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January 18, 2019

VIA EMAIL

Attention: Mr. Dave Vardy

Dear Mr. Vardy:

**Re: Your request for access to information under Part II of the *Access to Information and Protection of Privacy Act, 2015* (File #: PB/954/2018)**

On December 19, 2018, Nalcor Energy received your request for access to the following records:

ATIPPA Request: Questions on Load Growth and Revenue Requirements

Please compare chart 4 on page 16 of MHI's October 2012 report with the slide on page 25 of Stan Marshall's update of February 15, 2018 presented at Memorial University (and similar slides presented as well in Stan Marshall's updates of June 2016 and 2017.)

These are my questions:

1. Was MHI's Chart 4 the official load growth used by Nalcor at DG3 and, if so, was the green line on page 25 of the February 15, 2018 update intended to present this same load forecast?
2. Why is there a difference between these two forecasts, with the MHI forecast showing about 9 TWh in 2017, increasing to about 10.5 TWh by 2040 while the February 15, 2018 representation of the 2012 forecast begins just over 7 TWh in 2017 and rises to not quite 9 TWh by 2040?
3. Is the load as represented by MHI in October 2012 defined the same in the February 2018 document? Are these data comparable?
4. Please provide a table showing the numbers used in both charts, including both the 2012 projections and the latest load growth curve shown in the February 2018 chart.
5. If the MHI Chart 4 is not the official DG3 load forecast please provide the official forecast used at sanction.
6. In the February 2018 chart the latest load growth data are based on a target rate of 18 cents/KWh, escalating at 2% thereafter. Page 28 of the same presentation shows that a rate of 22.89 cents/KWh in 2021 and rising would be required to cover all costs. What will be the revenues from rates and the deficit arising from the load growth shown on page 25 and escalated each year from 18 cents/KWh by 2% from 2021 to 2070?
7. In responding to 6 above please provide the latest revenue requirements for the period 2021-2070 showing the LIL, LTA and MF generation separately, as in Table 4 of PB-242-2018 and PB-651-2017, along with the annual deficit for each year as per

question 5 above. In these projected revenue requirements please provide updated O & M numbers for each of MF, the LIL and the LTA?

8. In Table 4 on page 19 of the COS study at

<http://www.pub.nf.ca/applications/NLH2018CostofService/application/Application%20-%20Cost%20of%20Service%20Methodology%20-%202018-11-15.PDF> the revenue requirements appear to be much lower than the revenue requirements supplied to me in P242-2018 and PB-651-2071 and it has been my understanding that Muskrat Falls capital cost estimates (\$12.7 B) have not changed since 2017. Can you explain this?

9. Please reconcile the revenue requirements for the Island Interconnected system including Muskrat Falls as shown in in Table 4 of the Cost of Service study filed with the PUB and the latest numbers for the incremental cost of Muskrat Falls as requested in 7 above?

10. Please explain what is meant by “Illustrative 2021” in Table 4 of the COS study?

The responses to your requests are as follows:

1. MHI’s “Figure 4” on page 16 of MHI’s October 2012 report presented the official forecasted total energy requirements for the Island Interconnected System at DG2 (2010) compared to DG3 (2012). The DG3 (2012) forecast in the figure reflected the Interconnected Island option load forecast. The slide on page 25 of Stan Marshall’s February 15, 2018 presentation at Memorial University presented the forecasted NL Hydro energy sales for the Island Interconnected System. NL Hydro forecasted energy sales presented on the slide on page 25 are lower than forecasted total energy requirements for the Island Interconnected System as it does not include the energy losses associated with 138/230 kV Island transmission system nor the self-generation energy that is available to Newfoundland Power and Corner Brook Pulp & Paper. The forecasted energy requirements on these two charts are not directly comparable.
2. Please refer to the response to question 1.
3. Please refer to the response to question 1.
4. No responsive records.
5. The MHI Chart 4 (more accurately, Figure 4) is the official DG3 load forecast for the Island Interconnected System which shows total Island energy requirements.
6. No responsive records.
7. Appendix 1 outlines the revenue requirements as of October 15, 2018 for each of MF, LTA and LIL for the period 2021-2070, including the O&M costs.

