



# Northwest Transmission Line Project

**Update to:  
Alaska – British Columbia Intertie Project  
Advisory Work Group Public Meeting**

**October 29, 2007**



**BC Transmission  
CORPORATION**

*Building Connections*

# Overview

- **About BCTC, BCH and transmission system**
- **Northwest Transmission Line (NTL)**
  - Overview
  - Route
  - Right-of-Way and structures
- **Key milestones and construction**



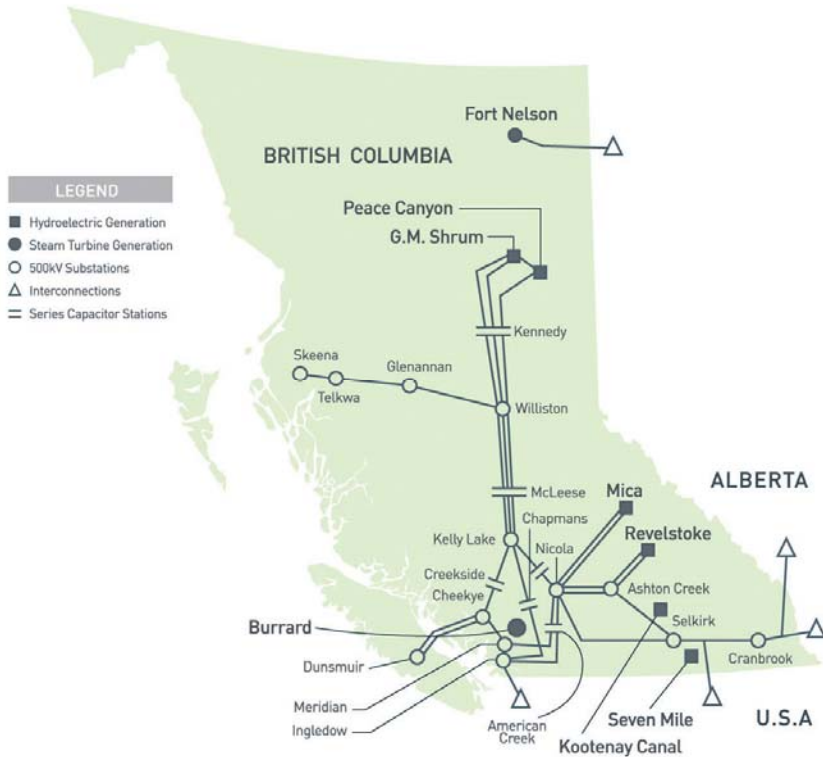
## About BCTC

- Crown corporation formed in 2003
- Role: Plan, operate and maintain B.C.'s publicly owned electrical transmission system
- Reports to: Minister of Energy, Mines & Petroleum Resources; regulated by British Columbia Utilities Commission

## About BC Hydro

- Crown corporation formed in 1962
- Role: Owns core transmission assets in the Province and is responsible for facilitating consultations with NTL First Nations on behalf of BCTC
- Reports to: Minister of Energy, Mines & Petroleum Resources; regulated by British Columbia Utilities Commission

