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DELIVERED BY HAND

August 23, 2021

Board of Commissioners  
of Public Utilities  
P.O. Box 21040  
120 Torbay Road  
St. John's, NL A1A 5B2

Attention: G. Cheryl Blundon  
Director of Corporate Services  
and Board Secretary

Dear Ms. Blundon:

**Re: Elenchus Comments on Newfoundland Power's 2022 Capital Budget Application,  
Requests for Information**

Please find enclosed the original and 9 copies of Newfoundland Power's Requests for Information NP-CA-001 to NP-CA-021 in relation to the above-noted comments submitted by Elenchus Research Associates of behalf of the Consumer Advocate.

If you have any questions regarding the enclosed, please feel free to contact the undersigned.

Yours truly,

A handwritten signature in blue ink, appearing to read "D. Foley".

Dominic Foley  
Legal Counsel

Enclosures

c. Shirley Walsh  
Newfoundland and Labrador Hydro

Dennis Browne, Q.C.  
Browne Fitzgerald Morgan & Avis

**Newfoundland Power Inc.**

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**IN THE MATTER OF** the *Public Utilities Act*, (the “Act”); and

**IN THE MATTER OF** capital expenditures and rate base of Newfoundland Power Inc.; and

**IN THE MATTER OF** an application by Newfoundland Power Inc. for an order pursuant to Sections 41 and 78 of the Act:

- (a) approving a 2022 Capital Budget of \$109,651,000;
- (b) approving certain capital expenditures related to multi-year projects commencing in 2022; and
- (c) fixing and determining a 2020 rate base of \$1,181,897,000.

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**Requests for Information by  
Newfoundland Power Inc.**

**To: Elenchus Research Associates Inc.**

**NP-CA-001 to NP-CA-021**

**August 23, 2021**

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## Requests for Information

NP-CA-001 Reference: *Comments on Newfoundland Power's 2022 Capital Budget Application*, Elenchus Research Associates Inc., August 13, 2021, page 8, lines 9-13.

*“Consistent with GARP, regulators expect the utilities they regulate to adopt the least cost option for meeting the needs of their customers (primarily adequate and reliable service) unless a higher cost is justified as necessary to meet specific government policy objectives (e.g., renewable targets) or to achieve identified and quantified external benefits.”*

Is Elenchus Research Associates Inc. (“Elenchus”) aware of any Canadian jurisdictions where DER projects are proceeding as alternatives to traditional utility investment without the requirement to meet specific government policy objectives? If yes, had the utility’s regulator and other interested parties previously agreed upon how other quantifiable benefits could be used to justify the higher cost?

NP-CA-002 Reference: *Comments on Newfoundland Power's 2022 Capital Budget Application*, Elenchus Research Associates Inc., August 13, 2021, page 13, line 1-6.

*“The alternatives considered will normally include (i) design alternatives, (ii) technological alternatives, (iii) the deferral alternative, and (iv) the do nothing alternative. It will normally be expected that all alternatives that do not have unacceptable implications in terms of maintaining an adequate, reliable and safe supply of power be considered in a cost-benefit analysis that compares the feasible alternatives.”*

Would Elenchus agree that in addition to screening out all alternatives that have unacceptable implications in terms of maintaining an adequate, reliable and safe supply of power, that alternatives with excessive cost should also be screened out? If not, why not?

NP-CA-003 Reference: *Comments on Newfoundland Power's 2022 Capital Budget Application*, Elenchus Research Associates Inc., August 13, 2021, page 13, line 3-6, and page 18, lines 23-27.

*“It will normally be expected that **all** (emphasis added) alternatives that do not have unacceptable implications in terms of maintaining an adequate, reliable and safe supply of power be considered in a cost-benefit analysis that compares the feasible alternatives.”*

*“... the Prudence Review Standard in Order No. P.U. 13(2016) have been fulfilled. In particular, as stated in the Order (quoted above):*

*Prudent decisions and actions require that management follow specific practices:*

- 1. identify all relevant information*
- 2. identify **a reasonable range of** (emphasis added) alternative solutions”*

Would Elenchus agree that Order No. P.U. 13 (2016) requires consideration of a reasonable range of alternatives, not all alternatives? If not, why not?

NP-CA-004

Reference: *Comments on Newfoundland Power’s 2022 Capital Budget Application*, Elenchus Research Associates Inc., August 13, 2021, page 14, lines 4-6 and page 24, lines 8-10.

*“For example, an alternative with a short service life may offer significant value in terms of future flexibility (option value) that justifies a higher total cost over the service life of the longest-lived alternative.”*

and

*“A more significant consideration when comparing a long-lived asset to an alternative with a shorter life, such as the hypothetical DER project in the table above, is the option value provided by the more flexible alternative.”*

How are utilities and regulators valuing future flexibility in the comparison of alternatives, and how is the “option value” of the hypothetical DER project determined? Please provide examples of regulatory guidance from other Canadian jurisdictions that address option value.

