

1 Q. **Load Forecast, Generation, and Purchases**

2 Please provide MS excel copies of “Loss Model” and “Load Model”.

3

4

5 A. IC-NLH-084, Attachment 1 provides the requested information for the 2018 Test

6 Year and IC-NLH-084, Attachment 2 provides the requested information for the

7 2019 Test Year. Please refer to Hydro’s response to IC-NLH-082 to see the flow of

8 data for the Cost of Service Study.

NEWFOUNDLAND & LABRADOR HYDRO
SUMMARY OF DEMAND & ENERGY FACTORS

2018 Forecast

	Billing Demand			MWH @					Coincident kW @				Non-Coincident kW @			
	MWh Sales	Number of Customers	(kW)	Generation	Generation	Transm.	Primary	Secondary	Generation	Transm.	Primary	Secondary	Generation	Transm.	Primary	Secondary
	(A)	(B)	(C)	(D)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(J)	(K)	(L)	(M)
ISLAND INTERCONNECTED																
Newfoundland Light & Power	5,824,500	1	0	6,078,841	1,298,159	1,288,631	-	-	1,342,730	1,332,872	-	-	-	-	-	-
Praxair	50,800	1	72,000	53,018	5,461	5,280	-	-	6,205	6,000	-	-	-	-	-	-
Vale Newfoundland	380,900	1	624,000	397,533	47,326	45,760	-	-	53,779	52,000	-	-	-	-	-	-
Corner Brook Pulp & Paper Co. Ltd. CB	40,000	1	84,000	41,747	6,371	6,160	-	-	7,240	7,000	-	-	-	-	-	-
N. Atlantic Refining Ltd.	253,100	1	384,000	264,152	29,124	28,160	-	-	33,095	32,000	-	-	-	-	-	-
Teck Resources	1,200	1	6,000	1,252	455	440	-	-	517	500	-	-	-	-	-	-
TOTAL INDUSTRIAL	726,000	5	1,170,000	757,703	88,736	85,800	-	-	100,836	97,500	-	-	-	-	-	-
Interruptible	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-
1.1 Domestic	104,643	11,400	0	119,251	28,647	27,699	26,276	24,166	35,133	33,971	32,225	29,638	-	-	-	-
1.12 Domestic All Electric	142,462	8,521	0	162,350	34,802	33,650	31,921	29,358	44,884	43,399	41,169	37,864	-	-	-	-
1.3 Special	345	1	0	393	127	123	117	107	150	145	138	127	-	-	-	-
2.1 General Service 0-10 kW	75,733	2,856	130,647	86,306	15,176	14,673	13,919	12,802	21,660	20,944	19,867	18,272	-	-	-	-
2.2 General Service 10-100 kW	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-
2.3 General Service 110-1,000 kVA	56,788	93	186,362	64,701	9,709	9,387	8,905	8,156	15,073	14,575	13,826	12,663	-	-	-	-
2.4 General Service Over 1,000 kVA	35,480	9	101,913	39,807	4,782	4,624	4,386	2,913	14,191	13,721	13,016	8,643	-	-	-	-
4.1 Street and Area Lighting	2,800	953	0	3,191	791	765	725	667	791	765	725	667	-	-	-	-
Sub-Total Rural	418,250	23,833	418,922	475,999	94,033	90,922	86,250	78,170	131,882	127,519	120,967	107,873	-	-	-	-
Grand Total	6,968,750	23,839	1,588,922	7,312,543	1,480,928	1,465,353	86,250	78,170	1,575,449	1,557,891	120,967	107,873	-	-	-	-
Coincident Peak at Generation for System Load Factor					1,515,496											
Zero check -->	-	-		0		0	0	0	0	34,568	0	0				

