

1 Q. With reference to the response to PUB-Nalcor-5, please provide the rate
2 projections for both alternatives with the \$20 million per year for Holyrood life
3 extensions for the years 2012 to 2016, the \$581.976 million for Holyrood
4 ESP/scrubbers in 2015 and the \$19.817 million for No_x burners eliminated from the
5 costs for the Isolated Island Option.

6

7

8 A. Page 2 of 4 provides the rate projections for the Interconnected Island alternative
9 which would be the same as provided in PUB-Nalcor-5.

10

11 Page 3 of 4 provides the rate projections for the Isolated Island alternative under
12 the assumptions provided. For this alternative, in addition to removing the fixed
13 costs associated with Holyrood life extensions, ESP/Scrubbers and low NO_x burners
14 as requested, the operating and maintenance costs associated with the
15 ESP/Scrubbers have been removed and the incremental fuel cost associated with
16 maintaining a 0.7% fuel oil specification has been added.

17

18 Nalcor notes that the scenario as framed in this Request for Information is does not
19 consider commitments made by the Government of Newfoundland and Labrador in
20 the *Energy Plan*, and is therefore not in accordance with provincial energy policy.

Hydro's Wholesale and Retail Rate Estimates: Muskrat Falls - Labrador Island Transmission Link Electricity Supply Future

	Energy Delivered by Hydro at Transmission Level GWH	Island Interconnected Revenue Requirement \$000	Island Interconnected Average Wholesale Rate \$/MWh	Projected Wholesale Rate to Nfld Power \$/MWh	Nfld Power Pass Through of Hydro Costs to Retail Rate %	Retail Rate Projections Cents per KWh
2010	6,044.8	377,584	62.46	68.77	66.8%	11.73
2011	6,124.7	416,470	68.00	64.24	66.8%	11.21
2012	6,493.0	475,478	73.23	70.75	66.8%	11.97
2013	6,886.3	557,459	80.95	82.75	66.8%	13.33
2014	6,984.6	584,408	83.67	86.20	66.8%	13.70
2015	7,103.7	624,440	87.90	91.68	66.8%	14.28
2016	7,119.7	648,177	91.04	95.64	66.8%	14.69
2017	7,153.7	765,135	106.96	112.62	66.8%	16.44
2018	7,222.4	781,387	108.19	114.56	66.8%	16.63
2019	7,291.3	804,891	110.39	117.83	66.8%	16.94
2020	7,353.1	810,652	110.25	118.05	66.8%	16.97
2021	7,446.9	797,548	107.10	115.12	66.8%	16.68
2022	7,538.7	803,229	106.55	114.79	66.8%	16.65
2023	7,644.1	810,483	106.03	114.42	66.8%	16.62
2024	7,706.7	818,746	106.24	114.90	66.8%	16.66
2025	7,764.0	830,467	106.96	115.88	66.8%	16.76
2026	7,845.5	847,435	108.02	117.12	66.8%	16.88
2027	7,933.4	863,679	108.87	118.15	66.8%	16.98
2028	8,013.8	880,782	109.91	119.39	66.8%	17.10
2029	8,093.1	905,310	111.86	121.54	66.8%	17.30
2030	8,168.9	923,845	113.09	122.87	66.8%	17.43
2031	8,244.7	936,319	113.57	123.37	66.8%	17.47
2032	8,320.5	955,667	114.86	124.72	66.8%	17.60
2033	8,396.3	970,062	115.53	125.44	66.8%	17.67
2034	8,472.1	990,836	116.95	126.92	66.8%	17.81
2035	8,540.3	1,004,607	117.63	127.68	66.8%	17.88
2036	8,608.5	1,019,329	118.41	128.45	66.8%	17.95
2037	8,676.8	1,048,463	120.84	130.95	66.8%	18.19
2038	8,745.0	1,098,597	125.63	136.03	66.8%	18.66
2039	8,813.2	1,118,794	126.95	137.45	66.8%	18.79
2040	8,873.9	1,134,591	127.86	138.47	66.8%	18.88
2041	8,934.5	1,156,525	129.44	140.20	66.8%	19.04
2042	8,995.2	1,176,540	130.80	141.67	66.8%	19.17
2043	9,055.9	1,199,891	132.50	143.54	66.8%	19.34
2044	9,116.5	1,222,613	134.11	145.32	66.8%	19.50
2045	9,177.2	1,247,059	135.89	147.29	66.8%	19.68
2046	9,237.8	1,279,704	138.53	150.11	66.8%	19.93
2047	9,298.5	1,317,695	141.71	153.54	66.8%	20.23
2048	9,359.2	1,343,291	143.53	155.54	66.8%	20.41
2049	9,419.8	1,370,029	145.44	157.66	66.8%	20.60
2050	9,472.9	1,401,310	147.93	160.36	66.8%	20.83
2051	9,526.0	1,439,880	151.15	163.87	66.8%	21.14
2052	9,579.1	1,467,830	153.23	166.18	66.8%	21.33
2053	9,632.2	1,491,959	154.89	168.07	66.8%	21.50
2054	9,685.3	1,526,614	157.62	171.01	66.8%	21.75
2055	9,738.4	1,572,215	161.44	175.17	66.8%	22.10
2056	9,791.5	1,604,820	163.90	177.89	66.8%	22.33
2057	9,844.6	1,634,189	166.00	180.25	66.8%	22.53
2058	9,897.7	1,663,605	168.08	182.57	66.8%	22.72
2059	9,950.8	1,700,336	170.87	185.70	66.8%	22.98
2060	10,003.9	1,724,130	172.35	187.45	66.8%	23.13
2061	10,057.0	1,749,757	173.98	189.39	66.8%	23.29
2062	10,110.1	1,776,956	175.76	191.48	66.8%	23.46
2063	10,163.2	1,813,751	178.46	194.48	66.8%	23.70
2064	10,216.3	1,856,229	181.69	198.11	66.8%	24.00
2065	10,269.4	1,887,383	183.79	200.54	66.8%	24.20
2066	10,322.5	1,936,347	187.59	204.66	66.8%	24.53
2067	10,375.5	1,941,406	187.11	204.53	66.8%	24.52

