

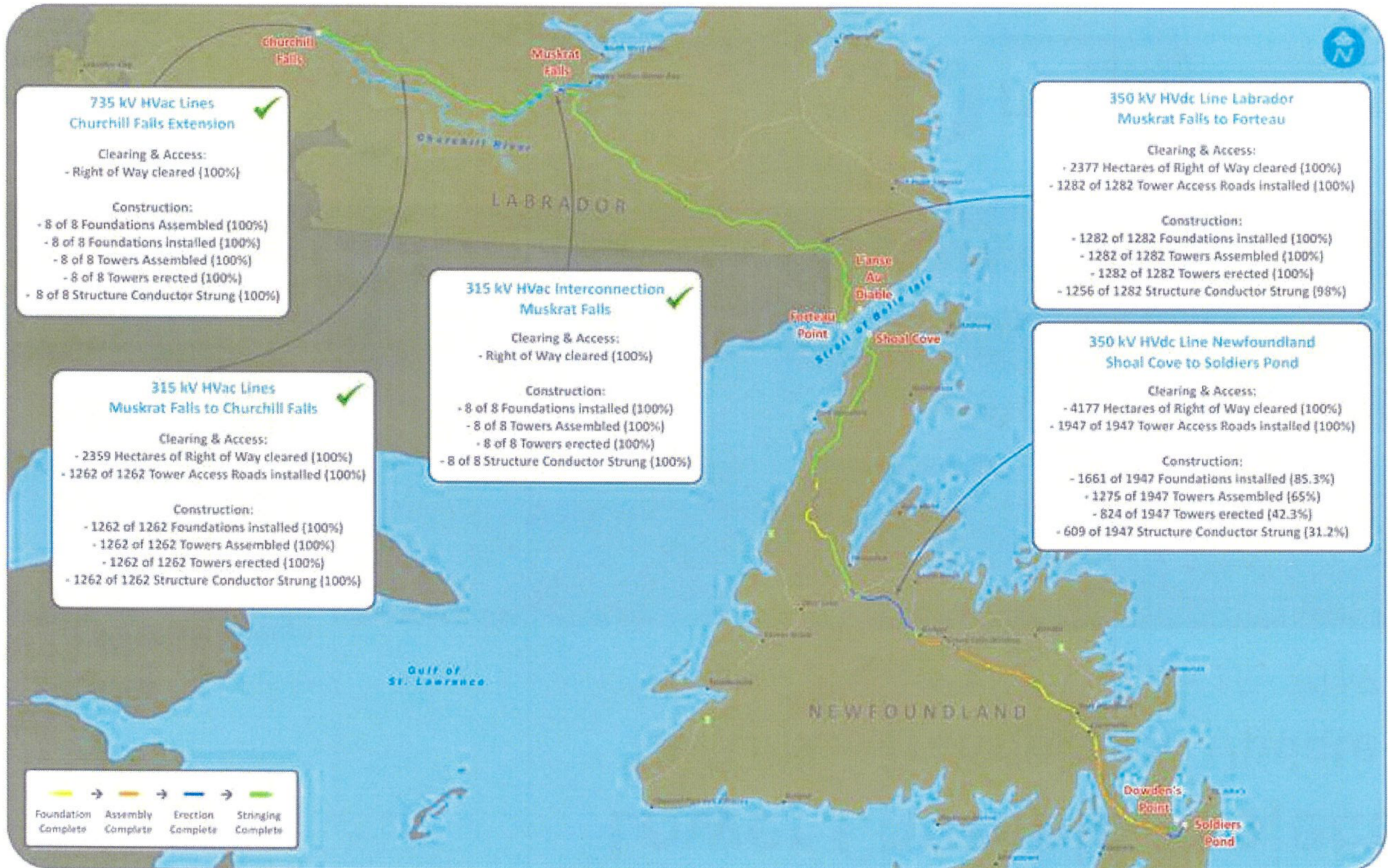
# Lower Churchill Project

## The Link - Transmission Update

*June 15, 2017*

Boundless Energy





**735 kV HVAc Lines  
Churchill Falls Extension** ✓

Clearing & Access:  
- Right of Way cleared (100%)

Construction:  
- 8 of 8 Foundations Assembled (100%)  
- 8 of 8 Foundations Installed (100%)  
- 8 of 8 Towers Assembled (100%)  
- 8 of 8 Towers erected (100%)  
- 8 of 8 Structure Conductor Strung (100%)

**350 kV HVdc Line Labrador  
Muskrat Falls to Forteau**

Clearing & Access:  
- 2377 Hectares of Right of Way cleared (100%)  
- 1282 of 1282 Tower Access Roads installed (100%)

Construction:  
- 1282 of 1282 Foundations installed (100%)  
- 1282 of 1282 Towers Assembled (100%)  
- 1282 of 1282 Towers erected (100%)  
- 1256 of 1282 Structure Conductor Strung (98%)

**315 kV HVAc Interconnection  
Muskrat Falls** ✓

Clearing & Access:  
- Right of Way cleared (100%)

Construction:  
- 8 of 8 Foundations installed (100%)  
- 8 of 8 Towers Assembled (100%)  
- 8 of 8 Towers erected (100%)  
- 8 of 8 Structure Conductor Strung (100%)

**315 kV HVAc Lines  
Muskrat Falls to Churchill Falls** ✓

Clearing & Access:  
- 2359 Hectares of Right of Way cleared (100%)  
- 1262 of 1262 Tower Access Roads installed (100%)

