

February 19, 2020

Doreen Friis  
Regulatory Affairs Officer/Clerk  
Nova Scotia Utility and Review Board  
1601 Lower Water Street, 3<sup>rd</sup> Floor  
P.O. Box 1692, Unit "M"  
Halifax, NS B3J 3S3

**Re: Q4 2019 FAM Report**

Dear Ms. Friis:

Enclosed is the non-confidential version of the Q4 2019 FAM Report.

The confidential version of this report as well as the FAM Data Cart Index, containing confidential and non-confidential information, and the Q4 2019 Natural Gas Market Update have been uploaded to the Board's confidential website.

The confidential report is covered by the 2019 FAM Confidentiality Undertaking.

Please contact us if you have any questions.

Yours truly,



Brian Curry  
Senior Regulatory Counsel

Encl.

- c. Judith Ferguson
- David Landrigan
- Nicole Godbout
- FAM Intervenors

**Nova Scotia Power Inc.**  
**Quarterly FAM Reporting**  
**As of December 31, 2019**

**NON-CONFIDENTIAL**



(Note - Figures presented reflect whole numbers which may cause \$0.1M or 1% in rounding differences on some line items.)

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**Foreign Currency Exchange Program**

	2020	2021	2022
<b><u>\$US Dollar (\$Millions)</u></b>			
Hedged - \$	\$173	\$90	\$58
Open - \$	\$31	\$112	\$121
Total Requirement	\$204	\$202	\$179
Hedged - \$ Rate	1.3148	1.3270	1.3254
Open - \$ Forecasted Rate	1.3100	1.3100	1.3500
Total - \$ Blended Rate	1.3140	1.3176	1.3420
Hedge %	85%	45%	32%
Open %	15%	55%	68%

**Foreign Currency Exchange Program - New Contract Details**

Value Date	USD Amount	Rate	CDN Amount	Execution Date
16 Oct 2020	\$5,000,000	1.31884	\$6,594,175	12 Dec 2019
11 Mar 2021	\$5,000,000	1.31970	\$6,598,500	12 Dec 2019
8 Apr 2021	\$5,000,000	1.32003	\$6,600,125	12 Dec 2019
24 Nov 2021	\$5,000,000	1.32140	\$6,607,000	12 Dec 2019
20 Dec 2021	\$5,000,000	1.32170	\$6,608,500	12 Dec 2019
12 Jan 2022	\$5,000,000	1.32190	\$6,609,500	12 Dec 2019
10 Feb 2022	\$5,000,000	1.32310	\$6,615,500	12 Dec 2019
10 Mar 2022	\$5,000,000	1.32348	\$6,617,375	12 Dec 2019
7 Apr 2022	\$5,000,000	1.32388	\$6,619,375	12 Dec 2019

