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The Island Regulatory and Appeals Commission

August 14, 2015

Mr. Mark Lanigan
Regulatory Services
Island Regulatory and Appeals Commission
PO Box 577
501–134 Kent Street
Charlottetown PE C1A 7L1

Dear Mr. Lanigan:

# CT4 Filing Docket UE20723 Response to Interrogatories from Commission Staff

Please find attached the Company's response to the Interrogatories filed by Commission Staff with respect to the CT4 filing. An electronic copy will follow shortly which will include attachments referred to in the responses.

Yours truly,

MARITIME ELECTRIC

Jason C. Roberts

Director, Regulatory & Financial Planning

JCR35 Enclosure S-1 This is an application for an expenditure under Section 3 of the Electric Power Act. That section outlines the obligation to provide service, which Maritime Electric accepts as service provider for most of P.E.I. Please explain the decision to file under Section 3 vs Section 17 of the Electric Power Act, which deals with capital item approvals.

#### **Response:**

The Application for the design, construction and commissioning of CT4 filed with the Commission is premised upon Maritime Electric's ownership of the unit. As such, the Application engages various statutory provisions, including the Commission's general power of supervision over public utilities, Maritime Electric's obligation to serve, and the Commission's authority to approve the capital budgets of public utilities.

S-2 Please provide the input assumptions which are used to determine the peak loads outlined in Table 1 (in addition, please provide a copy of the electronic spreadsheets related to forecast peak load determination). Please provide breakdown of peak load forecast by customer class for the period covered in Table 1.

#### **Response:**

For the purposes of estimating peak loads, Maritime Electric's load is broken into three components:

- 1. Residential Rate classes non-space heating load and the General Service Rate classes (including Small Industrial, Large Industrial served at distribution voltage, Street Lighting and Unmetered) The peak load is estimated by applying a historical load factor to the estimate of annual energy usage.
- 2. Residential space heating load The peak load for December is assumed to occur at a temperature of -13 deg C. To this is applied an estimate of the space heating load for the Residential rate classes in terms of MW/deg C (see the response to S-11 for further detail). For example, for December 2014 the estimate of the space heating load for the Residential Rate classes for a temperature of -13 C at system peak is (15 C (-13 C)) x 1.76 MW/deg C = 49 MW plus system losses. (15 C is used as the base instead of 18 C because the contribution from lighting and appliances at time of system peak is greater than average.)
- 3. Transmission voltage customers The peak load is estimated by applying a historical load factor to the estimate of annual energy usage.

The accompanying Excel workbook "IRAC Staff IRs-S2-CT4.xlsx" contains the requested forecast peak load calculations.

The following table contains the breakdown of the peak load forecast in Table 1 of the Company's Application.

Breakdown of Maritime Electric Forecast Peak Load ( MW )								
	2015	2016	2017	2018	2019	2020		
Residential non-space heating and								
General Service classes	160	160	161	162	164	165		
Residential space heating	64	68	74	80	87	93		
Transmission voltage	<u>16</u>	<u>16</u>	<u>16</u>	<u>16</u>	<u>16</u>	<u>16</u>		
Total	240	245	251	259	267	275		

Note: Columns do not always add to totals due to rounding.

S-3 Please provide actual data for peak load amount, date, time of day, temperature and method of supplying that peak load for the past 10 years including 2015 year to date. Secondly, please provide an analysis for peak load separated by customer class contribution to peak load.

#### **Response:**

						Energy Method of Supply				
Date	Time HE	MECL	cos	Gross Total	Net Total	Temp.	NB Supply	PEI Wind Supply	PEI Generation Supply	Total Purchase and Supply
Dec 13, 2005	18:00	189.6	19.4	209.0	208.3	-3.8*C	197.7	3.2	7.4	208.3
Dec 19, 2006	18:00	196.3	20.4	216.7	216.2	-5.0*C	186.2	9.2	20.9	216.2
Dec 17, 2007	18:00	197.4	21.7	219.1	218.2	-6.6*C	151.0	48.0	19.2	218.2
Dec 19, 2008	18:00	201.0	21.8	222.8	222.5	-14.8*C	181.3	34.8	6.4	222.5
Dec 17, 2009	18:00	196.5	23.5	220.0	219.4	-13.0*C	183.5	28.3	7.6	219.4
Feb 02, 2010	19:00	186.3	21.2	207.4	207.1	-19.1*C	175.4	31.8	0.0	207.1
Jan 24, 2011	18:00	200.5	22.9	223.5	223.2	-17.8*C	177.9	45.3	0.0	223.2
Dec 10, 2012	18:00	205.7	23.0	228.7	228.4	0.3*C	180.3	48.1	0.0	228.4
Dec 12, 2013	18:00	227.1	25.2	252.4	251.8	-15.5*C	211.1	40.7	0.0	251.8
Dec 30, 2014	18:00	228.9	26.8	255.7	254.5	-14.5*C	175.5	79.0	0.0	254.5
Jan 06, 2015	18:00	237.1	27.9	265.0	263.9	-17.6*C	215.6	48.3	0.0	263.9

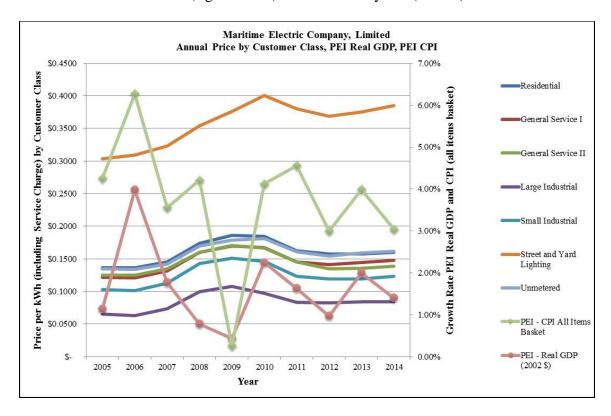
Maritime Electric does not track nor have the ability to track peak load contribution to peak load by customer class.

The difference between the Gross Totals and the Net Totals in the above table is the electricity used to power the auxiliary equipment at the Company's generating stations. This usage is referred to as station service.

S-4 Please provide a graphical analysis of peak load growth by customer class in past 10 years as compared to electric prices by customer class, PEI–GDP, and PEI-CPI All Items Basket.

#### **Response:**

Maritime Electric does not have peak load data for customers in the residential class. As an alternative, the graph below presents the annual price per kWh by rate class (left Y-axis) as well as the annual percentage change in the economic indicator for PEI-GDP and PEI-CPI-All Items Basket (right Y-axis) for the last 10 years (X-axis).



S-5 Please provide copies of any correspondence which Maritime Electric has with NB Power regarding discussions on the availability of additional transmission capacity purchases from NB Power.

#### **Response:**

Most correspondence was verbal. Meetings were held in Feb 2012 and March 2013 to discuss future transmission plans and possible solutions. The NBSO's minutes of the March 6, 2013 meeting capture the content of these discussions.

## NBSO minutes for Meeting Between NBSO and MECL Wednesday March 6, 2013

Attendees: MECL Ron LeBlanc

MECL Jim Coyle NBSO Alden Briggs NBSO Marc Roy NBSO Rod Hicks NBSO Scott Brown

- 1. Can the New Brunswick System Operator (NBSO) provide the Maritime Electric System Operator (MESO) with more definitive reasons for Curtailments and/or Hold to Schedule directives?
  - Curtailments are used to ensure the system is operated in a reliable, studied state (i.e. the N-0 state). When postured in the N-0 state, the system can handle any single contingency (i.e. it can handle the transition to any N-1 state) without causing additional overloads or voltage problems leading to cascading outages.
  - N-0, or studied state, means that NBSO can supply transmission for NB firm load and accommodate all firm transmission reservations and experience a N-1 contingency and not cause a cascade effect.
  - O Post-contingency (i.e. now in the N-1 state) the system must be back in a studied state within 30 minutes. Obviously, for very minor contingencies, system recovery may be relatively easy and occurs in much less time. The Minimum Must Run table represents studied states assuming no transmission elements out-of-service, but it does not represent all studied states. For example, if there is generation on-line additional to that shown in the Minimum Must Run Table, then those are also studied states. Other studied states are achieved from operational studies of outages, and the contingency analysis program in real-time.
  - A contingency occurring represents the transition from the N-0 state to the N-1 state. In operations, the system must be back in an N-0 state after 30 minutes. The N-0 state before the contingency is not exactly the same as the

N-0 state 30 minutes after the contingency. For example, a large generator tripping offline is a contingency causing a transition from an N-0 state to an N-1 state. Recovering from this generator trip event begins immediately, and may necessitate the need for reserve activation, generation redispatch, and possible curtailment of transactions. Once 30 minutes have passed, the large generator is still offline, but the system must be back into a studied state (i.e. N-0) so that it is ready to handle the next contingency.

- N-1-1 represents a transition as follows: N-0 state → N-1 state due to a contingency → recovery to a new N-0 state → new N-1 state due to a different contingency.
- The state estimate runs every seven minutes, and the contingency analysis program runs every 14 minutes.
- o If a situation occurs which is not in the Minimum Must Run table, then use the situation closest to the current situation. The contingency analysis program will also be used to assess the situation, and the on-call operations engineer may be asked to provide assistance if necessary. Major contingencies have the potential to cause cascading outages due to voltage collapse or thermal overloads. The power system must be kept in a reliable operating state to adequately mitigate the risk and impact of these major contingencies should they occur.
- 2. Is the West Cape Wind Farm a Market Participant in the NB Electricity Market? If so, is it the responsibility of the NBSO to balance the wind being supplied to its market?
  - GDF SUEZ Energy Marketing NA, Inc. is the Market Participant for the West Cape facility.
  - Question: When there is a constraint on the NB Transmission System, how is wind load following supplied to PEI wind farms?
    - Generators providing regulation and load following to NBSO are used to balance the Area Control Error (ACE) on the New Brunswick/New England interface. Individual wind farms are not supplied with load following. The aggregate changes to balancing area load, balancing area wind, and other balancing area generator changes (trips, redispatch, etc.) may cause the ACE to change and result in the balancing generators performing a correction.
    - Schedule 3(c) of the NB OATT charges wind projects for AGC and Load Following. The purpose of this charge is that it is recognized that wind projects contribute to ACE and therefore contribute to the costs associated with maintaining ACE within performance standards. The wind projects themselves are not supplied with AGC or load following.
- 3. Can the Minimum Must Run Requirement spreadsheet be broken down into smaller aggregates?
  - Yes, in theory but from a practical point of view, no! Practicality depends on the size of the new aggregates. For instance, if the aggregate for just the

NB $\leftarrow$  PEI interface is decreased to 25%, the work to create the table is increased by a factor of 4. If the aggregate for the NB  $\leftarrow$  NE interface is also similarly decreased, the work to create the table is increased by a factor of 16 (i.e. 4 x 4)

- (Numbers used are for illustrative purposes only and do not necessarily reflect actual points or table entries)
- So if at 2399 load in NB and everything OK then load goes to 2401 then NBSO may have to curtail 100 MW to PEI? Yes.
- NBSO will consider looking at 50 MW curtailment range as opposed to 100 MW for MECL.
- MECL would like to see 25 MW increments for curtailment purposes while using a smaller load step of 25 MW.
- o Can the ISO-NE interface be broken down into 25MW aggregates? **No**
- o Can the System Load be broken down into 25MW aggregates? **No**
- Can the NBSO supply any information on the Day Ahead flows ISO-NE Interface? No
- 4. Can the Day Ahead Curtailment notification be broken down into smaller aggregates (i.e. 80 to 100, 100 to 125, 125 to 150, 150 to 175, etc.)?
  - See response # 3.
- 5. Are real time operational conditions taken into account, such as temperature, load changes within the hour, etc.?
  - o Temperature correction is taken into account before curtailments.
- 6. What dictates "Curtailments" versus "Hold to Schedule"?
  - Curtailment is a limit imposed which is normally less than total amount capable on the interface. For example, a load of 120 MW on a 200 MW interface could be curtailed to 150 MW which would have no effect on the amount of energy flowing. It is the interface that is curtailed. A hold to schedule is a curtailment to the current energy take. They should all be considered curtailments.
- 7. The message always seems to imply that all NS and PEI load are of a lower "firmness" than native NB load. The 80 MW of long term firm reservation to PEI is equivalent to Network Service load in NB and all correspondence should reflect this.
  - Native NB load transmission requirements and the 80 MW long term firm reservations have the same priority from a transmission point of view.
- 8. Has the NBSO considered real time adjustments to curtailments? For example, if the load in Firm load (PE (80MW) & NB) drops below the curtailment range could the NBSO change the curtailment within the hour?
  - Yes if the NBSO is sure that the reason for the curtailment is over.