Construction:  
- 1262 of 1262 Foundations installed (100%)  
- 1262 of 1262 Towers Assembled (100%)  
- 1262 of 1262 Towers erected (100%)  
- 1262 of 1262 Structure Conductor Strung (100%)

**350 kV HVdc Line Newfoundland  
Shoal Cove to Soldiers Pond**

Clearing & Access:  
- 4177 Hectares of Right of Way cleared (100%)  
- 1947 of 1947 Tower Access Roads installed (100%)

Construction:  
- 1661 of 1947 Foundations installed (85.3%)  
- 1275 of 1947 Towers Assembled (65%)  
- 824 of 1947 Towers erected (42.3%)  
- 609 of 1947 Structure Conductor Strung (31.2%)

→ Foundation Complete  
→ Assembly Complete  
→ Erection Complete  
→ Stringing Complete

LCP - HVAc and HVdc Transmission Line Construction Progress 08-JUN-2017

# LCP Transmission Link

## Progress Summary by Asset



	Substantial Completion	Commercially Settled
<p><b>Strait of Belle Isle (SOBI)</b></p> <ul style="list-style-type: none"> <li>• 100% Complete</li> <li>• Final testing complete; all cables accepted</li> <li>• All contracts commercially settled</li> </ul>		
<p><b>Labrador Transmission Asset (LTA)</b></p> <ul style="list-style-type: none"> <li>• 93% Complete</li> <li>• Substantial Completion on track</li> <li>• Major contracts commercially settled</li> </ul>	<p>On track</p>	
<p><b>Labrador-Island Transmission Link (LITL)</b></p> <ul style="list-style-type: none"> <li>• 78% Complete</li> <li>• Substantial Completion in on track</li> <li>• All major contracts commercially settled</li> <li>• Anticipated early in-service Q2 2018</li> </ul>	<p>On track</p>	

# Last Tower on the Transmission Link



# Soldiers Pond



# Muskrat Falls Converter Station



# Churchill Falls



# Sky Lift



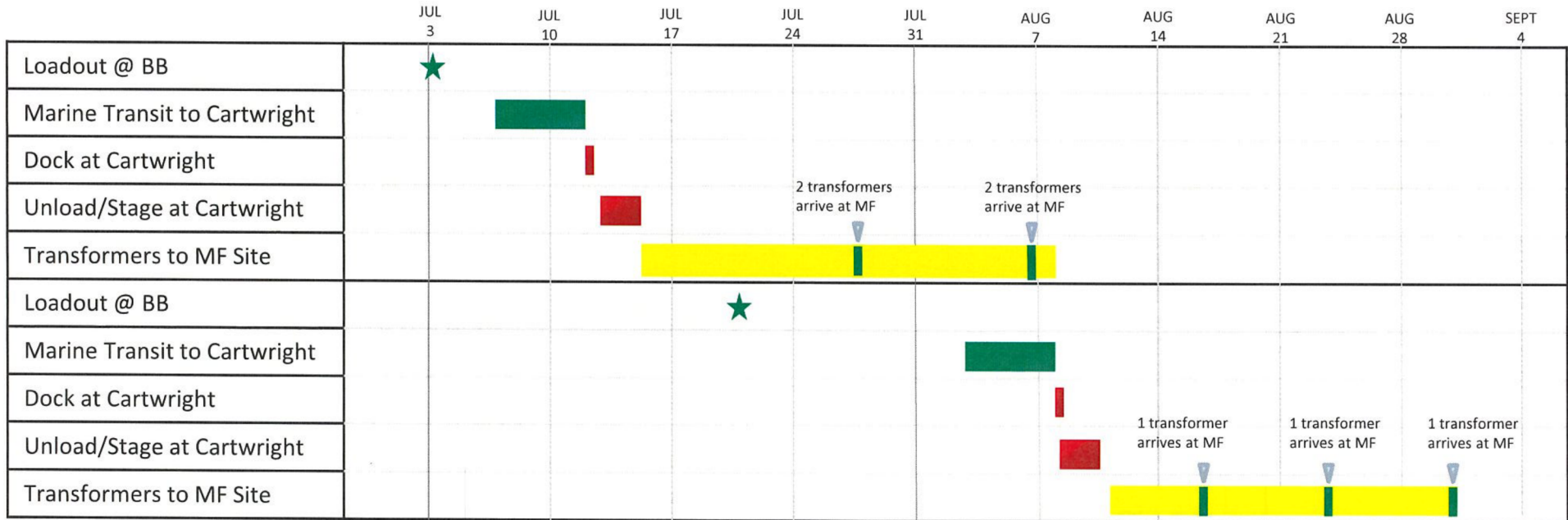


# Notable Updates & Issues

- Quanta/Valard settlement
- SOBI subsea cables – positive results
- Shunt reactor
- HJ O’Connell contracts
  - GE Power
  - GE Grid

# Transformer Shipment to Muskrat Falls

## High Level Schedule



- The highest risk activities are, in general, tied to the activities that cannot be stopped once set in motion. They include rolling the transformers off of the barge and staging at the Port of Cartwright. Security measures around these activities and work spaces will be deliberate and highly controlled.
- The longest task, road transport from the staging area to the MF site, is the activity most exposed to protest activity. Every effort should be made to reduce time spent in this phase, including:
  - Roads are prepared (graded, smooth)
  - Dust Control (Water trucks etc..)
  - Maximize daily work activity
  - Swift permitting/decision making in-field

# Committee Questions

- DANs & PCNs
- Insurance claims
- Material contracts
- Phased commissioning costs
- Engineering status for C3 and C4
- Guy wire anchors
- Conductor galloping