

1 Q. **Newfoundland and Labrador Hydro – Near-Term Reliability Report, May 15, 2020**

2 ***Hydro Electric Energy Storage***

3 Please describe with detail the measures that ensure Hydro’s ability to maximize use of its hydro
4 resources to ensure reliability, given Nalcor Energy Marketing’s role in managing Hydro’s hydro
5 resources.

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8 A. Under the direction of Newfoundland and Labrador Hydro (“Hydro”), Nalcor Energy Marketing’s
9 (“NEM”) Water Management and Production Scheduling group manages reservoir storage levels
10 and generation. This allows Hydro to ensure its ability to reliably supply customers with least-
11 cost energy through maximizing its hydraulic resources and minimizing the production required
12 from higher cost thermal sources. The measures that ensure Hydro’s ability to maximize use of
13 its hydro resources given NEM’s role in managing Hydro’s hydro resources are as follows:

14 a. Minimum Storage Limits – Using assumptions, methodology, and information provided and
15 approved by Hydro, NEM develops monthly minimum storage limits to provide guidance in
16 the reliable operation of Hydro’s major reservoirs. These minimum storage limits ensure
17 Hydro’s ability to supply customers in the event of a prolonged dry sequence. Once
18 prepared, minimum storage limits are reviewed and approved by Hydro before
19 implementation. These limits are then incorporated into NEM’s water management model
20 and the development of subsequent operating strategies.

21 b. Water Management Meetings – On a weekly basis, NEM and Hydro meet to discuss
22 production requirements for the coming week. Topics covered during these meetings
23 include current and historic system inflows and reservoir storage, weekly weather forecast,
24 last week’s operating strategy and results, forecast weekly production requirements, unit
25 availability, operating strategy for the current week, requirement for thermal generation
26 and potential to offset using imports, and ponding activities. This weekly coordination and

1 oversight ensures that Hydro has insight and influences to decision making
2 recommendations regarding the deployment of its assets.

3 c. Water Management Generation Guidelines – As part of the weekly water management
4 meetings, Hydro and NEM discuss the upcoming week’s generation guidelines. NEM issues
5 the Water Management Generation Guidelines to the Newfoundland and Labrador System
6 Operators (“NLSO”) for guidance. These guidelines are then incorporated into Hydro’s Day
7 Ahead Dispatch Plan, prepared by Hydro’s Resource and Production Planning department,
8 which is issued to the NLSO for use.

9 d. Pursuant to the Pilot Agreement for the Optimization of Hydraulic Resources, Hydro has
10 engaged NEM to export on its behalf to monetise energy that would otherwise be spilled or
11 has been deemed to be at a high potential for spill from Hydro’s reservoirs. Exports
12 generally occur in the overnight hours when system load is light which has allowed for
13 sustained maximization of the generating plant(s).