8. The revenue requirements presented in Access to Information Requests PB-242-2018 and PB-651-2017 for MF, LTA and LIL were current as at the June 2017 Muskrat Falls Project Update. The revenue requirements provided in Table 4 on page 19 of the COS study filed by NL Hydro on November 15, 2018 are based on more current information as of October 2018. Accordingly, there are changes in various assumptions that impact the overall revenue requirements, notwithstanding that overall project capital cost estimates remain unchanged.
9. No responsive records.
10. The "Illustrative 2021" information provided in Table 4 of the 2018 Cost of Service Methodology Review Report provides the forecast revenue requirement for the Island Interconnected System reflecting the full commissioning of the Muskrat Falls Project. This is a preliminary estimate of NL Hydro's 2021 revenue requirement for the Island Interconnected System to be used in cost allocation among customers on the Island Interconnected system (i.e., Newfoundland Power, Island Industrial customers and Hydro Rural customers).

The Cost of Service Methodology Report provides recommendations on the methodology for the Board of Commissioners of Public Utilities (the "Board") to use in determining the cost sharing among customer classes for use in establishing customer rates. The term "illustrative" is used in the report as these costs are not yet proposed for approval for cost recovery from customers but are used to illustrate projected customer impacts on differing methodologies to be considered by the Board in a cost of service methodology review proceeding anticipated for 2019.

It is the goal to publish this letter following a 72 hour period after it is sent electronically to you or five business days in the case where the letter has been mailed to you.

Please be advised that you may ask the Information and Privacy Commissioner to review the processing of your access request, as set out in section 42 of the Access to Information and Protection of Privacy Act (the Act). A request to the Commissioner must be made in writing within 15 business days of the date of this letter or within a longer period that may be allowed by the Commissioner. Your appeal should identify your concerns with the request and why you are submitting the appeal.

The appeal may be addressed to the Information and Privacy Commissioner is as follows:

Office of the Information and Privacy Commissioner  
2 Canada Drive

P. O. Box 13004, Stn. A  
St. John's, NL. A1B 3V8

Telephone: (709) 729-6309  
Toll-Free: 1-877-729-6309  
Facsimile: (709) 729-6500

You may also appeal directly to the Supreme Court Trial Division within 15 business days after you receive the decision of the public body, pursuant to section 52 of the Act (a copy of this section of the Act has been enclosed for your reference).

If you have any further questions, please feel free to contact the undersigned by telephone at (709) 733-5381 or by e-mail at [matthewcraig@nalcenergy.com](mailto:matthewcraig@nalcenergy.com).

Sincerely,

  
 Matthew Craig  
Access and Privacy Officer

#### Access or correction complaint

42. (1) A person who makes a request under this Act for access to a record or for correction of personal information may file a complaint with the commissioner respecting a decision, act or failure to act of the head of the public body that relates to the request.

(2) A complaint under subsection (1) shall be filed in writing not later than 15 business days

(a) after the applicant is notified of the decision of the head of the public body, or the date of the act or failure to act; or

(b) after the date the head of the public body is considered to have refused the request under subsection 16(2).

(3) A third party informed under section 19 of a decision of the head of a public body to grant access to a record or part of a record in response to a request may file a complaint with the commissioner respecting that decision.

(4) A complaint under subsection (3) shall be filed in writing not later than 15 business days after the third party is informed of the decision of the head of the public body.

(5) The commissioner may allow a longer time period for the filing of a complaint under this section.

(6) A person or third party who has appealed directly to the Trial Division under subsection 52(1) or 53(1) shall not file a complaint with the commissioner.

