Alaska LNG Project

January 29, 2020

ALASKA ** **GASLINE** ** DEVELOPMENT CORP.

Topics



- Why are we here?
- Alaska Gasline Development Corporation (AGDC)
- Alaska LNG Project
 - Overview
 - North Slope Activities
 - West Dock
 - Barge Vessel Activity
- Regulatory Overview
 - NMFS IHA
- Marine Mammal Monitoring & Mitigation Plan
- Barrow Whaling Captains Communications Plan
- Future meetings

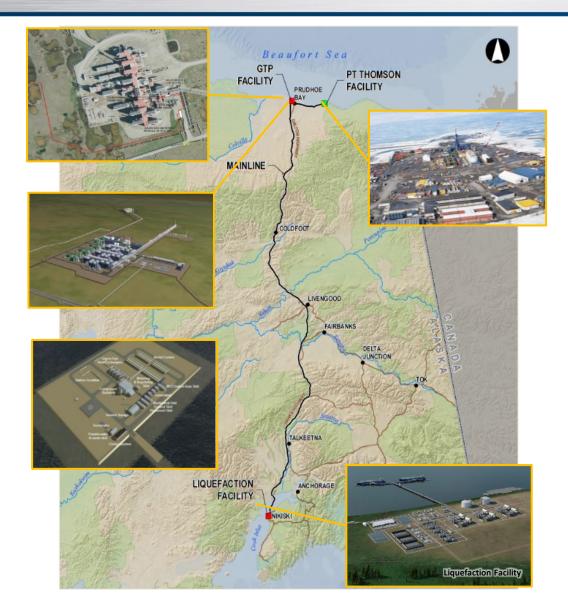


Alaska Gasline Development Corporation (AGDC):

- Independent, public corporation owned by the State of Alaska
- Created by the Alaska State Legislature
- Completed major permitting of the ASAP Project
- Currently lead party for developing the Alaska LNG Project
 - Maximize the benefit of Alaska's vast North Slope natural gas resources through the development of infrastructure necessary to move the gas to local and international markets

Alaska LNG – Project Overview

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Producing Fields

• Anchored by Prudhoe Bay and Point Thomson for 20 years

Gas Treatment Plant

- Located at North Slope
- Remove CO₂ / H₂S; Compress for re-injection
- Footprint: 150-250 acres

Pipeline

- Large diameter: 42" operating at >2,000 psi
- Capacity: 3.3 billion cubic feet per day
- Length: ~800 miles (similar to TAPS)
- Point Thomson Transmission Line (PTTL): 63 miles, 32" pipeline above ground on VSM
- Mainline: ~776 miles 42" pipeline, mostly buried , offshore Cook Inlet Crossing about 28 miles, buried at shore crossings
- 8 compression stations and 1 heater station for temperature control

Liquefaction Plant

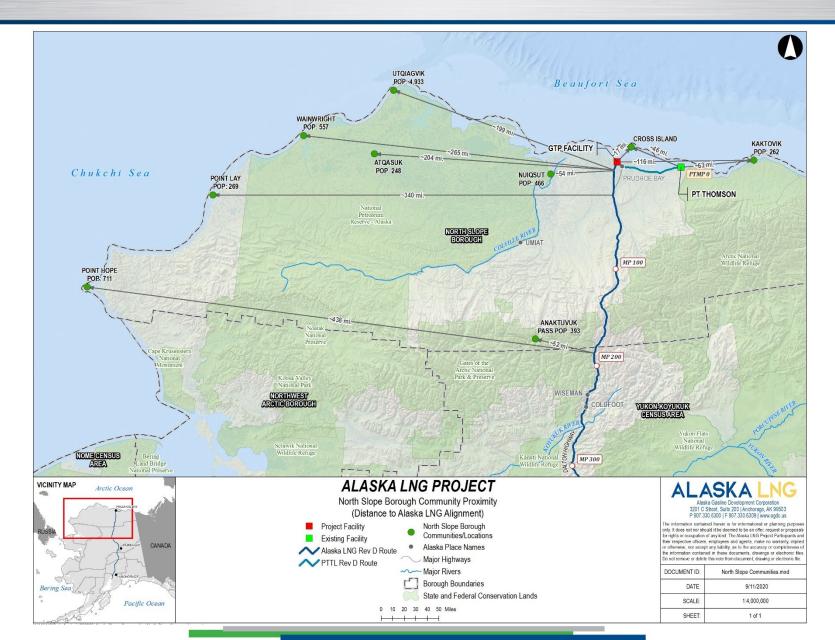
- Capacity: up to 20 MTA
- 3 trains (6.67 MTA/train)
- Footprint: 640-1,000 acres

