Review: ISLAND CONSTRUCTION

9.3 ACRE GRAVEL PAD

SUBSEA PIPELINE

MODELED AFTER NORTHSTAR
Review: PROVEN TECHNOLOGY

OOOGURUK ISLAND
- Operated by: Caelus
- Constructed in 2007
- Island Surface: 6 acres
- Water Depth: 4.5 feet
- Subsea Pipeline: 5.7 miles

NIKAITCHUQ ISLAND
- Operated by: ENI Petroleum
- Constructed in 2010
- Island Surface: 11 acres
- Water Depth: 8 feet
- Subsea Pipeline: 3.8 miles

NORTHSTAR ISLAND
- Operated by: Hilcorp
- Constructed in 2000
- Island Surface: 7 acres
- Water Depth: 40 feet
- Subsea Pipeline: 6 miles

ENDICOTT
- Operated by: Hilcorp
- Constructed in 1987
- Island/CW Surface: 45 acres
- Water Depth: 4 – 10 feet
- Subsea Pipeline: none

LIBERTY ISLAND
- Operated by: Hilcorp
- Construction: 2020 (tbd)
- Island Surface: 9.3 acres
- Water Depth: 19 feet
- Subsea Pipeline: 5.6 miles
Review: LOCATION

15 MI. EAST OF PRUDHOE BAY
6 MI. OFFSHORE
19 FEET OF WATER
0 CS LEASES
LARGEST PROVEN LIGHT OIL RESERVOIR ON THE NORTH SLOPE

≈60,000 BARRELS/DAY PEAK PRODUCTION

80-130 MILLION BARRELS RECOVERABLE OIL

15-20 YEARS OF OPERATION
Review: PROJECT BENEFITS

GOOD-PAYING JOBS FOR ALASKA
- 200 construction jobs
- 60-80 drilling jobs
- Full-time operations jobs for 20+ years

$1 BILLION+ IN NEW INVESTMENT

60,000 BBL/DAY OF LIGHT OIL TO TAPS

LOCAL TAX REVENUES FOR NSB ROYALTY REVENUES FOR THE STATE

NEW BUSINESS FOR ALASKA’S SUPPORT INDUSTRY

NEW REVENUE & PRODUCTION FOR AMERICA
FINAL ENVIRONMENTAL IMPACT STATEMENT (EIS) PUBLISHED AUGUST 31, 2018

RECORD OF DECISION EXPECTED BEFORE NOVEMBER 1, 2018
THE “PREFERRED” PROJECT DESCRIPTION WAS ADOPTED

1. Island is optimally located
   - Minimize drilling risks
   - Minimize impacts to boulder patch
   - Results in simple, proven design

2. Imposes seasonal drilling restrictions

3. Ensures environmental protection

4. Design is based on other offshore installations on the slope
WHERE ARE WE TODAY? PERMITTING

FEDERAL
- EPA National Pollutant Discharge Elimination System: Fall 2018
- US Army Corps of Engineers Section 404: Q1 2019
- National Marine Fisheries Service Petition for Incidental Take Regulations: In progress, on target for project start
- Pipeline and Hazardous Materials Safety Administration Special Permit: Q4 2018
- Bureau of Safety and Environmental Enforcement Oil Spill Response Plan: In progress

STATE & LOCAL
- Finalizing Department of Natural Resources Mine Site application for submittal this year
- State Pipeline Coordinator Service Right of Way Lease: In progress
- North Slope Borough Rezoning: Ongoing coordination meetings with Planning and Wildlife: Will submit application after Record of Decision is published

PERMITTING ACTIVITIES WILL CONTINUE INTO 2019
WHERE ARE WE TODAY? FACILITY DESIGN

TRUCKABLE COMPONENTS

- Utilizes off-the-shelf sizing, proven designs
- Leverages vendor knowledge and expertise
- Employs common engineering designs
- Reduces excess structural steel
- Much less expensive than single train modules
- 14’x14’x80’ - 160,000 lbs. shipping limits
WHERE ARE WE TODAY? PIPELINE DESIGN

SUBSEA to ONSHORE PIPELINE
- 5.6 miles subsea line to shore
- Bundled Pipe in Pipe
  - 16” steel pipe, 12” steel sales oil, 4” utility, 1” armored fiber optic
- 3 Phase Leak Detection System

DESIGN CONSIDERATIONS
- Upheaval Buckling
- Strudel Scour
- Ice Keel
- Thaw settlement
- Cathodic protection
WHERE ARE WE TODAY? DRILLING PLANS

DRILLING
- Exploring “new build” vs. existing rig
- Refurbish and move Rig 428 as relief rig
- 5-7 Producer Wells
- 3-5 Injector Wells
- 1-2 Disposal wells
LIBERTY PROJECT

THANK YOU
Resource development has been an economic foundation for communities throughout Alaska and should be allowed to continue.

Email BOEM before October 1, 2018

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