Date: 8/9/2011 8:24:36 PM From: "Bown, Charles W." To: "Skinner, Shawn" Subject: presentation

Attachment: cabinet draft deck Aug 9 430.pptx;

The LCP presentation is attached; speaking notes are available on some of the slides

# Lower Churchill/Muskrat Falls

Presentation to Cabinet August 10, 2011





# **Safety Moment**





# **Today's Presentation**

- Project Overview and Rationale
- Schedule & Status Update
- Project Benefits



# **Project Overview and Rationale**



# Lower Churchill Hydroelectric Generation Project

A dam and powerhouse at Gull Island





2250 MW/ 12 TW-h/yr Reservoir length – 232 km Flood area – 85 sq km

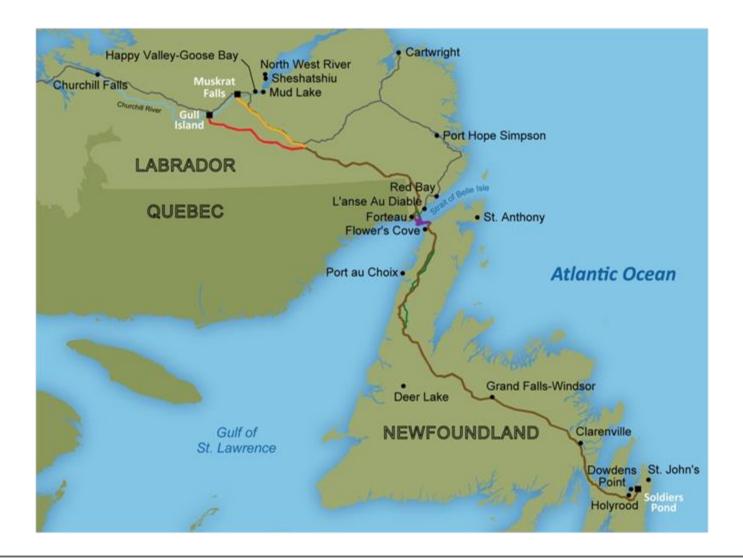


824 MW/ 5 TW-h/yr Reservoir length - 60 km Flood area – 41 sq km

• Interconnecting Transmission Lines between Muskrat Falls, Gull Island, and Churchill Falls



## **Labrador – Island Transmission Link**





#### Phase 1 – Muskrat Falls, Labrador CIMFP Exhibit P-00917 Page 8 **Island Link and Maritime Link Muskrat Falls Generation** 824 Megawatt hydro-electric facility • Two dams, one powerhouse • 60 km reservoir LABRADOR Construction start 2011; in-service late 2016 Construction cost \$2.9 billion • Ownership 100% Nalcor NEWFOUNDLAND **Labrador-Island Transmission Link** St. John's • 900 MW capacity **Soldiers** Pond · Muskrat Falls to St. John's area Brook • 1,100 km, including 30 km under Strait of Belle Isle · Construction start 2012; in-service late 2016 Cape Ray **Maritime Transmission Link** Construction cost \$2.1 billion 500 MW capacity Ownership 71% Nalcor, 29% Emera Includes 180 km undersea link from Cape Ray NL P.E.I. to Cape Breton NS Construction start 2013; in-service late 2016 Construction cost \$1.2 billion • Ownership 100% Emera **ONTARIO** Labrador - Island Transmission Link **Maritime Transmission Link Existing AC Transmission Lines** NH AC Transmission - Muskrat Falls to Churchill Falls Proposed Expansion of NS - NB Interconnect **NEW YORK** Subsea component of link



