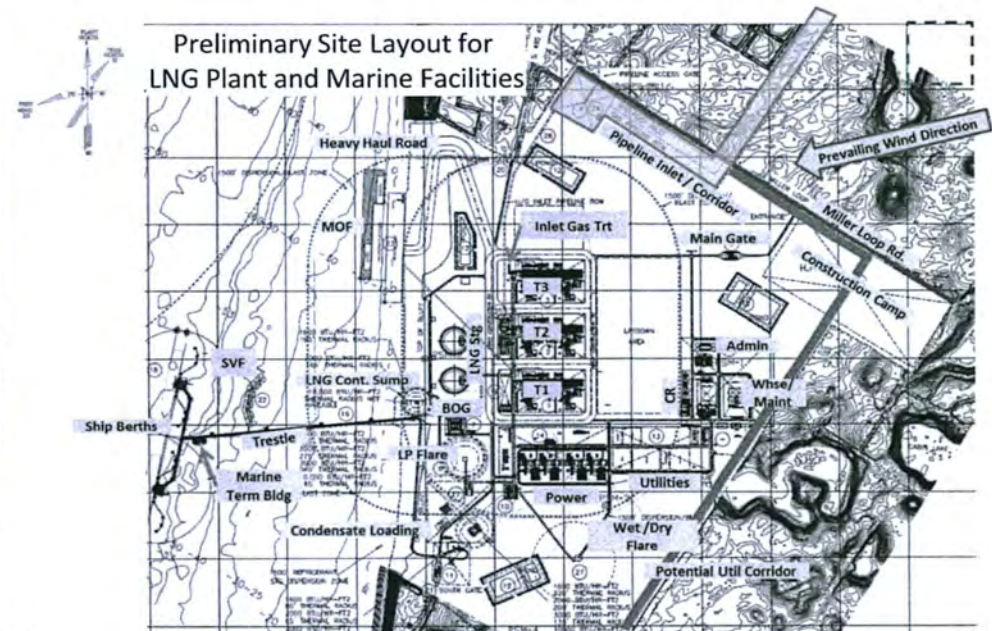
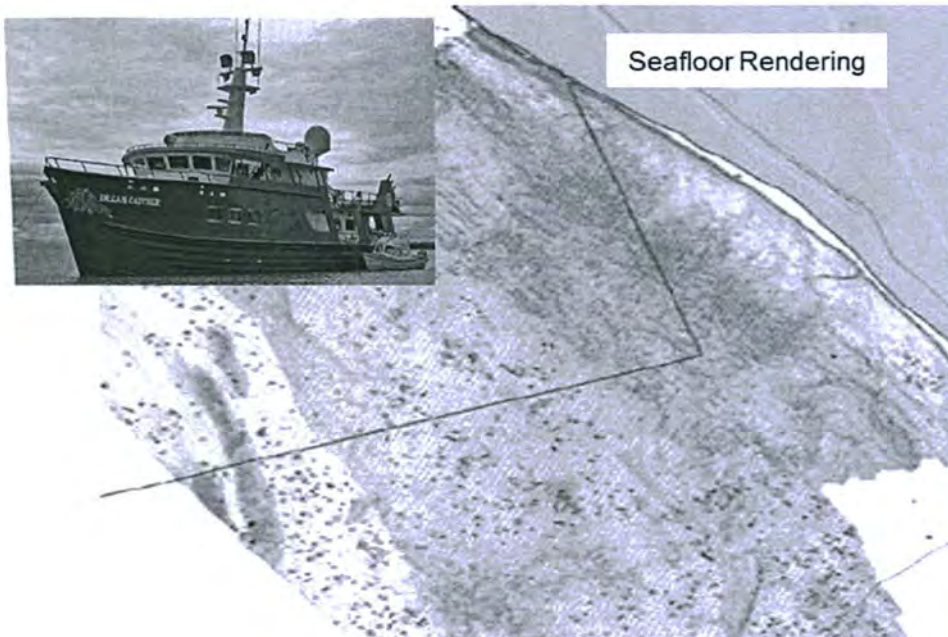
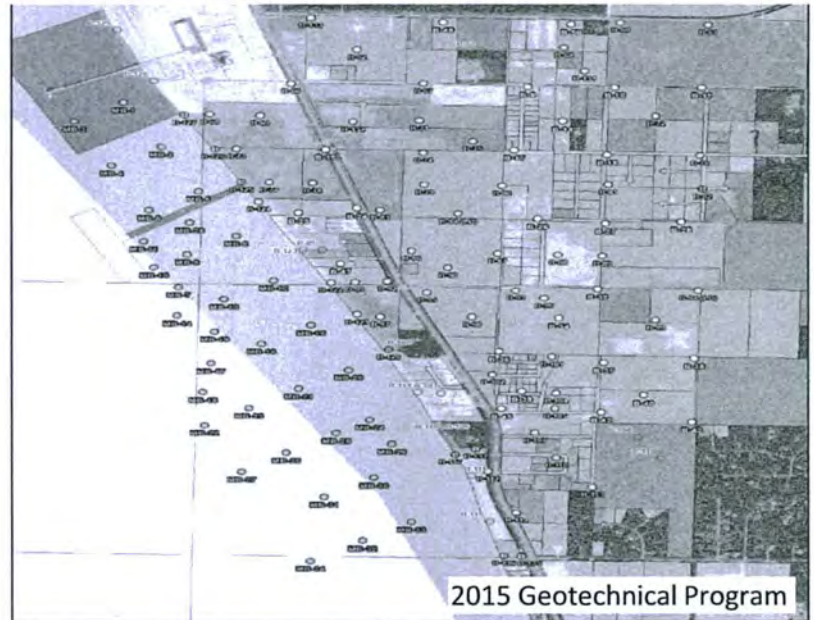
Evaluating alternative layouts, driver selection complete

Continuing to improve marine facility design and operations

- \* Collecting sea floor and metocean data
- \* Incorporating findings from navigation simulation

Continuing geotechnical assessment onshore and offshore

Focusing on fabrication / modularization to reduce costs



# Pipeline Update

Initial design scope 78% complete through end of July

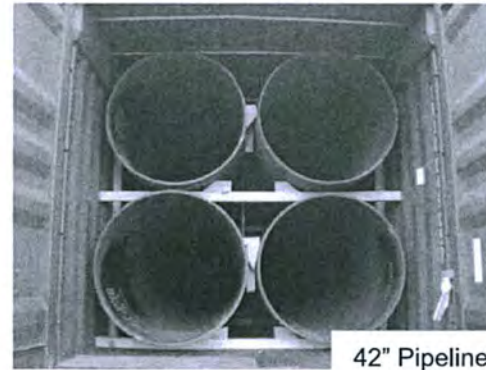
Pipeline materials design and testing in progress

- ✦ Evaluating weld development / procedures
- ✦ Evaluating alternative coating designs / applications
- ✦ Ordering 48" test materials (targeted 1<sup>st</sup> arrival 1Q16)

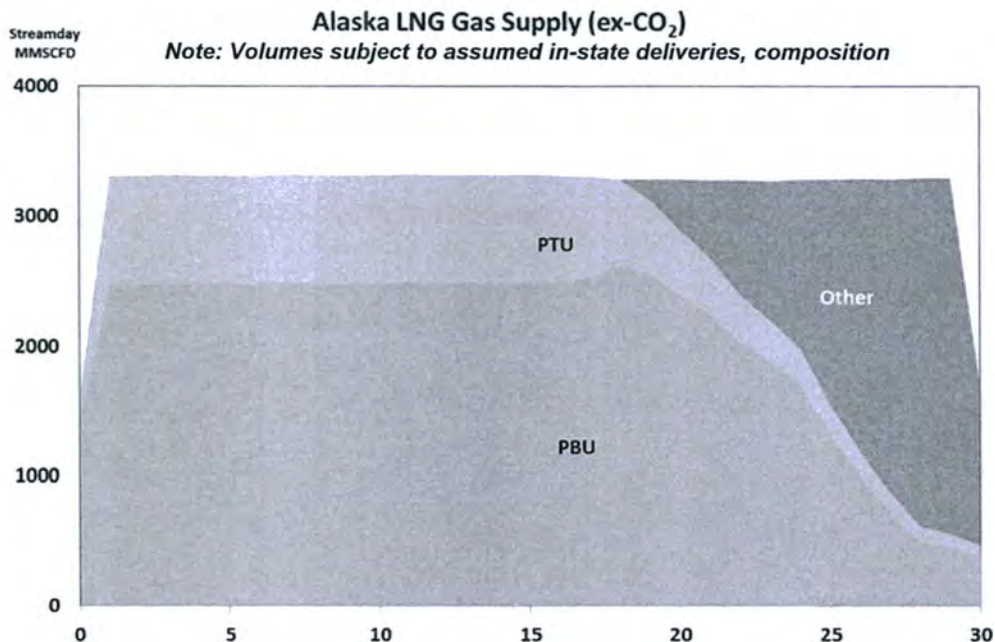
Working with federal pipeline regulator (PHMSA) to confirm design basis and align on special permit conditions

Continued data exchange / collaboration with AGDC on route, design, execution planning and in-state offtakes

Evaluating cost / schedule impacts of a 48" pipeline system



42" Pipeline Testing Program



	42" PIPELINE	48" PIPELINE
Design Peak Capacity from GTP	3.3 BCFD	3.3 BCFD
Peak to LNG (Annual Average)	2.8 BCFD (2.7 BCFD)	2.8 BCFD (2.7 BCFD) <i>(Net of fuel and in-state gas)</i>
Capex / Opex	Lowest capex	Higher capex, lower opex
Compression	Base: 8 stations - Operating redundancy	Base: 4 - 5 stations - Less fuel
Expansion	Single train expansion with 10 additional stations	Single train expansion with 5 additional stations
Construction Risk	More construction risk than typical pipelines in U.S. - pipe 22% heavier than other NA gas pipelines	More construction risk than 42", 59% heavier than typical - more equipment, gravel, truckloads - CI crossing complexity
N American Content	Available for non-strain based design sections (~ 80 - 90%)	No relevant experience suitable for Alaska today
Schedule	Base Case	Potential 6-8 month impact to FEED decision

