

January 27, 2014

Board of Commissioners of Public Utilities  
Prince Charles Building  
120 Torbay Road, P.O. Box 21040  
St. John's, NL  
A1A 5B2

**ATTENTION: Ms. Cheryl Blundon**  
**Director of Corporate Services & Board Secretary**

Dear Ms. Blundon:

**Re: The Board's Investigation and Hearing into Supply Issues and Power Outages on the Island Interconnected System**

Further to the Board's letter of January 22, 2014, following is an update on the system events:

**Holyrood Unit No. 3 - Issues with the boiler feedwater pump on Holyrood Unit No. 3 and the unit derating to 75MW**

Event Details

On January 17, 2014 at approximately 17:00 the east boiler feed pump motor failed on Holyrood Unit No. 3. This resulted in a derating of the unit to 75 MW.

Results of Investigation

Hydro's service provider, Siemens, conducted a root cause failure analysis of the motor at their St. John's facility. The testing and analysis determined that the most probable cause of the failure was an insulation breakdown.

Current Status (January 27, 2014)

The motor was repaired and returned to the Holyrood Generating Station on January 24, 2014. The motor was reinstalled and tested and Unit No. 3 was returned to full service at 18:26 on January 25, 2014.

**Stephenville Gas Turbine - Loss of one end of the Stephenville gas turbine and its derating to 25MW**

Event Details

On January 8, 2014 End B of the Stephenville Gas Turbine tripped, making the end unavailable and resulting in a derating of the unit to 25 MW.

### Results of Investigation

A representative from Alba Power, who previously overhauled the unit, travelled to site on January 9, 2014. The Alba representative along with Hydro representatives carried out an initial visual inspection, including an internal borescope inspection, and determined that End B suffered a major failure and would require further investigation to determine the root cause.

### Current Status (January 27, 2014)

The Stephenville Gas Turbine is available in generate mode with End A at 25 MW and End B at 0 MW. The unit is also available for synchronous condenser operation.

Hydro is currently working with Alba on plans to repair or replace the engine at their facility in the United Kingdom. Additionally, they are also sourcing an engine that can be installed on a temporary basis while End B is being repaired or replaced. The preliminary schedule proposed by Alba today has one of their representative's return to site on February 6, 2014 to continue the root cause investigation and oversee the removal of the damaged unit.

### **Granite Canal - Loss of Granite Canal and the investigation of the trip before its return to service.**

#### Event Details

On January 14, 2014 the Granite Canal unit tripped in the afternoon but Hydro could not dispatch crews immediately due to foggy conditions. The crew responded on January 15, 2014 and determined that the cause of the trip was related to a pressure switch in the governor system. The switch was replaced and the unit was started and loaded without incident.

In the late evening of January 16, 2014 the unit tripped again and a crew was dispatched to site the following day. The cause of the trip again was related to the governor system. The crew was able to make temporary repairs and put the unit back in service on January 18, 2014. The crew stayed on site to continue their investigation and to make permanent repairs when the unit could be scheduled for an outage. This was completed on January 24, 2013 and the unit was placed back in full service on January 25, 2013.

### Results of Investigation

The crew completed an inspection of the system and determined that repairs needed to be made to the pump, pressure switches and pressure relief valves of the unit governor. An outage was requested and the necessary parts were sent to site.

The governor system last underwent annual preventative maintenance in July 2013 and was returned to service with no known issues. Hydro is presently reviewing the governor preventative maintenance routines to identify areas that could be improved as a result of the issues that were found in January 2014.

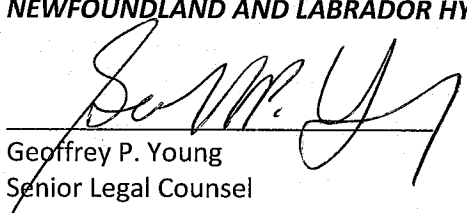
Current Status (January 27, 2014)

Repairs were made to the governor system during a scheduled outage on January 24, 2013 and the unit was placed back in full service on January 25, 2013.

Should you have any questions, please contact the undersigned.

Yours truly,

**NEWFOUNDLAND AND LABRADOR HYDRO**



Geoffrey P. Young  
Senior Legal Counsel

GPY/jc