Project Title: Upgrade Transmission Line Corridor

Location: Bay d'Espoir to Western Avalon

Category: Transmission and Rural Operations - Transmission

Definition: Other

Classification: Normal

Project Description:

This proposal describes the upgrade to the transmission line corridor from Bay d'Espoir to Western Avalon Terminal Station. These upgrades will consist of a testing program on insulators for TL206, as well as the construction of a new 230 kV transmission line. These upgrades are requirements to ensure the security of supply to growing loads east of Bay d'Espoir. These upgrades will be required for generation expansion scenarios involving either a Labrador Infeed or continued Isolated Island operation. The new transmission line will be 188 km in length from Bay d'Espoir to Western Avalon and will require terminal station modifications at each end.

The budget estimate for this project is shown in Table 1.

Table 1: Budget Estimate				
Project Cost: (\$ x1,000)	<u> 2012</u>	<u>2013</u>	<u>Beyond</u>	<u>Total</u>
Material Supply	0.0	14,288.8	33,788.0	48,076.8
Labour	<mark>2,042.0</mark>	2,330.0	7,763.1	12,135.1
Consultant	242.6	247.8	0.0	490.4
Contract Work	0.0	<mark>10,409.0</mark>	<mark>68,990.1</mark>	<mark>79,399.1</mark>
Other Direct Costs	<mark>165.1</mark>	<mark>181.2</mark>	818.1	<mark>1,164.4</mark>
Interest and Escalation	<mark>182.2</mark>	<mark>2,738.6</mark>	<mark>51,063.2</mark>	<mark>53,984.0</mark>
Contingency	0.0	0.0	<mark>14,126.5</mark>	<mark>14,126.5</mark>
TOTAL	2,631.9	30,195.4	176,549.0	209,376.3

Operating Experience:

Hydro identified that the transfer of power to load centres east of Bay d'Espoir is constrained as a result of the thermal limitations of the transmission lines and the voltage stability of the power system. As a result, Newfoundland and Labrador Hydro must operate units at the Holyrood Thermal Generating Station in an inefficient manner, resulting in increased fuel consumption and increased spill at hydroelectric facilities.