

# BC Hydro Woodfibre LNG Interconnection Project

February/March 2015



FOR GENERATIONS

# Outline

- BC Hydro Woodfibre LNG Interconnection Project
- BC Hydro FortisBC Compressor Stations Interconnection Project
- BC Hydro costs
- Public engagement and First Nations consultation

# Woodfibre LNG Interconnection Project

- Woodfibre has proposed a small-scale liquefied natural gas (LNG) processing and export facility near Squamish
- Woodfibre will use electricity to liquefy natural gas
- BC Hydro has been requested to interconnect the proposed LNG facility to the electricity system by March 2017

# Three interconnection alternatives

- Each alternative involves a temporary solution to provide power to Woodfibre by March 2017, and a permanent solution to provide a fully redundant power supply (date TBD)
  
- Currently completing studies in the following areas:
  - Environmental (fisheries, vegetation, wildlife, terrain, etc.)
  - Archeological
  - Electric and magnetic fields
  - Audible noise
  - Visual aesthetics
  - Radio interference
  - Geotechnical
  
- Continuing First Nations consultation and seeking stakeholder input in order to select a preferred alternative in spring 2015

# Alternative 1: 138 kV/500 kV connection

- **Temporary solution**

- Upgrading the existing 138 kV transmission line located between Gibsons and BC Hydro's existing Cheekye Substation (work expected to be within existing right-of-way)
  - More detailed studies are required to determine the exact upgrades needed and the locations of the upgrades; upgrades could include replacing wood poles with slightly taller wood poles, retensioning (tightening) the conductors, etc.

- **Permanent solution**

- Interconnecting the proposed Woodfibre LNG facility to the existing 500 kV transmission line adjacent to the Woodfibre site
- Constructing a new point of interconnection switching station on Woodfibre's property

- Based on a preliminary assessment, Alternative 1 appears to be the leading alternative considering information available to date
- However, BC Hydro is continuing to study and now will consult on **all three** alternatives – yet to select the preferred alternative for interconnecting the proposed LNG facility

# Alternative 2: 230 kV connection

## ■ **Temporary solution**

- Converting sections of the existing 138 kV transmission line to 230 kV from the Cheekye Substation to the Woodfibre site (work expected to be within existing right-of-way)
- Upgrading the existing Cheekye Substation

## ■ **Permanent solution**

- Constructing a new substation on BC Hydro property near Port Mellon
- Converting sections of the existing 138 kV transmission line to 230 kV from the new substation to the Woodfibre site
- Constructing a new point of interconnection switching station on Woodfibre's property
- Interconnecting the proposed Woodfibre LNG facility to the 230 kV transmission line adjacent to the Woodfibre site
- Upgrading the existing Cheekye and Malaspina substations
- Upgrading the existing 230 kV transmission line from Port Mellon to Malaspina

# Alternative 3: 230 kV/500 kV connection

- **Temporary solution**

- Converting sections of the existing 138 kV transmission line to 230 kV from the Cheekye Substation to the Woodfibre site (work expected to be within existing right-of-way)
- Upgrading the existing Cheekye Substation

- **Permanent solution**

- Interconnecting the proposed Woodfibre LNG facility to the existing 500 kV transmission line adjacent to the Woodfibre site
- Constructing a new point of interconnection switching station on Woodfibre's property

# FortisBC Compressor Stations Interconnection Project

- Should Woodfibre's LNG facility be constructed, FortisBC will need to:
  - Expand a portion of its existing pipeline system (from Coquitlam to the Woodfibre site)
  - Upgrade existing FortisBC compressor stations in Coquitlam and Port Mellon
  - Construct a new compressor station in or near Squamish
  
- FortisBC will be using electricity to power its expanded Coquitlam and new Squamish compressor stations
  - Expansion at Port Mellon will not require a new electrical connection
  
- BC Hydro has been asked to interconnect the compressor stations by November 2016



# FortisBC Compressor Stations Interconnection Project

- To interconnect the compressor stations into the electricity system, BC Hydro has identified the following upgrades:
  - Coquitlam (addition to existing Eagle Mountain Compressor Station)
    - 230kV connection at BC Hydro's Meridian Substation
  
  - Squamish (new compressor station)
    - Connection to existing 69kV transmission line

# BC HYDRO SYSTEM NEAR WOODFIBRE LNG



# BC Hydro costs

- Woodfibre will be responsible for all costs associated with upgrading the electricity system for interconnecting the proposed LNG facility
  - BC Hydro's ratepayers will not be paying for this work
- Costs for the FortisBC Compressor Stations Interconnection Project will be split between BC Hydro and FortisBC as per the Electric Tariff Supplement No. 6

# Stakeholder engagement and First Nations consultation

- BC Hydro initiated First Nations consultation in 2013
- Stakeholder engagement began in 2014
- BC Hydro will be hosting the following public open houses:
  - Gibsons – March 17 (5-8 p.m.) @ Gibsons & Area Community Centre
  - Sechelt – March 18 (5-8 p.m.) @ Seaside Centre
  - Squamish – March 19 (4-8 p.m.) @ Executive Suites Hotel and Resort

# Questions?

- If you have any questions or would like more information about BC Hydro's Woodfibre LNG Interconnection Project or FortisBC Compressor Stations Interconnection Project, please contact:
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