# Gas Treatment Plant Update

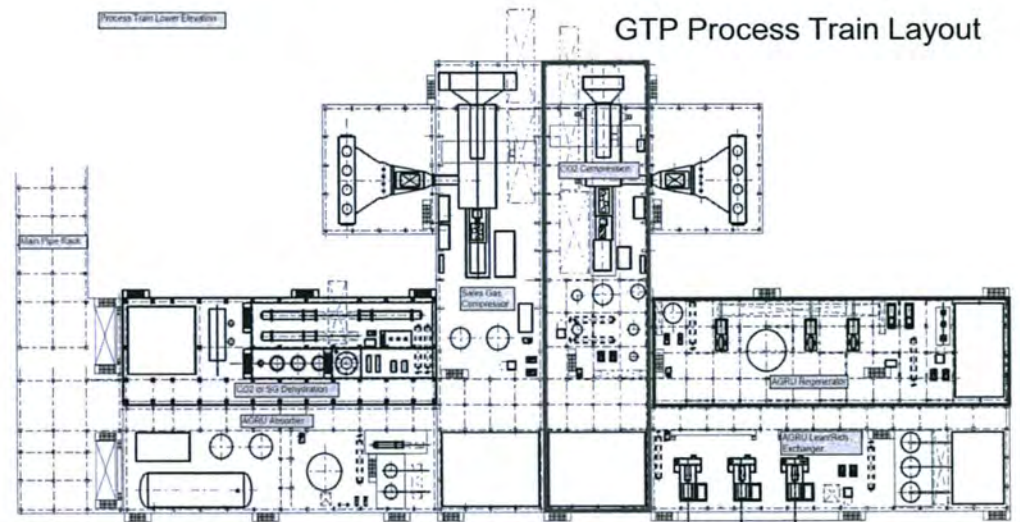
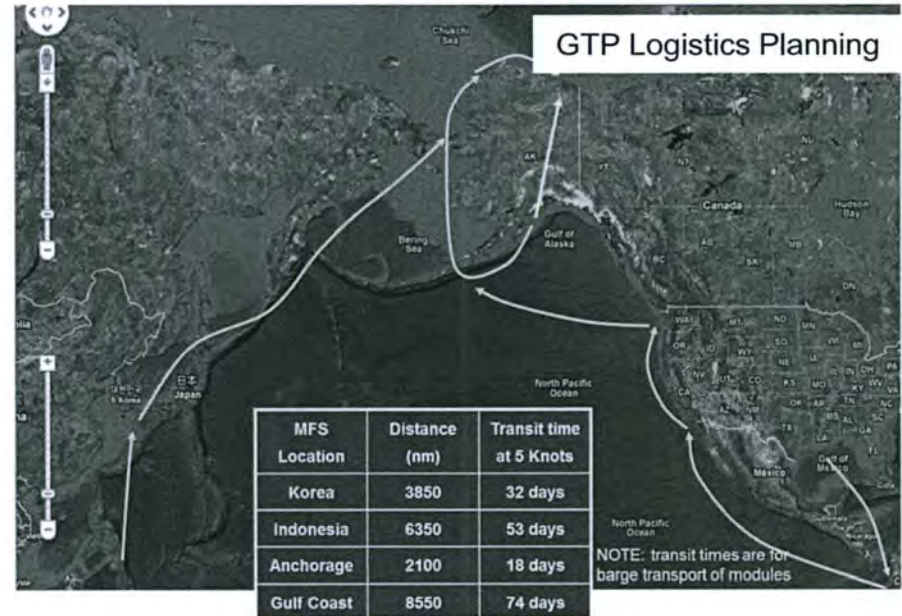
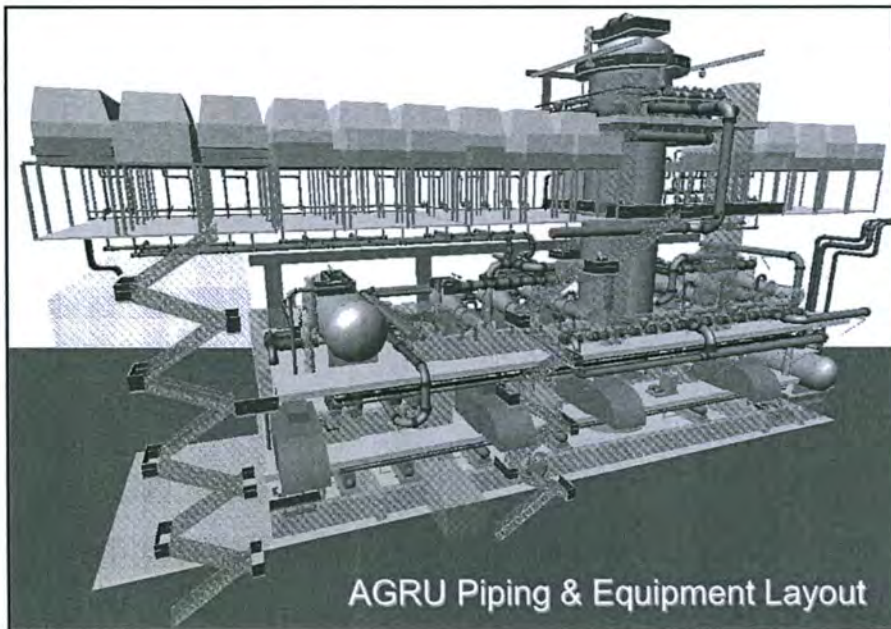
Initial design scope 86% complete through end of July

Completed geotechnical assessment, confirmed soils, access to gravel, water resources

Using 3D modeling of Acid Gas Rejection Unit (AGRU), CO<sub>2</sub> compression piping and equipment layout for cost estimates and constructability.

Working integrated design issues with PBU

Working with FERC to define engineering information required to complete NEPA process



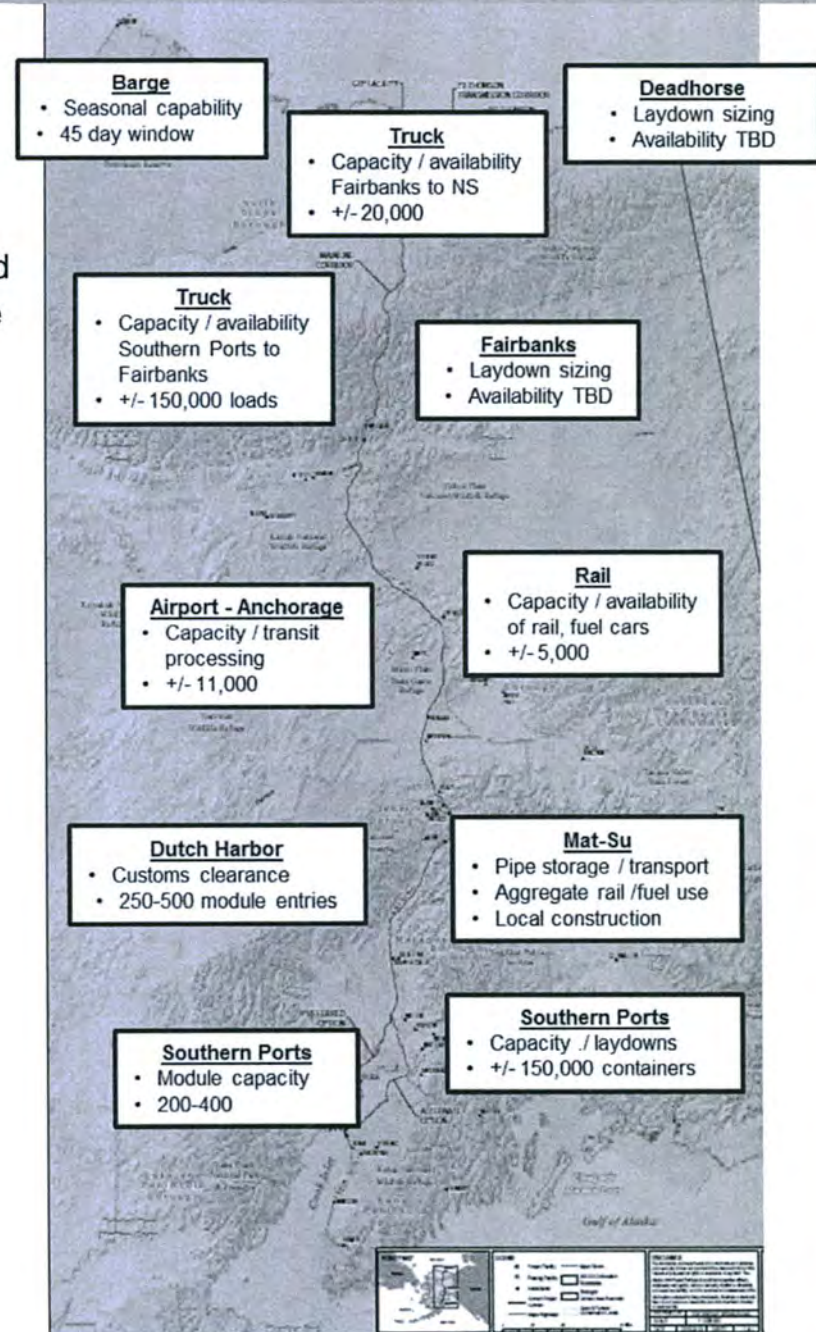
# Integrated Logistics Update

Initial logistics and infrastructure analysis complete (roads, trucks, ports, marine vessels, airports, rails, fuel, etc.)

**Preliminary findings include:**

- \* Sufficient capacity in key ports with some modernization already planned
- \* Potential pinch points identified with Alaska based trucking, railroad pipe cars, air transport capacity for personnel, camp infrastructure and the Alaska Marine Highway – developing plans to resolve
- \* Jones Act compliant vessels for pipe, break-bulk cargo are limited

