

# Nalcor Energy

# Muskrat Falls Project Update

December 10, 2013

Boundless Energy



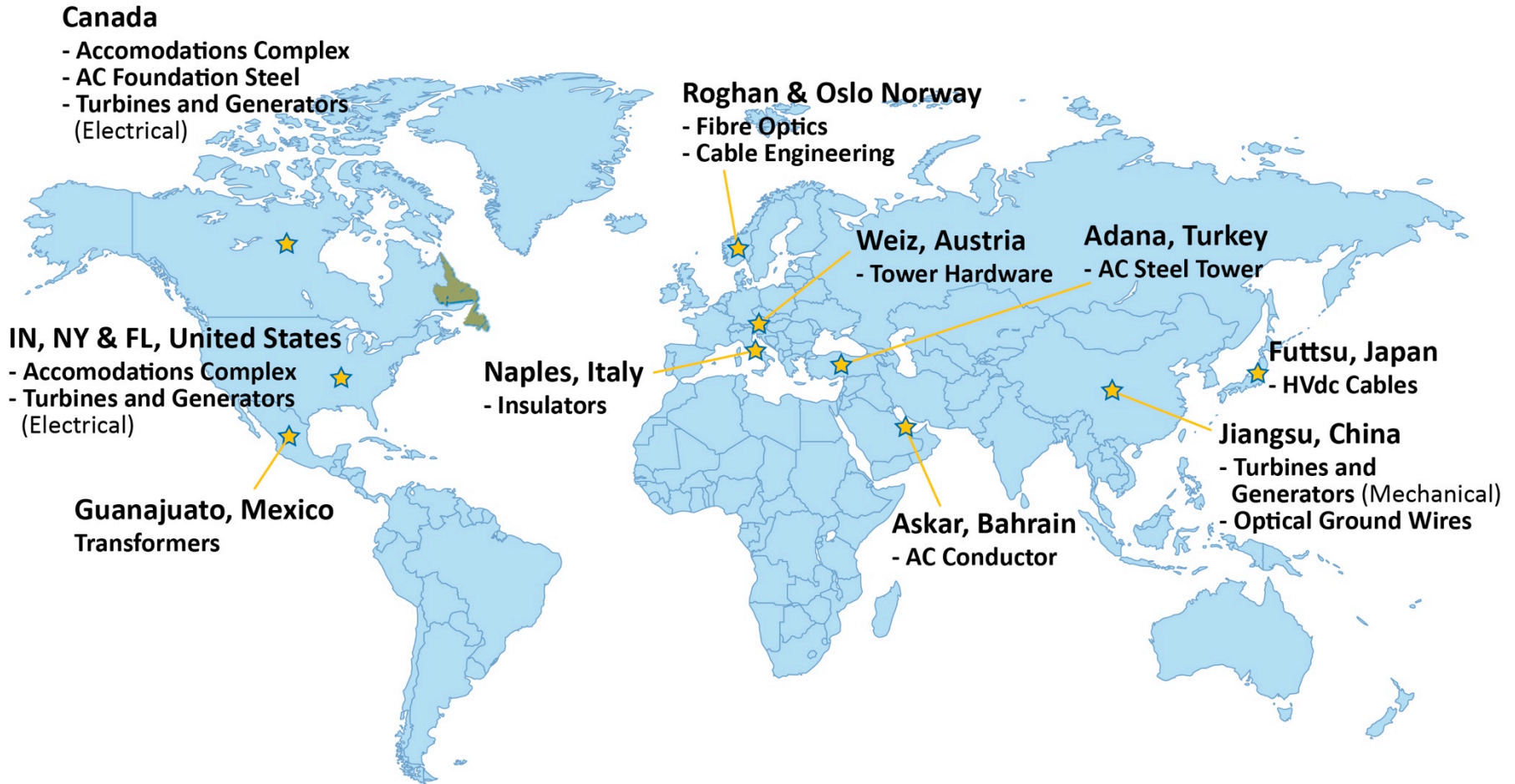
Take a  
**MOMENT**  
for Safety

# Muskrat Falls Project

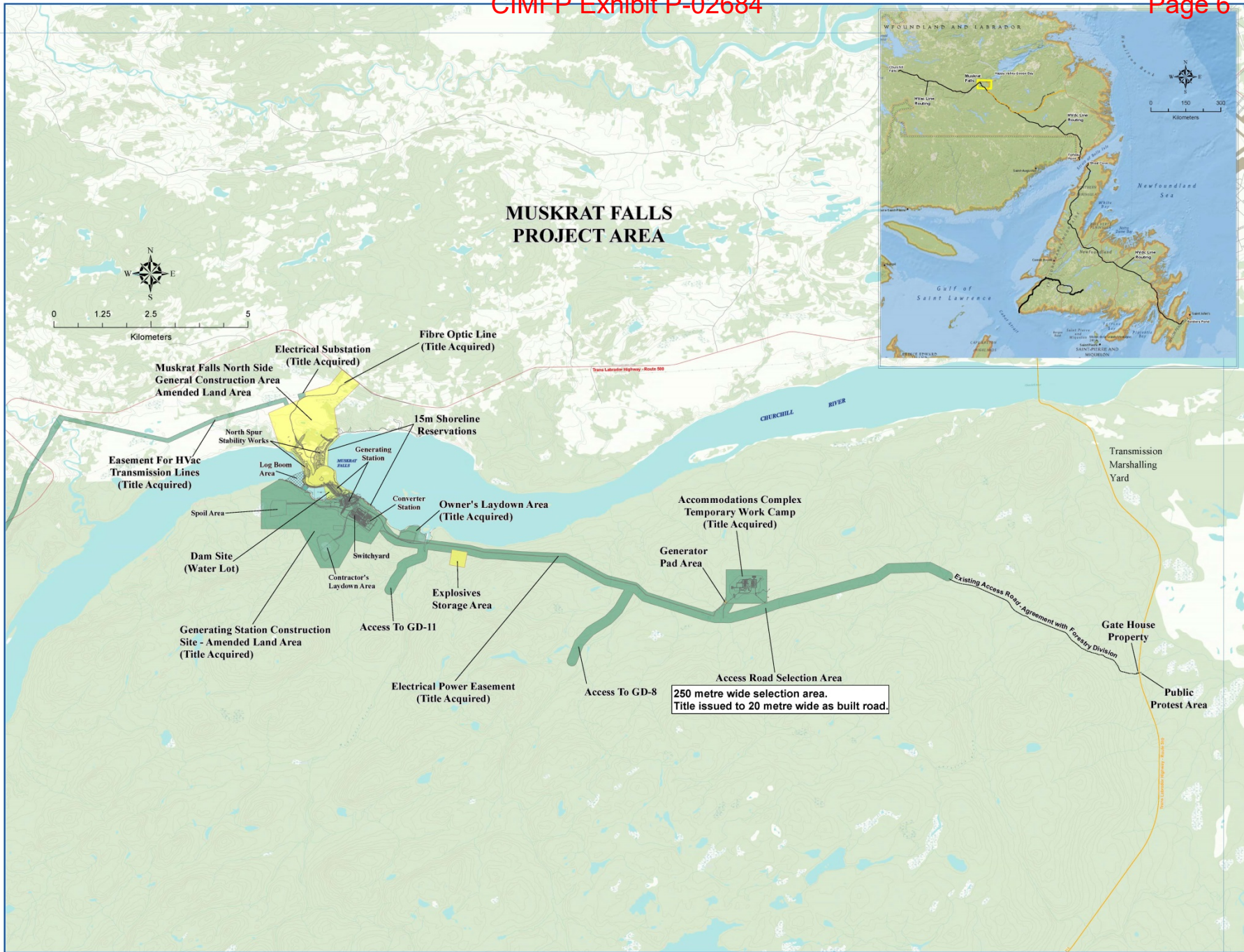


- Muskrat Falls Generation**
  - 824 MW hydroelectric facility; 4.9 TWh/yr
- Labrador-Island Transmission Link**
  - 900 MW capacity
  - Muskrat Falls to Soldiers Pond near Holyrood
  - 1,100 km, including 35 km across the Strait of Belle Isle
- Maritime Transmission Link**
  - 500 MW capacity
  - Includes 180 km undersea link from Cape Ray, NL to Cape Breton, NS

