

1 Q. Please provide the analysis for Newfoundland Hydro from 2020 to 2039, showing
2 the impact of the following:

- 3 1) Debt issues
4 2) Debt retired
5 3) Revenue requirement (Island Interconnected)
6 4) Net Income
7 5) Dividends
8 6) Promissory notes
9 7) Capital expenditures
10 8) % of equity
11 9) Cash flow/total debt
12 10) Fixed charge coverage
13 11) EBITDA interest coverage

14
15 using the following assumptions:

Scenario	Equity Target	Return on Equity
1	25%	8.50%
2	25%	6.50%
3	25%	5.00%
4	25%	3.50%
5	20%	8.50%
6	20%	6.50%
7	20%	5.00%
8	20%	3.50%
9	15%	8.50%
10	15%	6.50%
11	15%	5.00%
12	15%	3.50%
13	10%	8.50%
14	10%	6.50%
15	10%	5.00%
16	10%	3.50%

1 A. Please refer to PUB-Nalcor-255, Attachment 1. The forecast scenarios were
2 completed based upon the assumptions outlined in Nalcor’s response to PUB-
3 Nalcor-049. In addition, please note that the scenarios can become materially
4 altered based upon changes to key assumptions such as capital forecast,¹ interest
5 rates,² LCP power purchase and transmission costs, and the value of export energy.
6 For example, the forecast scenarios assume there are no capital additions for
7 incremental generation. This is subject to change following the outcome of Hydro’s
8 Reliability and Resource Adequacy Study currently before the Board. In the event
9 there are capital additions for incremental generation, then this could materially
10 change scenario results due to required financing for the incremental generation.

¹ Capital additions from 2019 to 2023 are consistent with the Capital Plan filed with Hydro’s 2019 Capital Budget Application. Capital additions for 2024 to 2037 are based on a 20-year capital plan forecast, years 2038 to 2039 are based on an average of prior year’s additions.

² Interest rates for future debt issues are based on the Conference Board of Canada’s December 2017 forecast of long term federal bonds plus 1% to reflect the estimated cost of Hydro’s debt issuances.

PUB-Nalcor-255, Attachment 1
Rate Mitigation Options and Impacts Reference, Page 5 of 5

