Overview of the C-NLOPB and the Can-NL Offshore Oil and Gas Industry

Sean Kelly MA, APR, FCPRS
May 15, 2017
Safety Moment - Working in the harshest environment in the world demands the highest regard for safety

Everything we do at the C-NLOPB is seen through the lens of the Ocean Ranger, the Universal Helicopter crash of 1985 and Cougar 491

Ocean Ranger, 1982
84 lost lives

Universal Crash, 1985
6 lives lost

Cougar 491, 2009
17 lost lives

Terra Nova spill, 2004
1000 barrels of crude

Cougar Near Miss, 2011, descent halted 38 ft from water

Collision, 2011
Maersk Detector and GSF Grand Banks

Hibernia spill, 2013
6000 litres from the offloading facility

Person Overboard, 2015
West Hercules
Expert Capabilities

85 employees, includes technical expertise:

- Safety Officers
- Environmental Compliance Officers
- Environmental Assessment Officer
- Reservoir Engineers
- Certification Engineers
- Well Operations Engineers
- Industrial Benefits Engineers
- Reservoir Geologists
- Exploration Geologists
- Operations Geologist
- Development Geologist
- Exploration Geophysicists
- Petrophysics Specialist
- Petroleum Technologists
- Measurement Analysts

And other professionals:

- Lawyers, Public Relations, Human Resources, Information Technology, Information Management, Industrial Benefits and Accounting
Offshore Activities

Hibernia

Terra Nova

White Rose/North Amethyst

Hebron
Production in 2017

Sub-sea Expansion

Seismic

Exploration Drilling
Canada-Newfoundland and Labrador Offshore Area

29 Exploration Licences (ELs)

51 Significant Discovery Licences (SDLs)

12 Production Licences (PLs)

Increased activity beyond 200 miles
Drilling and Production

- Over 430 wells have been spudded since 1966, including over 35 in deep water (>500 metres)
- To date, over 1.7 billion barrels have been produced from 4 projects: Hibernia, Terra Nova, White Rose and North Amethyst
- Production in 2016: 76.7 million barrels
- Hebron to start producing in late 2017
The Regulatory Framework and Compliance Instruments

- Legislation – *Atlantic Accord Acts, CEAA*
- Regulations
- Guidance
- Codes of Practice
- Authorizations and Approvals
- Certifying Authorities
Operations Authorization (OA) Requirements

- Safety Plan
- Environmental Assessment
- Environmental Protection Plan
- Contingency Plans
  - Emergency Response Plans
  - Oil Spill Response Plan
  - Ice Management
  - Relief Wells
- Certificate of Fitness
- Operator’s Declaration of Fitness
- Letter of Compliance
- Financial Requirements
- Benefits Plan
Offshore Safety - Our Highest Priority

Safety Plans, Monitoring and Compliance

• Operators must have a Safety Plan

• Oversight activities include audits and inspections and reviews of:
  • Operators’ daily reports;
  • Incident reports;
  • Complaints;
  • Joint Occupational Health and Safety Committee meeting minutes
Safer Offshore Helicopter Transportation

Highlights of Safety Improvements Since Cougar 491

• A dedicated SAR service is in place with wheels up time of 15-20 minutes

• A First Response Dispatch Protocol is in place as is a formal protocol between DND and Cougar

• Offshore workers have greater access to information about flight safety

• New passenger transportation suits

• Safety forums and safety conferences

• New HUET and HUEBA facilities
# Offshore Helicopter Safety Inquiry Recommendations

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* March 10 2016

**Legend:**
- Not started
- In progress
- Continuous/No designated end point
- Completed
- Not applicable
- Action plan developed by the Operators
Safer Drilling in Deep Water

Highlights of Improvements

• A dedicated regulatory oversight team

• Timely submittal of daily reports, seven days a week

• Bi-weekly meetings with the Operator

• Increased frequency of audits and inspections

• Placing C-NLOPB technical experts onboard the offshore drilling installation from time to time to observe specific operations

• Scrutinizing reports received from Operators respecting the testing of both primary and backup BOP control systems
Strategic Environmental Assessments (SEAs)

- An SEA provides an overview of the biophysical and socio-economic environment, including potential environmental sensitivities and is principally conducted in support of the C-NLOPB rights issuance process.

- Call for Bids issued in that region will not close for a minimum of 120 days after the completion of an SEA or SEA Update.

- The C-NLOPB released the *Western Newfoundland and Labrador SEA Update* in May 2014 and the *Eastern Newfoundland SEA* in August 2014.

- No activity can take place without a project-specific Environmental Assessment.
Oil Spill Prevention and Response

• C-NLOPB is lead government agency for oil spill response respecting drilling and production installations on site

• Federal and provincial agencies with environmental emergency related responsibilities provide advice

• Operators are responsible for emergency response. Requirements for Operators include:
  • Report all spills to C-NLOPB
  • Contingency plans
  • Annual field countermeasures exercise
  • Take “all reasonable measures” to respond to and mitigate spill including subsea well intervention and relief well drilling where necessary
  • Financial responsibility for all “actual loss or damage” resulting from spill or debris

• C-NLOPB Chief Conservation Officer has authority to intervene in response
Exploration and Scheduled Land Tenure System

The land tenure system introduced in December 2013 extends the prospect assessment period between the request for nominations and the close of the Call for Bids.

Categories
- **Low Activity regions** - few exploratory wells and limited seismic data acquisition.
- **High Activity regions** typically have elevated exploration activity levels including 2D and 3D seismic data acquisition and exploration drilling.
- **Mature region** would have substantial 2D and 3D seismic data coverage extensive exploration/delineation drilling and production activities.

Time Cycles
- **Four-year cycle** for Low Activity category.
- **Two-year cycle** for High Activity category.
- **One-year cycle** for the Mature category.
- **One-year cycle** for any lands not publically announced in the scheduled system.
Anticipated 2017 Exploration Activity

Geophysical Programs

2D Seismic Data Acquisition
• 2 programs Eastern Newfoundland
• 1 program Labrador
• 1 program Southern Grand Banks

3D Seismic Data Acquisition
• 3 programs Eastern Newfoundland
• 1 program Labrador

Electromagnetic Programs
• 1 program Eastern Newfoundland
• 1 program Gulf of St. Lawrence
Development Plan

A Development Plan and a Can-NL Benefits Plan is required for all projects prior to start up. The Development Plan is a Fundamental Decision and requires government approval. The Benefits Plan is approved by the Board.
Benefits Plan

A Benefits Plan is a plan for the employment of Canadians and, in particular members of the labor force of the province; and for providing manufacturers, consultants, contractors, and service companies in the province and other parts of Canada with a full and fair opportunity to participate on a competitive basis in the supply of goods and services

• Corporation must establish an office in the Province

• First consideration for goods and services provided from within the Province (where competitive)

• NL residents given first consideration for training and employment

• Expenditures for R&D and E&T to be carried out in the Province

• Designated individuals or groups are to have access to training and employment opportunities
Benefits Agreement

• A Benefits Agreement is between the **Provincial Government and an Operator**. It commits the Operator to undertake specific work in the province. Examples include:

**West White Rose Extension Project:**
• Graving Dock and Gates
• Concrete Gravity Structure
• Other Fabricated Items

**Hebron:**
• Construction of the Gravity Based Structure

• The Board has agreed to monitor Benefits Agreements on behalf of the Province
WEBSITE: CNLOPB.CA

TWITTER: @CNLOPB

YOU TUBE: C-NLOPB CHANNEL

EMAIL: INFORMATION@CNLOPB.CA