- 9. How long does the NBSO see the curtailments/Hold to Schedules being an impact on the NB/NS/PE Interface (i.e. summer peak loading in ISO-NE, etc.)?
  - There will be impacts on the NB/NS/PE interface until additional transmission is built or generation is located in southeast NB.
  - o The Winter Period is anticipated to be worse than the Summer Period.
- 10. If MECL registers its Combustion Turbines in the NB Electricity Market, will this alleviate the issues on the NB/NS/PE Interface? If yes, how will dispatch be handled? How will settlement be handled?
  - o No.
- 11. If the NBSO and the MESO enter into an Emergency Energy Agreement, will this alleviate the issues on the NB/NS/PE Interface? Could this be considered Security Energy as well and be used to alleviate the interface for all Transmission Customers?
  - o No, this is not available from the NBSO.
  - MECL is free to enter into an agreement with NSPI directly for Security Energy.
- 12. The MESO was told by the NBSO that Security Energy could be purchased if all available generation was online and maxed out. The NBSO said that if this was the case the MESO must contact the NBSO immediately and indicated that the NBSO would ask the MESO if they wanted to curtail their interruptible Customers or purchase Security Energy at the NSPI FHMC. There have been a couple of times that PEI has been above the required net schedule, when the ME System Operator was not able to purchase Security Energy. How will this be settled at the month end process?
  - o See response to #11.
- 13. PEI has typically generated in the past for peaking purposes during cold weather conditions. In January and February MECL generated significantly above the normal generation required for the period. Does the NBSO foresee the number and duration of the curtailments increasing in the future?
  - o There will be less curtailments in warmer weather.
- 14. Does the NBSO have a short term solution to alleviate the current restrictions on the NB/NS/PE Interface?
  - o No.
- 15. Has the NBSO completed any recent transmission studies on the South Eastern portion of the NB transmission system?
  - There is transmission planning taking place between the NBSO and NB Power, with NB Power being the lead party.
  - Discussions are ongoing between NBSO and NB Power and eventually MECL and NSPI will be invited to those discussions.

- MECL indicated that it would consider signing a long term transmission reservation in order to help justification for new transmission to southeast NB.
- 16. Does the NBSO have a long term solution to alleviate the current restrictions on the NB/NS/PE Interface?
  - See response to # 15. There would be a minimum of 2 years before anything would be constructed. This estimate is based upon a best case scenario for design, engineering, procurement and construction of a major transmission project.
- 17. Does the current MOU require the NBSO to adhere to all current NERC N-1 standards/ NERC Standards in general?
  - Yes. NBSO has the right to appeal application of standards to the EUB. N-1 criterion is industry standard, and NBSO would never ask the EUB to repeal this criterion.
  - Not following the N-1 criterion creates risks to reliability, risks to possible sanctions and penalties from regulatory authorities, and risks to access to neighboring markets.
- 18. Please provide specific references in NERC/FERC that justifies curtailment for conditions that have not yet occurred (n-1).
  - o References have been supplied by NBSO to MECL via e-mail.
- 19. Low voltage seems to be a prevalent reason for the curtailments, could not Low Voltage Load Shedding be a solution?
  - The tables take into account Special Protection Schemes (SPS) already.

S-6 When did Maritime Electric first experience curtailments from NB Power due to transmission constraints in the South Eastern New Brunswick (i.e. Moncton hub) area? Previous to that, were the only restrictions from NB Power either their own generation capacity or cable loading constraints? Please provide explanations for the NB Power curtailments due to transmission. Was it just capacity of transmission line due to Moncton hub demands or physical transmission line interruptions?

#### **Response:**

Maritime Electric was first alerted of the upcoming limits on the NB to PEI/NS interface on July 8, 2011. The Maritimes Area Transmission Planning Committee released their finding at the end of August 2011. The first curtailments started in 2012 but increased significantly in 2013.

Prior to this, curtailments/restrictions only occurred when a piece of equipment directly feeding the Island was taken out of service at certain times of the year. The curtailments prior to 2012 were due to a combination of things.

- Increased loads in Moncton, PEI and NS;
- Decrease in generation assets in NB; and
- NB Power adhering to the North American Electric Reliability Corporation's (NERC) standards of N-1 (loss of a single contingency).

The change is that now maintenance on transmission elements which are not directly connected to PEI can cause restrictions due to reconfiguring the system so as to be able to withstand the N-1 scenario that can create possible low voltage conditions in southeastern New Brunswick.

S-7 Does the transmission constraint in Southeastern New Brunswick affect NB Power's ability to serve their customers in that area? Do they have interruptible customers in this area? Have they been interrupted during transmission constraint periods similar to Maritime Electric? If so, does Maritime Electric have any information from NB Power which outlines how they plan to service their own customers in the Moncton area, in light of the transmission constraints identified? Do NB Power interruptible customers in the Southeastern part of New Brunswick get priority over Maritime Electric when transmission system constraints occur?

#### **Response:**

New Brunswick Power takes Network Service through its Open Access Transmission Tariff (OATT), which along with Long Term Firm transmission service is the most secure form of transmission service available.

Presently there is adequate transmission capacity within New Brunswick to service the needs of its load as well as the load in PEI with all generation and transmission elements in service.

Reductions in the transmission capacity to southeastern New Brunswick (including PEI and Nova Scotia) occur when a critical element (transmission line, transformer, circuit breaker or generator) is out of service and when the loss of the next critical element would result in instability to the power grid. In these instances, NB Power will reduce load levels such that the loss of the next critical element will NOT result in instability to the power grid.

Load is curtailed or transmission usage is reduced or interrupted according to the NB Power OATT. NB Power's Network Service load and Maritime Electric's 80 MW of Long Term Firm transmission are the last to be curtailed as they are the most secure form of transmission service available.

Should transmission curtailment be required that affects either NB Power's Network Service load or Maritime Electric's 80 MW of Long Term Firm transmission, then they are both reduced by the same percentage, i.e., both the New Brunswick Power Network Service and Maritime Electric's 80 MW of long term Firm service get equal priority.

To date neither NB Power's Network Service nor Maritime Electric's 80 MW of Long Term Firm transmission have been curtailed or interrupted.

S-8 Has Maritime Electric discussed with NS Power if there is capacity available from their operations that could be available for purchase? Please provide any correspondence and evidence regarding any such discussions with NS Power.

#### **Response:**

Maritime Electric has had ongoing discussions with NS Power to purchase energy from NS Power during periods of transmission constraint from NB Power. NS Power has verbally indicated that is not an arrangement that they are interested in pursuing.

# **Maritime Electric**

UE20723 (CT4) Responses to Interrogatories -

**IRAC Staff** 

S-9 Has Maritime electric ever run on-island generation to supply NB Power with energy in Southeastern New Brunswick?

## **Response:**

No.

S-10 Should the interruptible customers be considered in the Table 1 calculation of peak load and system requirements? What level of energy consumption at peak can be available if interruptible customers are taken off line? What amount of energy load did interruptible customers contribute at peak during the last 5 years? What customer class were these interruptible customers?

#### **Response:**

There is a limit to both the duration and frequency that interruptible customers can be called on to reduce load. The reason is that reducing load on short notice usually results in interruptible customers incurring costs that they would not have otherwise incurred, and they must balance these costs against the benefit they receive through a reduction in their electricity bills.

Maritime Electric includes interruptible customer load in the calculation of how much generating capacity it requires in total because under the Interconnection Agreement with NB Power the total requirement is for generating capacity to be at least equal to 115 % of firm peak load. The planning reserve of 15 % is intended to provide extra capacity to cover unplanned outages of generators or load being higher than forecast. For these events the frequency or the length of time that interruptible customers would be called on to reduce their load is assumed to be such that the associated costs to the interruptible customers will not exceed the benefit they receive through reduced electricity bills.

To determine the portion of the Company's generating capacity that should be on-Island, Maritime Electric uses the N-1 criterion. For this calculation the Company uses the limitation of supply from the mainland as the worst case single contingency loss of supply. Previously this had been the loss of one of the submarine cables, which would limit supply from the mainland to the 100 MW capacity of the remaining cable. Now it is a transmission constraint in New Brunswick that would limit supply from the mainland to 80 MW. The outage of a submarine cable could last for up to six months, and in the past the Company did not include interruptible customers in the N-1 calculation because six months was judged to be too long a time period to be relying on interruptible load. Transmission constraints in New Brunswick that would result in a limitation of supply from the mainland to 80 MW are expected to be of relatively short duration, but their frequency may be such that the associated cost to interruptible customers would be too much. Thus Maritime Electric continues to not use interruptible load in the N-1 calculation.

Interruptible customer load was not included in the Table 1 calculation of peak load and system generating capacity requirements because Table 1 is the N-1 calculation.

Maritime Electric interruptible load at time of system peak									
2010 2011 2012 2013 2014									
Date of system peak load	Feb 2	Jan 24	Dec 10	Dec 12	Dec 30				
Time of peak (hour ending)	19:00	18:00	18:00	18:00	18:00				
Interruptible load at peak (MW)	11	10	9	11	16				

The increase in interruptible load in 2014 is due to Maritime Electric contracting with a large customer to make the balance of its load interruptible.

The interruptible customers are served under the large Industrial Rate and the General Service 1 Rate.

S-11 The application states that since 2012 electricity demand is increasing due to increased use of electricity for space heating. Please provide a breakdown in electricity sales growth by customer class for the past 10 years. Please provide Maritime Electric's data which shows increased electricity usage for space heating.

#### **Response:**

The table below presents electricity sales growth by customer class for the last 10 years.