NEWFOUNDLAND & LABRADOR HYDRO
SUMMARY OF DEMAND & ENERGY FACTORS

2018 Forecast

	Billing Demand			Coincident kW @					Non-Coincident kW @			
	MWh Sales	Number of Customers	(kW)	Generation	Generation	Transm.	Primary	Secondary	Generation	Transm.	Primary	Secondary
	(A)	(B)	(C)	(D)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
LABRADOR INTERCONNECTED												
CFB-Goose Bay Boiler	-	-	-	-	-	-	-	-	-	-	-	-
IOCC Firm	1,734,300	-	2,816,000	1,842,457	239,492	220,770	-	-	266,102	245,300	-	-
IOCC Non-Firm	-	-	-	-	-	-	-	-	-	-	-	-
Total Industrial	1,734,300	-	-	1,842,457	239,492	220,770	-	-	266,102	245,300	-	-
1.1 Domestic	2,154	343	0	2,405	737	679	657	624	962	887	858	815
1.1A Domestic All Electric	313,062	9,486	0	349,644	94,296	86,925	84,116	79,869	112,344	103,561	100,215	95,155
2.1 General Service 0-10 kW	6,545	515	0	7,309	1,485	1,369	1,325	1,258	2,099	1,935	1,873	1,778
2.2 General Service 10-100 kW	70,792	675	235,221	79,049	16,980	15,653	15,147	14,294	23,374	21,547	20,850	19,676
2.3 General Service 110-1,000 kVA	128,884	184	384,004	143,871	29,224	26,939	26,069	24,352	30,484	28,101	27,193	25,402
2.4 General Service over 1000 kVA	132,910	6	248,520	146,981	30,085	27,733	26,837	17,447	32,607	30,058	29,087	18,909
4.1 Street and Area Lighting	1,797	384	0	2,007	505	466	451	428	505	466	451	428
Sub-Total Jurisdictional	656,144	11,592	867,745	731,266	173,313	159,764	154,602	138,272	202,375	186,554	180,526	162,163
Grand Total	2,390,444	11,592	867,745	2,573,723	412,805	380,534	154,602	138,272	468,477	431,854	180,526	162,163
<i>Zero check --></i>	-	-	-	0	0	0	0	0	0	0	0	0

NEWFOUNDLAND & LABRADOR HYDRO
SUMMARY OF DEMAND & ENERGY FACTORS

2018 Forecast

	Billing Demand			Coincident kW @					Non-Coincident kW @			
	MWh Sales	Number of Customers	(kW)	Generation	Generation	Transm.	Primary	Secondary	Generation	Transm.	Primary	Secondary
	(A)	(B)	(C)	(D)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
ISLAND ISOLATED												
1.2 Domestic Diesel	5,194	684	0	5,493	1,601	1,601	1,546	1,463	2,098	2,098	2,026	1,916
1.2G Government Domestic Diesel	-	0	0	-	-	-	-	-	-	-	-	-
1.23 Churches & Schools	280	0	0	296	48	48	46	44	73	73	70	66
2.1 General Service 0-10 kW	721	92	0	763	102	102	98	93	159	159	154	145
2.2 General Service 10-100 kW	839	13	2,961	888	196	196	189	179	295	295	285	269
2.3 General Service 110-1,000 kVA	-	0	0	-	-	-	-	-	-	-	-	-
2.5 General Service Diesel	-	0	0	-	-	-	-	-	-	-	-	-
2.5G Government General Service Diesel	-	0	0	-	-	-	-	-	-	-	-	-
4.1 Street and Area Lighting	96	38	0	102	29	29	28	26	29	29	28	26
4.1G Government Street Lighting	4	3	0	4	1	1	1	1	1	1	1	1
Total Rural	7,134	830	2,961	7,545	1,976	1,976	1,908	1,805	2,655	2,655	2,563	2,425
<i>Zero check --></i>	-	-		0	0	0	0	0	0	0	0	0
LABRADOR ISOLATED												
1.2 Domestic Diesel	21,291	2,072	0	22,598	5,540	5,540	5,360	5,088	7,759	7,759	7,506	7,125
1.2G Government Domestic Diesel	561	26	0	595	161	161	156	148	217	217	210	199
1.23 Churches & Schools	1,678	0	0	1,781	81	81	79	75	115	115	111	105
2.1 General Service 0-10 kW	4,309	450	0	4,574	746	746	722	685	1,190	1,190	1,151	1,093
2.2 General Service 10-100 kW	10,671	129	36,743	11,326	1,920	1,920	1,858	1,764	2,624	2,624	2,539	2,410
2.3 General Service 110-1,000 kVA	2,080	5	9,536	2,208	107	107	104	99	781	781	755	717
2.4 General Service over 1000 kVA	2,377	1	6,137	2,523	142	142	138	131	1,065	1,065	1,030	978
2.5 General Service Diesel	-	0	0	-	-	-	-	-	-	-	-	-
2.5G Government General Service Diesel	-	0	0	-	-	-	-	-	-	-	-	-
4.1 Street and Area Lighting	292	90	0	310	87	87	85	80	89	89	86	81
4.1G Government Street Lighting	7	2	0	7	2	2	2	2	3	3	2	2
Total Rural	43,266	2,773	52,416	45,922	8,788	8,788	8,503	8,071	13,841	13,841	13,391	12,711
<i>Zero check --></i>	-	-		0	0	0	0	0	0	0	0	0