Storage / Loading

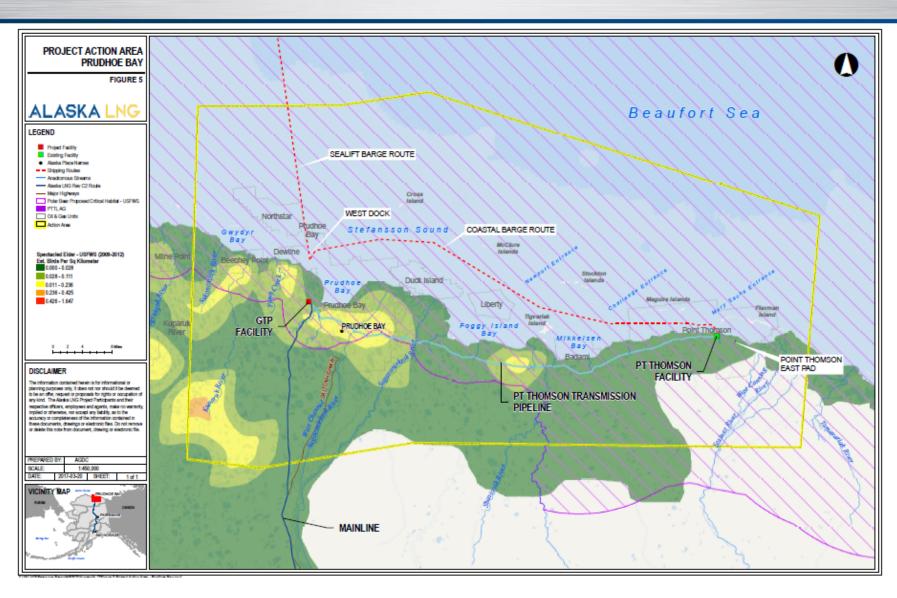
- Terminal: 2 x 240,000 m³ LNG Storage Tanks
- 1 loading jetty with 2 berths; 15-20 tankers per month

Map

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Project Action Area – Prudhoe Bay



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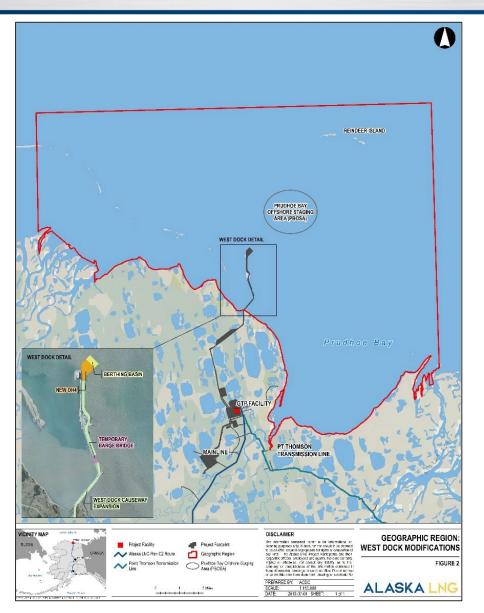
Alaska LNG - North Slope