**Modeling costs / schedule implications of existing infrastructure**



# Integrated Labor Update

## Progressing labor analysis with key stakeholders:

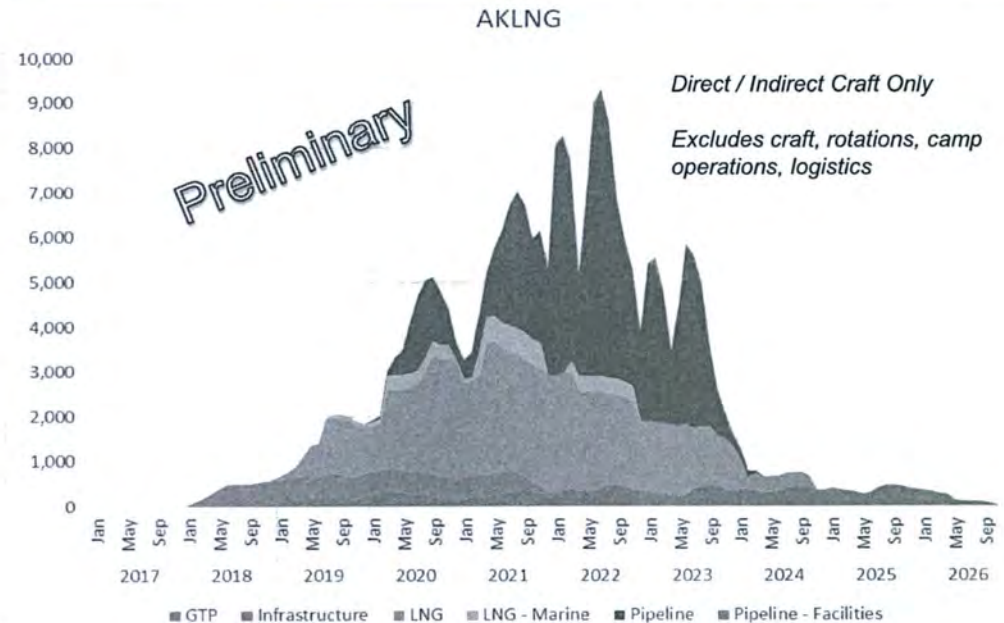
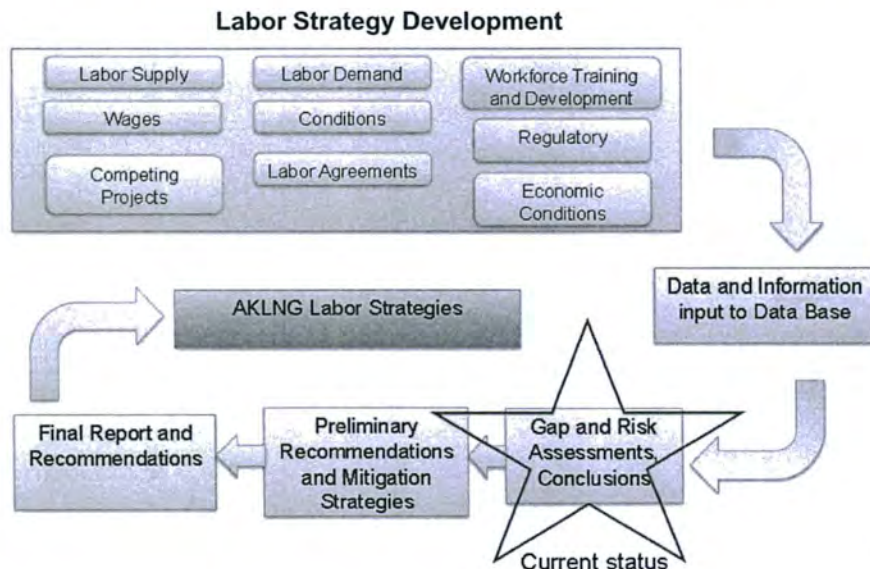
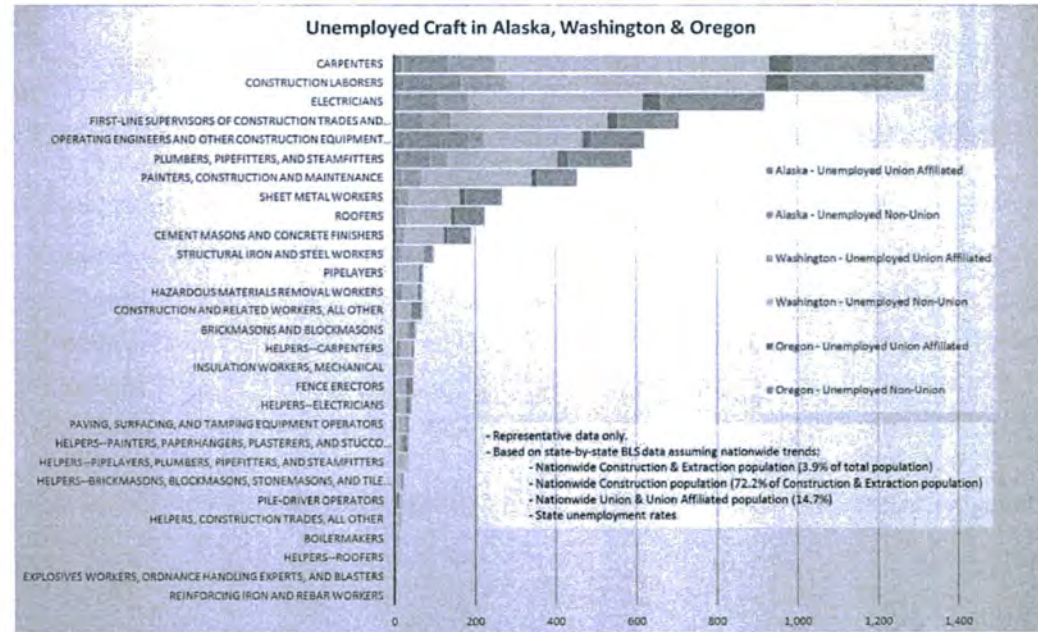
- \* Labor unions and merit based associations,
- \* Alaska Department of Labor, State representatives
- \* Alaska Native regional and village corporations
- \* Federal officials, national databases

## Initial Focus on 9 Key Craft Types: Boilermakers, Carpenters, Electricians, Insulators, Iron Workers, Laborers, Operating Engineers, Pipefitters, Teamsters

## Maximize use of qualified Alaska Hires

## Work in progress (complete by YE15), early findings:

- \* Construction demand significantly greater than currently available Alaskan workforce
- \* Access to all sources of Alaskan labor required
- \* Risk from competing industrial demand to be mitigated



# Summer Field Season / Regulatory Work Alaska LNG™

## 200+ people / 225,000+ hours in the field

- ☛ Collected engineering, environmental, social, and cultural data to support regulatory filings and permitting
- ☛ Supported the routing and siting of Project facilities

## Engineering and Field Work to support National Environmental Policy Act (NEPA) underway

- ☛ Developing second draft Resource Reports 1-12 with updated analysis of project impacts (1Q2016 submittal)
- ☛ Timing allows stakeholder input for October 2016 filing

### Pre-Filing

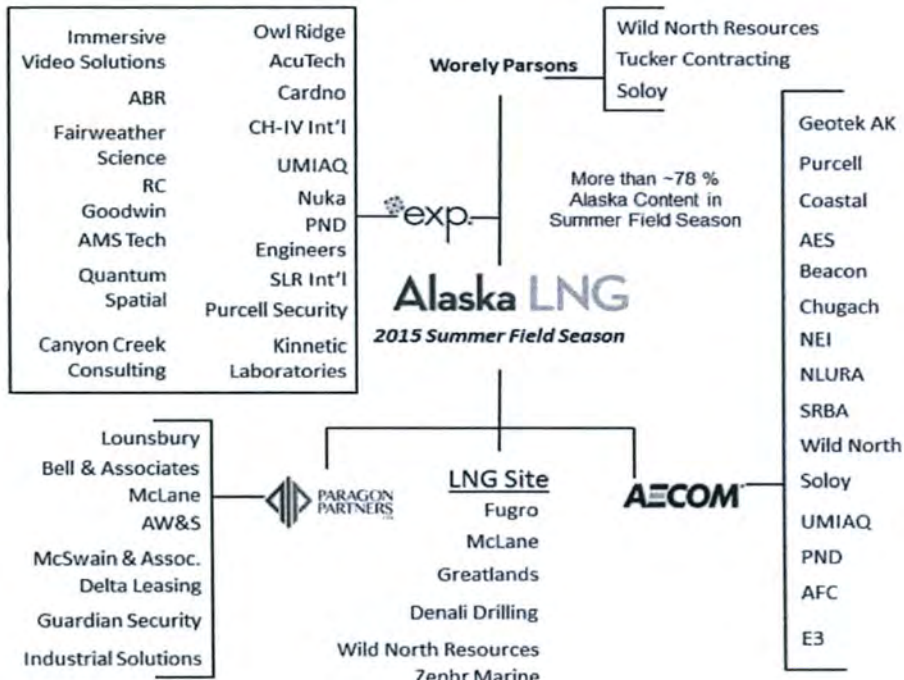
#### Draft Resource Reports

1. Project Description
2. Water Use & Quality
3. Vegetation & Wildlife
4. Cultural Resources
5. Socioeconomics
6. Geological Resources
7. Soils
8. Land Use, Recreation & Aesthetics
9. Air & Noise Quality
10. Alternatives
11. Reliability & Safety
12. PCB Contamination
13. LNG Information

### Filing – planned October 2016

#### Natural Gas Act Section 3 Application

- Exhibit A – Articles of incorporation and bylaws
- Exhibit B – Statement of corporate and financial relationships
- Exhibit C – State authorization
- Exhibit D – Agreement between the applicant and border facilities
- Exhibit E – Safety and reliability statement
- Exhibit E-1 – Earthquake hazards and engineering
- Exhibit F – “Final” Resource Reports
- Exhibit G – Location of facilities
- Exhibit H – Statement regarding additional federal authorizations



# External Engagement

Alaska LNG™

## Community

- \* 90+ community sessions in last 12 months
- \* Community meetings continuing to support summer field program
- \* FERC scoping meetings planned for fall 2015
- \* Legislative & media tours: 4
- \* Communications tools: newsletter, ak-lng.com, toll-free line

## Alaska Businesses

- \* Using Alaska vendors, equipment, residents provides access to valuable local expertise, can reduce cost
- \* Business information sessions in Barrow, Fairbanks, Kenai and Anchorage in April with ~ 700 participants
- \* Over 500 businesses registered at ak-lng.com
- \* Labor & logistics studies

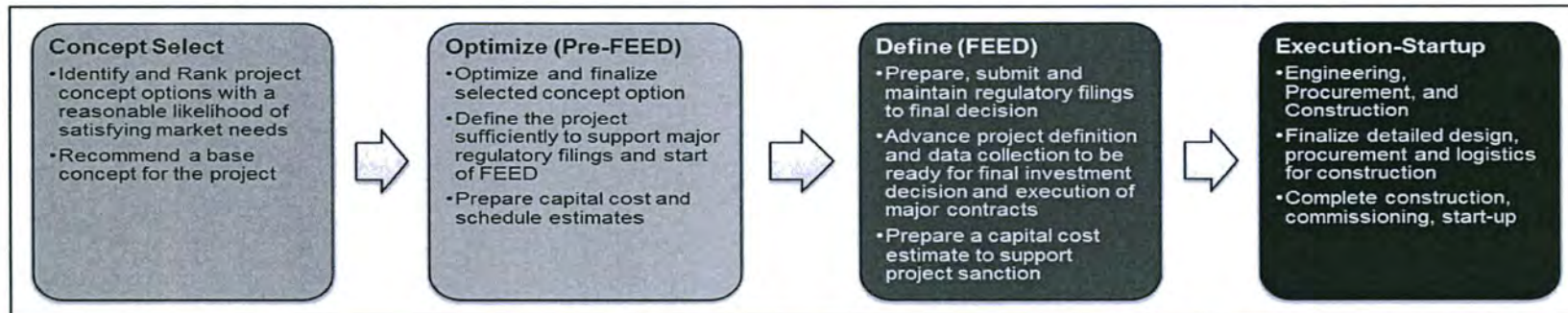
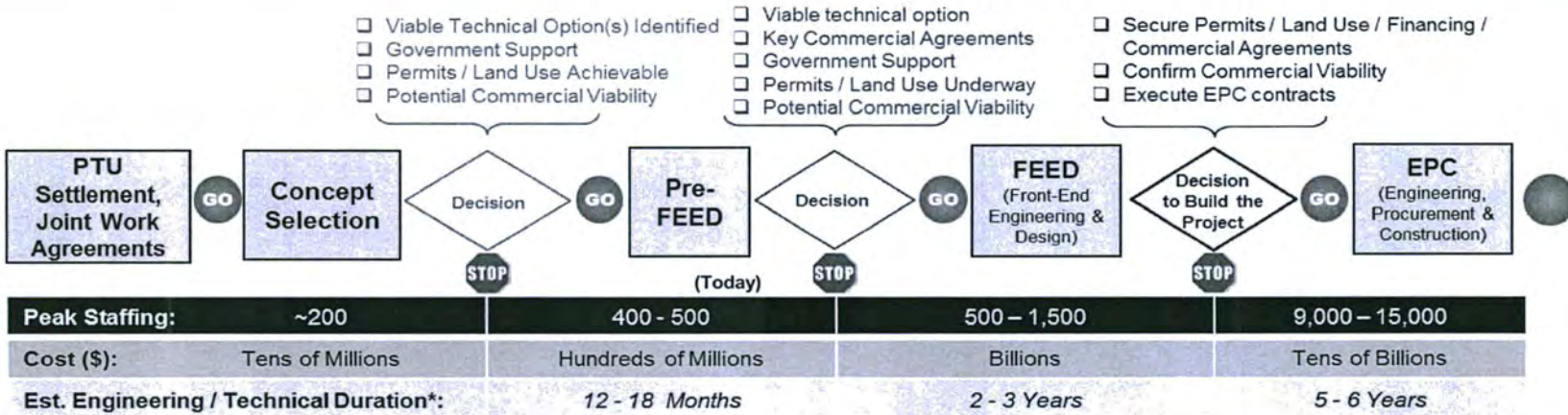
## Alaska Native Groups

