# INFORMATION RELEASE



# CAPACITY AND ENERGY LOSSES FOR GENERATION ADDITION NEAR SKEENA SUBSTATION

### **BACKGROUND**

This information release provides capacity and energy loss estimates for generation transfer in the North Interior close to Skeena Substation. About 241 MW in the year 2010 and of 198 MW in the year 2015 is studied. The generation is transferred to meet the increased load in the BC Hydro system.

# Study assumptions

The assumptions are:

- 1. BC Hydro's December 2006 load forecast for the years 2010/2011 and 2015/2016 is used.
- BC Hydro's system Load curve for the year 2006/2007 is used for computing the Loss Load Factor (LLF). The load curve is assumed to be the same for 2010/2011 and 2015/2016.
- 3. 280 MW export from BCH to the BPA system is modelled only at the Ingledow Substation.
- 4. 101 MW export from BCH to the Alberta system is used.

## Results

The results are shown in Table 1.

**Table 1: Capacity and Energy losses** 

		2010	2015	
Generation capacity (MW)	Full Year	241	198	
	Winter <sup>1</sup>	241	198	
Generated energy (MWH)	Full Year	1979112	1600256	
	Winter <sup>1</sup>	711432	584496	
Load factor	Full Year	0.66	0.66	

	Winter <sup>1</sup>	0.72		0.72	
Loss load factor	Full Year	0.48		0.48	
Loss load factor	Winter <sup>1</sup>	0.56		0.56	
		Total	Percentage of specified generation	Total	Percentage of specified generation
Capacity losses (MW)	Full Year	37	15.27	30	14.95
	Winter <sup>1</sup>	37	15.27	30	14.95
Energy losses (MWH)	Full Year	219011	11.07	173373	10.83
	Winter <sup>1</sup>	84493	11.88	67962	11.63

<sup>1.</sup> Winter period considered is from 1<sup>st</sup> October to 31<sup>st</sup> January.

### **DISCLAIMER**

The information set out in this Information Release is based on a number of assumptions, only some of which have been identified. Changes to relevant factors (including without limitation different load and generation forecasts or different construction timelines for the reinforcement options) may make those assumptions invalid, and therefore the results and their costs may differ substantially from those presented here.

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