

Muskrat Falls to Happy Valley Interconnection

Questions of Labrador Interconnected Group

1. Please disclose the amount of load from data centre contracts that:
 - a. are in service
 - b. Hydro has committed to serving but are not yet in service
 - c. has been requested but Hydro has not yet committed to serving
 - d. has been the object of inquiries without a formal request for service
2. For each type of load from Question (1), please disclose any information Hydro has about:
 - a. the nature of the load's activities (cryptocurrency mining, data storage, real-time internet services, etc)
 - b. the maximum capacity requested or provided
 - c. the date when the service was requested (if applicable)
 - d. the duration of the service contract requested or entered into
 - e. the nature and extent of any financial guarantees provided by the client to Hydro
 - f. any information regarding load shape provided by the client
3. What is the load shape for Happy Valley-Goose Bay, before and after the existing data centre contracts? What is the load shape for Happy Valley-Goose Bay if the projected contracts are entered into?
4. Please provide hourly capacity at Happy Valley-Goose Bay for the three most recent winters available, and/or for the three most recent years available.
5. Please provide any information Hydro has regarding the price point at which existing data centres would relocate their Labrador-based operations, and at which projected data centre loads would choose to locate elsewhere.
6. Has Hydro raised with the customers and potential data centre customers the possibility that they might be required to take financial responsibility for a certain share of the network additions that providing service to them will require? If so, please describe in detail these exchanges. If not, why not?
7. Has Hydro raised with existing and potential data centre customers the possibility of load curtailment? Please disclose any information regarding how much load curtailment, and in what seasons, may be possible for data centre customers.
8. With respect to the additional Department of National Defence ("DND") load currently anticipated in 2020, please indicate:
 - a. Whether or not a contract for this additional capacity has been signed with DND;
 - b. Whether or not Hydro has had exchanges with DND regarding possible curtailment options that might be associated with this increase in capacity. If so, please provide details of these exchanges. If not, why not?
 - c. More specifically, whether or not Hydro has asked DND what compensation would be required for DND to be open to curtailing demand during the winter peak;
 - d. Whether or not Hydro has provided DND with any estimates of its future rates, from 2020 onward, and, if so, if DND has indicated any price sensitivity with regard to its future power requirements, and
 - e. Whether or not Hydro has raised with DND the possibility that, if it goes ahead with this capacity increase, it would have to take responsibility for a portion of the additional capital cost required to allow Hydro to provide such service.

9. Please clarify to what extent loads greater than 77 MW at Happy Valley-Goose Bay are compatible with reliable electric service. More specifically, please describe the consequences of transient or short-term loads that exceed this level, in increments of 1 MW, taking into account existing diesel generation, utility-scale energy storage, curtailment options and any other demand management resources available to Hydro.
10. Please provide estimates of the additional generation that would be required – both in MW and in MWh/year – to meet forecast loads for a) the 2018-2019 winter, and b) the 2019-2020 winter, taking into account the specific load shapes of existing and planned data centre loads, as well as the existing clientele. Please provide hourly forecasts in support of your response.
11. Under the interim OATT approved by the Board in P.U. 3(2018), how would the costs of the proposed Labrador capital additions affect NLSO's revenue requirement? Please explain in detail how these additional costs would flow through to the various categories of consumers and of other potential users of the transmission system.