# The transmission system



## Interconnected grid:

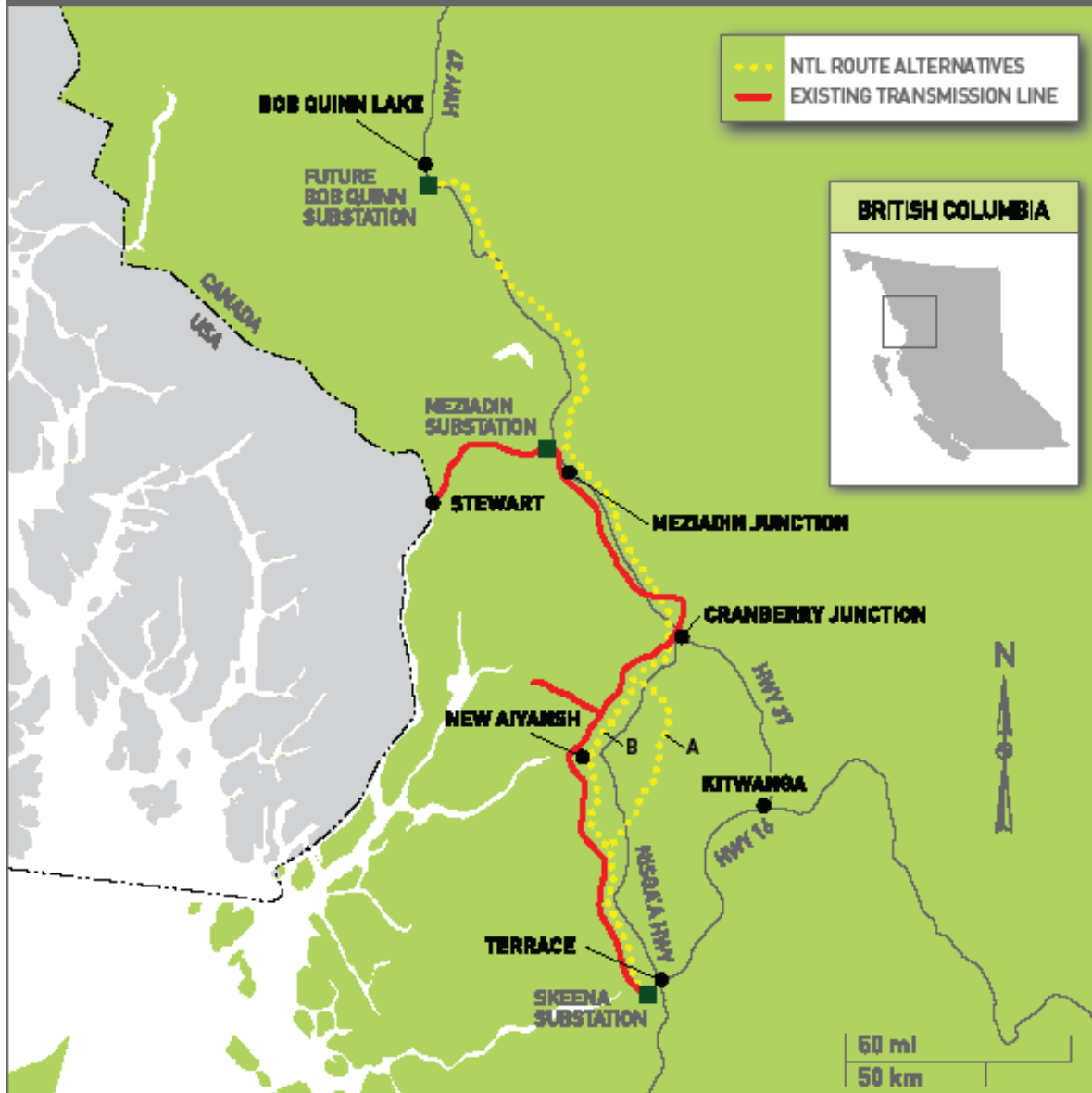
- Approximately 18,200 km of transmission lines and cables
- 95,500 towers and poles
- 290 stations
- 5 control centres

**The transmission grid in B.C. operates at voltages from 69 kilovolts (kV) to 500 kV and stretches over 75,000 hectares.**

## NTL - overview

- **A new 335 km, 287 kV transmission circuit**
- **Route from Skeena Substation (near Terrace) to a new substation near Bob Quinn Lake**
- **Would not replace the existing 138 kV circuit from Skeena Substation to Meziadin Junction**

