IN THE MATTER OF

the Electrical Power Control Act, 1994, SNL, 1994, Chapter E-5.1 ((the "EPCA") and the Public Utilities Act, RSNL 1990, Chapter P-47 (the "Act"), as amended, and regulations thereunder;

IN THE MATTER OF Newfoundland and Labrador Hydro's Reliability and Supply Adequacy Study.

CONSUMER ADVOCATE REQUESTS FOR INFORMATION CA-NLH-001 to CA-NLH-030

Issued: June 30, 2020

| 1 2 3 | CA-NLH-001 | Please provide Hydro's current schedule for the commissioning of Muskrat Falls generation, the LIL and the synchronous condensers. |
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| 4 5 6 7 | CA-NLH-002 | Have delays stemming from the Covid-19 pandemic impacted Hydro's/Nalcor's costs relating to the Muskrat Falls Project and the various contract commitments relating to the project? |
| 8 9 10 11 12 13 14 15 | CA-NLH-003 | It is understood that Hydro has changed its generation planning criteria to an LOLE of 0.1. Further it is understood that this criterion was chosen as it is a generally accepted industry standard. Please confirm or deny the accuracy of this statement and explain how it ties in with customer willingness to pay for reliability. What is the expected cost to customers of this change in generation planning criteria and how does it compare to the value customers place on the expected reduction in unsupplied energy? |
| 16 17 18 19 20 21 22 23 | CA-NLH-004 | Does Hydro currently place a value on unsupplied energy in its planning studies (value of lost load, VOLL)? Attachment 1 to PUB-NLH-074 appears to suggest that there are a number of limitations to studying VOLL specific to the electricity consumers of the Province (or any jurisdiction). It is noted that most of the references cited in Attachment 1 predate the year 2000. Does Hydro continue to believe such a study provides value? What are Hydro's current plans relating to the study on VOLL? |
| 24 25 26 27 28 29 | CA-NLH-005 | Hydro states in its Reliability and Resource Adequacy Study – 2019 Update (Volume I, pages iii and iv) "Hydro remains committed to working with the Board and stakeholders to help ensure an appropriate balance of cost and reliability for the provincial future electrical system." Specifically, what steps has Hydro taken, and is planning to take, to meet this commitment? |
| 30 31 32 33 34 35 36 37 38 39 40 | CA-NLH-006 | It is understood that Hydro proposes to base supply planning decisions on a P50 peak demand forecast while continuing to assess and report to the Board on forecast exposure under the P90 peak demand forecast. Hydro will use the P90 peak demand forecast in evaluating the requirement for incremental resources. Please confirm or deny the accuracy of this statement and explain that this approach to using the P90 forecast is appropriate when the P90 forecast is already incorporated in Hydro's model used for determining the LOLE of 0.1. It is noted that Hydro's 2019 Update (Volume I, page 14) suggests there may be duplication using this approach. Is such double counting consistent with ensuring an appropriate balance of cost and reliability? |
| 41 42 43 44 | CA-NLH-007 | It is understood that Hydro has produced a "conservative" load forecast for NP which is 40 to 50 MW higher than the peak demand forecast provided by NP. Please confirm or deny the accuracy of this statement and provide |

| 1 | | the rationale. How much double or triple counting is arising when Hydro |
|----------|--------------|--|
| 2 | | uses this more conservative load forecast along with a P90 forecast for |
| 3 | | determining the need for incremental resources when the P90 forecast is |
| 4 | | already incorporated in its system modelling of LOLE? Would it not be |
| 5 | | better to inform the Board of the expected scenario and provide a number |
| 6 | | of what-if scenarios to present a clearer picture of the near-term resource |
| 7 | | situation and enable the Board to make more informed decisions? |
| 8 | G | |
| 9 | CA-NLH-008 | What are Hydro's best estimates of the impacts of Covid-19, rate mitigation |
| 10 | | and government intervention (i.e., heat pump incentives) on the load |
| 11 | | forecast? Has Hydro altered its load forecast uncertainty curve to |
| 12 | | incorporate these events and if so, how has the load forecast uncertainty |
| 13 | | curve been altered? |
| 14 15 | CA-NLH-009 | What is the difference in MW between the D50 and D00 femalests in the |
| | CA-NLIT-009 | What is the difference in MW between the P50 and P90 forecasts in the |
| 16 17 | | year 2025? How does the impact of the P90 scenario compare to the impact |
| 18 | | of other what-if cases Hydro considers in its reliability planning studies; i.e., loss of a pole on the LIL? |
| 19 | | i.e., loss of a pole of the LiL! |
| 20 | CA-NLH-010 | What projects, and what project costs, will Hydro be including in its 2021 |
| 21 | CA-NLII-010 | Capital Budget Application for Holyrood TGS and the Hardwoods and |
| 22 | | Stephenville gas turbines? |
| 23 | | Stephen ine gas taromes: |
| 24 | CA-NLH-011 | Does the NLSO have both the responsibility and the authority to operate |
| 25 | CH INDII OII | the Island and Labrador Interconnected power systems in a reliable and |
| 26 | | low-cost manner? Please reference documentation and specific clauses |
| 27 | | within that documentation that grant the NLSO this responsibility and |
| 28 | | authority. For example, does the NLSO have approval authority over load |
| 29 | | forecasts and maintenance outage plans? Does the NLSO have the authority |
| 30 | | to "require" Hydro, NP and the industrial customers to submit load |
| 31 | | forecasts and to review and approve equipment maintenance and outage |
| 32 | | plans? |
| 33 | | |
| 34 | CA-NLH-012 | What level of emergency support can Hydro rely on over the ML prior to |
| 35 | | and after full LIL commissioning? Please provide support for this figure. |
| 36 | | |
| 37 | CA-NLH-013 | Please provide import figures over the ML to date in 2020 and explain if |
| 38 | | the imports were driven by economics or system reliability. Please explain |
| 39 | | if, and how, ponding may have been used during ML imports. Please |
| 40 | | provide an estimate of the savings achieved owing to imports over the ML. |
| 41 | | |
| 42 | CA-NLH-014 | Please provide a summary of the occasions in 2020 when Hydro has |
| 43 | | procured the services of Nalcor Energy Marketing and indicate the purpose |
| 44 | | of the procurement and results following same. |