# Schedule & Status Update



### **Decision Gate Process**

Approval to Proceed with Concept Selection

Gate

Approval of Development Scenario and to Commence Detailed Design

> Gate 2

Project Sanction

Gate 3

Approval to
Commence First
Power Generation

Gate 4 Approval to
Commence
Decommissioning

Gate 5

#### Phase 1

Opportunity
Identification
and Initial
Evaluation

#### Phase 2

Generate and Select Alternatives

#### Phase 3

Engineering and Procurement/ Contracting

#### Phase 4

Engineering,
Procurement,
Construction and
Commissioning

#### Phase 5

Start-up and Operate

#### Phase 6

Decommissioning

Project Identification, Framing and Feasibility

**Execution** 

**Operations and Abandonment** 



### **Phase III Work Streams**

- 1. Environmental Assessment
- 2. Labrador Innu IBA
- 3. Engineering and Project Planning
- 4. Project Reviews
- 5. Financing and Commercial



### 1. Environmental Assessment

#### Generation

- Joint Panel Report Due August 2011
- Public/Aboriginal Consultation prior to referral to federal/provincial cabinets
- Expect Release from EA early 2012

#### Transmission

- EA Guidelines Released
- EIS to be filed Fall 2011
- Expect EA release in mid 2012



### 2. Labrador Innu IBA

- Agreements have been ratified
- Final legal/technical review under way
- Land Claim AIP requires federal cabinet direction – expected early September
- Signing dates in September currently discussed with Innu



# 3. Engineering and Project Planning

- SNC Lavalin (EPCM) mobilized in St. John's
- 130 staff assigned to the Project
  - Muskrat Falls and Labrador Island Link
- Activities
  - Detailed engineering design
  - Construction Estimates and Schedules
  - Procurement



## 4. Project Reviews

- Two processes under way
  - External review by Navigant due Aug 31
  - PUB Review due Dec 31
- Nalcor team providing information to both
- PUB process includes written submission by Nalcor, public hearings/events, and report from Manitoba Hydro International (MHI).

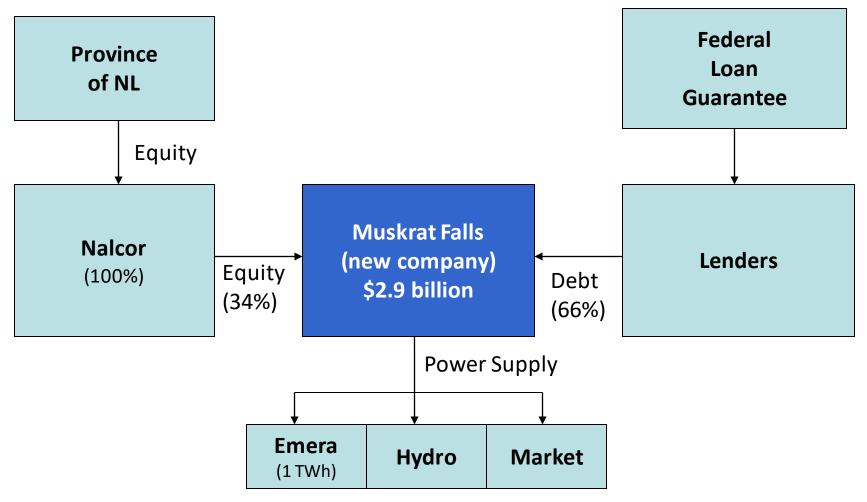


# 5. Financing & Commercial

- Financing Strategy
  - Capital Structure
  - Provincial Equity Commitment
  - Cash Flow Stream to Support Financing
- Financing Process
- Commercial Arrangements
  - Emera
  - NLH



