

1 Q. **Reference: Labrador Expansion Study, p. 32 (p. 40 pdf)**

2 Citation :

3

4 7.2.1 Considerations for an Interconnection to Hydro-Québec

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6 As per Table 11, if incremental loads are such that forecasted loads in Labrador
7 West exceed 434 MW, the least-cost alternative will involve an interconnection
8 with Hydro-Québec at its Bloom Lake (“BLK”) Station.

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10 Hydro has been in consultation with Hydro-Québec TransÉnergie (“HQT”) with
11 respect to interprovincial interconnection alternatives. These discussions have
12 included cooperative transmission planning activities and have allowed for a
13 shared understanding of commercial processes if such an interconnection were
14 to be pursued.

15

16 From a transmission planning perspective, a preliminary load flow study has been
17 performed cooperatively by personnel from both utilities. The outcome of this
18 analysis is that HQT has validated Hydro’s load flow models and analysis and has
19 provided preliminary confirmation of the technical viability of the
20 interconnection.

21

22 From a commercial standpoint, personnel from HQT have informed Hydro that if
23 the interconnection is to be pursued, a Transmission Service Request will need to
24 be submitted.³⁴ This request will be for a point-to-point service to a new
25 delivery point to be established at the border in western Labrador. This request
26 will trigger the system impact study process.

27

28 a) Please:

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30 i) confirm that neither the Bloom Lake nor the Flora Lake substations currently exist;
31 and

32

33 ii) provide a map showing the locations of these two proposed substations and the
34 new lines required to interconnect them to both the HQ and NLH transmission
35 systems.

1 b) Please explain Hydro's power supply assumptions with respect to the Hydro-Québec
2 interconnection scenario. Would Hydro purchase electricity from Hydro-Québec, or would
3 it wheel its own power over the HQ transmission system? If neither option has been
4 excluded, please describe the advantages and disadvantages, both economic and
5 otherwise, of each.

6

7

8 A. a) Please see responses below:

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10 i) The Bloom Lake Terminal Station is an existing terminal station, belonging to Quebec
11 Iron Ore. Normand Terminal Station is owned by Hydro-Québec and is roughly 5 km to
12 the south west of the existing Bloom Lake Terminal Station. Both stations are
13 interconnected at 315 kV. The Flora Lake Terminal Station does not currently exist.

14

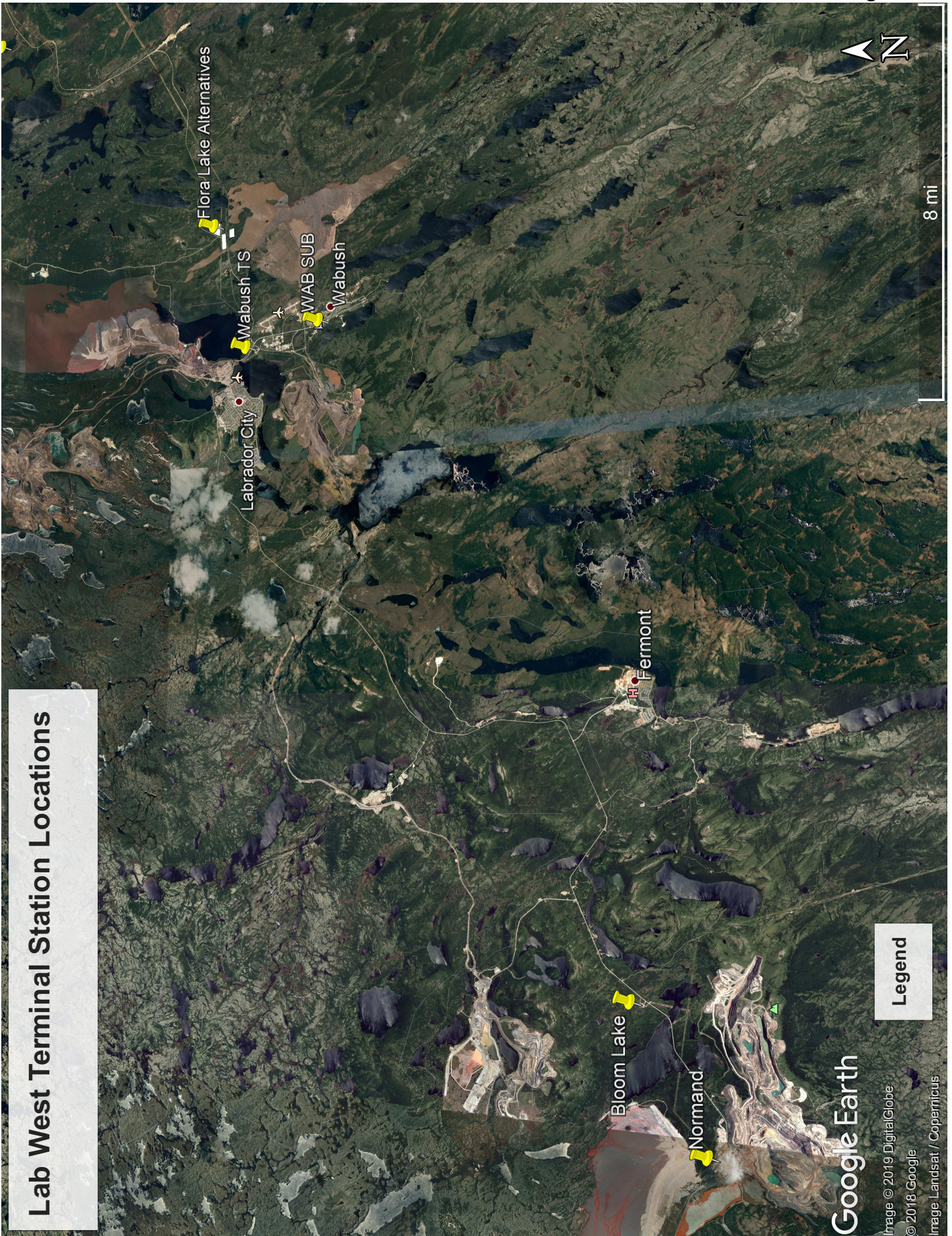
15 ii) Please refer to LAB-NLH-084, Attachments 1 and 2 showing locations of relevant
16 terminal stations and transmission line routing.

17

18 b) In the event that an interconnection is made with Hydro-Québec, Newfoundland and
19 Labrador Hydro would consider all options including the purchase of electricity from
20 outside the province of Newfoundland and Labrador or the wheeling of its own power. The
21 selection of the preferred solution would be through a supply adequacy study. Cost benefit
22 analyses would be performed to assess economic advantages and disadvantages of these
23 alternatives, which would be dependent of the following parameters:

24

- 25 • Forecasted capacity requirements;
- 26 • Available supply within the province of Newfoundland and Labrador;
- 27 • The cost of incremental supply within the province of Newfoundland and Labrador;
- 28 • The cost of tariffs; and
- 29 • The cost of imported capacity and energy.



Lab West Terminal Station Locations

Legend

Google Earth

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