## Northwest Transmission Line (NTL)



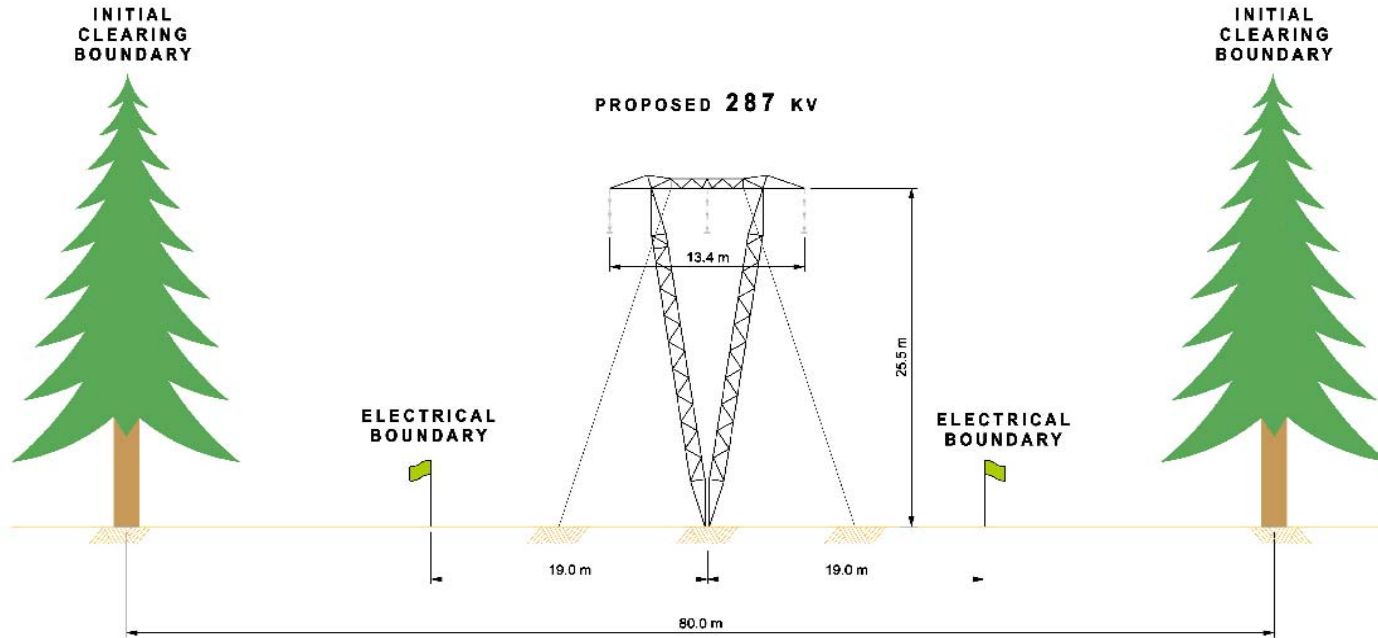
## NTL routing

- General route location based on initial studies
- Alternative routes being studied in some locations
- New ROW required for much of route, even where route parallels existing 138 kV line

# NTL route

- **New corridor/right-of-way will:**
  - Permit the straighter right-of-way required by a 287 kV circuit
  - Avoid difficult terrain
  - Minimize visual impacts
  - Lessen environmental impacts
- **Detailed route planning is underway**
- **Exact route and structure placement will take into account:**
  - Results of environmental studies and environmental assessment
  - Input from consultation with First Nations and stakeholders
  - Engineering design factors