- GTP is composed of large modules weighing up to 9,400 s/tons to treat Prudhoe Bay gas
- 32" gas pipeline from Point Thomson west to the GTP (PTTL)
- 42" Mainline from GTP south to Brooks Range, Atigun Pass, and south to Cook Inlet
- West Dock causeway requires modification to receive modules
- Requires 12 feet of water depth and use of furthest north portion of West Dock causeway
- Requires bypass of weight-limited causeway bridge, use of ballasted barges as temporary bridge



Geographic Region - West Dock



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- Average of ~10 barges per year for 6 years
 - 2 years of pre-construction deliveries
 - 4 years of module transport
- Tugs and barges stage at Port Clarence awaiting iceout at Utqiagvik, then move to Prudhoe Bay to offload w/ assist tugs
- Some barges offload at Prudhoe Bay, then move to Point Thomson
- Tugs and barges return to Dutch Harbor after offload



- Module Offload Docking and Transport from Causeway
 - Activity Period: Approximately 4 6 years
 - Season: Summer (July September)
 - Location: Adjacent to 650-foot breach

Mitigation

- Barges placed prior to sealift but after migrating cisco passage
- Barge bridge contains openings/gaps for passage of local fish

Regulatory Program Overview

• FERC Natural Gas Act Section 3 application and major federal permit applications submitted in April 2017

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- Primary objective is to de-risk the Project and improve economic viability
- FERC issued the FEIS on schedule March 6, 2020
- FERC Order issued May 21, 2020 allows for construction of Project
- Prudhoe Bay IHA application pending NMFS approval
 - Plan of Cooperation
 - Communications Plan
- DOE Export License issued
- Major federal and State of Alaska permits either in hand or pending issuance





- Prior to construction, AGDC shall file with FERC, for the review and written approval, the *Project Local Subsistence Implementation Plan* prepared in coordination with NMFS and AEWC (FERC Order, page 69 #199)
- Prior to construction, AGDC shall file with FERC, a signed Conflict Avoidance Agreement prepared in coordination with NMFS and the AEWC (FERC Order, page 69 # 199)

Monitoring & Mitigation Plan

- NMFA issued an IHA in December 2020
- Activities for which an IHA is required:
 - Causeway Widening
 - Dock Head 4 Construction
 - Barge Bridge and Abutments
 - Sealift
- Specific objectives:
 - Complete work safely and efficiently while avoiding and minimizing impacts to marine mammals
 - Data collection of sightings including location, species, numbers, behavior, environmental conditions
 - Clear chain of command and communication
 - Preventative Shutdown Zone for all marine mammals
- Project to employ experienced, trained Protected Species Observers during in-water activities
 - PSO's have the ability to stop activity

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• Lisa to add highlights

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- Establish a Local Subsistence Implementation Committee
 - Meet on a regular basis
 - Provide project updates and information
 - Identify community issues and concerns
 - Work to resolve issues, if any, in a mutually satisfactory manner
- Avoid and minimize impacts on subsistence whaling and marine mammal hunting by coordination with individual whaling associations
 - In conjunction with the Barrow Whaling Commission develop a Communications Plan
- Employ community representatives to alert the project on planned subsistence activities and places to avoid



- **Develop** Conflict Avoidance Agreement with AEWC
- Prepare Project Local Subsistence Implementation Plan
 Completed in coordination with AEWC and NMFS
- Project Transit Management Plan
- Vessel Strick Avoidance Measures

Barrow Whaling Captains Communications Plan

- Identify the most effective way to engage and communicate activities during annual sealifts and construction
 - Annual meetings throughout Project construction in January of each year
 - Email and phone numbers for community & organizational contacts
 - Dedicated Web Site
 - Project hotline
 - Dedicated radio channel to communicate activities and locations during whaling season
- Post season community meetings after the end of whaling season
 - What worked
 - What needs improvement
- Other suggestions

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Future Meetings



- How often do you want to meet and receive project updates?
- When is the best time of year to meet?

Thank You

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Vessel Activity