Annual Sales Growth by Customer Class										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
				Annual Sa	les in MW	h				
Residential	412,122	413,239	433,863	437,741	445,647	441,450	457,940	475,781	514,277	541,356
General Service I	346,149	354,637	365,269	365,137	361,617	361,872	363,273	370,287	370,483	377,190
General Service II	4,850	4,631	4,543	5,227	5,294	5,956	6,018	8,200	9,365	9,421
Large Industrial	145,514	145,166	149,652	149,262	141,491	143,060	141,596	141,006	143,378	142,152
Small Industrial	73,342	73,982	72,945	69,161	69,394	72,444	70,306	74,998	80,917	88,930
Street & Yard Lighting	5,536	5,666	5,776	5,878	5,982	6,065	6,113	6,147	6,196	6,236
Unmetered	1,736	1,847	2,018	2,184	2,137	2,313	2,316	2,428	2,373	2,405
Grand Total	989,250	999,168	1,034,066	1,034,589	1,031,563	1,033,161	1,047,562	1,078,848	1,126,989	1,167,691
			Anr	nual Percent	age Growth	Rate				
Residential	0.4%	0.3%	5.0%	0.9%	1.8%	-0.9%	3.7%	3.9%	8.1%	5.3%
General Service I	1.4%	2.5%	3.0%	0.0%	-1.0%	0.1%	0.4%	1.9%	0.1%	1.8%
General Service II	-3.0%	-4.5%	-1.9%	15.0%	1.3%	12.5%	1.0%	36.3%	14.2%	0.6%
Large Industrial	0.1%	-0.2%	3.1%	-0.3%	-5.2%	1.1%	-1.0%	-0.4%	1.7%	-0.9%
Small Industrial	8.8%	0.9%	-1.4%	-5.2%	0.3%	4.4%	-3.0%	6.7%	7.9%	9.9%
Street & Yard Lighting	2.2%	2.3%	1.9%	1.8%	1.8%	1.4%	0.8%	0.6%	0.8%	0.6%
Unmetered	20.1%	6.4%	9.2%	8.2%	-2.1%	8.2%	0.1%	4.8%	-2.3%	1.4%
Grand Total	1.3%	1.0%	3.5%	0.1%	-0.3%	0.2%	1.4%	3.0%	4.5%	3.6%

The following table shows Maritime Electric's estimates of electricity usage for space heating by the Residential Rate classes. These estimates include all electricity usage for space heating, including the electricity used by pumps and fans in oil-fired furnaces.

The estimates are from regression analysis of monthly Residential electricity sales in MWh against monthly heating degree days (HDD). The MW/deg C values shown in the table are the result of dividing the MWh/HDD values by 24 hours/day. The MW/deg C estimates are used in the Company's sales forecast model.

Estimated electricity usage for space heating by the Residential Rate classes						
Time period	MWh/HDD	MW/deg C				
October 2005 to May 2006	14.44	0.60				
October 2006 to May 2007	19.57	0.82				
October 2007 to May 2008	19.99	0.83				
October 2008 to May 2009	21.89	0.91				
October 2009 to May 2010	22.49	0.94				
October 2010 to May 2011	22.17	0.92				
October 2011 to May 2012	25.87	1.08				
October 2012 to May 2013	34.20	1.42				
October 2013 to May 2014	39.87	1.66				
October 2014 to May 2015	42.26	1.76				

Implicit in the MW/deg C values is that they apply for temperatures below 18 C, which is the base temperature for heating degree days. However, system peak occurs for the hour ending 6:00 p.m. in December or January, when the contribution to space heating by lighting and appliances is greater than average, so for peak load calculations Maritime Electric uses 15 C as the base. Thus, for example, the space heating load at system peak for the Residential Rate classes at -13 deg C for the winter of 2014/2015 would be estimated as  $(15 \text{ C} - (-13 \text{ C})) \times 1.76 \text{ MW/C} = 49 \text{ MW}$ .

S-12 PEI is the only jurisdiction in Canada which still has a discount pricing block for higher consumption customers. How many customers, by customer class, at peak load are impacted by the discounted price block?

#### **Response:**

Maritime Electric does not have peak load by customer class for all customers. However, as an alternative, the table below shows the number of Residential Rate class customers with consumption in excess of the first block size for the month in which the peak occurred.

Residential Customers with Consumption in Excess of First Block							
		Number of	First Block Size				
Year	Month	Residential	(kWh)				
		Customers					
2005	December	5,096	1,200				
2006	December	5,113	1,200				
2007	December	5,865	1,200				
2008	December	3,363	1,600				
2009	December	2,013	2,000				
2010	February	2,855	2,000				
2011	January	3,464	2,000				
2012	December	3,424	2,000				
2013	December	4,700	2,000				
2014	December	4,185	2,000				

The Residential rate class has experienced changes in the first block size during the period covered by the table above. The table also shows the first block sizes used for purposes of compiling the Residential data for the table. These were the first block sizes in effect at the time, as approved by IRAC.

S-13 Does Maritime Electric have any comments it would like to provide the Commission relating to maintaining the discount for higher consumption customers. Does Maritime Electric believe it should be considered as part of the current application for demand side management?

#### **Response:**

Maritime Electric's view is that the lower second block energy charge in the Residential Rate classes should be eliminated, and that the appropriate submission to the Commission under which to address this issue is the General Rate Application that the Company expects to file with the Commission later this year.

S-14 Please provide in electronic format the calculations which explain the 2.7% increase in rates associated with the new generator? Please provide in electronic format the calculations which explain the 1.7% increase in rates when looking at the asset complete life span.

#### **Response:**

The accompanying Excel workbook "IRAC Staff IRs-S14-CT4.xlsx" contains three spreadsheets.

The "first year" sheet has the calculations for the 2.7% increase in rates.

The "fixed charges rate" sheet is the same as Schedule 7 in the Company's Application, and has the calculations for the 7.48% levelized financing factor.

The "levelized financing basis" sheet contains the calculations for the 1.7% rate increase for a levelized financing basis over the 50 year life of the asset.

S-15 Please provide copies of any correspondence Maritime Electric has received from the Province of PEI concerning any discussions currently ongoing relating to generator ownership. What has the Province offered and at what interest rate? If owned by the Province do they intend to recover the generator cost from ratepayers or are taxpayers covering the cost of the unit? Under Provincial ownership, where does responsibility for the "obligation to serve" reside (Section 3 of Electric Power Act), with Province or Maritime Electric? If Maritime Electric accepts the obligation serve for this asset, is there a fee associated for this responsibility in addition to lease cost of asset?

#### **Response:**

The Company has two pieces of correspondence regarding CT4 ownership. The first is a letter sent to the Commission (with copy to Maritime Electric) on June 4, 2015 by the Minister of Transportation, Infrastructure and Energy, attached to these responses as "IRAC Staff IRs-S15\_a-CT4.pdf". This letter states Government's recently approved policy to have the option to finance and own future generating equipment that may be required by MECL, including the proposed 50 MW Combustion Turbine 4 (CT4). It also states that Government's costs for the new electrical generation assets will be recovered from ratepayers.

The second correspondence is a letter from the Minister of Transportation, Infrastructure and Energy attached as "IRAC Staff IRs-S15\_b-CT4.pdf". This letter speaks to Government's commitment to further discussions and acknowledges the need to proceed with the CT4 filing to allow IRAC to assess the need for the unit and recovery from rate payers.

To date, the Company has not had further detailed discussions with the Province regarding Government's policy on how the final ownership or financing of CT4 will be structured. Maritime Electric takes seriously its obligation to serve under the Electric Power Act and looks forward to furthering discussions with the Province to ensure customer and Maritime Electric requirements and obligations are satisfied in a just and reasonable manner.

S-16 If a lease from the Province is being negotiated, what lease term is being proposed? Does Maritime Electric believe NB Power must deal with transmission constraints in Southeastern New Brunswick? Does Maritime Electric have any evidence indicating NB Power's position relating to their transmission system constraints?

#### **Response:**

Maritime Electric's understanding of NB Power's position regarding the transmission constraints in southeastern New Brunswick is that the New Brunswick transmission system is currently adequate to reliably supply <a href="New Brunswick">New Brunswick</a> load. The Company believes that the following excerpts from NB Power's 2014 Integrated Resource Plan support this understanding.

"The net effect to the transmission system, and to the power system as a whole, is that it is more stressed today than was the case almost a decade ago. This is particularly prevalent in the southeast corner of the province as reflected through the lowering of our transfer capabilities to PEI and Nova Scotia. Additional transmission reinforcements, or additional generation, are required in this area to return our transfer capabilities to historic values.

Sufficient transmission capacity is available for in-province load levels and for exports, assuming necessary generation is available in critical areas and during certain times of the year, and that special protection systems are in place in the event of loss of transmission and/or generation equipment." [page 18]

"The New Brunswick to Nova Scotia and PEI transfer capabilities are a function of the transmission system's transfer capability into the southeastern region of New Brunswick, minus the southeastern region load (mainly Moncton, Dieppe, Riverview and surrounding areas). As the New Brunswick southeastern region load increases, the net electricity transfer capability available to PEI and Nova Scotia is reduced. NB Power's in-province load growth in the Moncton area in the past 10 years has reduced the combined transfer limits to PEI and Nova Scotia." [page 21]

"Although the current transmission system in New Brunswick is sufficient to reliably transfer electricity of the existing generation, potential upgrades may be necessary in the future, especially in the southeast of the province as load in the Moncton area grows."

[page 22]

"NB Power continues to investigate solutions to future transmission constraints. ... The final solution to transmission constraints will be evaluated in a separate study." [page 23]

S-17 Has Maritime Electric discussed with NB Power the possibility of additional generation in Moncton area now, as opposed to 2020?

#### **Response:**

Maritime Electric has discussed the possibility of additional generation in the Moncton area with NB Power. The timing of such generation is based on the availability of natural gas supply. Presently there is no availability of natural gas for such a venture. With proposed pipeline projects in the New England area there is expected to be additional natural gas supply in the Maritimes in the 2019/2020 timeframe.

# S-18 Please provide a budget breakdown of the \$68 million expenditure by major components and provide explanation on how the budget figure was determined.

# **Response:**

	Cost - Rounded	
Turbine – Generator	(2017 \$ x 1,000) \$33,230	Based on proposal received July 2014, costs similar to other manufacturer budgetary figures received Q3 2014.
Large Equipment:	4.440	
✓ Transformer	1,460	Budgetary estimate from manufacturer, Q4 2014.
✓ Electrical and Fuel Handling Buildings	470	Based on MECL experience building Charlottetown substation control building, 2013.
✓ Cables, Substation Equipment	400	Budgetary estimate from manufacturer, Q4 2014.
✓ Switchgear and Motor Control Centre	1,050	Budgetary estimate from manufacturer, Q4, 2014.
( E ID T I	150	D. I
✓ Fuel Day Tank	1,530	Budgetary estimate from manufacturer, Q4 2014.
✓ Additional Fuel Storage	1,550	Budgetary estimate from manufacturer, Q4 2014.
Ç .	510	
✓ Water Treatment		Budgetary estimate from manufacturer, Q4 2014.
Transportation	600	Based on Stantec estimate, September 2014.
Engineer/Procure/Construct (EPC):		
✓ Engineering and Contractor Costs	7,830	Based on Stantec estimate, September 2014.
✓ Civil Works/Structural	3,550	Based on Stantec estimate, September 2014
✓ Electrical and Instrumentation	2,140	Based on Stantec estimate, September 2014.
✓ Mechanical	1,970	Based on Stantec estimate, September 2014.
Transmission System	100	Internal estimate to move transmission line for new fuel storage tank, Q2 2015.
Permitting/Legal/Regulatory/ Salaries	2,420	Based on Stantec estimate, September 2014.
Spare Parts	640	Based on suggested spare parts at outset of CT3 project.
SUBTOTAL	<u>\$58,050</u>	
Project Contingency	5,680	10% exchange rate risk on T-G purchase. 8% on remainder of project as per Stantec estimate, September 2014.
TOTAL CAPITAL COST	<u>\$63,730</u>	•
Interest During Construction	4,230	Based on 6.54% weighted cost of capital, similar project cash flow to CT3 project.
TOTAL PROJECT COST	<u>\$67,960</u>	

S-19 Please provide the date, time of day and outside temperature for the periods in past 5 years when combustion turbines (CT1,2,3) were run according to Table 2. How does this relate to peak load chart?

