Bay du Nord Framework Agreement

Technical Briefing
Department of Natural Resources
July 2018
Outline

- Project Overview
- Fiscal and Equity Terms
- NL Benefits
- Next Steps
• Location
  • Flemish Pass basin
  • 500 km from shore
  • Approx. 1200 metres water depth
Project Overview

• Highlights
  • Deepwater FPSO development
  • Owners: 65% Equinor / 35% Husky
    • Nalcor O&G to acquire 10%
  • Estimated $10.9 billion in capital and operating costs over the next 20 years
  • 300 MMbbls reserves
    • Bay du Nord SDL 1055
    • Baccalieu SDD
  • Project sanction anticipated in 2020
  • First oil expected in 2025
Project Overview

• ‘Fit-for-field’ solution
  • Lower tonnage FPSO based on existing design
  • Lean subsea layout
  • Higher cost operating environment (far offshore, deepwater)
• NL must compete for E&P investment with other jurisdictions
  • Fiscal certainty
  • Competitive bid environment
  • Minimize execution risk (cost and schedule)
Why is this project important to NL?
- Aligns with Advance 2030 – The Way Forward on oil and gas
- Opens up a new basin in terms of production
- Demonstrates remote deepwater fields can be developed offshore NL
- Expected to lead to increased exploration opportunities
- Significant drilling and completions work prior to first oil
- New employment opportunities during the engineering, development and operations phases
- A focus on enhancing subsea engineering and fabrication capabilities
- Life-of-field commitments to NL benefits and reporting
- Increased revenues to government(s)
- Significant upside with higher prices and recoverable reserves (additional subsea tiebacks)
Fiscal and Equity Terms

• First project under Generic Oil Royalty Regulations (GORR)

• 10% equity in Bay Du Nord and Baccalieu
  • $89.4 million to be paid to the proponents for costs incurred to December 31, 2017

• Estimated $3.5 B in direct revenues to NL Government
  • Includes royalties, CIT and revenue from equity
• Expenditures
  • Total life-of-field expenditures are estimated at $10.9 billion
  • Pre-development and development phase expenditures are estimated at $6.8 billion, with $3.4 billion to be spent in the Province
  • Total operations phase expenditures are estimated at $4.1 billion, substantially all of which to be spent in the Province
• Employment
  • Estimated in-province employment of 22.3 million person hours life-of-field (11,000 person years/84% of total project employment)
    • 4 million person hours in pre-development and development phases, including 1.7 million person hours of engineering, project management and procurement work
      • At least 90% of project management in-province, not less than 320,000 person hours
      • At least 90% of procurement management in-province, not less than 280,000 person hours
      • At least 51% of pre-development and development engineering in-province, not less than 1.1 million person hours, with a focus on subsea engineering
    • 5.2 million person hours for drilling and completions
      • At least 90% of engineering and execution of drilling and completions in-province
    • 1.1 million person hours for Baccalieu subsea tieback
    • 12 million person hours for operations (substantially all onshore and offshore operations phase employment), including engineering, maintenance, logistics, R&D and support functions
• Fabrication
  • In-province fabrication of 5,000 metric tonnes within a competitive bid framework
    • 4,600 metric tonnes is related to Bay du Nord
    • 400 MT is conditional on Baccalieu subsea tieback
  • Fabrication of the hull, turret, flowlines, umbilicals, and other components will be international
  • New NL fabrication capabilities
    • Multi-million dollar investment in a large-scale steel roller to be used to manufacture suction anchors for moorings
    • Applicable to future subsea tiebacks, global work, etc.
NL Benefits

- Life-of-field ‘Gender Equity and Diversity Program’

- Establish an Integrated Operations Centre
  - Up to 50 positions in operations, engineering, maintenance, logistics, HSE, IT and other support personnel
  - High-speed data transmission to shore is expected to create digital innovation opportunities

- Supply and Service Opportunities Forum
  - Dedicated resources to identify business opportunities and foster operator-supplier collaboration and global competitiveness

- Invest a minimum $75 M over 10 years in R&D and E&T to position NL as a deepwater centre of excellence
  - Focus on subsea technology, digitalization, renewable energy solutions and ocean innovation
Next Steps

- Finalize Acquisition and Benefits Agreements with the Government of NL
- C-NLOPB Development Plan application and approval
- CEAA submission and approval
- Project sanction decision anticipated in 2020