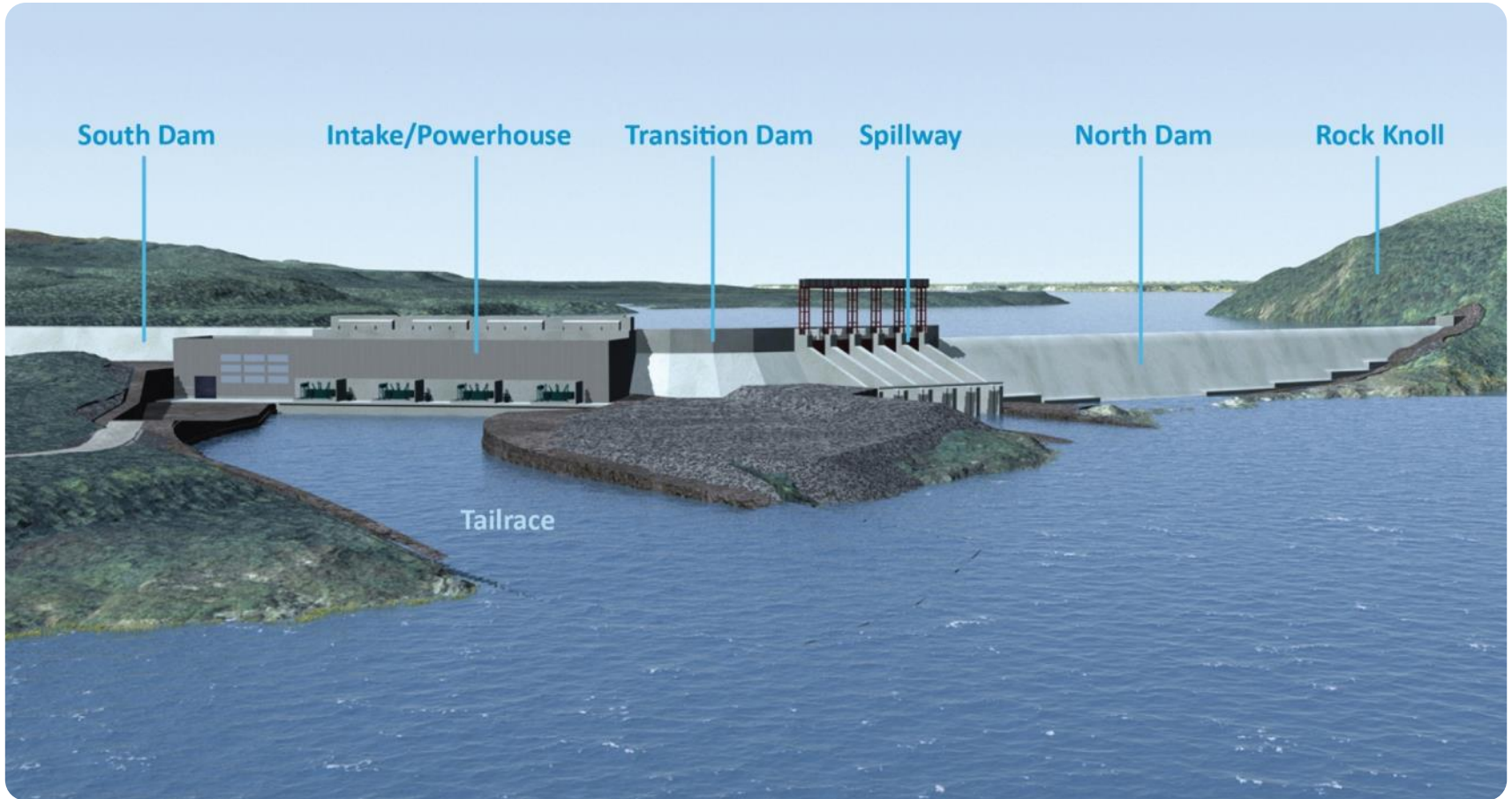
# LCP Global Reach