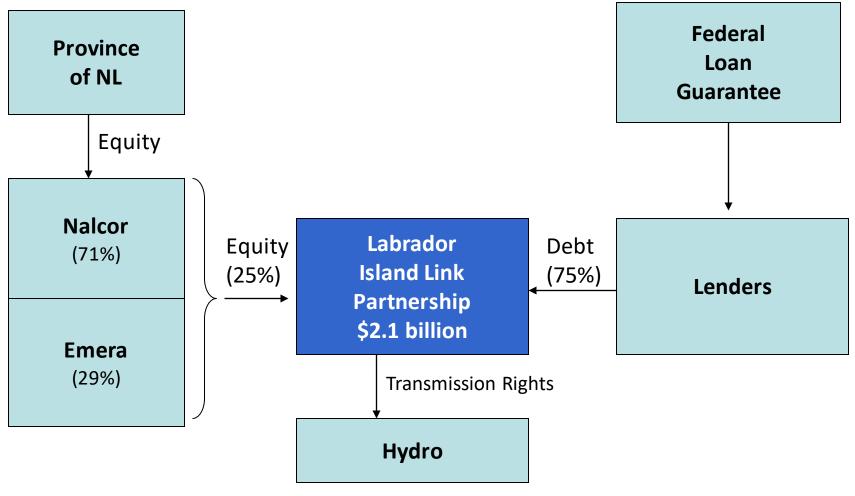
### Muskrat Falls



Note: Capital Costs do not include Interest During Construction ("IDC")



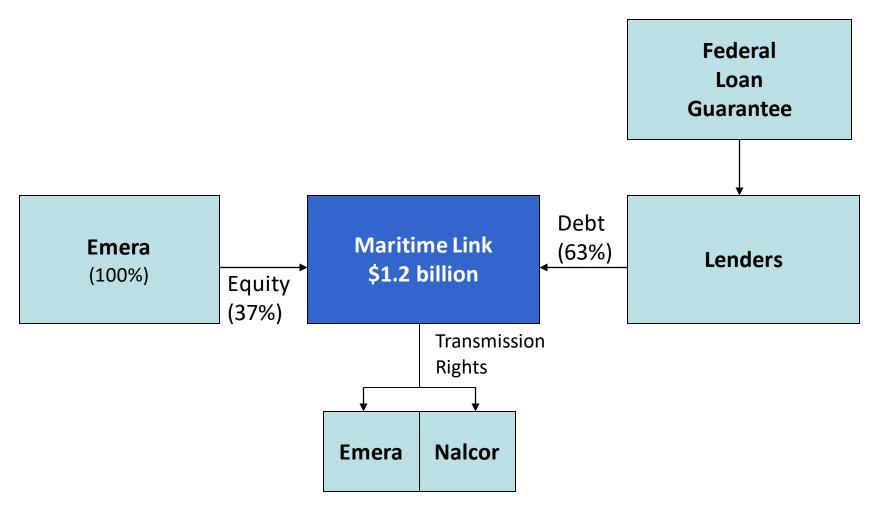
### **Labrador-Island Link**



Note: Capital Costs do not include Interest During Construction ("IDC")



### **Maritime Link**



Note: Capital Costs do not include Interest During Construction ("IDC")



# **Financing Process**

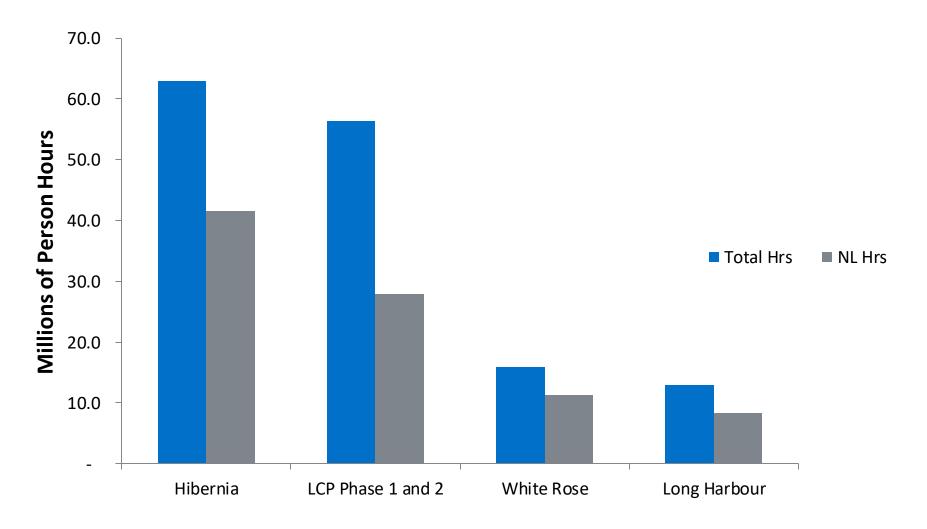
- 1. Federal Loan Guarantee
- 2. Preliminary Confidential Credit Ratings
- 3. Financing Road Show
- 4. RFP / Selection of Lead Arranger
- 5. Arranging Financing
- 6. Final Credit Ratings
- 7. Financial Close



