

NEWFOUNDLAND AND LABRADOR

BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

120 Torbay Road, P.O. Box 21040, St. John's, Newfoundland and Labrador, Canada, A1A 5B2

E-mail: greg.connors@mcinnescooper.com

2019-04-12

Gregory J. Connors Counsel for Nalcor McInnes Cooper 5th Floor, 10 Fort William Building P.O. Box 5939 St. John's, NL A1C 5X4

Dear Mr. Connors:

Re: Rate Mitigation Options and Impacts Reference - Information Requests

Attached are Information Requests PUB-Nalcor-129 to PUB-Nalcor-186 issued by the Board in relation to the above subject matter. Responses to these requests must be filed by 3:00 p.m. on Friday, May 3, 2019.

If you have any questions or require any clarification, please do not hesitate to contact the undersigned.

Sincerely,

Elleen Jove

Assistant Board Secretary

SK/bt

Enclosure

Nalcor Energy

Peter Hickman, E-mail: phickman@nalcorenergy.com Rob Hull, E-mail: robhull@nalcorenergy.com Jeannine Fitzgerald, E-mail: JeannineFitzgerald@nalcorenergy.com

Newfoundland and Labrador Hydro Geoff Young, Q.C., E-mail: gyoung@nlh.nl.ca NLH Regulatory, E-mail: Regulatory@nlh.nl.ca

Consumer Advocate

Dennis Browne, Q.C., E-mail: dbrowne@bfma-law.com Stephen Fitzgerald; E-mail: sfitzgerald@bfma-law.com Bernice Bailey, E-mail: bbailey@bfma-law.com Sarah Fitzgerald, E-mail: sarahfitzgerald@bfma-law.com

Newfoundland Power Inc.
Kelly Hopkins, E-mail: khopkins@newfoundlandpower.com Liam O'Brien, E-mail: lobrien@curtisdawe.com NP Regulatory, E-mail: regulatory@newfoundlandpower.com

Island Industrial Customer Group

Paul Coxworthy, E-mail: pcoxworthy@stewartmckelvey.com Denis J. Fleming, E-mail: dfleming@coxandpalmer.com Dean A. Porter, E-mail: dporter@poolealthouse.ca Patrick Bowman, E-mail: pbowman@intergroup.ca Labrador Interconnected Customer Group

Senwung Luk, E-mail: sluk@oktlaw.com

Reference from the Lieutenant-Governor in Council On the Rate Mitigation Options and Impacts Relating to the Muskrat Falls Project

INFORMATION REQUESTS

1	PUB-Nalcor-129	Please	e provide copies of the maps with the following information:
2 3 4 5 6		(i)	Provincial Distribution (Newfoundland) - showing residential territories for each office, including staffing, feeder lengths, and numbers of customers.
7 8 9		(ii)	Communities served by Newfoundland Hydro's Interconnected and Diesel Systems
10 11 12 13		(iii)	Diesel Generation (Newfoundland) – showing the locations of diesel plants, kW sizes, numbers of customers served, and the personnel for each diesel location.
14 15 16		(iv)	Provincial Distribution (Labrador) - showing residential territories for each office, including staffing, feeder lengths, and numbers of customers.
17 18 19 20		(v)	Diesel Generation (Labrador) – showing the locations of diesel plants, kW sizes, numbers of customers served, and the personnel assigned for each diesel location.
21 22 23 24		(vi)	Power Supply – showing Nalcor Power Supply transmission lines and personnel located at each Power Supply office.
25 26 27		(vii)	Provincial Generation and Transmission Grid – showing all transmission lines and generation in Newfoundland and Labrador.
28 29 30 31		(viii)	Newfoundland Hydro Transmission (Newfoundland) - showing Newfoundland Hydro transmission lines, voltages, and lengths, and field transmission personnel, for each Regional office.
32 33 34		(ix)	Newfoundland Hydro Transmission (Labrador) – showing Newfoundland Hydro operated/maintained transmission lines in Labrador