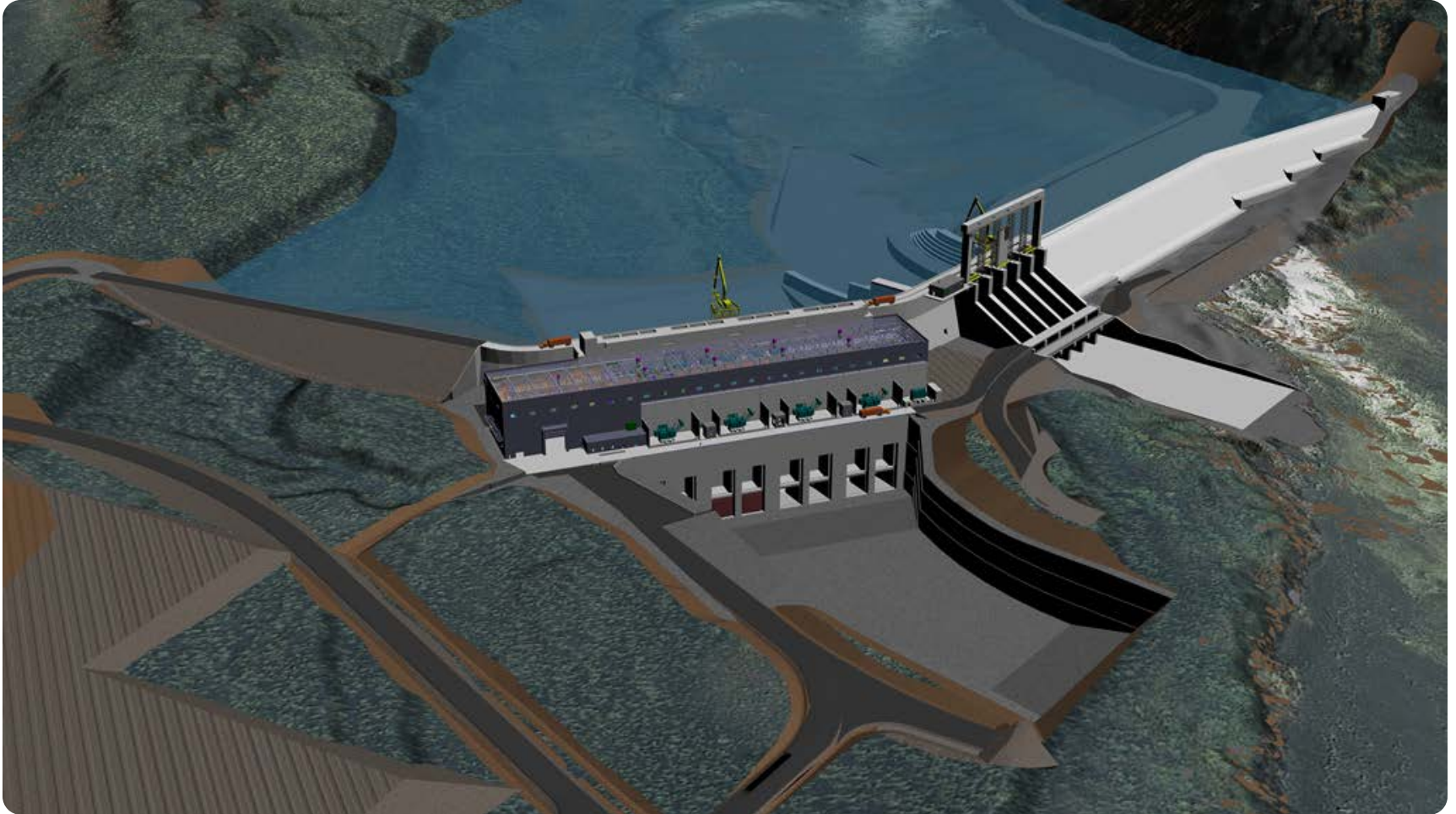
# Muskrat Falls Generating Facility