**Generation and Purchased Power Statistics**

	Q1		Q2		Q3		Q4		Current period Year-to-date	Prior period Year-to-date	Budget* Year-to-date
	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget			
<b>Net Generation (MWh)</b>											
Lingan											
Unit #1											
Gross	263,738	237,284	139,430	112,963	168,244	43,984	205,976	78,117	777,389	629,669	472,347
Station Service	(15,568)	-	(9,951)	-	(12,120)	-	(13,906)	-	(51,545)	(41,449)	-
Net	248,170	237,284	129,479	112,963	156,124	43,984	192,070	78,117	725,843	588,220	472,347
Unit #2											
Gross	227,314	-	80,025	-	87,572	-	205,366	0	600,276	456,566	0
Station Service	(14,051)	-	(6,221)	-	(7,047)	-	(15,963)	-	(43,281)	(30,599)	-
Net	213,263	-	73,804	-	80,525	-	189,403	0	556,995	425,967	0
Unit #3											
Gross	269,300	230,491	70,557	114,565	179,325	151,558	133,573	168,123	652,754	706,109	664,737
Station Service	(16,970)	-	(5,131)	-	(13,374)	-	(9,749)	-	(45,223)	(50,164)	-
Net	252,330	230,491	65,426	114,565	165,951	151,558	123,824	168,123	607,531	655,945	664,737
Unit #4											
Gross	291,161	298,863	88,937	167,629	190,700	98,954	182,479	192,332	753,278	805,713	757,778
Station Service	(18,007)	-	(6,137)	-	(14,534)	-	(12,522)	-	(51,200)	(57,555)	-
Net	273,153	298,863	82,800	167,629	176,166	98,954	169,958	192,332	702,077	748,158	757,778
Pt. Aconi											
Gross	291,378	352,699	322,776	209,539	241,707	295,526	224,224	294,884	1,080,086	1,183,708	1,152,648
Station Service	(32,402)	-	(34,454)	-	(28,436)	-	(25,826)	-	(121,118)	(127,741)	-
Net	258,976	352,699	288,322	209,539	213,271	295,526	198,398	294,884	958,968	1,055,968	1,152,648
Pt. Tupper											
Gross	317,774	248,281	23,059	180,099	273,607	139,005	278,415	232,235	892,856	1,083,981	799,621
Station Service	(15,714)	-	(1,215)	-	(14,424)	-	(15,430)	-	(46,784)	(60,607)	-
Net	302,060	248,281	21,844	180,099	259,182	139,005	262,985	232,235	846,072	1,023,374	799,621
Trenton											
Unit #5											
Gross	287,735	102,488	191,957	107,384	-	66,876	156,293	37,364	635,985	574,868	314,113
Station Service	(19,426)	-	(14,204)	-	(1,607)	-	(12,046)	-	(47,283)	(44,749)	-
Net	268,309	102,488	177,753	107,384	(1,607)	66,876	144,247	37,364	588,702	530,119	314,113
Unit #6											
Gross	329,659	300,848	279,555	80,448	79,794	119,438	281,215	229,032	970,222	1,099,232	729,766
Station Service	(20,816)	-	(19,585)	-	(7,914)	-	(20,190)	-	(68,505)	(78,285)	-
Net	308,843	300,848	259,970	80,448	71,880	119,438	261,025	229,032	901,718	1,020,947	729,766
Point Tupper Biomass											
Gross	21,844	1,166	36,049	774	27,213	4,089	21,495	2,596	106,601	222,914	8,625
Station Service	(6,414)	-	(6,753)	-	(6,048)	-	(5,761)	-	(24,976)	(34,138)	-
Net	15,431	1,166	29,295	774	21,165	4,089	15,734	2,596	81,625	188,776	8,625
Tufts Cove											
Unit #1											
Gross	33,564	32,628	16,671	2,243	53,061	16,582	52,051	-	155,347	177,679	51,453
Station Service	(2,773)	-	(1,698)	-	(3,919)	-	(3,538)	-	(11,929)	(14,162)	-
Net	30,791	32,628	14,973	2,243	49,142	16,582	48,513	-	143,419	163,517	51,453
Unit #2											
Gross	23,551	33,707	21,879	66,609	76,292	26,237	89,279	6,979	211,001	248,382	133,532
Station Service	(1,738)	-	(1,607)	-	(4,625)	-	(5,209)	-	(13,178)	(14,992)	-
Net	21,814	33,707	20,273	66,609	71,667	26,237	84,070	6,979	197,823	233,390	133,532
Unit #3											
Gross	152,147	64,374	183,835	6,615	167,943	6,066	60,324	15,221	564,249	625,119	92,275
Station Service	(8,932)	-	(9,639)	-	(8,718)	-	(4,388)	-	(31,677)	(31,868)	-
Net	143,215	64,374	174,197	6,615	159,225	6,066	55,936	15,221	532,573	593,251	92,275
LM 6000 (Tufts Cove #4)											
Gross	32,207	15,617	51,253	23,544	68,524	26,901	53,463	29,217	205,447	230,604	95,278
Station Service	(3,374)	-	(3,894)	-	(4,498)	-	(3,106)	-	(14,872)	(15,910)	-
Net	28,833	15,617	47,359	23,544	64,026	26,901	50,357	29,217	190,575	214,694	95,278
LM6000 (Tufts Cove #5)											
Gross	36,206	17,847	64,217	23,330	62,299	33,178	56,043	30,316	218,766	227,616	104,672
Station Service	-	-	(597)	-	(142)	-	(1,260)	-	(2,000)	(1,243)	-
Net	36,206	17,847	63,620	23,330	62,157	33,178	54,782	30,316	216,766	226,373	104,672
LM6000 (Tufts Cove #6)											
Gross	16,184	9,504	32,126	12,214	37,293	17,446	31,673	17,305	117,276	108,291	56,469
Station Service	-	-	-	-	-	-	-	-	-	-	-
Net	16,184	9,504	32,126	12,214	37,293	17,446	31,673	17,305	117,276	108,291	56,469

