

NEWFOUNDLAND AND LABRADOR HYDRO

Table of Concordance

TABLE OF CONCORDANCE

Public Utility Board Request	Location in Newfoundland and Labrador Hydro's Reports
1. Events	
(a) A detailed timeline including all relevant actions and occurrences before and after each system perturbation.	See Schedules 1 and 2 of Hydro's "A Review of Supply Disruptions and Rotating Outages: January 2-8, 2014"; see also Appendix 1 of the Emergency Response and Restoration Report and Section 4 of each of the Transmission Availability, Root Cause, External Protection Review, Coordination and Communication with Customers, Technology and Communications Infrastructure, and Generation Availability Reports, and Appendix A of the Generation Availability Report.
(b) For major sub-events, such as transformer or breaker failure, operator errors, or relaying inadequacies, please describe that sub-event in detail.	See the Root Cause, External Protection Review and Transmission Availability Reports.
(c) Explain operating, equipment, procedural, or other problems encountered during the event or in the recovery efforts.	See the Root Cause, External Protection Review, Transmission Availability and Emergency Response and Restoration Reports, and Appendices B-E of the Generation Availability Report.
(d) Availability of generating units for the winter season.	See the Generation Availability Report in general and Appendix A of the Report in particular.
(e) Results of Root Cause analyses completed.	See the Root Cause Report.
(f) Specifically discuss any 2014 problems that were similar to or common to the January 2013 events, including failure of the same or similar equipment and similar failures of protective schemes. In such cases, describe remedial actions taken in 2013 and how such actions mitigated or otherwise affected the 2014 events.	See Remedial Actions from the January 11, 2013 System Events.
(g) Provide any reports describing the January 2013 event, including material as requested above.	See binder entitled "Events of January 2013"

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2. Response	
(a) Rotating outage process, execution, prioritization, and notice.	See the Emergency Response and Restoration Report and Section 4.1 of the Coordination and Communication with Customers Report; see also Appendix A of the Generation Availability Report identifying utilization of Hydro's Generation Loading Sequence and Generation Shortages Protocol.
(b) Communications with Industrial, Commercial, and Domestic customers.	See Sections 3.2, 3.3, 4.2, 4.3, 5.2 and 5.3 of the Coordination and Communication with Customers Report.
(c) Communication and coordination between the utilities.	See Sections 2.1, 3.1, 4.1 and 5.1 of the Coordination and Communication with Customers Report.
(d) Outage response plans.	See Appendices 1, 7, 8, 9, 10 and 11 of the Coordination and Communication with Customers Report and Section 3 of the Emergency Response and Restoration Report.
3. Assurances	
(a) Discussion of system readiness up to and including 2014-16.	See the Generation and Reserve Planning Report; see also Ventyx's Planning Process Review Report and Section 3.4 of the Generation Availability Report.
(b) Evaluation of the adequacy of supply to meet the 2014-16 winter peak.	See the Generation and Reserve Planning Report; see also Ventyx's Planning Process Review Report and Section 3.4 of the Generation Availability Report.
(c) Actions that have been taken to assure reliability in 2014-16.	See Section 5.2 of Hydro's "A Review of Supply Disruptions and Rotating Outages: January 2-8, 2014" Report.
(d) Actions that are planned in the months ahead to assure adequacy and reliability over 2014-16 including available alternatives. Include explanation of the actions planned, their cost, timetable, and expected impact on reliability.	See Section 5.2 and Section 6 of Hydro's "A Review of Supply Disruptions and Rotating Outages: January 2-8, 2014" Report, Section 5 of the Generation Availability Report and Section 3.5 of the Generation and Reserve Planning Report.

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4. Risks and Vulnerabilities	
(a) Discuss potential risks that might lead to significant outages over 2014-16.	See Section 5 of each of the Transmission Availability Report, External Protection Review and Generation Availability Report.
(b) Provide any actions planned to mitigate the events noted in 4(a) above.	See Section 5 of each of the Transmission Availability Report, External Protection Review and Generation Availability Reports; see also Section 3.5 of the Generation and Reserve Planning Report and section 5.2 of Hydro's Review of Supply Disruptions and Rotating Outages Report.
5. Ongoing Analysis	
(a) Report on all current and future planned activities aimed at further investigating the supply issues and power outages of December 2013 – January 2014 or actions planned or being considered in relation to the events. Include the name or organization managing the study, its current status and forecasted completion.	See Section 5.2 of Hydro's "A Review of Supply Disruptions and Rotating Outages: January 2-8, 2014" Report; see also the Root Cause Report and Section 6 of each of the Asset Management Strategy & Practices, Transmission Availability and External Protection Review Reports, and Section 5 of each of the Generation Availability, Technology and Communications Infrastructure and Emergency Response and Restoration Reports.
6. Customer Input	
(a) Provide the results of any customer surveys or other efforts to determine perceptions and opinions regarding the events of January 2014 or subsequent utility performance.	See Section 5.3.1 and Appendices 2, 3 and 4 of the Coordination and Communication with Customers Report.

* Note as well that Hydro's Review of Supply Disruptions and Rotating Outages Report summarizes many of the issues noted above as being more particularly and fully dealt with in the identified Focus Area Reports.