NP-CA-005

Reference: *Comments on Newfoundland Power’s 2022 Capital Budget Application*, Elenchus Research Associates Inc., August 13, 2021, page 17, lines 22-25.

*“In order to manage long term risk, the economic analysis of alternatives could include scenario analysis that examines the implications of a reasonable range of different assumptions regarding costs trends and the economic (as opposed to physical) life of the alternative assets being evaluated.”*

How would the economic life of an asset be determined? Please provide examples of regulatory guidance from other Canadian jurisdictions that address economic life determination.

NP-CA-006

Reference: *Comments on Newfoundland Power's 2022 Capital Budget Application*, Elenchus Research Associates Inc., August 13, 2021, page 22, lines 8-11.

*"DERs, including NWAs such as behind-the-meter generation and storage, demand response programs, automated load control, etc. will make the power system of tomorrow almost unrecognizable to the power system engineers trained only in traditional assets."*

- a) What utility infrastructure is necessary to support behind the meter generation and storage, demand response programs and automated load control technologies? Please provide examples.
- b) Should the cost of establishing and upgrading this utility infrastructure be included in the economic analysis used to assess NWAs and DERs?

NP-CA-007

Reference: *Comments on Newfoundland Power's 2022 Capital Budget Application*, Elenchus Research Associates Inc., August 13, 2021, page 22, lines 14-18.

*"The long-term value of the energy and capacity that will be provided by the Sandy Brook Plant Penstock Replacement project is further undermined by the potential availability of Churchill Falls power after 2041. This power may become available to serve Newfoundland at extremely low cost causing the value of Sandy Brook to decline to close to zero."*

If Churchill Falls power were to become available to Newfoundland Power's customers after 2041, why would it be reasonable to expect that the wholesale price of this power would decline to close to zero?

NP-CA-008

Reference: *Comments on Newfoundland Power's 2022 Capital Budget Application*, Elenchus Research Associates Inc., August 13, 2021, page 23, Table 1.

The 20 years levelized revenue requirement stated in Table 1 is 3.87¢. Table 3 on page A-5 of the *1.2 Sandy Brook Plant Penstock Replacement* report shows the benefits of Sandy Brook Plant's production at between 7.04 and 10.21 ¢ per kWh based on the levelized cost of plant production over 50 years of 3.22 ¢ per kWh. Would Elenchus agree that even at a levelized cost of plant production over 20 years of 3.87 ¢ per kWh as shown in Table 1, the net benefit is still significant? If not, why not?

- NP-CA-009      Reference: *Comments on Newfoundland Power’s 2022 Capital Budget Application*, Elenchus Research Associates Inc., August 13, 2021, page 23, footnote 30.
- “The capital cost for the Distributed Energy Resource Project #2 assumes 1% annual cost reductions from technological improvements.”*
- Please provide industry sources that substantiate the 1% annual cost reductions from technological improvements in both the short term and the longer term.
- NP-CA-010      Reference: *Comments on Newfoundland Power’s 2022 Capital Budget Application*, Elenchus Research Associates Inc., August 13, 2021, page 24, Table 2 and page 27, Table 3.
- What is the basis of the estimated capital cost of hypothetical Distributed Energy Resource Projects listed in Table 2 and Table 3?
- NP-CA-011      Would hypothetical DER projects with the same energy (27.6 GWh) and capacity (6.31 MW) as Sandy Brook hydro plant be permitted under existing provincial legislation?
- NP-CA-012      Reference: *Comments on Newfoundland Power’s 2022 Capital Budget Application*, Elenchus Research Associates Inc., August 13, 2021, page 24, Table 2 and page 27, Table 3.
- Please provide an estimate of the annual operating and maintenance costs over the full service life for all the hypothetical DER projects listed in Table 2 and Table 3.
- NP-CA-013      Reference: *Comments on Newfoundland Power’s 2022 Capital Budget Application*, Elenchus Research Associates Inc., August 13, 2021, page 26, lines 11-14.
- “If the need for generation does not materialize, Sandy Brook would become a stranded asset and the present value of Sandy Brook capital-related revenue requirements project cannot be avoided.”*
- Why is it reasonable to assume that Sandy Brook would become a stranded asset if the future need for generation does not materialize, considering that there are multiple other hydro plants on the Island Interconnected System, operated by Newfoundland Power and Newfoundland and Labrador Hydro, with varying costs of energy and capacity?