Revenue Requirement (Isl Intc)	591,029	1,065,066	1,038,334	1,054,076	1,072,201	1,096,713	1,111,216	1,132,810	1,157,243	1,186,145	1,221,079	1,262,256	1,291,281	1,325,873	1,351,616	1,383,992	1,429,904	1,480,821	1,532,981	1,592,504
Hydro Consolidated Ratios¹																				
CashFlow/Total Debt (%)	6.62	5.41	5.13	5.33	5.12	5.05	5.24	5.40	5.36	5.33	5.34	5.44	5.53	5.63	5.75	5.62	5.38	5.41	5.57	5.62
Fixed Charge Coverage (x)	1.67	1.55	1.40	1.36	1.36	1.37	1.40	1.44	1.42	1.42	1.41	1.45	1.50	1.50	1.54	1.51	1.46	1.46	1.48	1.47
EBITDA interest coverage (x)	2.62	2.28	2.02	2.02	2.01	2.05	2.13	2.22	2.20	2.21	2.20	2.28	2.39	2.41	2.51	2.44	2.34	2.37	2.43	2.42
Regulated Hydro Ratios¹																				
CashFlow/Total Debt (%)	4.64	3.49	3.27	3.58	3.49	3.49	3.74	3.94	3.96	3.99	4.03	4.18	4.33	4.43	4.57	4.49	4.35	4.41	4.55	4.61
Fixed Charge Coverage (x)	1.22	1.14	1.05	1.04	1.05	1.07	1.09	1.12	1.11	1.13	1.13	1.17	1.21	1.22	1.25	1.23	1.21	1.22	1.24	1.23
EBITDA interest coverage (x)	2.18	1.87	1.67	1.69	1.70	1.75	1.83	1.90	1.90	1.92	1.92	2.00	2.10	2.13	2.22	2.17	2.09	2.13	2.19	2.18
Equity Target = 10%; ROE = 3.5%	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Debt Issues	-	400,000	200,000	-	-	-	400,000	-	200,000	-	300,000	-	300,000	-	-	300,000	300,000	200,000	-	-
Debt Retired	(0)	0	(0)	(0)	(0)	0	(300,000)	(0)	0	(0)	(0)	(300,000)	0	(125,000)	0	(0)	0	0	(0)	0
Capex	(133,622)	(132,723)	(121,697)	(123,884)	(151,970)	(176,955)	(169,668)	(172,927)	(196,276)	(269,769)	(201,450)	(183,449)	(265,823)	(164,619)	(153,569)	(329,698)	(460,519)	(249,471)	(164,379)	(167,571)
Prom Notes	479,924	230,291	60,764	123,113	208,613	317,557	123,011	213,540	123,541	301,439	107,497	304,606	157,779	252,389	283,609	186,344	210,447	117,026	137,810	160,869
Net Income	7,286	2,930	841	2,556	3,542	4,304	4,026	3,650	4,209	6,867	5,117	4,293	6,355	3,535	3,297	7,119	9,431	4,110	2,730	2,630
Dividends ²	211,384	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equity %	10.0	9.6	9.6	9.6	9.5	9.3	9.2	9.1	8.9	8.7	8.6	8.5	8.3	8.3	8.4	8.1	7.7	7.6	7.6	7.7
Revenue Requirement (Isl Intc)	586,164	1,061,502	1,034,684	1,050,254	1,068,221	1,092,547	1,106,846	1,128,249	1,152,452	1,181,046	1,215,676	1,256,615	1,285,347	1,319,690	1,345,281	1,377,372	1,422,827	1,474,950	1,528,592	1,587,083
Hydro Consolidated Ratios¹																				
CashFlow/Total Debt (%)	6.37	5.22	4.92	5.10	4.87	4.79	4.96	5.10	5.05	5.00	4.99	5.07	5.15	5.24	5.35	5.22	4.99	4.99	5.11	5.15
Fixed Charge Coverage (x)	1.61	1.51	1.36	1.32	1.32	1.33	1.36	1.39	1.37	1.38	1.36	1.40	1.45	1.45	1.49	1.46	1.41	1.38	1.37	1.37
EBITDA interest coverage (x)	2.56	2.24	1.99	1.98	1.97	2.01	2.09	2.17	2.15	2.16	2.15	2.23	2.33	2.36	2.45	2.39	2.29	2.26	2.26	2.28
Regulated Hydro Ratios¹																				
CashFlow/Total Debt (%)	4.38	3.30	3.06	3.36	3.25	3.24	3.47	3.66	3.67	3.69	3.70	3.84	3.97	4.06	4.19	4.12	3.98	4.01	4.12	4.17
Fixed Charge Coverage (x)	1.17	1.10	1.01	1.00	1.01	1.03	1.05	1.08	1.07	1.09	1.08	1.12	1.16	1.16	1.20	1.18	1.16	1.15	1.14	1.14
EBITDA interest coverage (x)	2.12	1.83	1.64	1.66	1.67	1.71	1.78	1.86	1.85	1.87	1.87	1.95	2.05	2.07	2.16	2.11	2.04	2.03	2.03	2.05

¹ Hydro has calculated both the Regulated and Consolidated ratios because the equity level targets and return on equity are calculated on a Regulated Hydro basis; whereas, DBRS calculates on a Hydro Consolidated basis. Ratios are calculated based on the DBRS method but there may be minor items included by DBRS that are not reflected in these forecasts. As well, there may be items arising in the future that would need input from DBRS on inclusion or exclusion in ratio calculations.

² An equity thickness of less than 19% results in a dividend in 2020 because the equity thickness is currently approximately 19%. However, this results in Hydro triggering a debt issuance in the following period.