NEWFOUNDLAND & LABRADOR HYDRO
SUMMARY OF DEMAND & ENERGY FACTORS

2018 Forecast

	Billing Demand			MWH @		Coincident kW @					Non-Coincident kW @			
	MWh Sales	Number of Customers	(kW)	Generation	Generation	Transm.	Primary	Secondary	Generation	Transm.	Primary	Secondary		
	(A)	(B)	(C)	(D)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)		
L'ANSE AU LOUP														
1.1 Domestic	4,404	392	0	4,734	1,370	1,370	1,303	1,203	1,753	1,753	1,667	1,540		
1.12 Domestic All Electric	11,227	421	0	12,068	2,989	2,989	2,843	2,625	4,196	4,196	3,990	3,685		
2.1 General Service 0-10 kW	6,442	76	17,616	6,925	1,366	1,366	1,299	1,200	1,962	1,962	1,866	1,723		
2.2 General Service 10-100 kW	-	-	-	-	-	-	-	-	-	-	-	-		
2.3 General Service 110-1,000 kVA	2,831	8	11,031	3,043	305	305	290	268	1,252	1,252	1,191	1,100		
4.1 Street and Area Lighting	52	34	0	56	14	14	13	12	14	14	13	12		
Total Rural	24,956	929	28,648	26,826	6,045	6,045	5,748	5,308	9,177	9,177	8,727	8,059		
<i>Zero check --></i>	-	-	-	-	881	-	-	-	-	-	-	-		

NEWFOUNDLAND & LABRADOR HYDRO
SUMMARY OF DEMAND & ENERGY FACTORS

2019 Forecast	Billing Demand			MWH @		Coincident kW @				Non-Coincident kW @			
	MWh Sales (A)	Number of Customers (B)	(kW) (C)	Generation (D)	Generation (F)	Transm. (G)	Primary (H)	Secondary (I)	Generation (J)	Transm. (K)	Primary (L)	Secondary (M)	
ISLAND INTERCONNECTED													
Newfoundland Light & Power	5,833,600	1	0	6,080,111	1,297,608	1,288,105	-	-	1,342,175	1,332,342	-	-	
Praxair	50,800	1	72,000	52,947	5,461	5,280	-	-	6,205	6,000	-	-	
Vale Newfoundland	393,800	1	624,000	410,441	47,326	45,760	-	-	53,779	52,000	-	-	
Corner Brook Pulp & Paper Co. Lt	34,100	1	72,000	35,541	5,461	5,280	-	-	6,205	6,000	-	-	
N. Atlantic Refining Ltd.	263,400	1	384,000	274,531	29,123	28,160	-	-	33,095	32,000	-	-	
Teck Resources	1,200	1	6,000	1,251	455	440	-	-	517	500	-	-	
TOTAL INDUSTRIAL	743,300	5	1,158,000	774,710	87,825	84,920	-	-	99,802	96,500	-	-	
Interruptible	-	-	0	-	-	-	-	-	-	-	-	-	
1.1 Domestic	104,446	11,410	0	118,866	28,436	27,495	26,083	23,989	34,873	33,719	31,987	29,419	
1.12 Domestic All Electric	142,194	8,529	0	161,826	34,545	33,402	31,685	29,142	44,552	43,078	40,865	37,584	
1.3 Special	345	1	0	393	126	122	116	107	149	144	137	126	
2.1 General Service 0-10 kW	73,738	2,858	124,956	83,919	14,653	14,168	13,440	12,361	20,975	20,281	19,239	17,694	
2.2 General Service 10-100 kW	-	-	0	-	-	-	-	-	-	-	-	-	
2.3 General Service 110-1,000 kV	55,306	94	181,512	62,926	9,373	9,063	8,598	7,874	14,595	14,113	13,387	12,261	
2.4 General Service Over 1,000 kV	34,576	9	99,330	38,725	4,614	4,462	4,232	2,781	13,744	13,290	12,607	8,284	
4.1 Street and Area Lighting	2,800	953	0	3,187	791	765	725	667	791	765	725	667	
Sub-Total Rural	413,405	23,853	405,798	469,842	92,538	89,477	84,879	76,920	129,680	125,390	118,947	106,035	
Grand Total	6,990,305	23,859	1,563,798	7,324,663	1,477,972	1,462,502	84,879	76,920	1,571,657	1,554,231	118,947	106,035	
Coincident Peak at Generation for System Load Factor					1,512,539								
Zero check -->	-	-		0		0	0	0	0	34,568	0	0	