(7) The commissioner shall refuse to investigate a complaint where an appeal has been commenced in the Trial Division.

(8) A complaint shall not be filed under this section with respect to

(a) a request that is disregarded under section 21;

(b) a decision respecting an extension of time under section 23;

(c) a variation of a procedure under section 24; or

(d) an estimate of costs or a decision not to waive a cost under section 26.

(9) The commissioner shall provide a copy of the complaint to the head of the public body concerned.

#### Direct appeal to Trial Division by an applicant

52. (1) Where an applicant has made a request to a public body for access to a record or correction of personal information and has not filed a complaint with the commissioner under section 42, the applicant may appeal the decision, act or failure to act of the head of the public body that relates to the request directly to the Trial Division.

(2) An appeal shall be commenced under subsection (1) not later than 15 business days

(a) after the applicant is notified of the decision of the head of the public body, or the date of the act or failure to act; or

(b) after the date the head of the public body is considered to have refused the request under subsection 16(2).

(3) Where an applicant has filed a complaint with the commissioner under section 42 and the commissioner has refused to investigate the complaint, the applicant may commence an appeal in the Trial Division of the decision, act or failure to act of the head of the public body that relates to the request for access to a record or for correction of personal information.

(4) An appeal shall be commenced under subsection (3) not later than 15 business days after the applicant is notified of the commissioner's refusal under subsection 45(2).

**Appendix 1****Nalcor Energy's Projection of Revenue Requirement - Labrador-Island Link, Muskrat Falls, Muskrat Falls-Churchill Falls Transmission Link (\$'000)**

Based on October 2018 Update

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<b>LIL 1</b>										
Return on Equity	125,181	123,498	121,804	120,440	118,404	116,706	115,003	113,616	111,597	109,893
O&M 2	38,589	39,544	40,522	41,524	42,552	43,604	44,683	45,788	49,626	48,082
Depreciation	96,973	96,973	96,973	96,973	96,973	96,973	96,973	96,973	96,973	96,973
Interest	119,107	116,927	114,735	112,341	109,958	107,828	105,607	103,434	101,383	99,047
	<u>379,849</u>	<u>376,941</u>	<u>374,033</u>	<u>371,278</u>	<u>367,886</u>	<u>365,111</u>	<u>362,265</u>	<u>359,811</u>	<u>359,578</u>	<u>353,995</u>
<b>Muskrat 1</b>										
Return on Equity	(3,627)	16,033	34,176	57,542	81,739	101,813	122,650	144,446	169,618	207,082
O&M 2	29,382	30,051	30,737	31,440	32,161	32,899	33,655	34,164	34,385	35,199
Innu	5,818	5,937	6,049	6,049	6,049	6,049	6,049	6,049	6,049	6,049
Water Power Rental	15,553	15,872	16,197	16,529	16,868	17,214	17,567	17,927	18,294	18,669
Depreciation	123,300	123,300	123,300	123,300	123,300	123,300	123,300	123,300	123,300	123,300
Interest	122,596	120,157	117,641	114,989	112,222	109,568	106,718	103,761	98,336	93,812
	<u>293,022</u>	<u>311,350</u>	<u>328,101</u>	<u>349,849</u>	<u>372,339</u>	<u>390,842</u>	<u>409,939</u>	<u>429,647</u>	<u>449,982</u>	<u>484,111</u>
<b>LTA 1</b>										
Return on Equity	(2,998)	(2,971)	(2,872)	3,595	8,947	12,329	15,846	19,479	23,692	29,971
O&M 2	10,715	10,970	11,231	11,499	11,774	12,056	12,344	12,640	12,943	13,253
Depreciation	21,106	21,106	21,106	21,106	21,106	21,106	21,106	21,106	21,106	21,106
Interest	24,064	23,587	23,091	22,568	22,021	21,498	20,936	20,351	19,287	18,416
	<u>52,887</u>	<u>52,692</u>	<u>52,557</u>	<u>58,768</u>	<u>63,848</u>	<u>66,990</u>	<u>70,232</u>	<u>73,576</u>	<u>77,027</u>	<u>82,746</u>

