

1 Q. Re: RRAS, 2019 Update, Vol. III, page 21 (137 pdf)

2 Citation 1 :

3 6.0 Load Forecasts

4 The purpose of load forecasting is to project electric power demand and energy requirements
5 through future periods. This is a key input to the resource planning process, which ensures
6 sufficient resources are available consistent with applied reliability standards. For the
7 Newfoundland and Labrador Interconnected System, the load forecast is segmented by the
8 Island Interconnected System and Labrador Interconnected System, as well as by utility load
9 (i.e., domestic and general service loads of Newfoundland Power and Hydro) and industrial load,
10 i.e., larger direct customers of Hydro such as CBPP, North Atlantic Refining Ltd, Vale, and Iron
11 Ore Company of Canada("IOC"). The load forecast process entails translating a long-term
12 economic and energy price forecast for the province into corresponding electric demand and
13 energy requirements for the electric power systems.

14 The resource planning process considers a range of potential forecast scenarios, rather than a
15 single forecast. This allows for evaluation of the sensitivity of results to differing economic
16 conditions. For this planning exercise, a range of forecasts were developed independently for
17 the Island and Labrador. The combination of those forecasts with evaluation of both the P50
18 and the P90 conditions for the Island Interconnected System as discrete scenarios resulted in
19 the evaluation of 12 discrete scenarios. visualization of the scenarios considered is presented in
20 Figure 1.

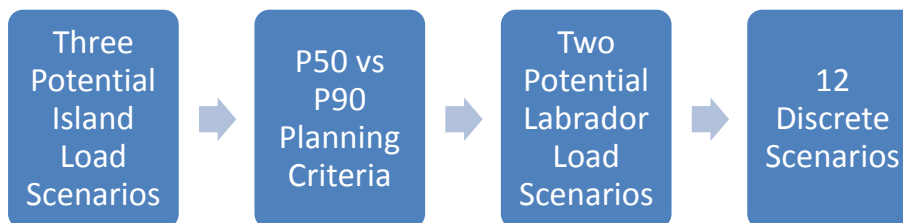


Figure 1: Modelled Scenarios

1 Citation 2 (page 27, pdf 143):

2 6.3 Considered Potential Labrador Load Scenarios

3 The Labrador Interconnected System load includes the power and energy requirements of the
4 iron ore industry in western Labrador and Hydro's rural customers. The communities include
5 Happy Valley-Goose Bay (including North West River, Sheshatshiu, and Mud Lake), Wabush,
6 Labrador City, and Churchill Falls town site customers.

7 Table 6 presents the base forecast with a sensitivity case for the total Labrador Interconnected
8 System over the study period. The base forecast reflects Hydro's Rural Load Forecast Spring
9 2019, which includes existing data centre requirements as well as the loads associated with
10 Wabush mine reactivation by Tacora Resources. A sensitivity case was developed to include
11 additional load requirements for the Department of National Defence ("DND") at 5 Wing Goose
12 Bay.

- 13 a) Please explain why the five load scenarios initially studied for Labrador in the 2018 RRAS
14 were first reduced to 3 scenarios in that study, and were then to 2 scenarios in the 2019
15 Update.
- 16 b) Please confirm that the LIS scenarios included in the 2019 Update include only the base case
17 (including existing data centre requirements and Tacora) and one sensitivity case (DND
18 additional load).
- 19 c) Please confirm that no scenarios were reviewed in the 2019 Update which include any
20 additional cryptocurrency (data centre) loads.
- 21 d) Please confirm (or correct) LIG's understanding that Hydro has received some 300 MW of
22 service requests for new cryptocurrency mining customers, which are on hold pending
23 resolution of the current proceeding regarding a Network Addition Policy.
- 24 e) Please indicate where in the 2019 RRAS Update a least-cost plan is found, corresponding to
25 a load scenario in which Hydro needs to provide service to 300 MW of additional

1 cryptocurrency customers, in addition to other additional DND and mining loads in
2 Labrador. If such a plan is not found in the 2019 Update, please provide it.

3 A. a) In the 2018 Reliability and Resource Adequacy Study, five independent load scenarios were
4 initially prepared. As any combination of those cases could occur, the analysis was
5 rationalized to focus on three potential load growth scenarios which would encompass the
6 load growth potential presented in each of the five independent load scenarios for
7 Labrador; the base case, a high industrial growth case, and a case where all recapture is
8 consumed in Labrador within the study period.

9 Please refer to Newfoundland and Labrador Hydro's ("Hydro") response to LAB-NLH-011,
10 part b) for the rationale behind having two scenarios for Labrador in the 2019 update.

11 b) Hydro confirms that the Labrador Island System scenarios included in the 2019 Update
12 include only the base case (includes existing data centre requirements and Tacora) and one
13 sensitivity case (Department of National Defence additional load).

14 c) Hydro confirms no scenarios were reviewed in the 2019 update that includes additional
15 cryptocurrency loads.

16 d) Please refer to Hydro's response to LAB-NLH-008, part a).

17 e) Please refer to Hydro's response to LAB-NLH-011.