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January 16, 2015

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:

Newfoundland and Labrador Hydro Combined Applications - Installation of Diesel Units at Holyrood for the Purposes of Black Starting the Generating Units and Supply, and Install 100 MW (Nominal) of Combustion Turbine Generation - Request for Update

Further to the Board's letter of August 1, 2014 regarding the above referenced matter, enclosed is the original plus 12 copies of Hydro's status update for the following project:

• Supply and Installation of a 100 MW Combustion Turbine Generator.

We trust you will find the enclosed update to be in order.

Should you have any questions, please do not hesitate to contact the undersigned.

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO

Geoffrey P. Young

Senior Legal Counsel

GPY/jc

cc.

Gerard Hayes – Newfoundland Power Paul Coxworthy – Stewart McKelvey Stirling Scales Fred Winsor – Sierra Club Canada Thomas Johnson – Consumer Advocate Thomas O'Reilly, QC – Cox & Palmer Danny Dumaresque

Supply and Installation of a 100 MW Combustion Turbine Generator

Status Update Briefing-Jan 16, 2015





Contents

- Project Dashboard
- Progress & Schedule Summary
- Cost Summary (S-Curve)
- Risk Analysis
- Project Photos

(Includes only material updated since Jan 5, 2014)



Project Dashboard

The project is progressing according to plan and in compliance with Safety, Quality, and Cost. Commissioning and function testing continues.





Progress & Schedule Summary

- Change in status from construction site to operational plant site January 7th with first energization and successful powering up of the plant.
- First ignition of the turbine generator completed January 14th. Several successful test runs completed same day.
- First electrical synchronization to the power grid is anticipated January $17^{th}/18^{th}$.
- 4. Safety stand-down completed prior to energization and all workers completed renewed site orientation for operational site.



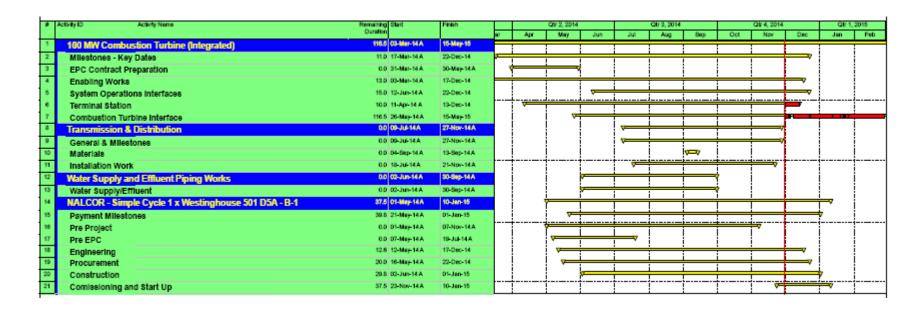
Progress & Schedule Summary (cont'd)

- 5. Released from further Environmental Assessment and Certificate of Approval in place.
- Additional authorities having jurisdiction including all required permits in place (Dept. of Labour, Service NL, CSA, etc.)
- Commissioning and operations manuals in place and on-the-job operator training ongoing.
- 8. Functional protection tests completed.
- Cost S-Curve reflects tracking in compliance with original plan. Refer to Level 2 Summary Schedule on the following page.



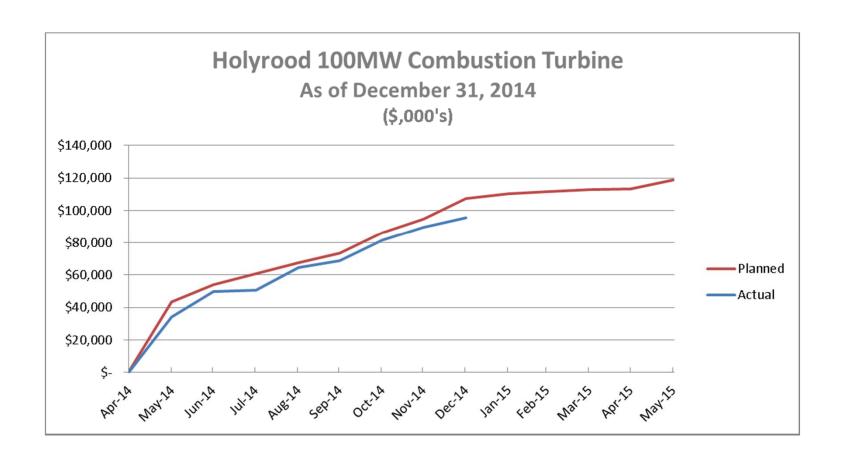
Level 2 – Summary Schedule

Summary level schedule provided below.