**Generation and Purchased Power Statistics**

	Q1		Q2		Q3		Q4		Current period Year-to-date	Prior period Year-to-date	Budget*
	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget			
Total CTs											
Gross	3,348	83	1,066	8	897	-	1,602	-	6,913	16,242	91
Station Service	(551)	-	(353)	-	(248)	-	(509)	-	(1,661)	(1,636)	-
Net	2,797	83	713	8	649	-	1,093	-	5,253	14,606	91
Total Hydro											
Gross	295,120	323,317	352,023	295,005	157,627	93,253	235,056	265,990	1,039,826	945,309	977,565
Station Service	(1,787)	-	(2,237)	-	(1,035)	-	(1,641)	-	(6,701)	(5,439)	-
Net	293,333	323,317	349,785	295,005	156,592	93,253	233,415	265,990	1,033,125	939,870	977,565
Total NSPI Wind											
Gross	78,193	68,504	59,907	61,479	45,110	52,520	72,694	76,995	255,905	262,772	259,499
Station Service	(48)	-	(6)	-	(7)	-	(45)	-	(106)	(292)	-
Net	78,145	68,504	59,901	61,479	45,103	52,520	72,649	76,995	255,798	262,480	259,499
Total Generation											
Gross	2,970,424	2,337,701	2,015,324	1,464,449	1,917,208	1,191,613	2,341,222	1,676,705	9,244,178	9,604,774	6,670,469
Station Service	(178,572)	-	(123,683)	-	(128,695)	-	(151,090)	-	(582,039)	(610,829)	-
Net	2,791,852	2,337,701	1,891,641	1,464,449	1,788,513	1,191,613	2,190,133	1,676,705	8,662,140	8,993,945	6,670,469
Purchases											
Imports	140,800	173,414	228,916	448,996	277,437	598,057	138,722	352,791	785,875	539,996	1,573,258
Maritime Link	-	376,668	-	221,764	-	223,737	-	329,065	-	-	1,151,234
IPPI/COMFIT	532,795	545,057	396,286	440,881	291,172	395,955	534,420	554,094	1,754,673	1,827,933	1,935,987
Total kWh Available	3,465,447	3,432,841	2,516,844	2,576,090	2,357,122	2,409,362	2,863,274	2,912,655	11,202,687	11,361,874	11,330,949
Less Export Sales	(76,321)	(29,500)	(7,621)	(2,500)	(20,000)	(1,000)	(17,937)	(17,000)	(121,879)	(88,519)	(50,000)
Losses (Export Sales)	(3,896)		(247)		(893)		(514)		(5,550)	(3,109)	
Net System Requirement	3,385,230	3,403,341	2,508,976	2,573,590	2,336,229	2,408,362	2,844,823	2,895,655	11,075,258	11,270,246	11,280,949
Less GRLF requirement	(2,195)	(5,652)	(8,769,34)	(7,585)	(5,164)	(6,596)	(2,380)	(4,088)	(18,509)	(20,391)	(23,921)
Less Load Retention	(217,901)	(247,871)	(205,845)	(268,949)	(242,027)	(272,646)	(194,842)	(268,802)	(860,615)	(1,109,398)	(1,058,268)
Less Shore Power			(0)	(91)	(393)	(606)	(287)	(304)	(680)	(751)	(1,000)
Less 1PT RTP	(862)	(300)	(2,215)	(2,093)	(4,183)	(3,762)	(2,691)	(3,619)	(9,951)	(11,489)	(9,774)
Less Back Up/Top Up	(4,300)		(6,470)		(8,303)		(5,158)		(24,231)	(25,105)	
Less Mersey Basic Block											
Less Losses **	(216,420)	(242,434)	(132,015)	(155,236)	(137,651)	(131,401)	(241,310)	(196,516)	(727,396)	(742,251)	(725,587)
Net Requirement	2,943,551	2,907,084	2,153,661	2,139,638	1,938,509	1,993,351	2,398,155	2,422,326	9,433,876	9,360,861	9,462,399