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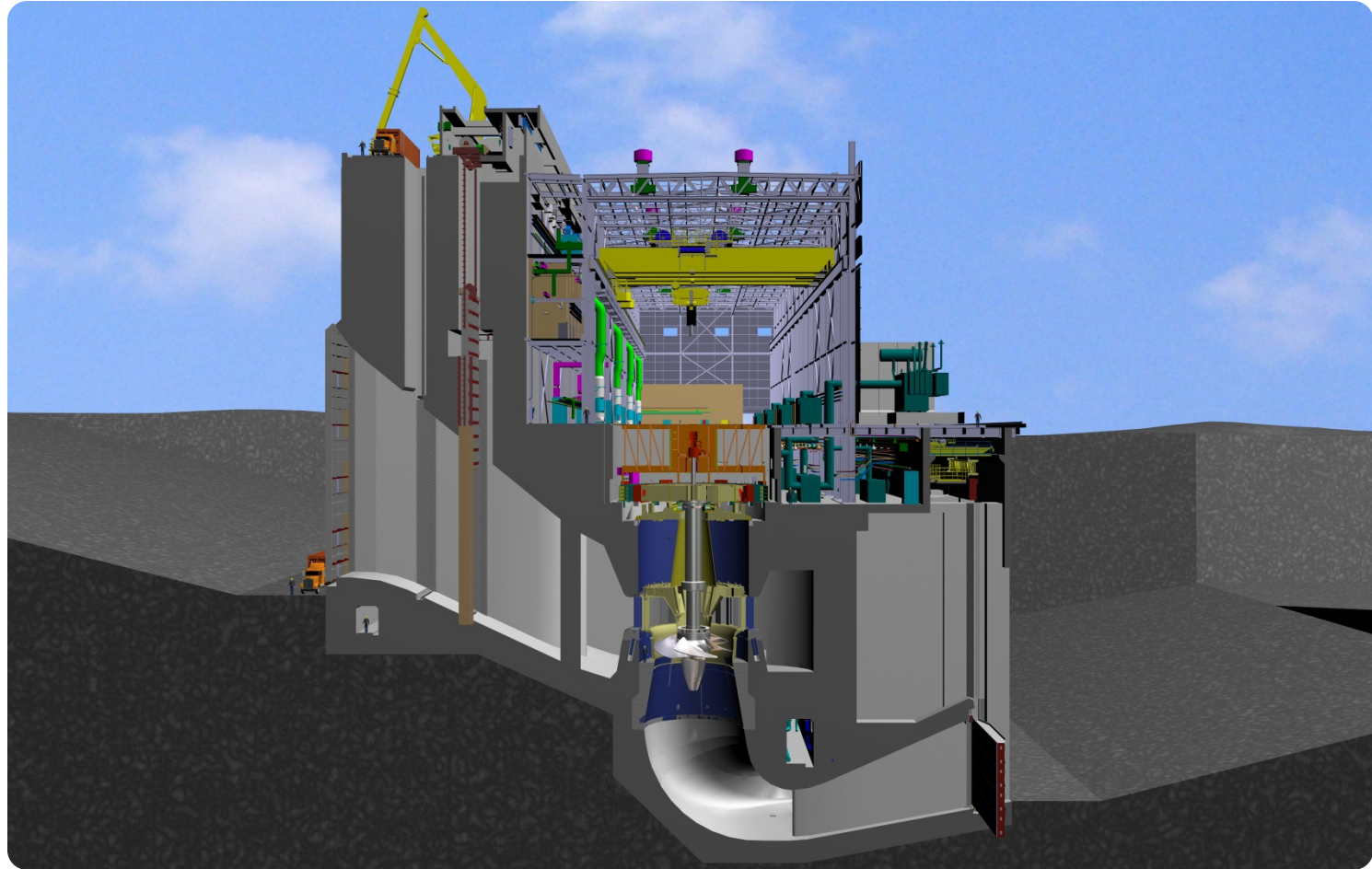


