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July 10, 2020

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: Holyrood Supplemental Capital Projects – Monthly Update

On April 7, 2020, Newfoundland and Labrador Hydro ("Hydro") filed its application for approval of capital projects necessary for the continued operation of the Holyrood Thermal Generation Station ("Holyrood TGS"). The application was approved on May 11, 2020 in Board Order P.U. 14(2020). In that Order, the Board directed Hydro to file monthly updates on the status of the approved capital projects from June 2020 to September 2020 and, thereafter, to provide updates as part of the Winter Readiness reports filed in October, November, and December 2020.

Projects Overview

Four projects were approved in P.U. 14(2020):

- Boiler Condition Assessment and Miscellaneous Upgrades includes Level 2 condition
 assessments on internal components of the main steam generators (boilers) and associated
 external high energy piping to identify required refurbishment or replacement work. Hydro will
 also replace or refurbish components that are identified as requiring immediate intervention.
 This project also includes the completion of required miscellaneous upgrades of condition based
 deficiencies identified in the 2019 Condition Assessment and Miscellaneous Upgrades project.
- Overhaul Unit 2 Turbine Valves includes the total disassembly, detailed internal inspection, refurbishment, and reassembly of all major steam valves. Valve refurbishment includes replacement of any identified damaged components.
- Overhaul Unit 3 Boiler Feed Pump West includes disassembly, inspection, reassembly, and recommissioning of the pump. During overhaul, parts, including the volute impeller cartridge, are replaced as necessary.
- Overhaul Unit 2 Generator includes disassembly of generator end shields, hydrogen seals, hydrogen coolers, and bearings; removal of the generator rotor from the stator; cleaning of internal components; detailed visual inspection and non-destructive evaluation of internal components; detailed measurement of clearances and alignments; mechanical integrity testing of windings and core wedges; and replacement or refurbishment of components found to be damaged.

Project Status Update

Project schedule and cost updates for the four projects are provided in Tables 1 and 2. All projects remain on schedule.

Holyrood TGS Unit 1 is currently on its planned annual maintenance outage. The Holyrood TGS Unit 2 maintenance outage is planned to commence July 15, 2020. The Holyrood TGS Unit 3 planned maintenance outage is complete and the unit is operating in synchronous condenser mode.

Table 1: Project Schedule Update

Project	Work activity is in progress for Unit 1 and is expected to be completed by August 21, 2020. Work activity is planned to commence on Unit 2 on August 3, 2020. Work for Unit 3 has been completed. This project is proceeding on schedule, as planned.		
Boiler Condition Assessment and Miscellaneous Upgrades ¹			
Overhaul Unit 2 Turbine Valves	Work activity is scheduled to commence July 27, 2020 to coordinate with the schedule for other planned, necessary work on this unit.		
Overhaul Unit 3 Boiler Feed Pump West	Work activity is in progress and on schedule. Site work is complete, which included pump disassembly, volute impeller cartridge change out, and reassembly. Final commissioning will occur upon start-up when Unit 3 is returned to service in generation mode as part of normal operations.		
	The removed volute impeller cartridge was received at the refurbishment facility on June 25, 2020 and is expected to be refurbished and returned to inventory as a spare by November 30, 2020.		
Overhaul Unit 2 Generator	Work activity is scheduled to commence July 31, 2020.		

Table 2: Project Cost Update

Project	Approved Budget (\$000)	Forecast and Expenditures (\$000)	Notes
Boiler Condition Assessment and Miscellaneous Upgrades	\$3,056.7	\$3,056.7	Expected to be completed on budget. Work being executed under existing contracted service provider.
Overhaul Unit 2 Turbine Valves	\$2,919.5	\$2,919.5	Expected to be completed on budget. Work being executed under existing contracted service provider.
Overhaul Unit 3 Boiler Feed Pump West	\$367.9	\$367.9	Expected to be completed on budget. Contractor executing overhaul work.
Overhaul Unit 2 Generator	\$1,294.1	\$1,294.1	Expected to be completed on budget. Work being executed under existing contracted service provider.

¹The Boiler Condition Assessment and Miscellaneous Upgrades project spans Units 1, 2, and 3.

Hydro continues to manage the required work and planned outage schedules with an aim to achieving project completion prior to the 2020–2021 winter season. At the time of this monthly update, there are no significant execution risks or concerns identified.

Should you have any questions or comments about any of the enclosed, please contact the undersigned.

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO

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