## **Response:**

See file "IRAC Staff IRs-S19-CT4.xlsx".

S-20 Has Maritime Electric filed for the approval the Environmental Impact Assessment and the City of Charlottetown building permit. If not filed, when will these be filed?

#### Response:

Maritime Electric expects to file for approval of the Environmental Impact Assessment by the PEI Department of Communities, Land and Environment by mid-October 2015.

Maritime Electric expects to file for building permit approval with the City of Charlottetown by the end of September, 2015.

S-21 With the short term capacity agreement available for 2015 and 2016, the information on page 19 of the application should include the additional 27MW of capacity for a total of 107MW available for next two years. Is this correct?

#### **Response:**

Yes, there is a total of 107 MW available for the next two years. The short term capacity agreement for 27 MW is shown separately in Table 1 on page 9 and is explained in a note to Table 1, so Table 1 shows a total of 107 MW available for the next two years.

The availability of an additional 27 MW for the next two years could have been included on page 19 as well, but the main point of the information on page 19 is to explain why there is a transmission constraint in New Brunswick.

S-22 NB Power's most recent 10-year plan for fiscal years 2016 to 2025 (document attached) does not predict peak load growth at the levels indicated in Schedule 2 of the application. Please provide Maritime Electric's comments regarding NB Power's prediction on load growth versus load growth predictions in this application.

#### **Response:**

Maritime Electric believes that the difference is due to different growth rates in electric space heating between the two Provinces.

The factors in New Brunswick that are limiting growth in electric space heating are:

- Penetration of residential electric space heating in New Brunswick is in the order of 75 %. Thus there is limited opportunity for load growth due to conversions to electric space heating from other fuels.
- Most of the electric space heating is electric resistance heating. A mini split heat pump will result in reduced annual electricity usage when installed in an electric resistance heated home.
- To the extent that the mini split heat pumps that are being installed are capable of operation down to -25 C, they will probably be operating at time of system peak and thus also provide a reduction in peak load when installed in a home with electric resistance heating.

The factors in PEI that are contributing to growth in electric space heating are:

- Penetration of residential electric space heating in PEI is in the order of 10 %. Thus there is a large potential for load growth due to conversions to electric space heating from other fuels, particularly furnace oil when its price is in the order of \$1.00 per litre.
- Most of the mini split heat pumps being installed in PEI are being installed in homes with oil heat. Thus while the homeowner realizes an energy saving, the electric utility sees an increase in load, both in annual energy usage and in peak load to the extent that the heat pumps being installed are capable of operating down to -25 C.

S-23 Has Maritime Electric participated/intervened in any capital expenditure applications before the New Brunswick Energy and Utilities Board (NBEUB) seeking capital expenditures for transmission? Have any NB Power customers in Southeastern New Brunswick raised this issue with NBEUB?

#### Response:

Maritime Electric has not participated/intervened in any capital expenditure applications before the New Brunswick Energy and Utilities Board (NBEUB) seeking capital expenditures for transmission.

Maritime Electric is not aware of any NB Power customers in southeastern New Brunswick having raised this issue with the NBEUB.

S-24 Nalcor and Emera have stated that they anticipate electricity sales to New England from both the current Muskrat Falls project and future Labrador hydro projects. What information can Maritime Electric provide concerning the project status of the Maritime Link? What stages are their plans at concerning any transmission interface with the NB Power transmission system?

#### **Response:**

The following information is taken from a Maritime Link Project Overview dated April 2015, which was accessed at emeranl.com:

- The Maritime Link Project received environmental approval in June 2013
- On November 29, 2013 the Nova Scotia Utilities and Review Board gave final approval for the Project to proceed.
- Commissioning and first power is expected in 2017.

The following information is taken from the Amended and Restated New Brunswick Transmission Utilization Agreement, which was accessed at muskratfalls.nalcorenergy.com/newsroom/reports/

The plan for transmission access through New Brunswick for delivery of Muskrat Falls energy to New England is based on using the Bayside Generating Station's existing firm transmission reservation. The Bayside Generating Station, which is located in Saint John, NB, is owned by a subsidiary of Emera. The Bayside Generating Station houses a 265 MW natural gas fired combined cycle unit, the output of which is under contract to NB Power for November through March. For the balance of the year (April 1 to October 31) the unit is operated as a merchant plant, selling into the New England market or to others depending on market conditions.

To facilitate its merchant plant operation, Bayside has the right to a minimum of 220 MW and a maximum of 260 MW of firm transmission rights during April through October from Bayside to the NB-Maine border, including a right of redirection in respect to the point of receipt to the NS-NB border instead of at Bayside. It is this ability to change the point of receipt to the NS-NB border that will enable Emera to provide a transmission path from the NS-NB border to the NB-Maine border for delivery of energy from Muskrat Falls to New England during April through October.

The Bayside Generating Station also has similar transmission rights on the Maine Electric Power Company (MEPCO) 345 kV line from the NB-Maine border to a connection point with the New England transmission system near Bangor. Emera has agreed to make these rights available to Nalcor on similar terms under a separate agreement.

# UE20723 (CT4) Responses to Interrogatories IRAC Staff S2 - CT4

#### MECL PEAK LOAD FORECAST IN TABLE 1

	2015	2016	2017	2018	2019	2020
Heating degree days	4,690	4,367	4,367	4,367	4,367	4,367
MECL electricity sales growth (%)	1.9	0.2	1.7	2.0	2.1	2.1
MECL electricity sales ( GWh ):						
- Residential non space heating	350	342	340	339	338	336
- General Service	489	498	507	514	522	529
subtotal non space heating	840	841	847	853	859	865
- Residential space heating loads	219	222	238	258	280	302
- MECL transmission voltage	131	131	131	131	131	131
	1,190	1,194	1,216	1,242	1,270	1,298
- impact of DSM on Residential		(2)	(4)	(6)	(8)	(9)
MECL Company use	2	2	2	2	2	2
Losses (at 7.0 %)	90	90	91	93	95	97
MECL net produced & purchased	1,281	1,284	1,306	1,331	1,360	1,388
System peak load factors:						
- Non space heating loads	0.60	0.60	0.60	0.60	0.60	0.60
- MECL transmission voltage	0.91	0.91	0.91	0.91	0.91	0.91
Residential htg load coeff. (MW / C)	2.09	2.23	2.40	2.61	2.83	3.05
MECL Dec system peak load ( MW )						
- Non space heating loads	160	160	161	162	164	165
- Residential space heating loads	64	68	74	80	87	93
- MECL transmission voltage	16	16	16	16	16	16
	240	245	251	259	267	275
- impact of DSM on Residential		(2)	(4)	(6)	(8)	(10)
	240	243	247	253	259	265
Temperature at 17:00 Date	(13.0)	(13.0)	(13.0)	(13.0)	(13.0)	(13.0)
MECL Jan system peak load ( MW )	234	240	243	247	253	259
Temperature at 17:00	(17.6)	(18.0)	(18.0)	(18.0)	(18.0)	(18.0)
Date	Jan 6					

# UE20723 (CT4) Responses to Interrogatories IRAC Staff S14 - CT4

#### FIRST YEAR RATE INCREASE FOR 50 MW CT4

Inflation	Discount				
rate (%)	rate (%)				
2.0	6.54				
Service life (	years )		50		
Installed cost	s (\$ millions)		67.96		
•	enue requiremer	• •			
	t, interest at 4.2		1.69		
•	ity, return at 9.7		2.75		
·	ncome taxes at 3		1.24		
	on(based on ful		1.36		
- fixed O&M	expense in 2018	3	0.69		
- fixed O&M	in 2018 for Ch'to	own Plant assets used by CTs	0.56		
			8.29		
less:	fixed O&M alre	ady being incurred (Ch'town Plant)	0.56		
	displace 40 MV	V of short term capacity	2.40		
	displace 50 MV	V of short term capacity			
net increas	e		5.32		
Maritime Ele	200				
First year rate increase (%)					

Notes:

Maximum short term firm capacity purchase from NB is 50 MW (80 MW limit - 30 MW for Lepreau). With 50 MW CT4, still need to purchase 10 MW of short term firm capacity in 2018, so 50 MW CT4 would displace 40 MW of short term firm purchases.

\$ 60 / kW-year for short term capacity in 2018.

Full year amortization is shown so as to reflect full impact on rates. Amortization for first year will be only half that amount.

15-08-05							Schedule 7
	FIXED CHARG	GES RATE FO	OR COM	IBUSTION TU	JRBINES		
1 Canitali	zation						
1. Capitali	- Debt	EQ EO %	<b>@</b>	4.25	0/ -		2.49
	- Common equity	58.50 % 41.50 %	@ @	9.75			4.05
	- Common equity	41.50 %	w	9.73	/0 -		4.03
	- Weighted average cost of	of capital ( r	-)				6.54
2. Capital	recovery factor ( f ):		50	years @	6.54	%	
	r(1 + r)^n =						6 02
	(1 + r)^n - 1						6.83
3. Levelize	ed capital cost allowance:	@ i =			8.00	%	
	f x 100 x i	_					
	=						3.76
	r+i						
4 5			24.00	0/ +			
4. Future i	income tax: - Levelized capital cost all	@ owanco	31.00	% tax rate	3.76		
	- Less str line amortization		50	years	2.00		
	- Less sti fine amortization	11 W	30	years _	2.00		
			0.31	x	1.76	=	0.55
- I							
5. Levelize	ed cost of debt:						6.83
	<ul><li>Capital recovery factor</li><li>Less straight line amorti</li></ul>	zation					2.00
	- Less future income tax	Zation					0.55
	- Less future income tax						4.28
			2.49				7.20
	- Levelized cost of debt =			·>	4.28	=	1.63
			6.54				
6. Levelize	ed current income tax:						6.00
	- Capital recovery factor		_				6.83
	<ul> <li>Less levelized capital cos</li> <li>Less levelized cost of de</li> </ul>		e				3.76
	- Less levelized cost of de	Dί					1.63
		1.44					1.44
	- Income tax payable			Х	0.31	=	0.65
		1 - 0.3			0.01		0.00
7. Annual	fixed charges rate:						
	- Capital recovery factor						6.83
	- Plus current income tax	es payable					0.65
	- Total						7.48

### FIRST YEAR RATE INCREASE FOR 50 MW CT4 BASED ON LEVELIZED FINANCING

Inflation rate (%)	Discount rate (%)	Fixed charges rate (%)					
2.0	6.54						
Service life (	50						
Installed cost	s (\$ millions)			67.96			
First year reve	enue requirem	ent (\$ millions	):				
•	•	3 % fixed charge		5.08			
- fixed O&M	expense in 20	18		0.69			
- fixed O&M	in 2018 for Ch	'town Plant asso	ets used by CTs	0.56			
				6.34			
less:	fixed O&M al	ready being inc	urred (Ch'town Plant)	0.56			
	displace 40 M	n capacity	2.40				
	displace 50 MW of short term capacity						
net increase 3.3							
Maritime Elec	Maritime Electric annual revenue requirement (\$ millions) 200						
First year rate	First year rate increase (%) 1.7						

Notes:

Maximum short term firm capacity purchase from NB is 50 MW (80 MW limit - 30 MW for Lepreau). With 50 MW CT4, still need to purchase 10 MW of short term firm capacity in 2018, so 50 MW CT4 would displace 40 MW of short term firm purchases.