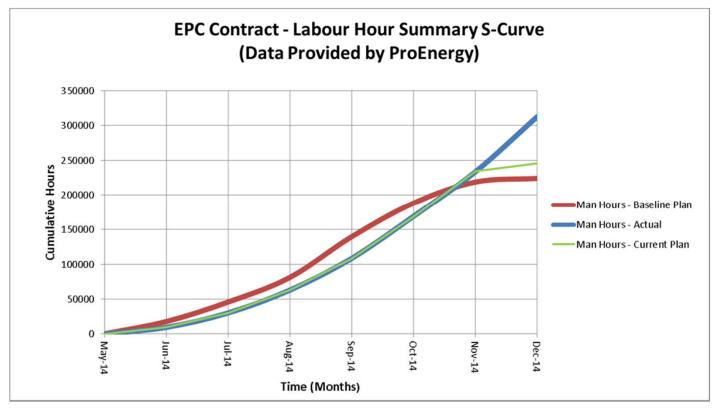


Cost Summary - S-Curve





EPC Labour Hour Summary



Notes:

Planned hours to Dec 31 (%Baseline Plan): 100% Actual Progress to Dec 31 from Schedule: 93.08 % Actual hours expended to Date (%Current Plan): 139.69%

Schedule Performance Index = 0.93 - Indicates tracking behind plan

Cost/Hrs Performance Index = 0.66 - Indicates slippage in labour efficiency, impacted adversely due to holiday period.

Total Hours to Date: 312,898 with 1 LTI



Risk Analysis

Two 3rd party facilitated risk workshops have been held to date:

June 26th – Focus on construction risks

Dec. 19th – Focus on energization risks

The resulting risk mitigation plans are being used to manage risk during execution of the project.



Risk: Construction activities lead to contact with energized lines leading to safety incident.

Mitigation: Relocate lines, power line hazard training for operators, use permit system, prepare lift plans, deenergize lines where possible.

(Jan 16 update – Full site safety stand-down was completed prior to energization)



Risk: Unfamiliarity with new equipment leads to delay in commissioning.

Mitigation: Training included in EPC contract; engage operations and commissioning personnel early in the process.

(Jan 16 update – Startup and Commissioning teams engaged and Plant Operator assigned for project and training continues)



Risk: Lack of coordination of work with all of the work crews on site leads to safety incident.

Mitigation: HSE Plans; Site Orientations; Contractor coordination meetings; toolbox meetings.

(Jan 16 update – Continue to have daily coordination meetings with relevant parties, and specific safety meetings where required)



Risk: During the start-up routine, the unit trips which results in customer impact.

Mitigation: Testing to be completed in the 0 to 40MW range to minimize impacts on the system. System configuration setup to minimize impacts should there be a trip. Corporate Communications engaged and coordination underway with Newfoundland Power on customer updates.

(Jan 16 update – this item identified in Dec. 19 risk workshop)



Risk: Lack of isolation plan or incomplete lock-outs leads to safety risk.

Mitigation: Isolation procedures are defined and a walk-down completed prior to work activity. Boundary isolation approach used. Site stand-down planned prior to energization.

(Jan 16 Update – Walk-downs completed, NLH stand-down completed, site stand-down completed prior to energization)



Project Photos



Photo 1 – First Run of CTG





Photo 2 – View Looking West





Photo 3 – 13.8kV Switchgear Complete

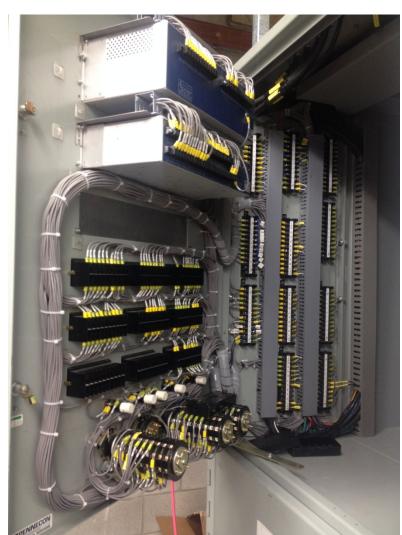




Photo 4 – Station Service Panels





Photo 5 – 480V MCC in Electrical Room





Photo 6 – Snow Louvres on Exhaust Stack