# Muskrat Falls Generating Facility





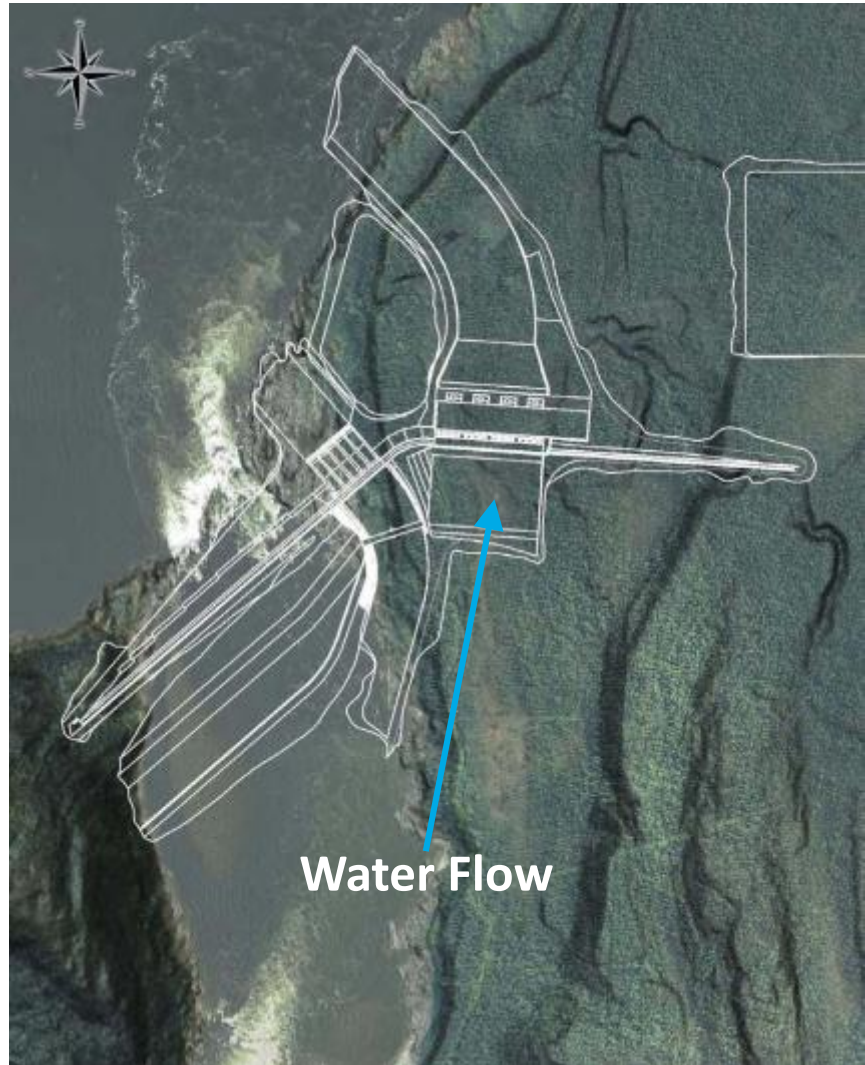
# Powerhouse Cross Section



# Muskrat Fall Generating Facility



# Muskrat Falls Plant Orientation



Water Flow

# Temporary Camp



# Permanent Camp Installation



# Muskrat Falls – Switchyard & Converter Earthworks (Site Grading)

# MF Laydown Area Expansion



# Powerhouse Excavation September 2013





# Powerhouse Excavation Area