\$ 60 / kW-year for short term capacity in 2018.

Full year amortization is shown so as to reflect full impact on rates. Amortization for first year will be only half that amount.

# UE20723 (CT4) Responses to Interrogatories IRAC Staff S15A - CT4



Transportation, Infrastructure and Energy Transports, Infrastructure et Énergie



Bureau du ministre C.P. 2000, Charlottetown Île-du-Prince-Édouard Canada C1A 7N8

Office of the Minister
PO Box 2000, Charlottetown
Prince Edward Island
Canada C1A 7N8

June 4, 2015

Mr. J. Scott MacKenzie, Q.C. Chair and Chief Executive Officer Island Regulatory and Appeals Commission P.O. Box 577 Charlottetown, PE C1A 7L1

Dear Mr. MacKenzie:

I am writing to inform you of the policy of the Government of Prince Edward Island, recently approved by the Executive Council, concerning the ownership of electrical generation assets required by Maritime Electric Co. Ltd. (MECL).

Effective immediately, Government's policy is that Government has the option to finance and own future generating equipment that may be required by MECL, including the proposed 50 MW Combustion Turbine 4 (CT4) (subject to IRAC's determination that this generation is required). MECL will operate and maintain these assets through an agreement with the PEI Energy Corporation.

The mechanism for establishing the new generation assets could be through a construction agency agreement and the asset could be managed through an operation and maintenance agreement. These agreements would be between MECL and the PEI Energy Corporation and reflect a similar approach to what is being utilized for the current PEI-NB Cable Interconnection Upgrade Project.

Government's costs for the new electrical generation assets will be recovered from ratepayers. Regulatory approval from IRAC would be though normal practices. Government is taking this step to achieve significant cost savings for ratepayers, on the basis of Government's ability to finance assets on terms more favourable than those available to MECL.

As you are aware, the report of the PEI Energy Commission recommended that in regard to electricity generation:

The [PEI Energy] Corporation should expand its current role as an owner of wind generation assets to include the ownership of all generation assets currently held by Maritime Electric, as well as any new generation assets required to support future system requirements.

Government's new policy, which provides Government the option that all new electricity generation assets required by MECL be owned by the PEI Energy Corporation, falls within the legislated mandate of the Corporation under the *Energy Corporation Act*.

## Section 6 of the Act states that:

The objects of the Corporation are to develop and promote the development of energy systems and the generation, production, transmission and distribution of energy in all its forms on an economic and efficient basis ...

Subsections 7 (a), (b) and (d) state that:

- ... the Corporation also has the following powers:
- (a) to acquire, lease, construct, maintain, operate and use in Prince Edward Island and elsewhere land, works, plant, buildings, structures, machinery, equipment, devices, pole lines, conduits, pipelines, power cables, and any other property used or useful to carry out the objects of the Corporation;
- (b) to generate, accumulate, transmit, distribute, supply, purchase, utilize and otherwise dispose of energy, in all its forms, in any part of the province or elsewhere;
- (d) to invest or otherwise participate in energy projects in order to enhance the availability of energy in the province ...

It is our opinion, as well, that nothing in the *Electric Power Act* prohibits a provincial crown corporation from owning energy generation assets; in fact, the PEI Energy Corporation already owns wind farms in the province with a total installed capacity of 73.5 MW.

While Government believes that our objective on ownership of electrical generation assets can be achieved through policy, for purpose of clarity, Government will introduce legislation in the fall 2015 sitting of the Legislative Assembly. Further, for clarification, although the recommendation of the PEI Energy Commission on ownership of generation assets includes the PEI Energy Corporation acquiring existing assets of MECL, Government's policy does not, at this time, apply to existing assets.

It is our understanding that MECL intends to file an application to IRAC soon for approval of a new combustion turbine generating station with an estimated cost, we have been informed, in excess of US\$50 million. Should IRAC approve such an application, Government ownership could save ratepayers well in excess of \$1 million annually.

Should you require clarification or wish to discuss this matter further, please contact John MacQuarrie, Deputy Minister of Transportation, Infrastructure and Energy.

Sincerely,

Honourable Paula Biggar

Minister of Transportation, Infrastructure and Energy

cc: Fred O'Brien, President and CEO
Maritime Electric Company, Limited

# UE20723 (CT4) Responses to Interrogatories IRAC Staff S15B - CT4



Transportation, Infrastructure and Energy Transports, Infrastructure et Énergie



Bureau du ministre C.P. 2000, Charlottetown Île-du-Prince-Édouard Canada C1A 7N8

Office of the Minister
PO Box 2000, Charlottetown
Prince Edward Island
Canada C1A 7N8

June 12, 2015

Fred J. O'Brien, President and CEO Maritime Electric Company Ltd. PO Box 1328 Charlottetown, PE C1A 7N2

Dear Mr. O'Brien:

Thank you for the opportunity to meet recently and discuss issues of mutual importance.

It is obvious the decision to accept the recommendation of the PEI Energy Commission that government finance and own future generation assets is a significant move. We respect the fact that the timing for the acquisition of a new 50MW combustion turbine generator is critical. We also understand the need to proceed with an application to IRAC to at least address the need for the generator and cost recovery from rate payers. To this end, we agree it would be prudent for MECL to proceed with an application to IRAC to address the preceding.

It is clear that we should meet in the near future to discuss issues such as asset ownership in more detail. I will ask staff to work with you to develop an agenda for a more fulsome discussion.

Thanks again for meeting and I look forward to a continued positive working relationship.

Sincerely,

Paula Biggar

Minister

cc: John MacQuarrie, Deputy Minister

Kim Horrelt, CEO PEI Energy Corporation

Tel/Tél.: 902 368 5120 gov.pe.ca Fax/Téléc.: 902 368 5385

# UE20723 (CT4) Responses to Interrogatories IRAC Staff S19 - CT4

	2012				
		_			
Date	Time	Temperature	Reason for Generation		
01/06/2012		-11.5	Off Load Submarine Cables		
01/06/2012		-11.1	Off Load Submarine Cables		
01/17/2012		-0.7	Off Load Submarine Cables		
01/17/2012		-0.9	Off Load Submarine Cables		
01/17/2012		-1.5	Off Load Submarine Cables Off Load Submarine Cables		
01/19/2012 01/19/2012		-9.5 -9	Off Load Submarine Cables		
01/19/2012		-8.3	Off Load Submarine Cables		
02/02/2012		-6.8	Off Load Submarine Cables		
02/02/2012		-0.8 -7.4	Off Load Submarine Cables		
02/02/2012		-7.8	Off Load Submarine Cables		
02/02/2012		-8.4	Off Load Submarine Cables		
02/22/2012		-1.9	Unit testing		
02/23/2012		0.2	Unit testing		
02/23/2012		1.9	Unit testing		
03/15/2012		-1.6	Unit testing		
03/16/2012	23-24	-0.1	Cable Management (Cable out)		
03/17/2012	00-1	-0.8	Cable Management (Cable out)		
03/17/2012	01-2	-0.8	Cable Management (Cable out)		
03/17/2012	02-3	-0.3	Cable Management (Cable out)		
03/17/2012	03-4	-0.1	Cable Management (Cable out)		
03/17/2012	04-5	0.4	Cable Management (Cable out)		
03/29/2012		0.4	Unit testing		
03/29/2012		0.7	Unit testing		
04/24/2012		15.5	Unit testing		
04/24/2012		16.8	Unit testing		
04/25/2012		12.1	Unit testing		
04/27/2012		6.4	Unit testing		
05/23/2012	10-11	13.7	Unit testing		
05/24/2012		11.8	Unit testing		
05/24/2012 05/29/2012		14 8.6	Unit testing Cable Management (Cable out)		
05/29/2012		8.8	Cable Management (Cable out) Cable Management (Cable out)		
05/29/2012	06-7	o.o 11.5	Cable Management (Cable out)		
06/10/2012		11.3	Cable Management (Cable out)		
06/10/2012	08-9	12.4	Cable Management (Cable out)		
06/10/2012		12.4	Cable Management (Cable out)		
06/10/2012	10-11	12.8	Cable Management (Cable out)		
06/16/2012	07-8	12.4	Cable Management (Cable out)		
06/16/2012		13.9	Cable Management (Cable out)		
06/16/2012		14.9	Cable Management (Cable out)		
06/16/2012		15.5	Cable Management (Cable out)		
06/16/2012	11-12	15.4	Cable Management (Cable out)		

Date	Time	Temperature	Reason for Generation
06/16/2012	12-13	15.3	Cable Management (Cable out)
06/16/2012	13-14	16.1	Cable Management (Cable out)
06/16/2012	14-15	15.8	Cable Management (Cable out)
06/16/2012	15-16	15.8	Cable Management (Cable out)
06/16/2012	16-17	16.2	Cable Management (Cable out)
06/16/2012	17-18	15.1	Cable Management (Cable out)
06/16/2012	18-19	14.8	Cable Management (Cable out)
06/16/2012	19-20	13.5	Cable Management (Cable out)
06/16/2012	20-21	11.6	Cable Management (Cable out)
06/16/2012	21-22	8.7	Cable Management (Cable out)
06/16/2012	22-23	8	Cable Management (Cable out)
06/16/2012	23-24	7.1	Cable Management (Cable out)
06/17/2012	08-9	13.6	Cable Management (Cable out)
06/17/2012	09-10	15.3	Cable Management (Cable out)
06/17/2012	10-11	15.3	Cable Management (Cable out)
06/17/2012	11-12	15.5	Cable Management (Cable out)
06/17/2012	12-13	16.2	Cable Management (Cable out)
06/17/2012	13-14	16.8	Cable Management (Cable out)
06/17/2012	14-15	17.3	Cable Management (Cable out)
06/17/2012	15-16	18.7	Cable Management (Cable out)
06/17/2012	16-17	19	Cable Management (Cable out)
06/17/2012	17-18	18.5	Cable Management (Cable out)
06/17/2012	18-19	17.9	Cable Management (Cable out)
06/18/2012	07-8	11.8	Cable Management (Cable out)
06/18/2012	08-9	13.1	Cable Management (Cable out)
06/18/2012	09-10	14.3	Cable Management (Cable out)
06/18/2012	10-11	15.7	Cable Management (Cable out)
06/18/2012		16.4	Cable Management (Cable out)
06/18/2012		17.8	Cable Management (Cable out)
06/18/2012		19.2	Cable Management (Cable out)
06/18/2012		19.4	Cable Management (Cable out)
06/18/2012		20.3	Cable Management (Cable out)
06/27/2012		17.4	Curtailment by NB Power
06/27/2012		18.3	Cable Management (Cable out)
06/28/2012		18.6	Cable Management (Cable out)
06/28/2012		19.4	Cable Management (Cable out)
06/28/2012		19.6	Cable Management (Cable out)
06/28/2012		20.6	Cable Management (Cable out)
06/28/2012	14-15	20.2	Cable Management (Cable out)
06/28/2012		21.4	Cable Management (Cable out)
06/28/2012		20.5	Cable Management (Cable out)
06/29/2012		22.4	Curtailment by NB Power
06/29/2012		24.1	Curtailment by NB Power
06/29/2012	13-14	24.6	Curtailment by NB Power