- \* Village and tribal outreach ongoing
- \* Engagement with Alaska Native Regional Corporations
- \* Involvement in 2015 AFN Conference

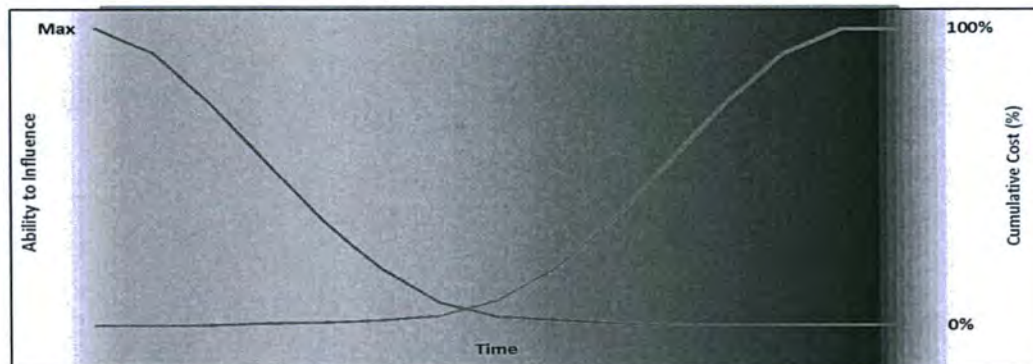


# Project Development Phases

## Alaska LNG – Phased/Gated Project Management Process (Oct 12)



### Project Influence Curve



# Alaska LNG by-the-numbers

Alaska LNG™

## Technical and field progress

- \* \$243M + on pre-FEED through August 15
- \* 570+ acres purchased in Nikiski, Alaska
- \* 130+ full-time personnel on Alaska LNG Project
- \* 200+ people in the field (80 scientists)
- \* 950+ acres of topographic survey
- \* 15,500+ acres of cultural surveys
- \* 148,000+ feet of shallow seismic completed
- \* 250 boreholes drilled
- \* 100+ environmental site assessments completed
- \* 2,000+ helicopter flying hours, 87,000+ miles driven
- \* 1,100+ field check points set/confirmed

## Regulatory

- \* 2 DoE conditional export licenses (FTA / non-FTA)
- \* 10,000+ pages of regulatory filings

## Engagement

- \* 90+ community outreach events
- \* 100s of Alaska entities involved in logistics and labor studies
- \* ~700 Alaska businesses – information sessions
- \* 40+ meetings with Alaska Native regional and village corporations and tribal entities



# Alaska LNG

Fueling Alaska's Future

AK-LNG.COM

## Questions



# ALASKA STATE LEGISLATURE

## SENATE RESOURCES COMMITTEE

SEN. CATHY GIESSEL  
Chair  
State Capitol, Room 427  
Juneau, AK 99801-1182  
(907) 465-4843 Fax 465-3871

Sen. Mia Costello, Vice-Chair  
Sen. Peter Micciche  
Sen. Bert Stedman

Sen. John Coghill  
Sen. Bill Stoltze  
Sen. Bill Wielechowski

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To: Members of the AK LNG Project External Affairs Group  
From: Senator Cathy Giessel, Chair  
Alaska Senate Resources Committee  
Re: Questions Related to Hearing on AK LNG Update for September 9<sup>th</sup>, 2015  
September 7<sup>th</sup>, 2015

Good Morning and a Happy Labor Day,

The quarterly update for the project, which is scheduled for Wednesday, September 9<sup>th</sup>, will be an opportunity for lawmakers to ask a variety of questions regarding the progress of the project.

In order to facilitate the proper time required for a full answer, my office is sending these questions to all the parties that will be participating in the AK LNG Update on September 9<sup>th</sup>. It is my intent to make the proceedings as transparent and open as possible. Unless otherwise qualified, all questions are directed to all the parties.

1. What conditions, or milestones, do you need in order to authorize the funding for entering the Front End Engineering and Design (FEED) Phase of the AK LNG Project?
2. Is there agreement on what it takes to enter the FEED stage of the AK LNG Project?

3. Is there agreement on the subject of Payment In Lieu of Taxes?
4. To the State of Alaska: What analysis has been conducted for determining the buy-out of TransCanada?
5. Do you feel that adequate progress has been made on fiscal terms?
6. What is your opinion about a constitutional amendment on fiscal terms being considered without the full-term agreements being complete?
7. Who is the State of Alaska's Gas Team lead?
8. To the State of Alaska: How does the State plan to fund its share of the costs through FEED?
9. What is the status of withdrawal discussions and why is this important to Alaskans?
10. What is the status of the gas balancing discussion and when will it be resolved?
11. When will the State make the royalty election contemplated in Senate Bill-138?

I look forward to seeing all of you on Wednesday, and wish you a very pleasant rest of your holiday weekend.

Sincerely,

A handwritten signature in cursive script that reads "Cathy Giessel".

Senator Cathy Giessel  
Senate District N

**Introductory Remark**

Good evening Madame Chair and Senators and Representatives. For the record my name is Dan Fauske and I am the President of your gas-line company, the Alaska Gasline Development Corporation. We are here tonight to present the quarterly Legislative update mandated by Senate Bill 138.

You just heard the technical update from Steve Butt and I think you will agree that the AKLNG Technical Team is doing well progressing the design, engineering, and permitting on the AKLNG Project.

However, the State team is very concerned about the lack of progress on many of the key commercial and fiscal issues. The process we are currently involved in assumes that all parties are equally motivated to getting a project built as soon as possible within reasonable engineering and design constraints. That may have been an unreasonable assumption given the different alternatives and economic considerations of each party. In the State Gas Team's opinion, the progression of the following key agreements will not allow them to be completed in time for a special session this fall:

- Gas balancing negotiations are at a virtual standstill with little progress amongst all parties having been made in the last several months. This is a critical issue that needs to be resolved for the process to move forward;
- Commercial agreements including governance and operating agreements are being negotiated but are not on schedule for a review by the Legislature in this calendar year;
- A Tax Stability Agreement, historically referred to as a fiscal agreement, has yet to be agreed, and there is little common ground between the Parties;
- Provisions for withdrawal by a party which would allow the State to proceed without interruption or delay if a party wanted to withdraw have yet to be agreed. In addition there is no agreement on milestones to insure that the parties are reasonably progressing the project. The failure to meet the milestones with out good cause would result in a loss of the fiscal stability provisions.

Without these foundation agreements, it will not be possible for the State Gas Team to present a project to the Legislature for review this fall. The State Gas Team does not intend to bring an incomplete package to the Legislature and expect a decision from you on a change to the Constitution to give the Producers the tax certainty they desire.

However, there are policy decisions including issues related to the State's participation and interim funding necessary for continuing the State's participation that may need to be resolved by a special session before the end of this calendar year.

On behalf of the State Gas Team, I thank you for your continued support of AGDC and the State's participation in the AKLNG Project.

1. AGDC views the conditions / milestones required to make a decision to proceed to FEED are primarily technical in nature and must include successful delivery of key Pre-FEED work products and deliverables. Those work products are now targeted for completion in early to mid 2016.

2. The deliverables for Pre-FEED are all necessary for a positive FEED decision, and those are clearly addressed by the Pre-FEED Joint Venture Agreement. While those are mostly technical deliverables, there are also commercial agreements that will need to be completed to ensure there is a commercial foundation in place for FEED.

Anticipating that there may be a concern by one or more Producers to make any commitment to enter FEED until the constitutional amendment authorizing the Fiscal Agreement has been passed during the November 2016 General Election, the SOA has offered that if the Producers make a conditional commitment to enter FEED in advance of the general election, the State will fund its share of FEED expenditures, estimated to be \$400-500M, to meet all FEED cash calls through the election, which will be the condition precedent for all Parties to enter FEED officially without further conditions.

3. The State has achieved tentative alignment on a property tax structure subject to MAGPR review that includes:

- Impact payments during construction
- Flow-related property tax mechanism after startup
- MAGPR meeting scheduled Sept 23 in Fairbanks to review property tax proposal
- To discuss alternative legislation to implement property tax structure

4. A decision on TC's role in the equity of the project must be made quickly. The failure to make that decision will substantially impair the ability of the parties to move the Process forward. TC's participation in the project is very expensive for the State of Alaska and reduces alignment between the SOA and the Producers. If TC is in the project, the SOA cannot act as a full partner with the producers, and its information and control over the entire project is reduced. While AGDC currently owns 25% of the LNG facilities, if the SOA terminates the TC relationship, AGDC will own 25% of the entire project. Uncertainty over the status of TC is holding up governance and LLC agreements. DNR retained B&V to do an extensive study of the pros and cons of terminating TC's status in the project. That project has been completed and has concluded that it may be advantageous to the SOA for the relationship to be terminated. If this decision is made, it will be brought before the Legislature and the report and analysis will be provided at that time.

5. No. As stated in my introductory statement, we are very concerned with the lack of agreement on Fiscal Terms. The Governor and his administration firmly believe that inadequate progress has been made in advancing and completing a fiscal agreement for the AKLNG Process.
6. We support bringing a resolution on a Constitutional Amendment to the Legislature only if it is accompanied by key fiscal and commercial agreements that fully describe the State's participation in the Project.
7. Rigdon Boykin is leading the State's Gas Team and is briefing the Governor and me daily. Questions about the team's day-to-day activities and engagement can be directed to me or Joe Dubler.
8. The costs for AGDC for the FEED segment of the AKLNG Process will need to be funded through Legislative Appropriations. It is anticipated that amount could approach \$1 billion. Appropriation authority lies with the Legislature, but it is likely that those appropriations will need to be made from either the Earnings Reserve of the Permanent Fund or the Constitutional Budget Reserve. Once the parties have made a positive Final Investment Decision, a project financing will likely provide the majority of the remaining investment by the State.
9. The process we are currently involved in allows the pace of the project to be dictated by any party. Because of this the State needs to ensure that if the process fails for any reason, the State will be able to continue progressing a project to commercialize North Slope gas. The only way for it to commercialize North Slope gas is if it has access to that gas, which is an underlying principle of the withdrawal process.

Specifically, the State will require the following from each withdrawing party:

- (i) such party's equity in the project company and in the LLC Members' Agreement;
  - (ii) Each Producer must agree to sell gas or ship gas through the project; and
  - (iii) All rights to receive project data/assets (technical or otherwise) produced during the Pre-FEED process up to the point of withdrawal.
10. In the State Gas Team's opinion a gas balancing agreement among all producers will not occur in time to meet a special session deadline for this fall.
  11. DNR to answer.