1		(x) Emera Transmission – showing Emera-owned transmission lines.
2 3 4 5	PUB-Nalcor-130	Please provide the O&M budgets for 2019 to 2023 for Newfoundland Hydro's Transmission System.
6 7	PUB-Nalcor-131	Please provide the O&M budgets for 2019 to 2023 for Nalcor Power Supply's Transmission System.
8 9 10	PUB-Nalcor-132	Please provide the Capital budgets for 2019 to 2023 for Nalcor Power Supply's Transmission System.
11 12 13	PUB-Nalcor-133	Please provide the O&M budgets for 2019 to 2023 for Newfoundland Hydro's Interconnected Distribution Systems, by Region.
14 15 16	PUB-Nalcor-134	Please provide the O&M budgets for 2019 to 2023 for Newfoundland Hydro's Diesel Plants systems, by Region.
17 18 19	PUB-Nalcor-135	Please provide the O&M budgets for 2019 to 2023 for Newfoundland Hydro's hydroelectric and combustion turbine plants, by Region.
20 21 22 23 24 25	PUB-Nalcor-136	Please provide a copy of the following process procedures for Newfoundland Hydro's hydro facilities: a. Work Management b. Maintenance c. Operations
26 27 28 29	PUB-Nalcor-137	Please provide a description of the software suites used for Work Management, Maintenance, Inventory Control, Procurement, and Invoicing at Newfoundland Hydro's facilities.
30 31 32 33	PUB-Nalcor-138	Please provide by plant the O&M budgets for 2019 to 2023 for Newfoundland Hydro and for the Nalcor Power Supply production organization.
34 35 36 37	PUB-Nalcor-139	Please provide by plant and by major expense category for 2019 to 2023 the capital budgets for Newfoundland Hydro and Nalcor Power Supply production organization.
38 39 40 41 42 43	PUB-Nalcor-140	Please provide a description of the process by which Nalcor Energy was restructured in 2016, which resulted in the segregation of Newfoundland Hydro and Nalcor Power Supply. Please provide the change at that point, if any, in total FTEs post-restructuring, as well as the change in FTEs for any Newfoundland Hydro Business Unit.
44 45 46	PUB-Nalcor-141	Please identify where staff/FTE increases have occurred since the organizational restructuring.

1 2 3 4	PUB-Nalcor-142	Please provide the average fully loaded costs for pay grades $1-11$, Vice President, Senior Vice President and Executive Vice President, as well as those for union groups $1-14$.
5 6 7 8 9 10 11 12 13 14 15 16	PUB-Nalcor-143	Please provide the most recent Newfoundland Hydro forecasted income statements, balance sheets, cash flow statements, and revenue requirements for 2019 to 2039 and provide the supporting information and calculations for each key component that drive the earnings and dividends: a. Energy sales/load forecasts b. Assumptions on price/MWh on energy sales component c. Capital structure assumptions d. Costs of equity and debt capital e. Operating and maintenance expenses f. Other major expense categories g. Calculations of Newfoundland Hydro returns and dividends
17 18 19 20 21 22 23 24 25 26 27 28	PUB-Nalcor-144	Please provide the most recent Churchill Falls forecasted income statements, balance sheets, cash flow statements, and revenue requirements for 2019 to 2039 and provide sensitivity or scenario analysis on the major components identified, prepared by the company or consultants. a. Energy sales to Hydro Quebec, Newfoundland Hydro, other b. Assumptions on price/MWh on energy sales component c. Capital structure assumptions d. Costs of equity and debt capital e. Operating and maintenance expenses f. Other major expense categories g. Calculations of Churchill Falls returns and dividends
29 30 31 32	PUB-Nalcor-145	Please provide a list of all engineering firms and/or contracted engineering employees, by function, used during 2018 by Newfoundland Hydro's Engineering Services organization.
33 34 35 36	PUB-Nalcor-146	Please describe the process that leads Newfoundland Hydro management to identify the need when to hire an engineering firm or an engineering contractor for its Engineering Services organization.
37 38 39 40	PUB-Nalcor-147	Please provide any internal studies that compare contracted engineering cost versus internal FTE engineering cost, for similar functions, for Newfoundland Hydro's Engineering Services organization.
41 42 43	PUB-Nalcor-148	Please provide a list of all contractors and/or contract employees, by function, used during 2018 by Nalcor Power Supply Engineering organization.