September 2013



# Riverside Cofferdam (September)



# Spillway Excavation (September)



# Spillway (Cofferdam) (September)



# Intake for Powerhouse (September)



# Riverside Cofferdam (November)



# Powerhouse (November)



# Powerhouse/Spillway Area (Nov)

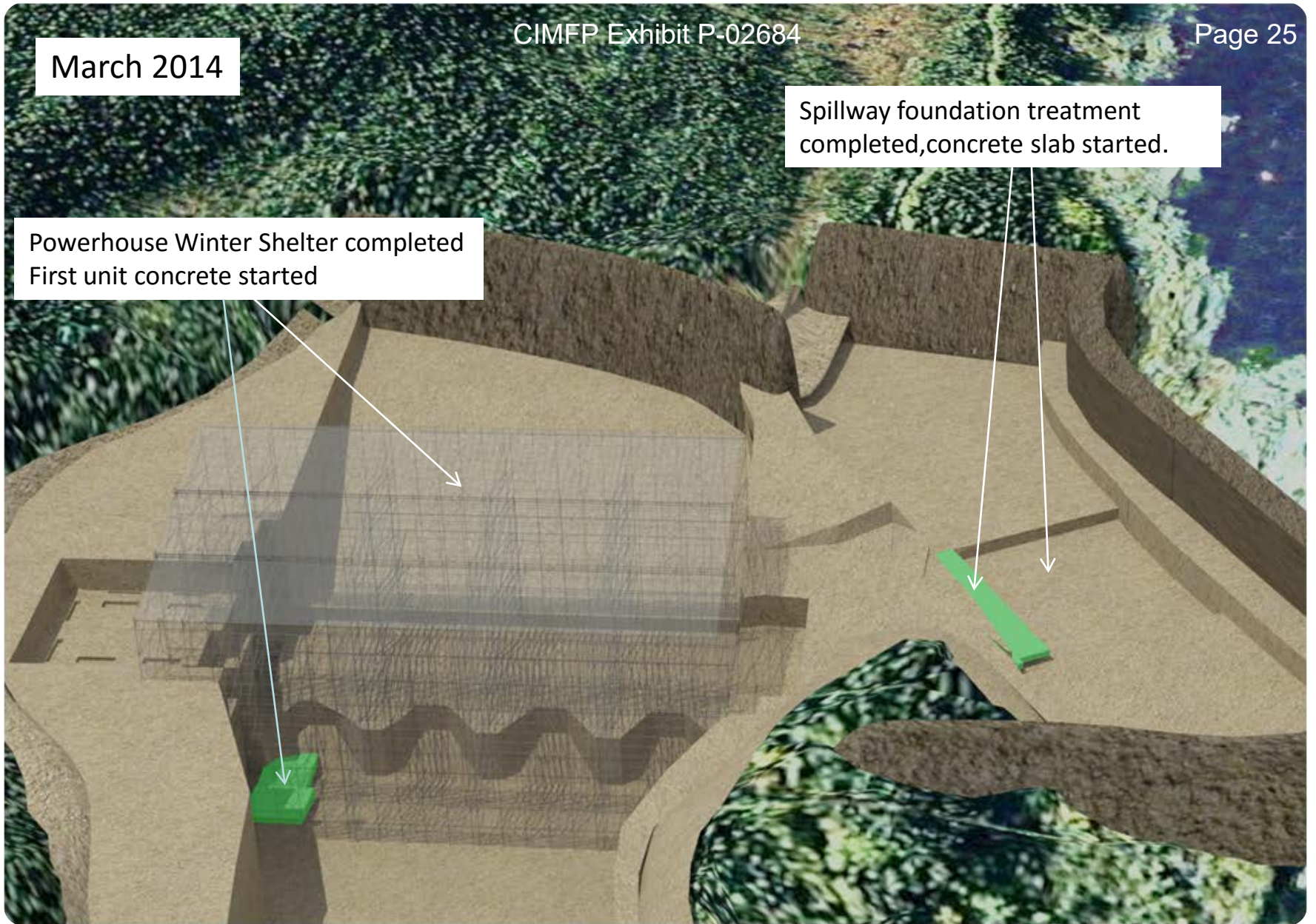




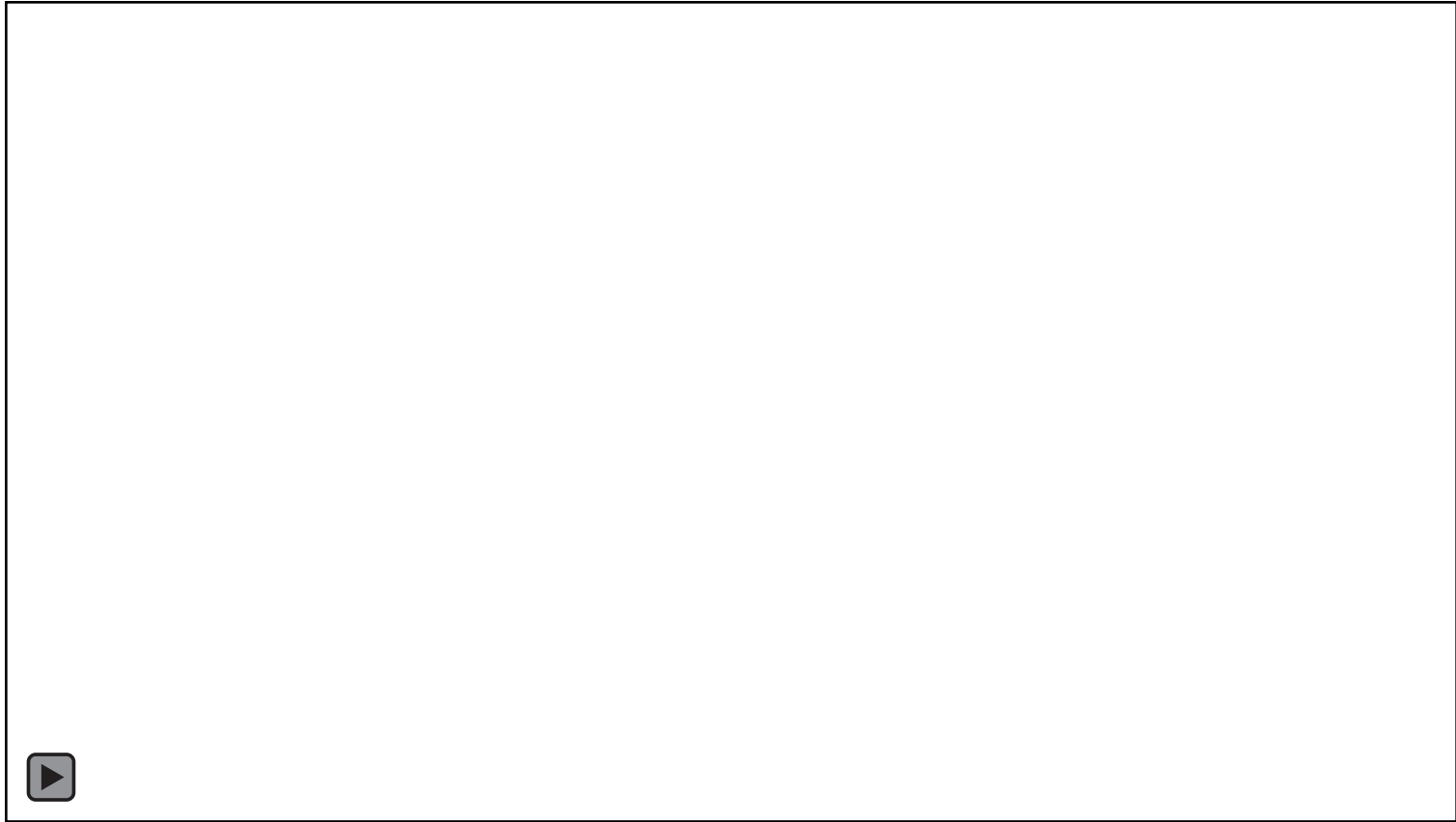
March 2014

Spillway foundation treatment completed, concrete slab started.