Note: LM6000 (Tufts Cove #6) budgeted generation is combined with Tufts Cove #4 and Tufts Cove #5.

\*Budget reflects the 2019 BCF Refresh Budget of \$653.7M

\*\*Includes losses for all customer classes, with the exception of Export Sales.

Mercury Additive Details for Current Quarter and Year to Date

Generating Plant	Additive Type	~ Quarter ~				~ Year To Date ~			
		Quantity	Unit of Measure	Costs [\$]	\$/MWh <sup>a</sup>	Quantity	Unit of Measure	Costs [\$]	\$/MWh <sup>a</sup>
Lingan Unit 1	Powder Activated Carbon		kgs				kgs		
Lingan Unit 2	Powder Activated Carbon		kgs				kgs		
Lingan Unit 3	Powder Activated Carbon		kgs				kgs		
Lingan Unit 4	Powder Activated Carbon		kgs				kgs		
Point Tupper	Powder Activated Carbon		kgs				kgs		
Trenton 5	Powder Activated Carbon		kgs				kgs		
Trenton 6	Powder Activated Carbon		kgs				kgs		
Lingan (all units)	Calcium Chloride		L				L		
Point Tupper	Calcium Chloride		L				L		
Trenton (all units)	Calcium Chloride		L				L		
<b>Total Costs (Powder Activated Carbon)</b>		765,715	kgs	\$1.851		4,034,794	kgs	\$9.237	
<b>Total Costs (Calcium Chloride)</b>		259,950	L	\$0.096		1,110,223	L	\$0.410	
<b>Total Costs (All Additives)</b>				\$1.947				\$9.647	

<sup>a</sup> Calculated using actual MWh produced by unit.

NSPI Environmental Report for Mercury Emissions<sup>b</sup>

Annual Limit = 65 kg<sup>c</sup>

Quarter	Reported This Quarter, kg	Reported Last	Variance, kg	Reason for Variance
Q1	27.0	27.0	0.0	Estimated data updated with actual data
Q2	10.4	10.3	-0.1	
Q3	8.7 <sup>d</sup>	8.5	-0.2	
Q4	13.0	0.0	-13.0	
<b>Year to Date</b>	<b>59.1</b>			

<sup>b</sup> As reported by NSPI's Environmental Services.

<sup>c</sup> Province of Nova Scotia Air Quality Regulations - Schedule C section 3(2).

<sup>d</sup> This value is an estimate based on incomplete laboratory results and consumption figures. Environmental Services will finalize this result next quarter.

NSPI Environmental Report for Mercury Diversion Program

	Verified Credits <sup>e</sup>	Unverified Credits	Total Verified + Unverified Credits	Credits Used <sup>f</sup>
2015	2.3		2.3	
2016	19.7		19.7	
2017	44.8		44.8	
2018	58.1		58.1	
Current Yr Q1		2.9	2.9	
Current Yr Q2		3.0	3.0	
Current Yr Q3		2.9	2.9	
Current Yr Q4		52.9	52.9	
<b>Year to Date</b>	<b>124.9</b>	<b>61.7</b>	<b>186.6</b>	

<sup>e</sup> A report by a verifier certifying the credits being claimed in a calendar year must be submitted to the Minister by March 31 of the following year per Sub-Section 7F of the Province of Nova Scotia Air Quality Regulations.

<sup>f</sup> NSPI can use credits for compliance with the Air Quality Regulations. Credits can start being used in 2020.