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Date	Time	Temperature	Reason for Generation
06/30/2012		18.5	Cable Management (Cable out)
06/30/2012	08-9	19.7	Cable Management (Cable out)
06/30/2012	09-10	19.6	Cable Management (Cable out)
06/30/2012	10-11	20.7	Cable Management (Cable out)
06/30/2012	11-12	21.7	Cable Management (Cable out)
06/30/2012	12-13	23.1	Cable Management (Cable out)
06/30/2012	13-14	24.7	Cable Management (Cable out)
06/30/2012	14-15	25 26.6	Cable Management (Cable out)
06/30/2012	15-16		Cable Management (Cable out)
06/30/2012 06/30/2012	16-17 17-18	27.4 26.9	Cable Management (Cable out) Cable Management (Cable out)
06/30/2012	18-19	23.8	Cable Management (Cable out)
06/30/2012	19-20	23.8	Cable Management (Cable out)
06/30/2012	20-21	23.4	Cable Management (Cable out)
06/30/2012	21-22	22.6	Cable Management (Cable out)
06/30/2012	22-23	21.5	Cable Management (Cable out)
06/30/2012	23-24	21.3	Cable Management (Cable out)
07/01/2012	00-1	19.6	Cable Management (Cable out)
07/01/2012	01-2	18.4	Cable Management (Cable out)
07/01/2012	02-3	17.6	Cable Management (Cable out)
07/01/2012	08-9	20.5	Cable Management (Cable out)
07/01/2012	09-10	22.1	Cable Management (Cable out)
07/01/2012	10-11	22.7	Cable Management (Cable out)
07/01/2012	11-12	23.5	Cable Management (Cable out)
07/01/2012	12-13	24	Cable Management (Cable out)
07/01/2012	13-14	24.5	Cable Management (Cable out)
07/01/2012	14-15	25.5	Cable Management (Cable out)
07/01/2012	15-16	25.9	Cable Management (Cable out)
07/01/2012		26.5	Cable Management (Cable out)
07/01/2012	17-18	26.2	Cable Management (Cable out)
07/01/2012		26.1	Cable Management (Cable out)
07/01/2012		25	Cable Management (Cable out)
07/01/2012		22.7	Cable Management (Cable out)
07/01/2012	21-22	21.4	Cable Management (Cable out)
07/01/2012	22-23	20.6	Cable Management (Cable out)
07/01/2012		20.3	Cable Management (Cable out)
07/02/2012	00-1	19.3	Cable Management (Cable out)
07/02/2012	01-2	19	Cable Management (Cable out)
07/02/2012	02-3	18.5	Cable Management (Cable out)
07/02/2012	03-4	18.2	Cable Management (Cable out)
07/02/2012	04-5	17.6	Cable Management (Cable out)
07/02/2012	05-6	18	Cable Management (Cable out)
07/02/2012	06-7	18.3	Cable Management (Cable out)
07/02/2012	07-8	18	Cable Management (Cable out)

Date	Time	Temperature	Reason for Generation
07/02/2012	08-9	20.6	Cable Management (Cable out)
07/02/2012	09-10	20.7	Cable Management (Cable out)
07/08/2012	00-1	18	Cable Management (Cable out)
07/08/2012	09-10	21.2	Cable Management (Cable out)
07/08/2012	10-11	21.9	Cable Management (Cable out)
07/08/2012	11-12	22.6	Cable Management (Cable out)
07/08/2012	12-13	22.8	Cable Management (Cable out)
07/08/2012	13-14	22.7	Cable Management (Cable out)
07/08/2012	14-15	22.9	Cable Management (Cable out)
07/08/2012	15-16	22.3	Cable Management (Cable out)
07/08/2012	16-17	22.2	Cable Management (Cable out)
07/08/2012	17-18	21.6	Cable Management (Cable out)
07/08/2012	18-19	20.1	Cable Management (Cable out)
07/08/2012	19-20	19.3	Cable Management (Cable out)
07/08/2012	20-21	19.4	Cable Management (Cable out)
07/09/2012	09-10	17.5	Cable Management (Cable out)
07/09/2012	10-11	19	Cable Management (Cable out)
07/09/2012	11-12	19.1	Cable Management (Cable out)
07/09/2012	12-13	21	Cable Management (Cable out)
07/09/2012	13-14	21.1	Cable Management (Cable out)
07/09/2012	14-15	22.7	Cable Management (Cable out)
07/09/2012	15-16	22.4	Cable Management (Cable out)
07/09/2012	16-17	22.4	Cable Management (Cable out)
07/09/2012	17-18	21	Cable Management (Cable out)
07/09/2012	18-19	20.5	Cable Management (Cable out)
07/09/2012	19-20	20.2	Cable Management (Cable out)
07/09/2012	20-21	19.4	Cable Management (Cable out)
07/09/2012		18.6	Cable Management (Cable out)
07/09/2012		18.3	Cable Management (Cable out)
07/09/2012	23-24	17.4	Cable Management (Cable out)
07/10/2012	08-9	19.3	Cable Management (Cable out)
07/10/2012		21.1	Cable Management (Cable out)
07/10/2012	10-11	22.5	Cable Management (Cable out)
07/10/2012		23.6	Cable Management (Cable out)
07/10/2012	12-13	24.4	Cable Management (Cable out)
07/10/2012		24.6	Cable Management (Cable out)
07/10/2012	14-15	25.1	Cable Management (Cable out)
07/10/2012	15-16	25.6	Cable Management (Cable out)
07/10/2012		25.2	Cable Management (Cable out)
07/10/2012	17-18	24.5	Cable Management (Cable out)
07/10/2012		23.6	Cable Management (Cable out)
07/10/2012	19-20	22.2	Cable Management (Cable out)
07/10/2012		20.4	Cable Management (Cable out)
07/10/2012	21-22	19.5	Cable Management (Cable out)

Date	Time	Tomporoturo	Reason for Generation
	Time	Temperature	
07/10/2012		17.8	Cable Management (Cable out)
07/10/2012		16.8	Cable Management (Cable out)
07/11/2012	00-1	16	Cable Management (Cable out)
07/11/2012		18 20 F	Cable Management (Cable out)
07/11/2012 07/11/2012		20.5 22	Cable Management (Cable out)
07/11/2012		23	Cable Management (Cable out) Cable Management (Cable out)
07/11/2012	11-12	23.7	Curtailment by NB Power
07/11/2012		24.7	Cable Management (Cable out)
07/11/2012		24.7	Cable Management (Cable out)
07/11/2012		24.4	Cable Management (Cable out)
07/11/2012		24.8	Cable Management (Cable out)
07/11/2012		24.6	Cable Management (Cable out)
07/11/2012		24.6	Cable Management (Cable out)
07/11/2012		24.5	Cable Management (Cable out)
07/11/2012		23.6	Cable Management (Cable out)
07/11/2012	20-21	21	Cable Management (Cable out)
07/11/2012	21-22	18.9	Cable Management (Cable out)
07/11/2012	22-23	18.4	Cable Management (Cable out)
07/13/2012	07-8		Cable Management (Cable out)
07/13/2012	08-9		Cable Management (Cable out)
07/13/2012	09-10		Cable Management (Cable out)
07/13/2012	10-11		Cable Management (Cable out)
07/13/2012	11-12	23.3	Cable Management (Cable out)
07/13/2012	12-13	22.7	Cable Management (Cable out)
07/13/2012		21.6	Cable Management (Cable out)
07/13/2012	14-15	23.6	Cable Management (Cable out)
07/13/2012		24	Cable Management (Cable out)
07/13/2012		22.9	Cable Management (Cable out)
07/13/2012		22.8	Cable Management (Cable out)
07/13/2012		21.3	Cable Management (Cable out)
07/13/2012		20.4	Cable Management (Cable out)
07/13/2012		19 10.1	Cable Management (Cable out)
07/13/2012		19.1	Cable Management (Cable out)
07/13/2012 07/13/2012		19 19 2	Cable Management (Cable out) Cable Management (Cable out)
07/13/2012		18.2 19	Cable Management (Cable out)
07/14/2012		19.6	Cable Management (Cable out)
07/14/2012		21.7	Cable Management (Cable out)
07/14/2012		21.7	Cable Management (Cable out)
07/14/2012		23.7	Cable Management (Cable out)
07/14/2012		25.5	Cable Management (Cable out)
07/14/2012		24	Cable Management (Cable out)
07/14/2012		22.6	Cable Management (Cable out)
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Date	Time	Temperature	Reason for Generation
07/14/2012		20.7	Cable Management (Cable out)
07/14/2012	17-18	20.1	Cable Management (Cable out)
07/14/2012	18-19	18.9	Cable Management (Cable out)
07/14/2012	19-20	18.2	Cable Management (Cable out)
07/14/2012		17.9	Cable Management (Cable out)
07/14/2012	21-22	16.5	Cable Management (Cable out)
07/14/2012	22-23	16	Cable Management (Cable out)
07/14/2012	23-24	16.1	Cable Management (Cable out)
07/15/2012	08-9	18.5	Cable Management (Cable out)
07/15/2012 07/15/2012	09-10 10-11	20 20.6	Cable Management (Cable out) Cable Management (Cable out)
07/15/2012	11-12	20.6	Cable Management (Cable out)
07/15/2012	12-13	23	Cable Management (Cable out)
07/15/2012	13-14	24.6	Cable Management (Cable out)
07/15/2012	14-15	24.7	Cable Management (Cable out)
07/15/2012	15-16	24.6	Cable Management (Cable out)
07/15/2012	16-17	24.8	Cable Management (Cable out)
07/15/2012	17-18	24.6	Cable Management (Cable out)
07/15/2012		24	Cable Management (Cable out)
07/15/2012	19-20	21.6	Cable Management (Cable out)
07/15/2012	20-21	20.8	Cable Management (Cable out)
07/16/2012	10-11	18.6	Cable Management (Cable out)
07/16/2012	11-12	20.8	Cable Management (Cable out)
07/16/2012	12-13	20	Cable Management (Cable out)
07/16/2012	13-14	20.1	Cable Management (Cable out)
07/16/2012	14-15	21.8	Cable Management (Cable out)
07/16/2012	15-16	21.6	Cable Management (Cable out)
07/16/2012		19.8	Cable Management (Cable out)
07/16/2012		19.9	Cable Management (Cable out)
07/16/2012		19.6	Cable Management (Cable out)
07/16/2012		19.2	Cable Management (Cable out)
07/16/2012		18.7	Cable Management (Cable out)
07/16/2012		18.8	Cable Management (Cable out)
07/16/2012	22-23	18.4	Cable Management (Cable out)
07/17/2012	06-7	18.2	Cable Management (Cable out)
07/17/2012		18.7	Cable Management (Cable out)
07/17/2012 07/17/2012		20.3 22	Cable Management (Cable out) Cable Management (Cable out)
07/17/2012	10-11	24.3	Cable Management (Cable out)
07/17/2012		24.5	Cable Management (Cable out)
07/17/2012		23.1	Cable Management (Cable out)
07/17/2012		24.6	Cable Management (Cable out)
07/17/2012		25.3	Cable Management (Cable out)
07/17/2012		25.4	Cable Management (Cable out)
0,,1,,2012	10 10	∠J.→	Cable Management (Cable Out)