### **Concluding Remark**

I once again thank you for your continued support of the AKLNG Project. I believe that all of us share the goal of commercializing North Slope gas through a large-scale LNG export project. The timing of large infrastructure projects is critical to their

success, particularly when competing in the global LNG market. We therefore must move a Project expeditiously to completion. I assure you that, even though we are disappointed with the lack of progress in the current process, the State Gas Team continues to effectively represent Alaska's best interests.

OPENING STATEMENT  
VINCENT LEE  
DIRECTOR OF MAJOR PROJECTS DEVELOPMENT  
TRANSCANADA CORPORATION  
BEFORE THE  
ALASKA JOINT SENATE & HOUSE RESOURCES COMMITTEES  
SEPTEMBER 9, 2015

Madam Chair, Mr. Co-chairs and members of the Committee, for the record my name is Vincent Lee. I am the Director of Major Projects Development at TransCanada. I serve as the commercial lead for TransCanada in the Alaska LNG project and represent TransCanada on the project's Management Committee.

Over the last few months, the Governor has been very clear with Alaskans about his desire for the State of Alaska to take on a bigger role in the Alaska LNG project. One way to accomplish this objective is for the State to take over TransCanada's interest in the project. The Precedent Agreement that the State and TransCanada entered into in June 2014 allows either party to terminate the agreement.

At the Governor's request, TransCanada has been working with the Administration to agree on a process for the State to terminate the Precedent Agreement and allow the State to assume TransCanada's interest. If an agreement is reached, we expect it will provide a roadmap for TransCanada's exit from the project, including an agreement by the Administration to request an appropriation to reimburse costs that TransCanada has invested in the LNG effort since the beginning of 2014.

TransCanada will work diligently to ensure that the termination occurs as smoothly and reasonably as possible. I recognize that some may want more detail on the termination discussion between TransCanada and the State, but due to confidentiality, I am not permitted to share more information beyond what I have just described.

TransCanada has been involved in advancing a natural gas pipeline in the State of Alaska for four decades and has made significant contributions to the advancement of the current LNG efforts. Anticipating TransCanada's role in the Alaska LNG project may come to an end soon, I would take this opportunity to wish our project partners and the State of Alaska well in this endeavor to bring Alaska's abundant natural gas resources to global markets.

Madam Chair, Mr. Co-Chairs, I also would like to extend my thanks to you for inviting me here today. One final point, TransCanada looks forward to working with the Administration and the Legislature to complete the transition in a timely fashion to allow the other JVA Parties and the State continue to be focused on advancing the Alaska LNG project.

Thank you.

# Alaska LNG

## *Project Update*

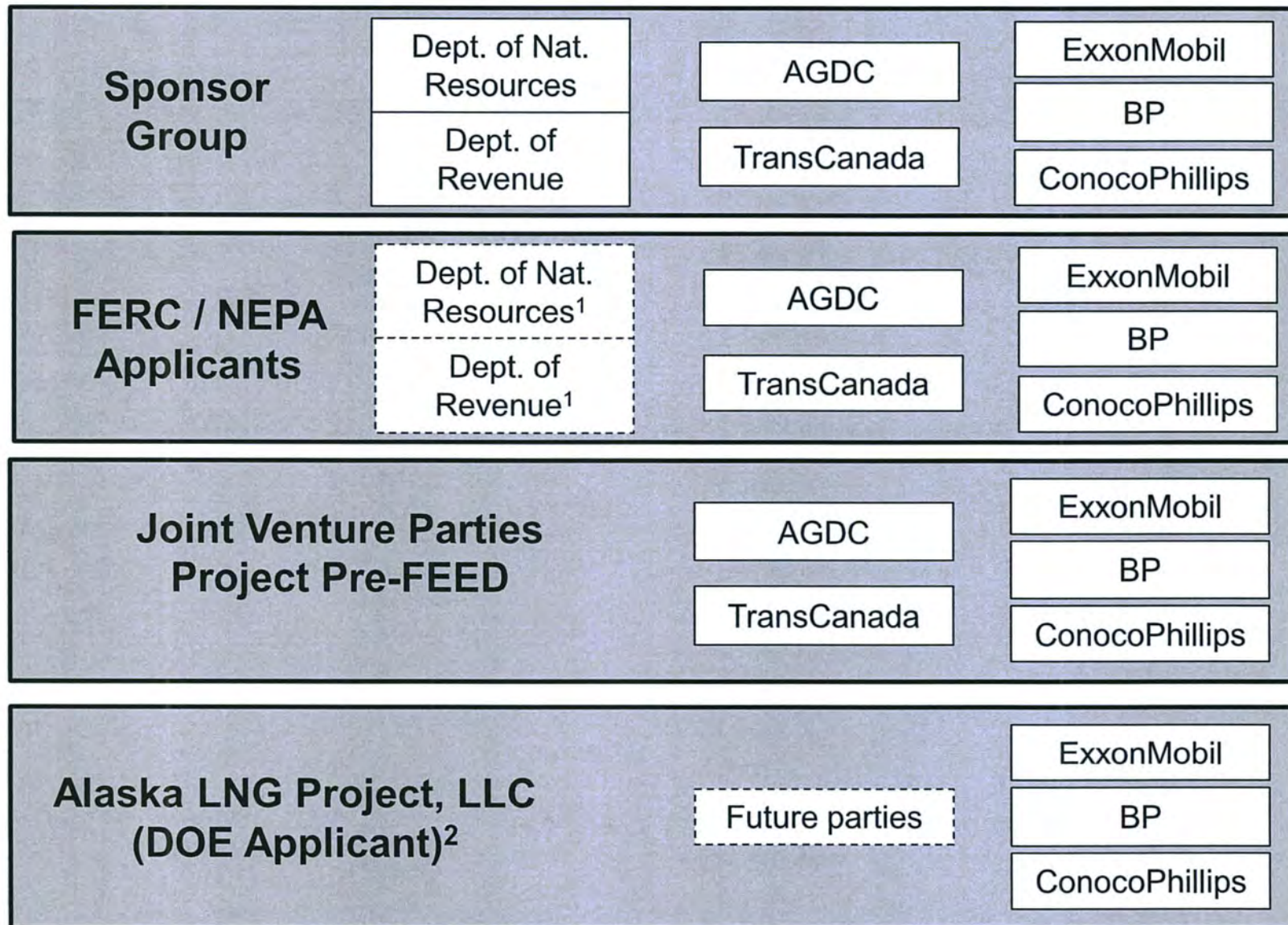
House and Senate Resources  
Committees

September 9, 2015

Dan Fauske – AGDC  
Vincent Lee – TransCanada

Bill McMahon – ExxonMobil  
Dave Van Tuyl – BP  
Darren Meznarich – ConocoPhillips