# **Project Benefits**



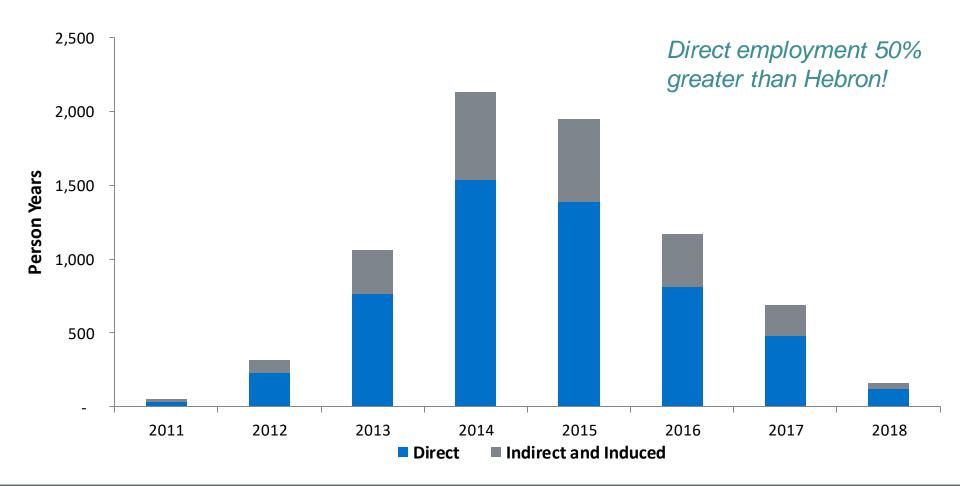
# **NL Project Employment Comparison**





# **Labrador Employment**

Total Employment in Labrador – Muskrat Falls & Labrador-Island Transmission Link





# **Building Labrador's Labour Force**

- 5,400 person-years of direct employment in Labrador
- More than 7,500 person-years of direct, indirect and induced employment in Labrador – average of 1,150 people/year
- More than 40 direct full-time jobs during operations in Labrador
- Approximately 60 total direct, indirect and induced employment in Labrador during operations
- More than 75% of direct labour for Muskrat Falls in Labrador



# Honouring Our Adjacency Principle

- First consideration for construction employment will be given to qualified, experienced personnel adjacent to the resource.
  - Nalcor and its contractors will establish qualifications and experience required for the Project.
- The hiring protocol for the generation project:
  - IBA Commitments
  - 2. Qualified and experienced residents of Labrador
  - 3. Qualified and experienced residents of Newfoundland
  - 4. Qualified and experienced Canadians
  - 5. Qualified and experienced non-Canadians



# **Ensuring Gender Equity and Diversity**

- Committed to a diverse construction labour force
- Proactive programs and practices for an inclusive work environment
- Accountability and responsibility for Nalcor, SNC-Lavalin and contractors
- Working to recognize barriers and incorporate programs policies and procedures to address them
- Comprehensive workforce analysis



# Supplier Development Next Steps

- Meet IBA and Benefits Agreement commitments
- Will hold supplier information sessions
- Currently developing the various contract and purchasing packages
- Will post Expression of Interests on SNC and Nalcor websites
- Conduct pre-qualification process
- Establish Bidders Lists



# Thank-you