Powerhouse Winter Shelter completed  
First unit concrete started



# Muskrat Falls Site (Video)



# Labrador-Island Link

# Labrador-Island Link

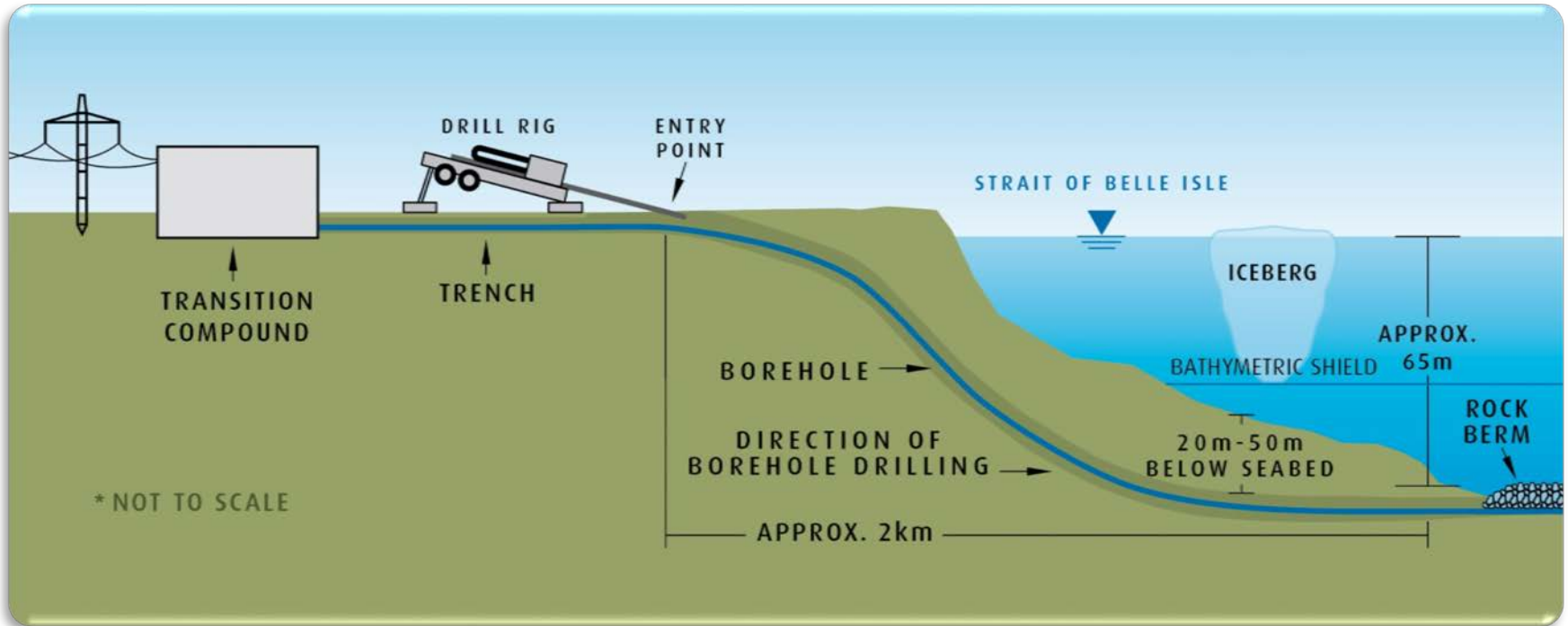


# Strait of Belle Isle

# Strait of Belle Isle Cable Crossing



# Horizontal Directional Drilling



# HDD Drill Rig





# Labrador Transmission Assets

# Right-of-Way Clearing (AC line)



# AC Tower



# Churchill Falls Switchyard



# Churchill Falls Camp Accommodations



# Reservoir Clearing



# Transmission Marshalling Yard



# Newfoundland and Labrador Benefits



# Project Benefits

<b>Newfoundland and Labrador</b>	<b>Phase One</b>
Direct employment in province (person-years) <sup>1</sup>	9,100
Direct employment occurring in Labrador (person-years) <sup>1</sup>	5,800
Total employment (direct, indirect, induced) (person-years) <sup>1</sup>	23,300
Total income to labour and business	\$1.9 billion
Total income to labour and business in Labrador	\$500 million
Average income benefits per year	\$320 million
Taxes to provincial government	\$290 million

# Employment (September 2013)

- 1,682 people working on MF Project
- Of those:
  - 76% (1,273) were NL residents
  - 1,122 people working in Labrador
  - 462 were Lab. residents; 207 are members of Lab. Aboriginal groups
  - Employment of Lab. residents rose 19% over Aug; employment from Lab. Aboriginal groups grew 11%

# Expenditures (September 2013)

- Total expenditures for the Muskrat Falls Project were about \$40M.
  - over \$17M to NL businesses (43% of all project expenditures for Sept)
  - Almost \$4.9M of NL expenditures were spent with Labrador companies

# Expenditures (Jan-Sept 2013)

- Between Jan 2013 and Sept 2013, over \$275M has been spent in the province:
  - \$154.4M in the province
  - \$82.6 in Newfoundland
  - \$71.8M in Labrador
- Next monthly benefits report available around Dec. 15.