1	Facil	Facility Rehabilitation (Pooled), \$1,917,000, p. 4 of 81	
2			
3	Q.	Are there reasons, other than the age of the plant, why Newfoundland Power has	
4		decided to undertake the Horsechops Protection, Control and Governor	
5		Refurbishment in 2009?	
6			

A. The decision to undertake the Horsechops Protection, Control and Governor Refurbishment project in 2009 is based upon the deterioration of the equipment identified for replacement.

The modernization of the plant planned by this project will, however, improve the frequency and voltage regulation of the generator, improve the electrical protection systems, improve the accuracy of metering systems, provide black start capability and allow the plant to meet current arc flash protection standards.

These improvements will result in improved operation of the electrical system. Providing black start capability and improving both frequency and voltage regulation better supports the Southern Shore transmission system when it is operated isolated from the rest of the Island Interconnected System. At 8.3 MW, Horsechops is the second largest plant on Newfoundland Power's Southern Shore transmission system and is critical in providing power during isolated situations.

The addition of 25 MW of wind energy in the Fermeuse area could possibly produce power quality issues when there is no generation at Holyrood, or when there are transmission outages on the lines into the Avalon Peninsula. Improving the frequency and voltage regulation at Horsechops will assist in dealing with power quality problems that might arise as a result of the large induction generators producing power at the Fermeuse wind farm.