Date	Time	Temperature	Reason for Generation
07/17/2012	16-17	24.7	Cable Management (Cable out)
07/17/2012	17-18	24.7	Cable Management (Cable out)
07/17/2012	18-19	23.3	Cable Management (Cable out)
07/17/2012	19-20	20.7	Cable Management (Cable out)
07/17/2012	20-21	20.4	Cable Management (Cable out)
07/17/2012	21-22	19.9	Cable Management (Cable out)
07/17/2012	22-23	19.6	Cable Management (Cable out)
07/17/2012	23-24	19.5	Cable Management (Cable out)
07/18/2012	10-11	20.2	Cable Management (Cable out)
07/18/2012	11-12	19.3	Cable Management (Cable out)
07/18/2012	12-13	19.3	Cable Management (Cable out)
07/18/2012	13-14	18.9	Cable Management (Cable out)
07/18/2012	14-15	18.7	Cable Management (Cable out)
07/18/2012	15-16	21.6	Cable Management (Cable out)
07/18/2012	16-17	23.5	Cable Management (Cable out)
07/18/2012	17-18	24.2	Cable Management (Cable out)
07/18/2012	18-19	21.8	Cable Management (Cable out)
07/18/2012	19-20	20.6	Cable Management (Cable out)
07/18/2012	20-21	19.8	Cable Management (Cable out)
07/18/2012	21-22	19	Cable Management (Cable out)
07/18/2012	22-23	19.2	Cable Management (Cable out)
07/19/2012	08-9	18.3	Cable Management (Cable out)
07/19/2012	09-10	18.8	Cable Management (Cable out)
07/19/2012	10-11	20.5 21.1	Cable Management (Cable out)
07/19/2012	11-12		Cable Management (Cable out)
07/19/2012 07/19/2012		21.2 22.6	Cable Management (Cable out)
	13-14		Cable Management (Cable out)
07/19/2012 07/19/2012		22 20.6	Cable Management (Cable out)
07/19/2012		19.5	Cable Management (Cable out)
07/19/2012		19.5 21	Cable Management (Cable out)  Cable Management (Cable out)
07/19/2012		20.4	Cable Management (Cable out)
07/19/2012		18.2	Cable Management (Cable out)
07/19/2012	20-21	15.7	Cable Management (Cable out)
07/20/2012	10-11	13.7 17.4	Cable Management (Cable out)
07/20/2012		17.4	Cable Management (Cable out)
07/20/2012		17.6	Cable Management (Cable out)
07/20/2012		17.5	Cable Management (Cable out)
07/20/2012	14-15	17.5 17.8	Cable Management (Cable out)
07/20/2012		18.1	Cable Management (Cable out)
07/20/2012		17.9	Cable Management (Cable out)
07/20/2012		17.9 17.6	Cable Management (Cable out)
07/20/2012		16.7	Cable Management (Cable out)
07/20/2012	19-20	15.8	Cable Management (Cable out)
07/20/2012	13-20	13.0	Cable Management (Cable Out)

Date	Time	Temperature	Reason for Generation
07/20/2012	20-21	13.6	Cable Management (Cable out)
07/20/2012	21-22	11.3	Cable Management (Cable out)
07/20/2012	22-23	10.1	Cable Management (Cable out)
07/20/2012	23-24	9.6	Cable Management (Cable out)
07/21/2012	07-8	14.6	Cable Management (Cable out)
07/21/2012	08-9	17	Cable Management (Cable out)
07/21/2012		18.7	Cable Management (Cable out)
07/21/2012	10-11	19.4	Cable Management (Cable out)
07/21/2012	11-12	20.4	Cable Management (Cable out)
07/21/2012		20.6	Cable Management (Cable out)
07/21/2012		21.5	Cable Management (Cable out)
07/21/2012		22.1	Cable Management (Cable out)
07/21/2012	15-16	22.2	Cable Management (Cable out)
07/21/2012	16-17	22.9	Cable Management (Cable out)
07/21/2012		22.6	Cable Management (Cable out)
07/21/2012	18-19	22.4	Cable Management (Cable out)
07/21/2012	19-20	20.9	Cable Management (Cable out)
07/21/2012	20-21	17.2	Cable Management (Cable out)
07/21/2012	21-22	16.9	Cable Management (Cable out)
07/21/2012	22-23	13.5	Cable Management (Cable out)
07/22/2012	08-9	19.9	Cable Management (Cable out)
07/22/2012	09-10	21.9	Cable Management (Cable out)
07/22/2012	10-11	21.5	Cable Management (Cable out)
07/22/2012		21.9	Cable Management (Cable out)
07/22/2012	12-13	23	Cable Management (Cable out)
07/22/2012		25.3	Cable Management (Cable out)
07/22/2012	14-15	26	Cable Management (Cable out)
07/22/2012		26.8	Cable Management (Cable out)
07/22/2012		26.8	Cable Management (Cable out)
07/22/2012		25.6	Cable Management (Cable out)
07/23/2012		19.9	Cable Management (Cable out)
07/23/2012		21.5	Cable Management (Cable out)
07/23/2012		23.1	Cable Management (Cable out)
07/23/2012	11-12	24.3	Cable Management (Cable out)
07/23/2012	12-13	25.9	Cable Management (Cable out)
07/23/2012		26.8	Cable Management (Cable out)
07/23/2012		27.2	Cable Management (Cable out)
07/23/2012		27.2	Cable Management (Cable out)
07/23/2012	16-17	27.2	Cable Management (Cable out)
07/23/2012		26.9	Cable Management (Cable out)
07/23/2012		25.2	Cable Management (Cable out)
07/23/2012		23.1	Cable Management (Cable out)
07/23/2012		21 20 F	Cable Management (Cable out)
07/23/2012	22-23	20.5	Cable Management (Cable out)

Date	Time	Tomporoturo	Reason for Concretion
_ 5.115	Time	Temperature	Reason for Generation
07/24/2012		19.2	Cable Management (Cable out)
07/24/2012		19.3	Cable Management (Cable out)
07/24/2012	18-19	19.3	Cable Management (Cable out)
07/24/2012	19-20	19.3	Cable Management (Cable out)
07/24/2012		19.1	Cable Management (Cable out)
07/24/2012		19.3	Cable Management (Cable out)
07/24/2012		19.2	Cable Management (Cable out)
07/25/2012	12-13	19.8	Cable Management (Cable out)
07/25/2012		20	Cable Management (Cable out)
07/25/2012		20	Cable Management (Cable out)
07/25/2012		19.9	Cable Management (Cable out)
07/25/2012		19.9	Cable Management (Cable out)
07/25/2012	17-18	20.4	Cable Management (Cable out)
07/25/2012		19.5	Cable Management (Cable out)
07/25/2012		18	Cable Management (Cable out)
07/25/2012		15.9	Cable Management (Cable out)
07/25/2012	21-22	14.5	Cable Management (Cable out)
07/25/2012	22-23	14	Cable Management (Cable out)
07/25/2012		13.4	Cable Management (Cable out)
07/26/2012	07-8	16.9	Cable Management (Cable out)
07/26/2012	08-9	19.6	Cable Management (Cable out)
07/26/2012	09-10	19.6	Cable Management (Cable out)
07/26/2012	10-11	22.5	Cable Management (Cable out)
07/26/2012		24.1	Cable Management (Cable out)
07/26/2012	12-13	25.4	Cable Management (Cable out)
07/26/2012		25.2	Cable Management (Cable out)
07/26/2012	14-15	25.8	Cable Management (Cable out)
07/26/2012		26.2	Cable Management (Cable out)
07/26/2012		26.4	Cable Management (Cable out)
07/26/2012		25.1	Cable Management (Cable out)
07/26/2012 07/26/2012		24.3	Cable Management (Cable out) Cable Management (Cable out)
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07/26/2012 07/26/2012		20.8 19.2	Cable Management (Cable out) Cable Management (Cable out)
07/20/2012			, ,
07/27/2012		19.2 19.3	Cable Management (Cable out)
07/27/2012		19.5	Cable Management (Cable out) Cable Management (Cable out)
07/27/2012		21.5	Cable Management (Cable out)
07/27/2012	11-12	21.5	Cable Management (Cable out)
07/27/2012		21.8	Cable Management (Cable out)
07/27/2012		23.6	Cable Management (Cable out)
07/27/2012		23.2	Cable Management (Cable out)
07/27/2012		23.2	Cable Management (Cable out)
07/27/2012			· · · · · · · · · · · · · · · · · · ·
0//2//2012	10-1	23.1	Cable Management (Cable out)

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Date	Time	Temperature	Reason for Generation
07/27/2012		23.2	Cable Management (Cable out)
07/27/2012		22.1	Cable Management (Cable out)
07/27/2012	19-20	20.7	Cable Management (Cable out)
07/27/2012	20-21	19	Cable Management (Cable out)
07/27/2012		18.7	Cable Management (Cable out)
07/27/2012		18 16.7	Cable Management (Cable out)
07/27/2012	08-9	_	Cable Management (Cable out)
07/28/2012 07/28/2012		19.3 22	Cable Management (Cable out)
07/28/2012		22.9	Cable Management (Cable out) Cable Management (Cable out)
07/28/2012		23.5	Cable Management (Cable out)
07/28/2012		23.5	Cable Management (Cable out)
07/28/2012	13-14	23.6	Cable Management (Cable out)
07/28/2012		23.0	Cable Management (Cable out)
07/28/2012		22.4	Cable Management (Cable out)
07/28/2012		22.5	Cable Management (Cable out)
07/28/2012		22.5	Cable Management (Cable out)
07/28/2012		20.9	Cable Management (Cable out)
07/28/2012		19.3	Cable Management (Cable out)
07/28/2012	20-21	17.3	Cable Management (Cable out)
07/28/2012	21-22	15.3	Cable Management (Cable out)
07/28/2012	22-23	15.1	Cable Management (Cable out)
07/28/2012	23-24	14.8	Cable Management (Cable out)
07/29/2012		22.3	Cable Management (Cable out)
07/29/2012	17-18	21	Cable Management (Cable out)
07/29/2012	18-19	20.4	Cable Management (Cable out)
07/29/2012	19-20	19.1	Cable Management (Cable out)
08/14/2012	15-16	26.2	Cable Management (Cable out)
08/14/2012	16-17	27.2	Cable Management (Cable out)
08/14/2012	17-18	26.3	Cable Management (Cable out)
08/20/2012	16-17	22	Cable Management (Cable out)
09/28/2012	09-10	11.9	Unit testing
09/28/2012	10-11	12.7	Unit testing
09/28/2012	11-12	14	Unit testing
10/09/2012	11-12	9.7	Curtailment by NB Power
10/09/2012	12-13	10.4	Curtailment by NB Power
11/05/2012	16-17	2.7	Off Load Submarine Cables
11/05/2012	17-18	2.3	Off Load Submarine Cables
11/05/2012	18-19	1.9	Off Load Submarine Cables
11/05/2012	19-20	1.6	Off Load Submarine Cables
11/07/2012	07-8	-3.9	Reserve Call - NBSO
11/07/2012	08-9	-3.5	Reserve Call - NBSO
11/23/2012		6.9	Unit testing
11/23/2012	11-12	7.8	Unit testing