See accompanying notes.

PUB-Nalcor-12: Excludes Investments for Holyrood Pollution Controls and Life Extension Projects Prior to 2017
Hydro's Wholesale and Retail Rate Estimates: Isolated Island Electricity Supply Future

	Energy Delivered by Hydro at Transmission Level GWH	Island Interconnected Revenue Requirement \$000	Island Interconnected Average Wholesale Rate \$/MWh	Projected Wholesale Rate to Nfld Power \$/MWh	Nfld Power Pass Through of Hydro Costs to Retail Rate %	Retail Rate Projections Cents per KWh
2010	6,044.8	377,584	62.46	68.77	66.8%	11.73
2011	6,124.7	416,470	68.00	64.24	66.8%	11.21
2012	6,493.0	475,393	73.22	70.74	66.8%	11.97
2013	6,886.3	557,048	80.89	82.68	66.8%	13.32
2014	6,984.6	578,719	82.86	85.39	66.8%	13.61
2015	7,103.7	610,993	86.01	89.73	66.8%	14.08
2016	7,119.7	617,613	86.75	91.35	66.8%	14.25
2017	7,153.7	635,558	88.84	93.91	66.8%	14.51
2018	7,222.4	671,749	93.01	98.29	66.8%	14.96
2019	7,291.3	695,376	95.37	101.35	66.8%	15.27
2020	7,353.1	736,008	100.09	106.44	66.8%	15.79
2021	7,446.9	746,143	100.19	106.89	66.8%	15.83
2022	7,538.7	792,159	105.08	112.08	66.8%	16.35
2023	7,644.1	850,976	111.32	118.69	66.8%	16.99
2024	7,706.7	880,041	114.19	121.78	66.8%	17.29
2025	7,764.0	913,972	117.72	125.61	66.8%	17.65
2026	7,845.5	945,264	120.49	128.55	66.8%	17.92
2027	7,933.4	983,655	123.99	132.23	66.8%	18.27
2028	8,013.8	1,032,854	128.89	137.30	66.8%	18.74
2029	8,093.1	1,076,928	133.07	141.76	66.8%	19.14
2030	8,168.9	1,117,909	136.85	145.59	66.8%	19.49
2031	8,244.7	1,156,076	140.22	148.99	66.8%	19.79
2032	8,320.5	1,191,747	143.23	152.06	66.8%	20.06
2033	8,396.3	1,264,114	150.56	159.36	66.8%	20.71
2034	8,472.1	1,451,054	171.28	180.00	66.8%	22.50
2035	8,540.3	1,488,080	174.24	183.25	66.8%	22.77
2036	8,608.5	1,561,575	181.40	190.56	66.8%	23.38
2037	8,676.8	1,665,017	191.89	201.16	66.8%	24.25
2038	8,745.0	1,711,351	195.70	205.18	66.8%	24.57
2039	8,813.2	1,758,743	199.56	209.22	66.8%	24.89
2040	8,873.9	1,804,355	203.33	213.10	66.8%	25.20
2041	8,934.5	1,850,446	207.11	217.00	66.8%	25.51
2042	8,995.2	1,902,314	211.48	221.48	66.8%	25.86
2043	9,055.9	1,963,807	216.85	227.05	66.8%	26.30
2044	9,116.5	2,017,256	221.27	231.63	66.8%	26.65
2045	9,177.2	2,072,887	225.87	236.40	66.8%	27.02
2046	9,237.8	2,135,516	231.17	241.87	66.8%	27.43
2047	9,298.5	2,205,816	237.22	248.15	66.8%	27.91
2048	9,359.2	2,276,412	243.23	254.33	66.8%	28.37
2049	9,419.8	2,358,008	250.32	261.71	66.8%	28.92
2050	9,472.9	2,444,020	258.00	269.67	66.8%	29.51
2051	9,526.0	2,539,689	266.61	278.67	66.8%	30.17
2052	9,579.1	2,631,276	274.69	286.99	66.8%	30.77