1 2 3 4	PUB-Nalcor-149	Please provide any internal studies that compare contracted engineering cost versus FTE engineering cost, for similar functions, for Nalcor Power Supply's Engineering organization.
5 6 7 8	PUB-Nalcor-150	Please provide a list of all contractors and/or contract employees, by function, used during 2018 by all departments within all of Newfoundland Hydro's transmission and rural operations ("TRO") organization.
9 10 11	PUB-Nalcor-151	Please provide any internal studies that compare contracted cost versus FTE cost, for similar functions, for the various TRO organizations.
12 13 14 15 16	PUB-Nalcor-152	Please provide tables indicating the capital budgets for (1) Rural Distribution and (2) Diesel Plants for each year from 2019 to 2023. Please provide the justification used to plan each capital project, with start dates, for that time period.
17 18 19 20 21	PUB-Nalcor-153	Please provide a table indicating the capital budgets for Newfoundland Hydro transmission line projects for each year from 2019 to 2023. Please provide the justification used to plan each capital project, with start dates, for that time period.
21 22 23 24 25 26	PUB-Nalcor-154	Please provide a table indicating the capital budgets for Newfoundland Hydro terminal station projects for each year from 2019 to 2023. Please provide the justification used to plan each capital project, with start dates, for that time period.
27 28	PUB-Nalcor-155	Please provide the kilometers of Newfoundland Hydro transmission lines, by voltage.
29 30 31	PUB-Nalcor-156	Please provide the numbers of Newfoundland Hydro transmission lines, by voltage levels.
32 33 34 35	PUB-Nalcor-157	Please provide the number of Newfoundland Hydro terminal stations by voltage levels.
36 37 38 39	PUB-Nalcor-158	Please provide the numbers of terminal stations that supply distribution voltages to Newfoundland Hydro's rural interconnected distribution system.
40 41	PUB-Nalcor-159	Please provide the numbers of distribution substations by TRO Region.
42 43	PUB-Nalcor-160	Please provide the numbers of distribution circuits, by voltage levels, within the interconnected distribution systems in each of the TRO Regions.

1 2 3 4 5	PUB-Nalcor-161	Please provide the numbers of isolated diesel plant distribution systems within each of the TRO Regions. Also, please indicate the location of each diesel plant, and the number of diesel-generating units in each plant, by voltage and kW size.
6 7 8 9 10	PUB-Nalcor-162	Please provide tables that indicate SAIFI, CAIDI, and SAIDI for 2016, 2017, and 2018 for (1) transmission system, (2) the interconnected distribution system, by TRO Region, and (3) each of the isolated diesel plant systems for Newfoundland Hydro (major event day excluded – planned outages excluded).
11 12 13 14 15 16	PUB-Nalcor-163	Please provide tables that indicate SAIFI, CAIDI, and SAIDI for 2016, 2017, and 2018 for (1) transmission system, (2) the interconnected distribution system, by TRO Region, and (3) each of the isolated diesel plant systems for Newfoundland Hydro (major event day included – planned outages excluded).
17 18 19 20 21 22	PUB-Nalcor-164	Please provide tables that indicate SAIFI, CAIDI, and SAIDI for 2016, 2017, and 2018 for (1) transmission system, (2) the interconnected distribution system, by TRO Region, and (3) each of the isolated diesel plant systems for Newfoundland Hydro (planned outage caused only).
23 24 25	PUB-Nalcor-165	Please provide any update(s) to, or additional reviews similar to, Deloitte's 2012 Nalcor Intercompany Review Final Report.
26 27 28 29	PUB-Nalcor-166	Please provide any updates to the 2017 Transaction Costing Guidelines and/or describe any anticipated changes to those guidelines upon commercial operation of the Muskrat Falls Project.
30 31 32	PUB-Nalcor-167	Please provide any Service Level Agreements and/or service level metrics among Nalcor entities.
32 33 34 35	PUB-Nalcor-168	Please provide any internal studies that evaluate or compare shared service functions and costs versus external service providers.
36 37 38 39 40	PUB-Nalcor-169	Please provide a list of third-party service providers for Newfoundland Hydro, Nalcor Power Supply, and Finance for corporate functions (e.g. Information Technology, Human Resources, payroll, and legal) that have charges above \$1 million per year.
40 41 42 43 44	PUB-Nalcor-170	Please identify to what level of detail, and for which functions/jobs, data regarding productive and non-productive labor hours, both straight-time and overtime, are available for job functions within Newfoundland Hydro and Nalcor Power Supply.

1 2 3	PUB-Nalcor-171	Please provide budget and actuals (2018) for contractor staff by line of business and at the lowest organization level practical.
4 5	PUB-Nalcor-172	Please provide budget and actuals (2018) by line of business for fleet (non-labor) costs (e.g., work/crew vehicles, passenger vehicles, machine
6		equipment).
7		
8	PUB-Nalcor-173	Please provide facilities costs by line of business (e.g., lease costs, utilities,
9		communications, etc.).
10		
11	PUB-Nalcor-174	Please provide the following information for Muskrat Falls:
12		a. A study of original O&M costs versus projected
13		b. A listing of all contractors anticipated to be used in the future and
14		the tasks they will perform
15		c. The asset management plan for the site
16		d. Any studies that were performed to analyze O&M expenses
17		e. Any preventative maintenance programs developed for the plant
18		f. A copy of the plants work management process
19		g. A copy of any maintenance metrics projected to be monitored
20		including preventative maintenance ("PMs"), corrective
21		maintenance ("CMs"), schedule adherence statistics.
22		h. The forecast overtime statistics for operations and the maintenance
23		staff now and projected
24		i. A copy of any significant maintenance contracts in place or projected
25		j. A copy of any cost benchmarking studies performed
26		
27	PUB-Nalcor-175	Please provide the following for the Labrador Island Link ("LIL") and the
28		Labrador Transmission Assets ("LTA"):
29		a. Any benchmark studies performed to analyze costs
30		b. A copy of any detailed contingent work orders developed to replace
31		major components if needed such as breaker replacements or
32		transformer replacements
33		c. A copy of maintenance contracts used or anticipated to be used for
34		the assets
35		d. Any analysis conducted to reconcile the original maintenance cost
36		projections for the assets versus the current projections
37		e. Any original equipment manufactured ("OEM") or long-term
38		maintenance contracts contemplated
39		f. The current capital budgets for the assets for the next three years
40		versus original projections
41		g. A description and cost of major O&M and capital projects
42		anticipated for the next three years