# Alaska LNG Project Arrangements



<sup>1</sup> Consultant role for DNR / DOR

<sup>2</sup> DOE application also covers any potential State RIK and TAG volumes

# Alaska LNG Project Arrangements

## Sponsor Group

Dept. of Nat.  
Resources

Dept. of  
Revenue

AGDC

TransCanada

ExxonMobil

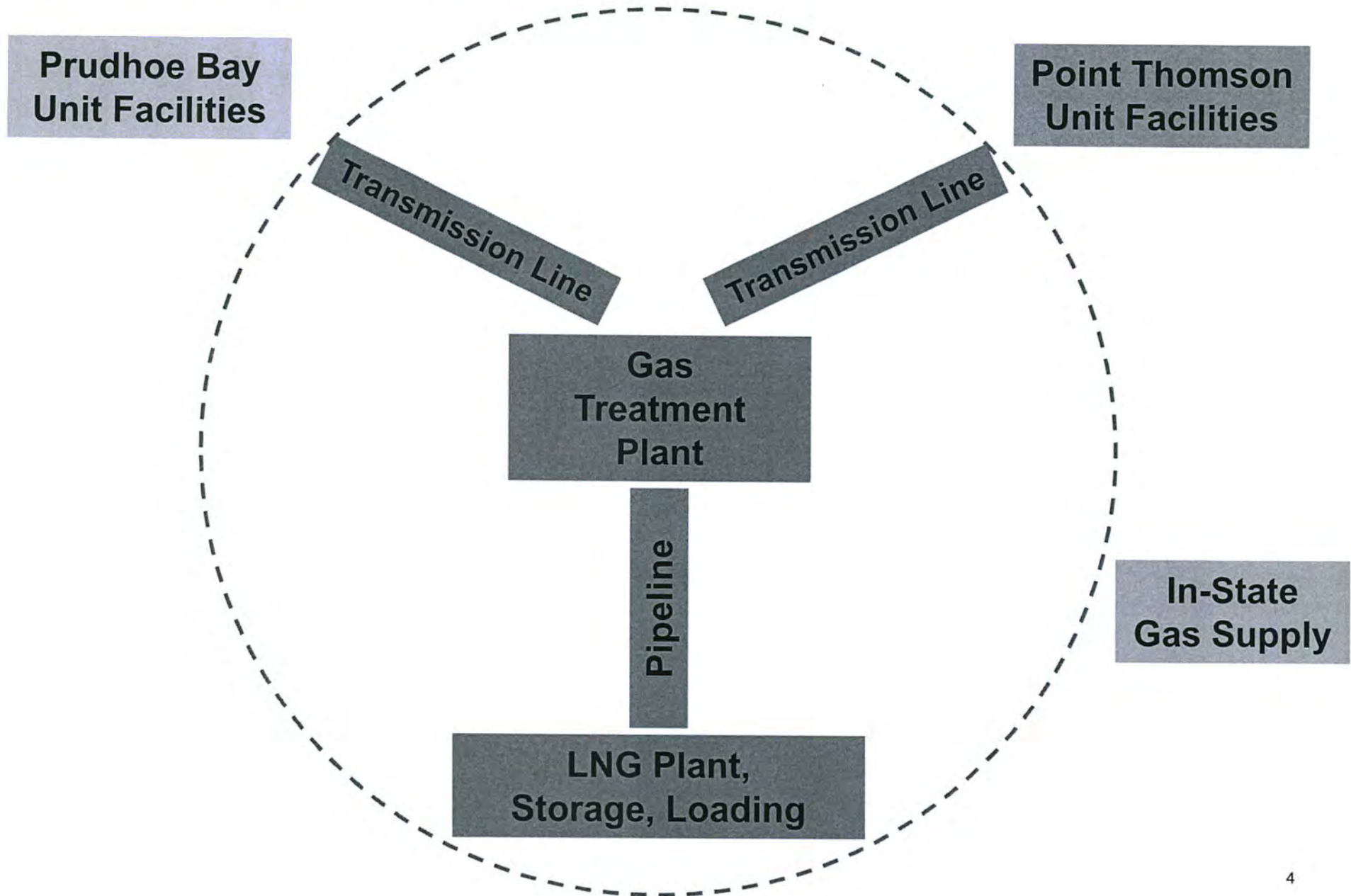
BP

ConocoPhillips

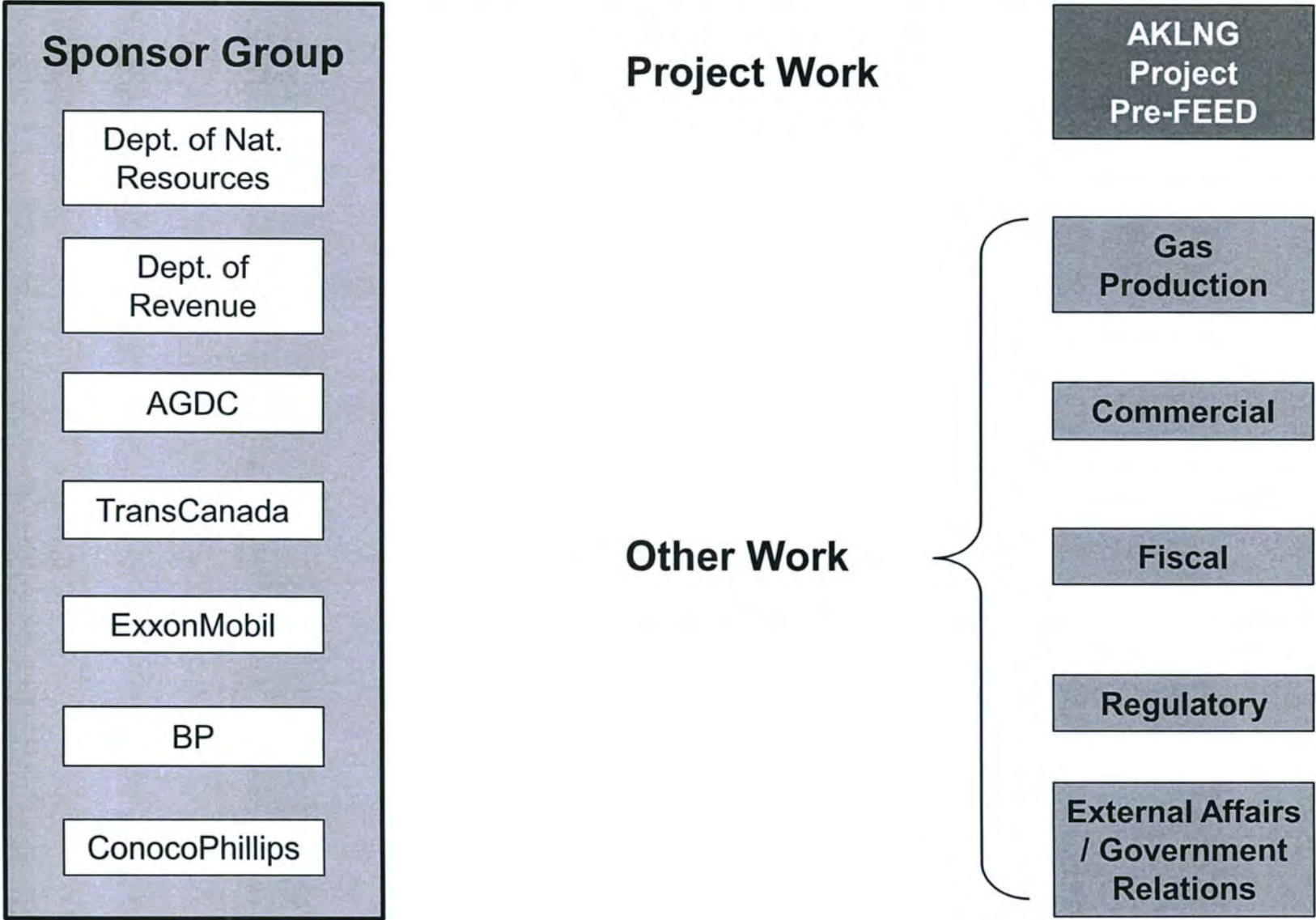
AKLNG  
Project  
Pre-FEED

- Integrated team includes experienced personnel from ExxonMobil (Lead), TransCanada, BP and ConocoPhillips
- Currently in Pre-FEED (Pre Front End Engineering Design)
- Advancing engineering of AKLNG Project facilities
- Conducting field studies to progress design basis
- Drafting project execution plans
- Refining overall cost and schedules
- Developing environmental permitting applications
- Cooperation agreement with AGDC on field data collection and historical data exchange

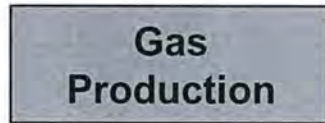
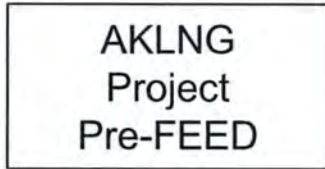
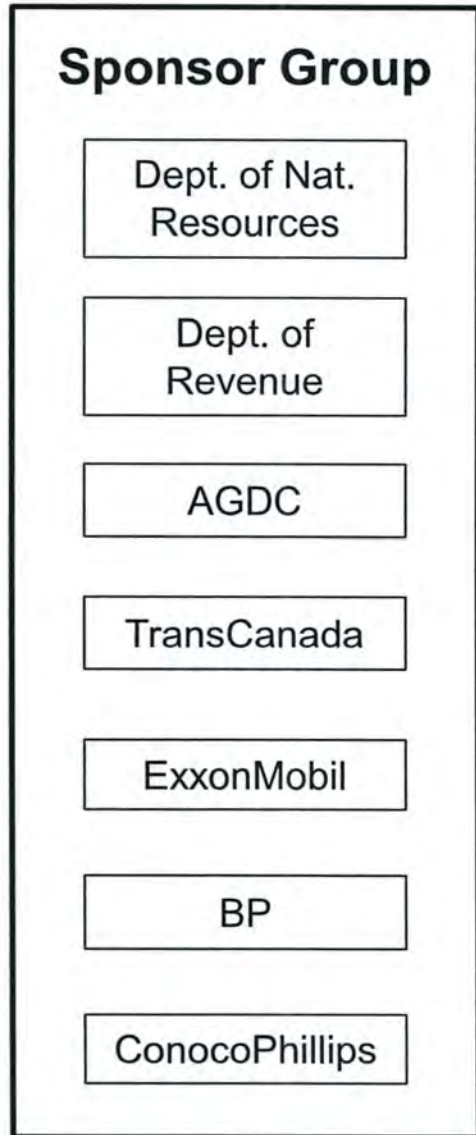
# Alaska LNG Project Facilities