1 Details provided for complete years during the 50 year term.

2 O&amp;M includes an allowance for Sustaining Capital.

**Appendix 1**

**Nalcor Energy's Projection of Revenue Requirement - Labrador-Island Link, Muskrat Falls, Muskrat Falls-Churchill Falls Transmission Link (\$000)  
Based on October 2018 Update**

	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
<b>LIL 1</b>										
Return on Equity	108,188	106,780	104,775	102,220	98,776	96,694	94,069	91,715	89,361	87,253
O&M 2	49,271	50,490	52,955	54,266	55,609	56,986	57,053	65,959	88,261	110,653
Depreciation	96,973	96,973	96,973	96,973	96,973	96,973	96,973	96,973	96,973	96,973
Interest	96,606	94,384	89,473	85,744	84,125	82,193	80,589	78,884	76,959	75,030
	<u>351,038</u>	<u>348,628</u>	<u>344,175</u>	<u>339,202</u>	<u>335,483</u>	<u>332,845</u>	<u>328,683</u>	<u>333,530</u>	<u>351,553</u>	<u>369,909</u>
<b>Muskrat 1</b>										
Return on Equity	242,817	267,939	293,800	320,454	347,879	376,097	407,137	438,487	469,282	500,956
O&M 2	36,033	36,888	37,764	38,661	39,581	40,523	41,903	51,490	48,351	49,487
Innu	6,049	6,049	6,049	6,049	6,049	6,049	6,049	6,049	6,049	6,049
Water Power Rental	19,052	19,443	19,841	20,248	20,663	21,087	21,519	21,960	22,410	22,870
Depreciation	123,300	123,300	123,300	123,300	123,300	123,300	123,300	123,300	123,300	123,300
Interest	92,178	88,670	85,103	81,444	77,731	73,963	68,131	62,767	58,758	54,692
	<u>519,429</u>	<u>542,288</u>	<u>565,857</u>	<u>590,156</u>	<u>615,203</u>	<u>641,019</u>	<u>668,039</u>	<u>704,053</u>	<u>728,150</u>	<u>757,353</u>
<b>LTA 1</b>										
Return on Equity	35,844	40,080	44,440	48,932	53,553	58,306	63,588	68,907	74,090	79,419
O&M 2	13,571	13,897	14,231	14,573	14,924	15,283	15,652	16,580	25,050	25,619
Depreciation	21,106	21,106	21,106	21,106	21,106	21,106	21,106	21,106	21,106	21,106
Interest	18,141	17,454	16,755	16,038	15,310	14,572	13,428	12,376	11,591	10,794
	<u>88,663</u>	<u>92,537</u>	<u>96,532</u>	<u>100,649</u>	<u>104,893</u>	<u>109,267</u>	<u>113,774</u>	<u>118,969</u>	<u>131,837</u>	<u>136,938</u>

1 Details provided for complete years during the 50 year term.

2 O&M includes an allowance for Sustaining Capital.



**Appendix 1**

**Nalcor Energy's Projection of Revenue Requirement - Labrador-Island Link, Muskrat Falls, Muskrat Falls-Churchill Falls Transmission Link (\$000)**