2053	9,632.2	2,725,039	282.91	295.62	66.8%	31.39
2054	9,685.3	2,792,223	288.29	301.23	66.8%	31.79
2055	9,738.4	2,863,450	294.04	307.25	66.8%	32.21
2056	9,791.5	2,953,921	301.68	315.16	66.8%	32.76
2057	9,844.6	3,069,537	311.80	325.76	66.8%	33.50
2058	9,897.7	3,137,887	317.03	331.25	66.8%	33.88
2059	9,950.8	3,206,819	322.27	336.76	66.8%	34.25
2060	10,003.9	3,280,837	327.96	342.73	66.8%	34.66
2061	10,057.0	3,357,168	333.81	348.90	66.8%	35.08
2062	10,110.1	3,437,914	340.05	355.47	66.8%	35.52
2063	10,163.2	3,576,582	351.92	367.70	66.8%	36.33
2064	10,216.3	3,726,984	364.81	381.30	66.8%	37.23
2065	10,269.4	3,829,054	372.86	389.77	66.8%	37.79
2066	10,322.5	3,952,156	382.87	400.18	66.8%	38.46
2067	10,375.5	4,116,129	396.71	414.62	66.8%	39.39

See accompanying notes.

Notes:

1. Energy delivered by Hydro at the transmission level represents Hydro's wholesale delivery requirement for the Island Interconnected System. Starting in 2014, it is derived by subtracting customer-based generation and transmission losses from Total Island Load as per 2010 PLF (Exhibit 1). Prior to 2014, it is derived from the short-term operating load forecast.
2. Hydro's Island Interconnected revenue requirement represents existing rate base plus incremental generation expansion costs as per the isolated or Muskrat Falls - LIL alternatives. The Isolated Island alternative has been adjusted to remove the following projects: Holyrood Life Extension (\$100 million); Holyrood ESPs/Scrubbers (\$581.976 million); and NOx Burners (\$19.817 million).
3. Hydro's Island Interconnected wholesale rate is derived by dividing the revenue requirement by energy delivered at the transmission level. This \$ per MWh illustrates the general electricity rate trends for costs on the Island under the alternative electricity supply futures.
4. The projected wholesale rate to Newfoundland Power is a function of Newfoundland Power's share of Hydro's total revenue requirement based on energy, demand and Rural deficit allocations, divided through by the Newfoundland Power's energy purchases from Hydro. It is intended to be a general estimate of the trend in the all-in wholesale average energy charge.
5. Hydro has estimated the impact of changes in its Island Interconnected revenue requirements on retail rates by assuming that the percentage pass through of Hydro costs applicable across Newfoundland Power in 2010 remains relevant in future periods. The starting retail rate was as of July 1, 2010 for the overall average consumption level applicable for the Island Interconnected system, inclusive of taxes.