# Alaska LNG Project Arrangements

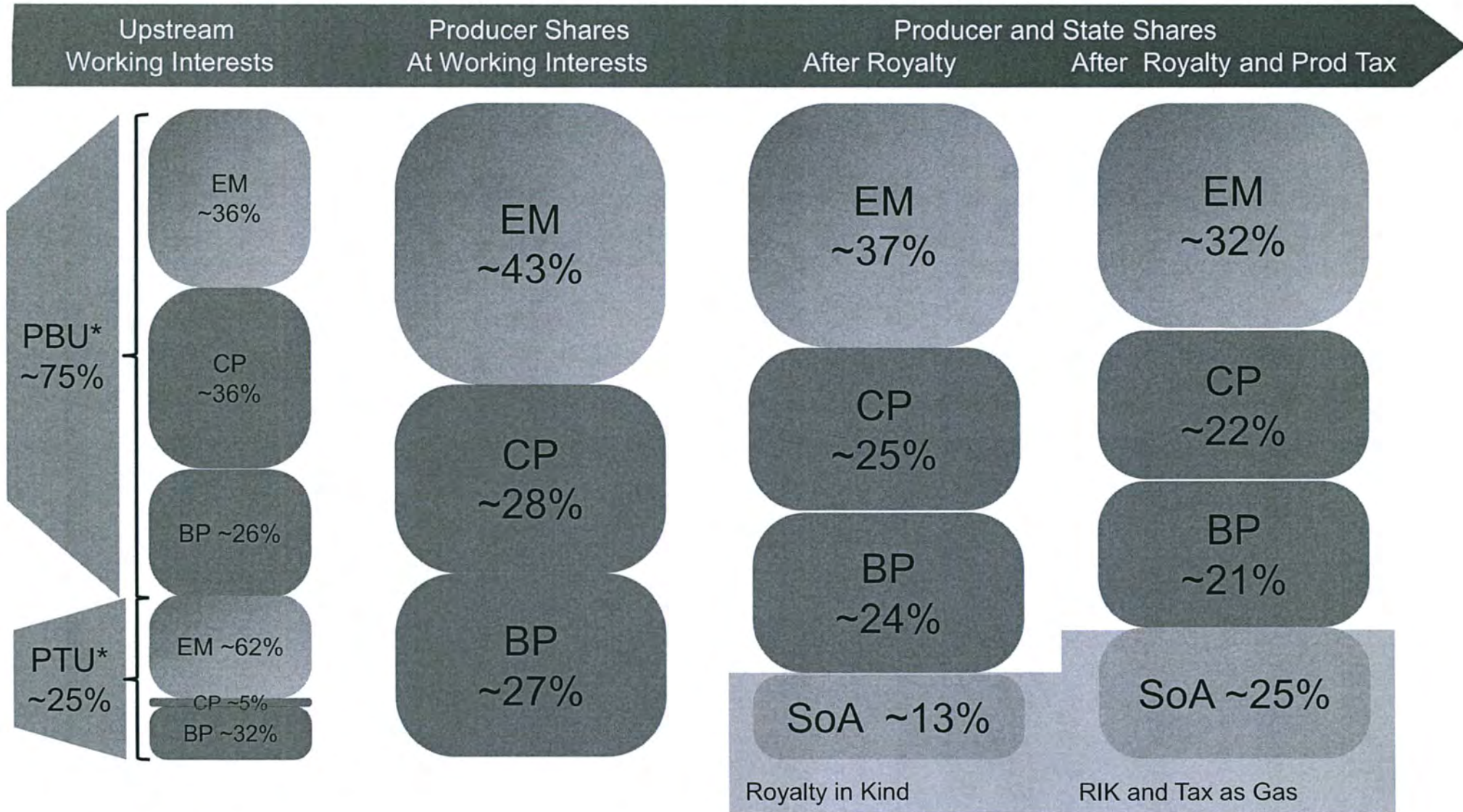


# Alaska LNG Project Arrangements



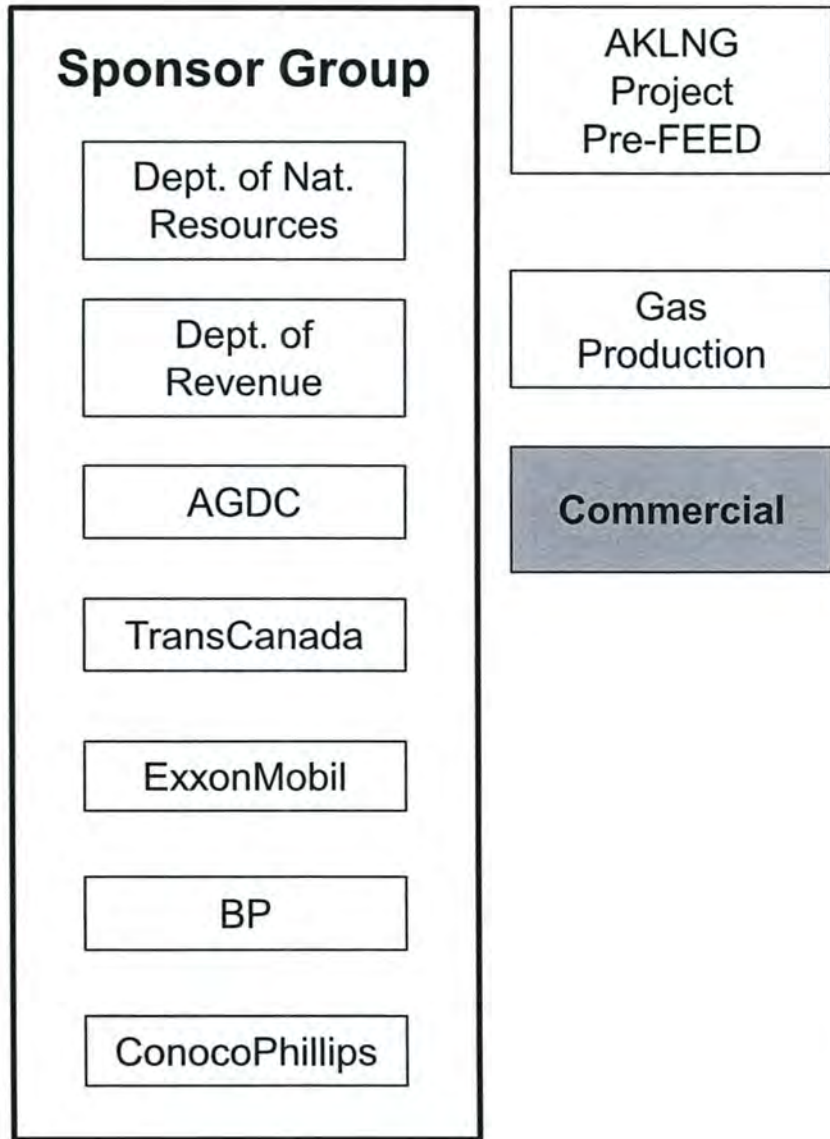
- Preparations for commercial natural gas production are underway at both Point Thomson Unit (PTU) and Prudhoe Bay Unit (PBU)
- Significant natural gas development required at PTU including drilling and gas handling facilities
- PBU would also require some new facilities
- Filed gas offtake authorization applications with AOGCC; hearings conducted on August 27 for PBU and September 1 for PTU

# Gas Production



\* PBU / PTU split subject to gas supply agreements and regulatory authorizations

# Alaska LNG Project Arrangements



Drafting DNR applications

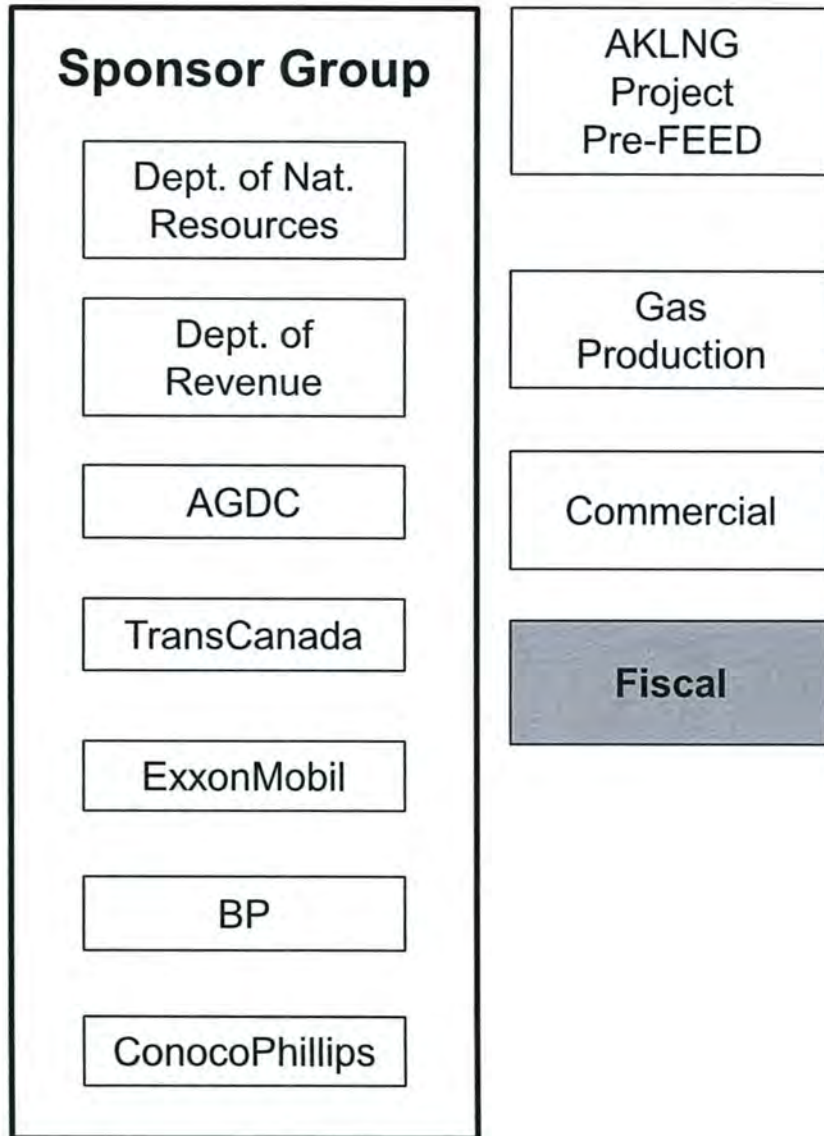
- SB 138 Lease Modifications to address RIK / RIV switching and PTU SSR / NPS leases

Developing commercial basis for the venture

- Commercial foundation agreements among State, AGDC, TransCanada, ExxonMobil, BP and ConocoPhillips to be sufficiently completed before fiscal action by the Legislature
  - Governance for long term venture including expansions
  - Gas supply to Project
  - Gas / LNG liftings from Project
  - In-state gas
  - Others
- Long-term Firm Transportation Services Agreement (FTSA) between TransCanada and State

Legislative review and approval of some agreements will be needed

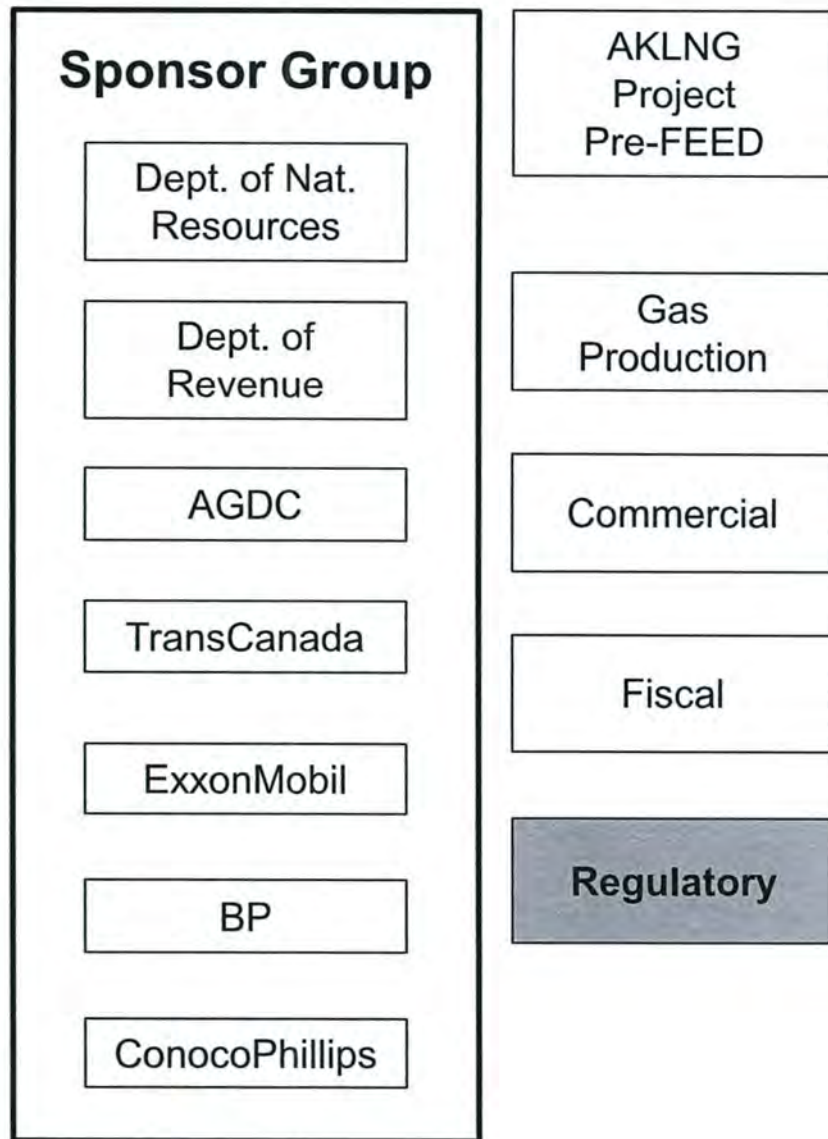
# Alaska LNG Project Arrangements



## Developing fiscal basis for the venture

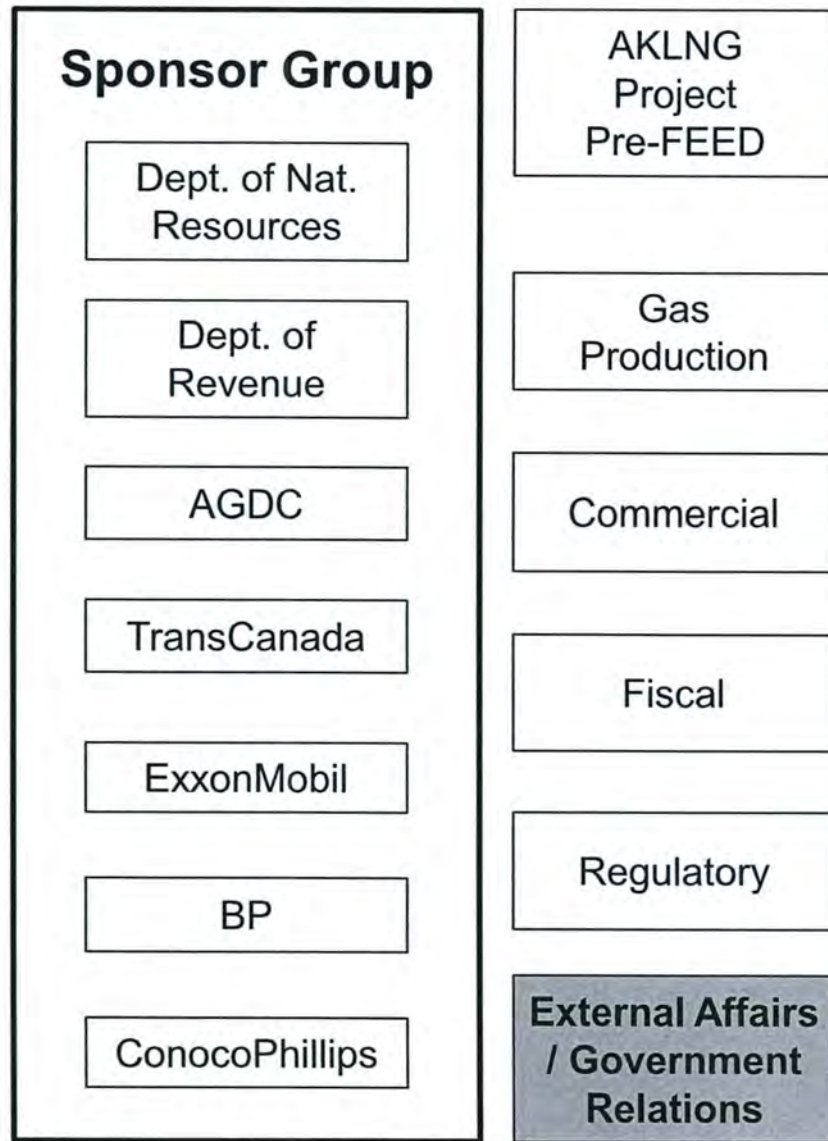
- Building on Jan 2014 HOA and SB 138
- DNR considering State Royalty in Kind
- Predictable and durable fiscal terms necessary for unprecedented scale, complexity and costs
  - Also required to compete in global energy markets
- Have aligned on constitutional amendment as vehicle to provide stabilization
  - 2/3rds legislative vote to place on ballot
  - Targeting November 2016 election
- Fiscal terms are a key enabler for the Project, and also with LNG Buyers, lenders and investors
- Legislative review and approval will be needed
- Seeking legislation to address property taxes
  - Tentative alignment reached on structure, subject to consultation with MAGPRB