Based on October 2018 Update

	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
<b>LIL 1</b>										
Return on Equity	84,652	82,297	79,943	77,807	75,233	72,822	69,720	67,346	64,783	62,409
O&M 2	113,462	116,261	119,018	121,775	124,416	127,059	129,546	132,172	134,763	137,391
Depreciation	96,973	96,973	96,973	96,973	96,973	96,973	96,973	96,973	96,973	96,973
Interest	73,097	71,256	69,385	67,451	64,889	56,209	54,561	52,741	50,898	49,054
	<u>368,185</u>	<u>366,787</u>	<u>365,319</u>	<u>364,005</u>	<u>361,510</u>	<u>353,064</u>	<u>350,800</u>	<u>349,233</u>	<u>347,416</u>	<u>345,827</u>
<b>Muskrat 1</b>										
Return on Equity	533,531	567,006	605,783	639,185	671,582	704,841	738,975	772,089	805,047	826,012
O&M 2	50,651	51,844	53,065	54,316	55,598	56,910	58,255	59,633	61,044	62,489
Innu	6,049	6,049	6,049	6,049	6,049	6,049	6,049	6,049	6,049	6,049
Water Power Rental	23,339	23,817	24,305	24,803	25,312	25,831	26,360	26,901	27,452	28,015
Depreciation	123,300	123,300	123,300	123,300	123,300	123,300	123,300	123,300	123,300	123,300
Interest	50,566	46,406	42,179	37,886	33,535	29,124	24,658	18,952	4,310	2,028
	<u>787,435</u>	<u>818,422</u>	<u>854,681</u>	<u>885,540</u>	<u>915,376</u>	<u>946,054</u>	<u>977,597</u>	<u>1,006,923</u>	<u>1,027,202</u>	<u>1,047,893</u>
<b>LTA 1</b>										
Return on Equity	84,899	90,527	97,027	102,647	108,105	113,705	119,452	125,074	130,952	134,467
O&M 2	26,201	26,797	27,407	28,031	28,669	29,322	29,991	30,675	31,375	32,092
Depreciation	21,106	21,106	21,106	21,106	21,106	21,106	21,106	21,106	21,106	21,106
Interest	9,985	9,171	8,343	7,502	6,649	5,785	4,910	3,787	916	469
	<u>142,191</u>	<u>147,600</u>	<u>153,883</u>	<u>159,286</u>	<u>164,529</u>	<u>169,918</u>	<u>175,458</u>	<u>180,642</u>	<u>184,350</u>	<u>188,134</u>

1 Details provided for complete years during the 50 year term.

2 O&M includes an allowance for Sustaining Capital.

**Appendix 1**

**Nalcor Energy's Projection of Revenue Requirement - Labrador-Island Link, Muskrat Falls, Muskrat Falls-Churchill Falls Transmission Link (\$000)  
Based on October 2018 Update**

	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060
<b>LIL 1</b>										
Return on Equity	60,035	57,827	55,288	52,861	47,640	44,443	41,877	38,451	35,694	33,365
O&M 2	140,034	142,722	145,374	148,125	150,243	152,824	155,588	158,202	161,009	163,958
Depreciation	96,973	96,973	97,030	97,319	97,319	97,319	97,332	97,338	97,338	97,338
Interest	47,208	45,361	44,817	56,672	53,541	49,773	51,189	50,995	46,444	41,853
	<u>344,250</u>	<u>342,883</u>	<u>342,509</u>	<u>354,977</u>	<u>348,744</u>	<u>344,359</u>	<u>345,985</u>	<u>344,987</u>	<u>340,485</u>	<u>336,514</u>
<b>Muskrat 1</b>										
Return on Equity	847,421	869,571	890,164	910,433	991,477	1,024,337	1,058,066	1,092,685	1,128,216	1,164,682
O&M 2	63,970	64,620	65,555	67,147	68,777	70,447	72,157	73,910	75,704	77,543
Innu	42,248	50,078	50,725	51,739	55,795	57,440	59,128	60,861	62,639	64,464
Water Power Rental	28,589	29,175	29,774	30,384	31,007	31,642	32,291	32,953	33,629	34,318
Depreciation	123,300	123,300	123,300	123,300	123,300	123,300	123,300	123,300	123,300	123,300
Interest	(324)	(2,171)	(2,319)	(2,365)	(2,551)	(2,626)	(2,703)	(2,782)	(2,864)	(2,947)
	<u>1,105,204</u>	<u>1,134,573</u>	<u>1,157,198</u>	<u>1,180,638</u>	<u>1,267,805</u>	<u>1,304,541</u>	<u>1,342,240</u>	<u>1,380,926</u>	<u>1,420,625</u>	<u>1,461,361</u>
<b>LTA 1</b>										
Return on Equity	138,056	141,842	145,288	148,616	161,922	167,317	172,855	178,539	184,372	190,360
O&M 2	32,825	33,344	33,947	34,733	35,537	36,360	37,202	38,064	38,946	39,849
Depreciation	21,106	21,106	21,106	21,106	21,106	21,106	21,106	21,106	21,106	21,106
Interest	8	(355)	(381)	(388)	(419)	(431)	(444)	(457)	(470)	(484)
	<u>191,996</u>	<u>195,937</u>	<u>199,960</u>	<u>204,066</u>	<u>218,146</u>	<u>224,352</u>	<u>230,719</u>	<u>237,252</u>	<u>243,954</u>	<u>250,830</u>