# Right-of-way

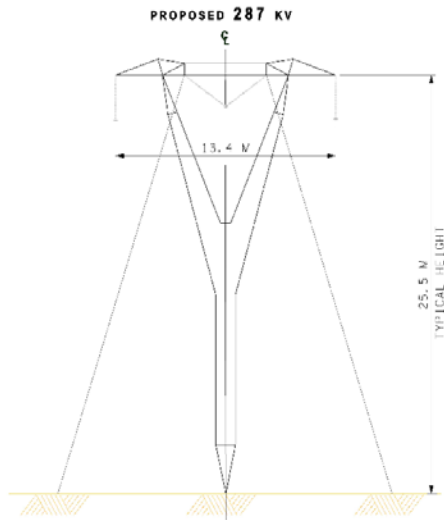


ROW width: 38 m

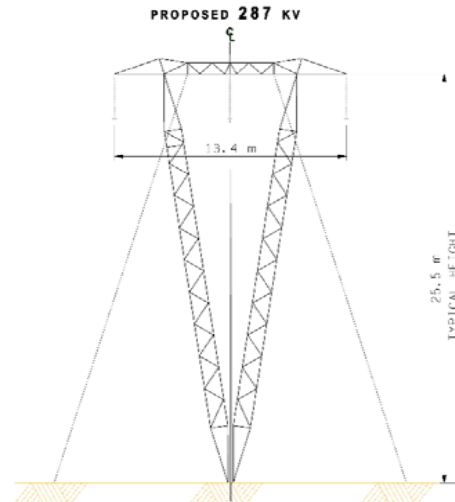
Extra one-time clearing on each side for security of line

TYPICAL NEW RIGHT - OF - WAY

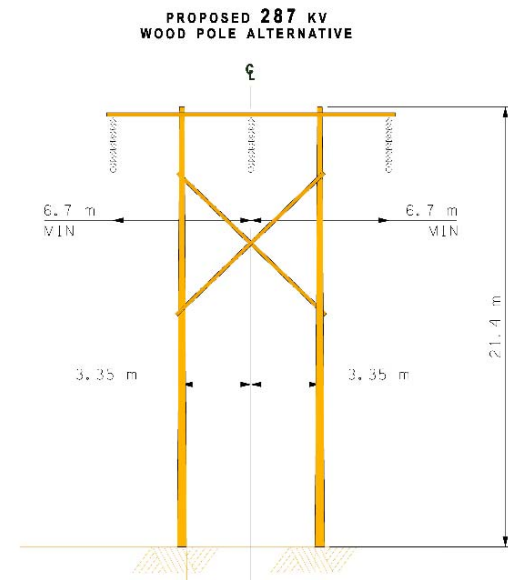
# Potential structure types



ALTERNATE LATTICE STEEL  
OR STEEL POLE GUYED Y TANGENT  
STRUCTURE w/ V-STRING



TYPICAL LATTICE STEEL  
V-GUYED TANGENT  
STRUCTURE



TYPICAL WOOD POLE  
H-FRAME TANGENT  
STRUCTURE

# NTL construction plans

## Two-phased

### By Fall 2009:

- Build new substation near Bob Quinn Lake
- Build circuit between Meziadin Junction and Bob Quinn Lake, interconnecting to temporary switch yard near Meziadin Junction
- Energize at 138 kV

### By Fall 2011:

- Construct circuit from Skeena Substation to Meziadin Substation
- Upgrade Skeena Substation
- Remove temporary facility near Meziadin Junction
- Energize circuit between Skeena Substation and Bob Quinn Substation to 287 kV

# Key milestones

| <b>Milestone</b>  | <b>Dates (subject to change)</b> |
|---|----------------------------------|
| First Nations and public consultation                               | Ongoing                          |
| Project description accepted by BCEAO                               | June 2007                        |
| File draft EA Terms of Reference (TOR) with BCEAO                   | October 2007                     |
| Community meetings  | November 2007                    |
| Draft TOR public comment period                                     | November 13 – Dec 13, 2007       |
| Finalize TOR; complete studies and effects assessments              | January 2008                     |
| File Environmental Assessment Certificate application with BCEAO    | End of January 2008              |
| 45-day public comment period for EAC application/community meetings | March/April 2008                 |
| Referral of EAC application to ministers                            | Summer/early fall 2008           |
| Ministers' decision re Environmental Assessment Certificate         | Fall 2008                        |
| First stage construction starts                                     | Winter 2008/09                   |
| First stage in-service  | Oct 2009                         |
| Second stage construction starts                                    | Winter 2009/10                   |
| Project completion/in-service                                       | October 2011                     |

For more information

[www.bctc.com](http://www.bctc.com)

(link to Northwest Transmission Line Project via home page)

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