NEWFOUNDLAND & LABRADOR HYDRO
SUMMARY OF DEMAND & ENERGY FACTORS

2019 Forecast	MWh Sales (A)	Number of Customers (B)	Billing Demand (kW) (C)	MWH @		Coincident kW @				Non-Coincident kW @			
				Generation (D)	Generation (F)	Transm. (G)	Primary (H)	Secondary (I)	Generation (J)	Transm. (K)	Primary (L)	Secondary (M)	
LABRADOR INTERCONNECTED													
CFB-Goose Bay Boiler	-	-	-	-	-	-	-	-	-	-	-	-	
IOCC Firm	1,733,100	-	2,816,000	1,841,097	238,866	220,500	-	-	-	265,406	245,000	-	
IOCC Non-Firm	-	-	-	-	-	-	-	-	-	-	-	-	
Total Industrial	1,733,100	-	-	1,841,097	238,866	220,500	-	-	-	265,406	245,000	-	
1.1 Domestic	2,123	340	0	2,370	725	669	648	615	946	873	845	802	
1.1A Domestic All Electric	313,891	9,549	0	350,553	94,421	87,161	84,345	80,086	112,494	103,844	100,489	95,415	
2.1 General Service 0-10 kW	6,584	518	0	7,353	1,493	1,378	1,333	1,266	2,108	1,946	1,883	1,788	
2.2 General Service 10-100 kW	71,241	679	234,327	79,547	17,064	15,752	15,243	14,385	23,487	21,681	20,981	19,800	
2.3 General Service 110-1,000 kV	130,158	185	384,719	145,287	29,472	27,206	26,327	24,597	30,744	28,381	27,463	25,659	
2.4 General Service over 1000 kV	129,941	6	238,700	143,659	28,575	26,378	25,526	16,417	31,170	28,773	27,843	17,907	
4.1 Street and Area Lighting	1,810	385	0	2,022	508	469	454	431	508	469	454	431	
Sub-Total Jurisdictional	655,748	11,659	857,746	730,791	172,258	159,014	153,875	137,797	201,457	185,967	179,958	161,802	
Grand Total	2,388,848	11,659	857,746	2,571,888	411,124	379,514	153,875	137,797	466,863	430,967	179,958	161,802	
Zero check -->	-	-	-	0	0	0	0	0	0	0	0	0	