# Alaska LNG Project Arrangements



- FTA and non-FTA DOE Export Authorizations received
  - Allows access to all key LNG markets
- NEPA Pre-File process sets foundation for the Environmental Impact Statement (EIS)
  - Two drafts of Resource Reports before final submission intended to facilitate stakeholder engagement
  - First draft of Resource Reports submitted in Feb 2015 – available for public review on FERC website
  - Specific, anticipated project impacts and proposed mitigation measures will be included in second draft of Resource Reports expected to be submitted in Feb 2016

# Alaska LNG Project Arrangements



- Project of this magnitude / complexity cannot succeed without broad public support
- Facilitating public dialogue and community engagement about the Alaska LNG Project

# Alaska LNG Project Update

- Key Accomplishments
  - Tentative alignment reached on structure, subject to consultation with MAGPRB
    - Flow Related Property Tax mechanism after startup
    - Impact payments during construction
- Remaining Challenges
  - Establish role of State as project participant
    - Midstream participation / funding / 2016 Pre-FEED WP&B approval
  - Timely completion of key commercial and fiscal contracts followed by legislative approval consistent with SB 138
  - Royalty decisions
    - Lease modifications
    - RIK election
  - Legislation for property taxes
  - Legislation to authorize public vote on constitutional amendment that provides durable / predictable fiscal terms

# Deliverables to Support FEED Decision

## AKLNG Project

- Pre-FEED Project Deliverables / Prep for regulatory filings

## Gas Production

- PBU / PTU Development Plans, AOGCC Offtake

## Commercial

- Key Agreements (e.g., Lease Modifications, Governance, Gas Supply, FTSA)

## Fiscal

- Property Tax, Royalty-in-Kind, Predictable / Durable Terms, approved Constitutional Amendment

## Regulatory

- DOE Export Authorizations Received, Progressing FERC NEPA Pre-File

## External Affairs / Government Relations

- Broad support for Project

## Gas Fiscal Testimony to House and Senate Resource Committees

David Van Tuyl, BP

September 9, 2015

Madam Chair, members of the committee, for the record my name is David Van Tuyl and I am Regional Manager for BP here in Alaska. I've been working for BP in Alaska for over 31 years, the last several of which have been dedicated to working to get Alaska's gas to market.

Now I have the privilege of working in my current roles on the joint fiscal team, and on the Management Committee of the Alaska LNG project effort.

I am very pleased to be here along with my colleagues to provide an update on the progress of the Alaska LNG project. The success of Alaska LNG is critical to BP's business here in Alaska, and it's also critical to the future of the State of Alaska and to so many Alaskans who will benefit, both directly and indirectly, from a successful project.

As you are all aware, the project has taken several very important steps forward toward becoming the reality we are all working so hard to achieve, and I think it's worth reminding us just what we've achieved:

- In January 2014, we signed the Alaska LNG Project Heads of Agreement, which publicly mapped out our agreed way forward to commercialize Alaska's Gas. That's the path we continue on today.

- A few months later, you, the Alaska Legislature, approved SB-138, which defined the State's participation in the project and provided the way forward.
- The Governor signed SB-138 into law the next month.
- Then last June, the parties all signed the commercial agreement that allowed the parties to advance through the pre-FEED phase.
- The next month, in July, the project submitted its export license application to the Department of Energy.
- In September, the project initiated our Federal Energy Regulatory Commission, or "FERC" pre-filing process, which the FERC approved later that month.
- In November, we received DOE's approval of the export license application for Free Trade Agreement countries.
- In May of this year we received our non-FTA export approval from the DOE.
  - As we have said before, this approval sent an important message not only to Alaska, but to the world – the Alaska LNG project is real, and it's coming.
- Just last month, the FERC Chairman visited the Alaska North Slope to see the existing facilities and the location of the future Alaska LNG project facilities.

- I believe that's the first time ever that a sitting FERC Chairman has visited the Alaska North Slope.
- Project momentum is building.
- Also last month, the Alaska Oil and Gas Conservation Commission heard our application to modify the Prudhoe Bay gas offtake rate, and allow for CO2 injection from the Alaska LNG Project into the main Prudhoe Bay reservoir.
  - Regulatory approval of Prudhoe Bay gas offtake is another critical step in this process.
  - Certainty of gas offtake underpins our upcoming FEED decision;
  - To support that huge financial commitment we want to reduce uncertainty wherever we can.
- And as you just heard from Steve Butt, the Project Team is making good progress on the pre-FEED deliverables.

So while there is still much work to be done, we continue to make progress. We understand the Governor's recent statements about the need for additional progress. We agree.

The agreements we are actively negotiating are complex, and will impact this multi-billion dollar project that will span decades. Given the complicated issues we are working through and the fact that each of the parties in the negotiations has its own needs and concerns, it shouldn't surprise you that the negotiations can be difficult. If we did not hit speed bumps along the way, you should be concerned. It would mean that we weren't driving down the road. We are driving down that road and continuing to make progress.

BP desires to get these agreements done as soon as possible, but we also recognize that it is essential to ALL parties that these agreements are done well.

BP is committed, just as we have been throughout this process, to working out our remaining issues as quickly and as fairly as possible.

We are encouraged that the project continues to make real, tangible progress, as measured by those key external milestones I mentioned.

BP remains actively engaged to continue progressing the Alaska LNG project, both with the technical work and the associated commercial work.

The project momentum is continuing.

BP looks forward to seeing the project through to its success.

Thank you, Madam Chair.

# *Alaska LNG Project*

## ***ExxonMobil Opening Remarks***

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Joint session of Senate / House Resources Committees – Wednesday, September 9, 2015 in Palmer, Alaska

- Co-Chair Nageak, Co-Chair Talerico and members of the House Resources Committee – Chair Giessel and members of the Senate Resources Committee – for the record, my name is Bill McMahon.
  - AGDC, TransCanada, ExxonMobil, BP, and ConocoPhillips appreciate the opportunity to provide you an update on the progress of the Alaska LNG Project today and we all look forward to answering your questions.
  - After the parties at the table introduce themselves, I will present the package that is before you. We would encourage you to ask questions along the way.
  - [Hand over to AGDC, TransCanada, BP and ConocoPhillips]
- I am a Sr. Commercial Advisor and have more than 33 years of experience with ExxonMobil and have worked on the commercialization of Alaska natural gas since 1992.
  - ExxonMobil, as a lease holder of natural gas resources on the Alaska North Slope (ANS), has diligently undertaken various individual and joint activities to commercialize ANS natural gas
- We are now pursuing the Alaska LNG Project (AKLNG) with the State of Alaska, AGDC, TransCanada, BP and ConocoPhillips.
  - We are following the framework established by the State of Alaska in 2014 that was set out in the AKLNG HoA (January 2014) and SB138 (April 2014),
  - Under this agreed framework, AKLNG has achieved significant project and regulatory milestones, including progress on Pre-FEED activities, receipt of export authorizations for both Free Trade and Non-Free Trade Agreement countries, and submission of environmental filings to the FERC.
  - The Pre-FEED alone, with ExxonMobil as lead party, will cost over \$400 million with ExxonMobil providing about one-third of the funding and two-thirds of the project personnel.
- ExxonMobil has had only two requirements to progress AKLNG into FEED:
  - Agree on a mutually acceptable fiscal contract for predictable and durable terms, and
  - Complete Pre-FEED in accordance with industry best practice of a stage/gate process to define project capital requirements and execution schedule.
- Both of these steps are required to evaluate the Project's commercial and technical viability for all stakeholders – an evaluation that will include an assessment of the FERC process, LNG market confidence and buyer support.

- While we have consistently stated other agreements are not required to progress into FEED, ExxonMobil does recognize that other parties in AKLNG may require that other agreements be completed before they support entering FEED.
  - We have been working with the Administration, BP, ConocoPhillips and the State's representatives – TransCanada and the Alaska Gasline Development Corporation (AGDC) – to reach alignment on the project-enabling fiscal and commercial agreements.
- During recent discussions, the State has proposed a constitutional amendment to establish the basis for fiscal terms. ExxonMobil is supporting the Administration's approach to making these terms durable and predictable, recognizing the public vote would not occur before November 2016.
- While it does not appear that the fiscal and commercial agreements will be completed in time for an October special session, ExxonMobil believes that there are actions the Legislature should consider in October, consistent with the State of Alaska's plan laid out in 2014:
  - Clarification of the State representatives' roles in the project, appropriations of funds and other matters required to enable approval of the 2016 Pre-FEED Work Program & Budget (WP&B); this is an essential matter to allow Pre-FEED work to be completed in 2016.
  - Authorize the ratification vote on a constitutional amendment to enable a predictable / durable fiscal contract. Given the importance of the Fiscal Contract, the Legislature should take the first opportunity to place the matter on the ballot for the November 2016 general election. If there is a delay, the next chance to amend the Alaska Constitution would not be until 2018.
  - Authorize the payment of Property Taxes via a Flow Related Property Tax (FRPT) and a Construction Payment in Lieu of Tax (CPLIT); the specific rates / amounts for AKLNG would be placed in the fiscal contract.
- Work will continue to complete Pre-FEED and finalize the supporting Fiscal and Commercial agreements. In addition, we can continue progressing FEED development work, such as contract development, under the pre-FEED JVA. Once completed, each party would decide if it supports entering the FEED stage – a stage that would require spending of over one billion dollars.
- Legislative action on the project-enabling agreements would be sought consistent with SB 138.
- ExxonMobil believes that the support of all stakeholders, including ANS lease holders, the State of Alaska, and its citizens, is necessary for a successful project.
- Actions of ExxonMobil to progress Pre-FEED, negotiate agreements and secure timely regulatory approvals demonstrate our commitment to advance AKLNG.
- Thank you for the opportunity to testify before you today. I will now go through the presentation package.