| 1 2 3 4 5 | CA-NLH-015 | Please provide a table summarizing Hydro's most recent forecast of demand and supply on the Island Interconnected System and for the Avalon Peninsula including all assumptions for the winters of 2020/21, 2021/22 and 2022/23 assuming the LIL is not available. |
|--|------------|---|
| 6 7 8 9 | CA-NLH-016 | Please confirm that Hydro proposes to have eight linespersons and two supervisors staffing two emergency response teams (one on the Island and one in Labrador) for the LIL. Please identify the expected cost of these teams and identify the work that will be undertaken by these teams by task. |
| 11 12 13 14 15 | CA-NLH-017 | How will Hydro determine the location of a fault on the LIL? How will Hydro staff travel to the fault location? Is there a road along the line route? If so, how will Hydro ensure the road is kept open for its use during emergencies? Does Hydro have, or intend to install, cameras along the LIL line route? |
| 17 18 19 20 21 22 | CA-NLH-018 | Does Hydro have more recent information (than the 3-week timeframe included in the 2019 Update) on the length of time necessary to repair a bipole outage on the LIL? How does a 3-week timeframe compare to that used in other Canadian jurisdictions such as Quebec, Ontario, Alberta and Manitoba? |
| 23 24 25 26 27 | CA-NLH-019 | Please confirm that Hydro continues to believe that there will not be reliability issues in the near term with or without the LIL (2019 Update, Volume II). Is Hydro satisfied that any near-term reliability issues that may come up can be addressed with purchases over the Maritime Link? |
| 28 29 30 31 32 | CA-NLH-020 | Specifically, when do commitments relating to the Nova Scotia block and the Supplemental Block commence; i.e., with the commissioning of the third Muskrat Falls generator, the commissioning of the LIL for bi-pole operation, or something else? |
| 33 34 35 | CA-NLH-021 | Is it possible that Hydro will be denied a Certificate of Approval, or any other required approvals, to operate Holyrood beyond August 2021? Please elaborate. |
| 36 37 38 39 40 41 42 43 | CA-NLH-022 | Liberty states (Summary of and Comments on LIL Study Reports Issued in April 2020, page 6) "At lower Island demand levels, the LIL's operating limit falls, as assumed levels of ML exports do. Without the ML in operation, the LIL can operate at maximum level of 750MW at maximum Island loads. That operating limit falls to 500MW for Island loads at about 950MW." How does Hydro incorporate outages of the ML in its reliability planning? Where do outages of the ML rank in terms of criticality to the reliability of supply to the Island Interconnected System? |

| 1 2 3 4 5 6 7 8 | CA-NLH-023 | Liberty states (Summary of and Comments on LIL Study Reports Issued in April 2020, page 4) "In response to our questions about restrictions General Electric has placed on LIL operation, Hydro stated that it has no role in what it termed a commercial matter. Hydro responded similarly when asked about responsibility for potential damage to LIL or other equipment connected to the ac network." Has Hydro since gained answers to these questions as recommended by Liberty? |
|--------------------------------------|------------|---|
| 9 10 11 | CA-NLH-024 | Have the Muskrat Falls turbine generation units been tested and are these operational? Please provide updates and details in reference to each unit. |
| 12 13 14 15 | CA-NLH-025 | Are warranties in place for all of the component parts of the Muskrat Falls Project? Specify what warranties are in place and the length and duration of the warranty. |
| 16 17 18 | CA-NLH-026 | Is there agreement among providers as to the procedure from when the warranties will commence? |
| 19 20 21 22 | CA-NLH-027 | Has NL Hydro undertaken discussions with Hydro Quebec in reference to water issues upon which the so-called Water Management Agreement was based? Please provide an update. |
| 23 24 25 | CA-NLH-028 | Has NL Hydro entered into discussions with Hydro Quebec regarding the export of recalled power and energy sales via the Hydro Quebec facilities? |
| 26 27 28 | CA-NLH-029 | What agreements does NL Hydro have in place with Hydro Quebec for various Labrador and Quebec locations? |
| 29 30 | CA-NLH-030 | Has NL Hydro entered into discussions with Hydro Quebec and or CFL Co. for the possible purchases of electricity from Hydro Quebec if required? |

<u>DATED</u> at St. John's, Newfoundland and Labrador, this <u>30th</u> day of June, 2020.

Per:

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