NEWFOUNDLAND & LABRADOR HYDRO
SUMMARY OF DEMAND & ENERGY FACTORS

2019 Forecast	Billing Demand			MWH @ Coincident kW @ Non-Coincident kW @									
	MWh Sales (A)	Number of Customers (B)	(kW) (C)	Generation (D)	Generation (F)	Transm. (G)	Primary (H)	Secondary (I)	Generation (J)	Transm. (K)	Primary (L)	Secondary (M)	
ISLAND ISOLATED													
1.2 Domestic Diesel	5,170	681	0	5,468	1,593	1,593	1,538	1,455	2,085	2,085	2,013	1,904	
1.2G Government Domestic Diesel	-	0	0	-	-	-	-	-	-	-	-	-	
1.23 Churches & Schools	280	0	0	296	48	48	46	44	73	73	70	66	
2.1 General Service 0-10 kW	717	92	0	758	102	102	98	93	155	155	150	142	
2.2 General Service 10-100 kW	836	13	2,961	884	194	194	188	177	292	292	282	267	
2.3 General Service 110-1,000 kV	-	0	0	-	-	-	-	-	-	-	-	-	
2.5 General Service Diesel	-	0	0	-	-	-	-	-	-	-	-	-	
2.5G Government General Service	-	0	0	-	-	-	-	-	-	-	-	-	
4.1 Street and Area Lighting	102	38	0	108	30	30	29	27	30	30	29	27	
4.1G Government Street Lighting	4	3	0	4	1	1	1	1	1	1	1	1	
Total Rural	7,109	827	2,961	7,518	1,968	1,968	1,900	1,797	2,636	2,636	2,545	2,408	
<i>Zero check --></i>	-	-	0	0	0	0	0	0	0	0	0	0	
LABRADOR ISOLATED													
1.2 Domestic Diesel	21,451	2,083	0	22,768	5,602	5,602	5,420	5,145	7,813	7,813	7,559	7,176	
1.2G Government Domestic Diesel	563	26	0	598	162	162	157	149	224	224	217	206	
1.23 Churches & Schools	1,677	0	0	1,780	82	82	79	75	112	112	109	103	
2.1 General Service 0-10 kW	4,330	453	0	4,596	754	754	729	692	1,196	1,196	1,157	1,098	
2.2 General Service 10-100 kW	10,679	130	36,762	11,335	1,929	1,929	1,867	1,772	2,626	2,626	2,540	2,411	
2.3 General Service 110-1,000 kV	2,082	5	9,538	2,210	108	108	104	99	780	780	755	717	
2.4 General Service over 1000 kV	2,377	1	6,138	2,523	143	143	138	131	1,065	1,065	1,030	978	
2.5 General Service Diesel	-	0	0	-	-	-	-	-	-	-	-	-	
2.5G Government General Service	-	0	0	-	-	-	-	-	-	-	-	-	
4.1 Street and Area Lighting	295	90	0	313	88	88	85	81	89	89	86	82	
4.1G Government Street Lighting	7	2	0	7	2	2	2	2	3	3	2	2	
Total Rural	43,461	2,789	52,438	46,129	8,870	8,870	8,582	8,146	13,908	13,908	13,456	12,773	
<i>Zero check --></i>	-	-	0	0	0	0	0	0	0	0	0	0	

NEWFOUNDLAND & LABRADOR HYDRO
SUMMARY OF DEMAND & ENERGY FACTORS

2019 Forecast	Billing Demand			Coincident kW @				Non-Coincident kW @				
	MWh Sales (A)	Number of Customers (B)	(kW) (C)	Generation (D)	Generation (F)	Transm. (G)	Primary (H)	Secondary (I)	Generation (J)	Transm. (K)	Primary (L)	Secondary (M)
L'ANSE AU LOUP												
1.1 Domestic	4,376	389	0	4,704	1,361	1,361	1,294	1,195	1,747	1,747	1,661	1,534
1.12 Domestic All Electric	11,401	427	0	12,256	3,035	3,035	2,886	2,665	4,265	4,265	4,055	3,745
2.1 General Service 0-10 kW	6,481	76	17,767	6,967	1,374	1,374	1,307	1,207	1,974	1,974	1,877	1,734
2.2 General Service 10-100 kW	-	0	0	-	-	-	-	-	-	-	-	-
2.3 General Service 110-1,000 kV	2,831	7	11,031	3,043	305	305	290	268	1,252	1,252	1,191	1,100
4.1 Street and Area Lighting	53	35	0	57	15	15	14	13	15	15	14	13
Total Rural	25,142	934	28,798	27,027	6,090	6,090	5,792	5,348	9,252	9,252	8,799	8,125
<i>Zero check --></i>	-	-		-	890	-	-	-				