- NP-CA-014 Further to the response to CA-NP-013, please describe the notion that the requirement for generation supply from Sandy Brook, which has been in service since 1963, is based on the future need for generation materializing.
- NP-CA-015 Newfoundland and Labrador Hydro's *Reliability and Resource Adequacy Study – 2019 Update in the Planning for Today, Tomorrow, and the Future* summary identifies capacity shortfalls on the Island Interconnected System requiring additional resources within the next 10 years. In light of this need for additional resources, please elaborate on the prudence of removing existing energy and capacity from the system and replacing it with DER projects. Would it not be more beneficial to use DER project potential (if it can be proven to be economic) to delay the need for these additional resources and leaving the existing economic generation like Sandy Brook in place?
- NP-CA-016 Reference: *Comments on Newfoundland Power's 2022 Capital Budget Application*, Elenchus Research Associates Inc., August 13, 2021, page 28, lines 4-8.
- “Limiting consideration of alternatives to what has been traditionally viewed as “good utility practice” may have been prudent in the past. But that does not suggest that the same approach in the future, or even in the present, is prudent. This conclusion is unavoidable if the PUB determines that the prudent economic life to use for a capital asset can be shorter than its physical, or potential service, life.”*
- Please provide a list of all Canadian utility regulators that have determined that the prudent economic life of a capital asset can be shorter than its physical, or potential service, life. Provide details of each determination.
- NP-CA-017 Reference: *Comments on Newfoundland Power's 2022 Capital Budget Application*, Elenchus Research Associates Inc., August 13, 2021, page 29, lines 13-19.
- “NP's economic analysis appears to quantify the reduction in its payments to NLH based on the implicit assumption that the costs that will have to be recovered by NLH from its other domestic customers will not be impacted. However, under the more realistic assumption that NLH's cost are mostly fixed and export revenue will not increase significantly when sales to NP decline, a portion of NP's reduced payments to NLH will be offset by an increase in the costs that NLH will recover from its in-province customers.”*
- Please provide the basis for the statement that *“NP's economic analysis appears to quantify the reduction in its payments to NLH based on the*

*implicit assumption that the costs that will have to be recovered by NLH from its other domestic customers will not be impacted.” In the response please indicate whether Hydro’s *Marginal Cost Study Update - 2018 Summary Report* was reviewed to understand the basis for the estimates provided of the marginal energy costs and avoided capacity costs provided in report 1.2 *Sandy Brook Plant Penstock Replacement: Appendix A Sandy Brook Plant Economic Evaluation*.*

NP-CA-018 Further to NP-CA-017 above, if in fact Newfoundland Power has provided an estimate of the total cost impact on Newfoundland and Labrador Hydro in its *Sandy Brook Plant Economic Evaluation*, as opposed to a billing impact, would Mr. Todd’s concerns with uneconomic bypass be alleviated? If not, why not?

NP-CA-019 Reference: *Comments on Newfoundland Power’s 2022 Capital Budget Application*, Elenchus Research Associates Inc., August 13, 2021, page 31, lines 6-11.

*“NP’s response CA-NP-001 shows that there are two years in which NP’s approved capital expenditures differed from requested capital expenditures in the past 25 years. The Board disallowed 0.9% of requested capital expenditures in NP’s 2003 CBA and disallowed 3.15% of requested capital expenditures in NP’s 2004 CBA. Approved amounts were equal to requested amounts in all other years. To provide some context for this observation, Elenchus has identified examples of disallowances in other jurisdictions.”*

Has Elenchus identified any examples of disallowances in this jurisdiction other than the NP disallowances noted in the referenced section? If so please list them. If not, why not?

NP-CA-020 Would Elenchus agree that a utility is responsible to only bring forward for regulatory approval those projects which can be fully justified before its regulator? If not, please explain why utilities should be encouraged to bring forward projects that are not fully justified?



NP-CA-021

Reference: *Comments on Newfoundland Power's 2022 Capital Budget Application*, Elenchus Research Associates Inc., August 13, 2021, page 34, line 23 to page 35, line 5.

*“While there will almost certainly be a lag of a few years from the implementation of new technologies and policies in leading jurisdictions such as California, new proven technologies will become available to, and adopted by, Canadians long before the end of the service life of grid assets build by NP in the 2020’s. [sic] All utilities, including NP, need to recognize that significant change is coming within the next decade, or two at most, before committing to further traditional investments in grid infrastructure.”*

Is Elenchus suggesting that utilities like Newfoundland Power not make further traditional investments in grid infrastructure for the next decade or two when the potential role of new technologies and policies is better understood?

**RESPECTFULLY SUBMITTED** at St. John’s, Newfoundland and Labrador, this 23<sup>rd</sup> day of August, 2021.



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