1 Details provided for complete years during the 50 year term.

2 O&M includes an allowance for Sustaining Capital.

**Appendix 1**

**Nalcor Energy's Projection of Revenue Requirement - Labrador-Island Link, Muskrat Falls, Muskrat Falls-Churchill Falls Transmission Link (\$000)  
Based on October 2018 Update**

	2061	2062	2063	2064	2065	2066	2067	2068	2069
<b>LIL 1</b>									
Return on Equity	30,842	28,417	25,991	23,635	21,140	18,714	16,289	13,905	10,576
O&M 2	166,914	169,952	173,048	176,223	179,435	182,735	186,102	189,558	192,888
Depreciation	97,338	97,338	97,338	97,338	97,338	97,338	97,338	97,338	97,338
Interest	37,263	32,672	28,081	23,490	18,899	14,308	9,718	5,127	1,523
	<u>332,357</u>	<u>328,378</u>	<u>324,459</u>	<u>320,686</u>	<u>316,812</u>	<u>313,096</u>	<u>309,447</u>	<u>305,928</u>	<u>302,326</u>
<b>Muskrat 1</b>									
Return on Equity	1,202,106	1,240,512	1,279,924	1,320,367	1,361,866	1,404,448	1,448,139	1,492,966	1,538,958
O&M 2	79,427	81,356	83,332	85,357	87,431	89,555	91,731	93,961	96,244
Innu	66,338	68,260	70,232	72,257	74,334	76,465	78,652	80,895	83,197
Water Power Rental	35,021	35,739	36,472	37,220	37,983	38,761	39,556	40,367	41,194
Depreciation	123,300	123,300	123,300	123,300	123,300	123,300	123,300	123,300	123,300
Interest	(3,033)	(3,121)	(3,211)	(3,303)	(3,398)	(3,496)	(3,596)	(3,698)	(3,804)
	<u>1,503,159</u>	<u>1,546,047</u>	<u>1,590,050</u>	<u>1,635,197</u>	<u>1,681,515</u>	<u>1,729,033</u>	<u>1,777,782</u>	<u>1,827,791</u>	<u>1,879,091</u>
<b>LTA 1</b>									
Return on Equity	196,504	202,810	209,280	215,920	222,734	229,725	236,899	244,259	251,810
O&M 2	40,772	41,718	42,685	43,676	44,689	45,726	46,787	47,874	48,985
Depreciation	21,106	21,106	21,106	21,106	21,106	21,106	21,106	21,106	21,106
Interest	(498)	(512)	(527)	(542)	(558)	(574)	(590)	(607)	(624)
	<u>257,885</u>	<u>265,121</u>	<u>272,545</u>	<u>280,160</u>	<u>287,971</u>	<u>295,983</u>	<u>304,202</u>	<u>312,631</u>	<u>321,277</u>

1 Details provided for complete years during the 50 year term.

2 O&M includes an allowance for Sustaining Capital.