1	PUB-Nalcor-176	Please provide the following information relating to Information
2		Technology:
3		a. 2018 and 2019 Budgets, and 2018 Actual for Capital and O&M
4		b. Resources (internal and external) by major categories for the most
5		recent year available, noting any significant planned future changes
6		c. Describe the major systems, platforms, services used by each of the
7		different "clients"
8		d. Please gauge (billings or allocations by category will work, for
9		example) how you measure each Nalcor Energy/ Newfoundland
10		Hydro client entity's share of usage from IT's work
11		e. Budgets and forecasts of costs by major category
12		f. Descriptions of organizations, resources, methods to integrate
13		Information Technology/Operations Technology ("IT/OT") threat
14		identification, mitigation, response and remediation
15		
16	PUB-Nalcor-177	Please provide a copy of the report dated April 2, 2019 on "Nalcor Energy
17		Marketing Activities Conducted in 2018 on Behalf of Newfoundland and
18		Labrador Hydro".
19		
20	PUB-Nalcor-178	Further to the response to PUB-Nalcor-008, page 3 of 12, lines 5-7, please
21		provide support for the statement that "This stand-alone entity has become
22		a common Canadian market structure approach" In the response please
23		provide details on all Canadian utilities that have established an energy
24		marketing organization separately from the regulated utility to buy and sell
25		capacity and energy by and for the utility and that performs the same
26		functions as Nalcor Energy Marketing as described in the report provided in
27		the response to PUB-Nalcor-177.
28	DUD Malass 170	Front and the second to DID Notes and 2 of 12 lives 1 10 of
29	PUB-Nalcor-179	Further to the response to PUB-Nalcor-008, page 3 of 12, lines 1-10, please
30	•	explain in detail how the creation of Nalcor Energy Marketing Activities: 1)
31 32		shields Nalcor Energy from the risk of becoming a taxable entity in the US
32 33		and 2) assists in protecting commercially sensitive information.
34	PUB-Nalcor-180	Please provide the organization structures for Nalcor Energy's Chief
35	I OD-MAICOI-100	Financial Officer ("CFO"), including organization charts, titles,
36		management personnel and number of employees for:
37		a. Prior to 2014
		\cdot
38		b. 2015 and 2016 (splitting off Newfoundland Hydro)
39		c. 2017 with new Nalcor Power Supply organization
40		d. Current
41	DVID NI 1 461	
42	PUB-Nalcor-181	Please provide the "Long Term Asset Management Plan" prepared for
43		Churchill Falls in 2012.

1 2 3 4	PUB-Nalcor-182	Please provide descriptions of current efforts to update the "Long Term Asset Management Plan", the goals and objectives of such an effort, and expected results.
5	PUB-Nalcor-183	Please provide each category and dollar amounts of taxes paid by Churchill
6	•	Falls, to whom, the purpose of the taxes and when such taxes were initiated.
7		
8	PUB-Nalcor-184	Please provide the "rental royalty" dollar amounts paid by Churchill Falls
9		to the Province, the purpose of the royalty and when it was initiated.
10		
11	PUB-Nalcor-185	Please provide the "Water Power Rental" dollar amounts to be paid by
12		Muskrat Falls to the Province, the purpose of the rental and a copy of the
13		Water Lease Agreement with the Province.
14		
15	PUB-Nalcor-186	Please provide the "IBA agreement" dollar amounts to be paid by Muskrat
16		Falls, the purpose of the payment and a copy of the IBA agreement.

DATED at St. John's, Newfoundland this 12th day of April, 2019.

BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

Per Allen Jmls
Sara Kean
Assistant Board Secretary