

## **Northwest Transmission Project – September 8, 2006**

BCTC has reviewed and updated its 2005 Planning Level study and cost estimate for the extension of transmission service north of Meziadin Junction for proposed loads and generation in the area. The attached Table provides a summary of the cost estimate breakdown for a system from Skeena to Iskut.

BCTC has determined that a 287 kV line would be required from the existing Skeena substation west of Terrace to points of interconnection at Bob Quinn (335 km) and Iskut (an additional 105 km). The new line would be run independently of, but generally in parallel with, the existing 138 kV line from Skeena to Meziadin and then continue north. A voltage of 287 kV would provide capacity beyond the immediate needs for future load growth potential in the area, as well as a possible point of connection for generation from Alaska and other future IPP projects.

The estimates provided are accurate to a level of +/- 20%. They include contingencies of 15%, BCTC corporate overheads, IDC and escalation (lower and higher escalation scenarios are included). The project estimates assume a commitment to go ahead in early 2007 with completion by fall of 2010.

**Northwest Transmission Project  
Estimated Cost – September 8, 2006**

		2006	2007	2008	2009	2010	2011	Total Cost (\$,000)
Direct Costs – Transmission	Skeena-Aiyansh (101km)	50	250	3,701	19,602	12,600	300	36,503
	Aiyansh-Meziadin (108km)	50	250	3,779	25,985	15,700	300	46,064
	Meziadin-Bob Quinn (126km)	50	250	5,286	36,051	22,100	300	64,037
	Bob Quinn-Iskut (105km)	50	250	3,700	28,647	15,750	291	48,688
<b>Subtotal – Transmission</b>		<b>200</b>	<b>1,000</b>	<b>16,466</b>	<b>110,285</b>	<b>66,150</b>	<b>1,191</b>	<b>195,292</b>
Direct Costs – Stations	Skeena Upgrade Sub-station	60	140	3,272	2,273	1,314	80	7,139
	Bob Quinn New 287kV Sub-station	125	158	19,600	7,514	5,750	457	33,604
	Iskut New 287kV Sub-station	120	129	7,845	2,880	2,220	180	13,374
<b>Subtotal – Stations</b>		<b>305</b>	<b>427</b>	<b>30,717</b>	<b>12,667</b>	<b>9,284</b>	<b>717</b>	<b>54,117</b>
Telecommunications		50	714	3,050	5,112	4,268	154	13,348
Indirect Costs		400	7,910	4,040	5,730	10,650	4,050	32,780
Contingencies @15%		143	1,508	8,141	20,069	13,553	917	44,331
OH & IDC		46	801	4,927	16,742	23,004	228	45,748
<b>Total (\$2006)</b>		<b>1,144</b>	<b>12,360</b>	<b>67,341</b>	<b>170,605</b>	<b>126,909</b>	<b>7,257</b>	<b>385,616</b>
<b>Total ( Low Inflation)</b>		<b>1,168</b>	<b>13,248</b>	<b>75,068</b>	<b>197,789</b>	<b>153,016</b>	<b>9,012</b>	<b>449,301</b>
<b>Total (High Inflation)</b>		<b>1,182</b>	<b>13,793</b>	<b>80,413</b>	<b>215,946</b>	<b>168,669</b>	<b>10,030</b>	<b>490,034</b>