Date	Time	Temperature	Reason for Generation
11/27/2012	16-17	-3.1	Off Load Submarine Cables
11/27/2012	17-18	-4.3	Off Load Submarine Cables
11/27/2012	18-19	-7.4	Off Load Submarine Cables
11/28/2012	16-17	-0.6	Off Load Submarine Cables
11/28/2012	17-18	-0.7	Off Load Submarine Cables
11/28/2012	18-19	-0.7	Off Load Submarine Cables
12/01/2012	17-18	-6.3	Reserve Call - NBSO
12/01/2012	18-19	-6.9	Reserve Call - NBSO
12/01/2012	19-20	-7.1	Reserve Call - NBSO
12/01/2012	20-21	-7.9	Reserve Call - NBSO
12/01/2012	21-22	-8.1	Reserve Call - NBSO
12/01/2012	22-23	-7.2	Reserve Call - NBSO
12/01/2012	23-24	-7.9	Reserve Call - NBSO
12/02/2012	00-1	-10.2	Reserve Call - NBSO
12/02/2012	01-2	-12.4	Reserve Call - NBSO
12/02/2012	02-3	-12.5	Reserve Call - NBSO
12/04/2012	13-14	2.2	Unit testing
12/04/2012	14-15	1.9	Unit testing
12/13/2012	17-18	-3.3	Off Load Submarine Cables
12/13/2012	18-19	-3.5	Off Load Submarine Cables
12/17/2012	17-18	1.3	Off Load Submarine Cables
12/17/2012	18-19	1.5	Off Load Submarine Cables
12/20/2012	16-17	0.3	Off Load Submarine Cables
12/20/2012	17-18	-0.1	Off Load Submarine Cables
12/20/2012	18-19	-0.1	Off Load Submarine Cables
12/20/2012	19-20	-0.7	Off Load Submarine Cables
12/20/2012	20-21	-0.3	Off Load Submarine Cables
12/20/2012	21-22	-0.4	Off Load Submarine Cables
12/29/2012	16-17	-4.3	Off Load Submarine Cables
12/29/2012	17-18	-4.6	Off Load Submarine Cables
12/29/2012	18-19	-4.9	Off Load Submarine Cables
12/29/2012	19-20	-5	Off Load Submarine Cables

	2013				
		Temperature			
Date	Time	in Celcius	Reason for Generation		
01/02/2013	09-10	-15.8	Curtailment by NB Power		
01/02/2013	10-11	-15.2	Curtailment by NB Power		
01/02/2013	11-12	-15	Unit Testing		
01/02/2013	16-17	-13	Curtailment by NB Power		
01/02/2013	17-18	-12.7	Curtailment by NB Power		
01/02/2013	18-19	-12.2	Curtailment by NB Power		
01/03/2013	08-9	-12.1	Curtailment by NB Power		
01/03/2013	09-10	-12.1	Curtailment by NB Power		
01/03/2013	10-11	-11.9	Curtailment by NB Power NB Power Hold to Schedule		
01/04/2013 01/04/2013	08-9 09-10	-15 -13.9	NB Power Hold to Schedule		
01/04/2013	10-11	-13.9 -13.6	NB Power Hold to Schedule		
01/04/2013	16-17	-13.6 -7.9	Curtailment by NB Power		
01/06/2013	17-18	-7.9 -7.9	Curtailment by NB Power		
01/06/2013	18-19	-7. <i>9</i> -8	Curtailment by NB Power		
01/06/2013	19-20	-8	Curtailment by NB Power		
01/16/2013	07-8	-8	Curtailment by NB Power		
01/16/2013	08-9	-7.1	Curtailment by NB Power		
01/16/2013	09-10	-6.1	Curtailment by NB Power		
01/16/2013	10-11	-5.6	Curtailment by NB Power		
01/16/2013	11-12	-5.1	Curtailment by NB Power		
01/16/2013	14-15	-4.3	Unit Testing		
01/16/2013	16-17	-4.3	Curtailment by NB Power		
01/16/2013	17-18	-4.5	Curtailment by NB Power		
01/16/2013	18-19	-4.8	Curtailment by NB Power		
01/16/2013	19-20	-4.9	Curtailment by NB Power		
01/18/2013	06-7	-14.5	Curtailment by NB Power		
01/18/2013	07-8	-14.4	Curtailment by NB Power		
01/18/2013	08-9	-14.4	Curtailment by NB Power		
01/18/2013	09-10	-14.2	Curtailment by NB Power		
01/22/2013	08-9	-13.9	Off Load Submarine Cables		
01/24/2013	16-17	-18.4	Voltage Support -NBSO		
01/24/2013	17-18	-18.5	Voltage Support -NBSO		
01/24/2013	18-19	-19	Voltage Support -NBSO		
01/28/2013	07-8	-13.9	Curtailment by NB Power		
01/28/2013	08-9	-14	Curtailment by NB Power		
01/29/2013	07-8	-11.8	Curtailment by NB Power		
01/29/2013	08-9	-11.5	Curtailment by NB Power		
01/29/2013	09-10	-9.9	Curtailment by NB Power		
02/06/2013	06-7	-16.3	Curtailment by NB Power		
02/06/2013	07-8	-21.5	Curtailment by NB Power		
02/06/2013	08-9	-21.7	Curtailment by NB Power		
02/06/2013	09-10	-14.6	Curtailment by NB Power		

Date	Time	Temperature in Celcius	Reason for Generation
_ 0.00			
02/06/2013	10-11	-12.1	Curtailment by NB Power
02/06/2013	11-12	-10.9	Curtailment by NB Power
02/08/2013	07-8 08-9	-20.2 -20.5	Curtailment by NB Power
02/08/2013 02/08/2013		-20.5 -18.8	Curtailment by NB Power Curtailment by NB Power
02/08/2013	10-11	-16.8	Curtailment by NB Power
02/08/2013	11-12	-10.8	Curtailment by NB Power
02/08/2013	12-13	-13.5	Curtailment by NB Power
02/08/2013	15-16	-14.1	Off Load Submarine Cables
02/08/2013	16-17	-12.7	Off Load Submarine Cables
02/08/2013	17-18	-13.5	Off Load Submarine Cables
02/08/2013	18-19	-14.7	Off Load Submarine Cables
02/08/2013	19-20	-15.2	Off Load Submarine Cables
02/08/2013	20-21	-14.9	Off Load Submarine Cables
02/08/2013	21-22	-14.3	Off Load Submarine Cables
02/13/2013	17-18	-0.8	Off Load Submarine Cables
02/13/2013	18-19	-0.9	Off Load Submarine Cables
02/13/2013	19-20	-0.8	Off Load Submarine Cables
02/14/2013	18-19	-2.8	Off Load Submarine Cables
02/14/2013	19-20	-3.1	Off Load Submarine Cables
02/19/2013	20-21	-3	Curtailment by NB Power
02/19/2013	21-22	-2.9	Curtailment by NB Power
02/20/2013	07-8	-3.6	Curtailment by NB Power
02/20/2013	14-15	0.2	NB Power Hold to Schedule
02/20/2013	15-16	0.5	NB Power Hold to Schedule
02/20/2013	16-17	0.3	NB Power Hold to Schedule
02/20/2013	17-18	0.2	NB Power Hold to Schedule
02/26/2013	07-8	-6.5	Curtailment by NB Power
02/26/2013	08-9	-5.8	Curtailment by NB Power
02/27/2013	06-7	-12.9	Curtailment by NB Power
02/27/2013		-13.6	Curtailment by NB Power
02/27/2013	08-9	-12.3	Curtailment by NB Power
05/08/2013	08-9	13.7	Curtailment by NB Power
05/08/2013	09-10	16.1	Curtailment by NB Power
05/08/2013	10-11	16.4	Curtailment by NB Power
05/24/2013	16-17	20.3	Unit testing
05/27/2013	10-11	8.8	NB Power Hold to Schedule
05/27/2013	11-12	9.9	NB Power Hold to Schedule
05/27/2013	12-13	10.6	NB Power Hold to Schedule
06/01/2013	23-24	8.1	Curtailment by NB Power
06/02/2013	00-1	7.8	Curtailment by NB Power
06/02/2013	01-2	7.7	Curtailment by NB Power
06/02/2013	02-3	8.1	Curtailment by NB Power
06/02/2013	03-4	8.6	Curtailment by NB Power

Date	Time	Temperature in Celcius	Reason for Generation
06/02/2013	04-5 05-6	9 10	Curtailment by NB Power Curtailment by NB Power
06/02/2013 06/02/2013	06-7	10	Curtailment by NB Power
06/02/2013	07-8	12.5	Curtailment by NB Power
06/02/2013	08-9	13.3	Curtailment by NB Power
06/02/2013	09-10	13.6	Curtailment by NB Power
06/02/2013	10-11	15.7	Curtailment by NB Power
06/02/2013	11-12	16.6	Curtailment by NB Power
06/02/2013	12-13	16.5	Curtailment by NB Power
06/06/2013	06-7	7.6	NB Power Hold to Schedule
06/06/2013	07-8	8.7	NB Power Hold to Schedule
06/11/2013	08-9	17.4	NB Power Hold to Schedule
06/11/2013	09-10	18.8	NB Power Hold to Schedule
06/11/2013	10-11	19.4	NB Power Hold to Schedule
06/13/2013	17-18	11.1	NB Power Hold to Schedule
06/13/2013	18-19	10.5	NB Power Hold to Schedule
07/04/2013	17-18	29.8	NB Power Hold to Schedule
07/04/2013	18-19	28.1	NB Power Hold to Schedule
07/05/2013	14-15	30.3	NB Power Hold to Schedule
07/10/2013	23-24	17.5	Off Load Submarine Cables
07/11/2013	00-1	17.6	Off Load Submarine Cables
07/18/2013	16-17	22.9	NB Power Hold to Schedule
07/18/2013	17-18	22.8	NB Power Hold to Schedule
07/26/2013	13-14	26.2	Unit testing
07/26/2013	14-15	26.5	Unit testing
07/26/2013	15-16	27.8	Unit testing
07/26/2013	16-17	27.3	Unit testing
07/26/2013	17-18	27	Unit testing
09/23/2013		15.7	Unit testing
09/23/2013	11-12	17.3	Unit testing
10/02/2013		15.6 17.3	Curtailment by NB Power Curtailment by NB Power
10/02/2013 10/09/2013		17.2 6	•
10/09/2013			Curtailment by NB Power Curtailment by NB Power
11/27/2013		8.2 6.1	Unit testing
11/27/2013		6.6	Unit testing
11/27/2013		7.3	Unit testing
11/30/2013		-6.7	Off Load Submarine Cables
11/30/2013		-7.4	Off Load Submarine Cables
12/01/2013	16-17	0.6	Off Load Submarine Cables
12/01/2013		0.8	Off Load Submarine Cables
12/01/2013		1	Off Load Submarine Cables
12/01/2013		0.7	Off Load Submarine Cables
12/02/2013		3	Off Load Submarine Cables

Doto	Time	Temperature in Celcius	December Congretion
Date	Time		Reason for Generation
12/02/2013		2.7	Off Load Submarine Cables
12/03/2013		4.3	Off Load Submarine Cables
12/03/2013	17-18	4	Off Load Submarine Cables
12/05/2013	15-16	-1.3	Off Load Submarine Cables
12/05/2013		-1.3	Off Load Submarine Cables
12/05/2013	17-18	-1.1 -1.4	Off Load Submarine Cables Off Load Submarine Cables
12/05/2013 12/09/2013	18-19 15-16	-1. <del>4</del> -5.6	Off Load Submarine Cables
12/09/2013	16-17	-5.5	Off Load Submarine Cables
12/09/2013	17-18	-5.6	Off Load Submarine Cables
12/09/2013	18-19	-5.4	Off Load Submarine Cables
12/09/2013		-5. <del>4</del> -5.1	Off Load Submarine Cables
12/13/2013	07-8	-17.3	NB Power Hold to Schedule
12/13/2013	08-9	-17.5	NB Power Hold to Schedule
12/13/2013		-12.5	NB Power Hold to Schedule
12/13/2013	10-11	-11.3	NB Power Hold to Schedule
12/13/2013	11-12	-10.3	NB Power Hold to Schedule
12/13/2013	12-13	-9.1	NB Power Hold to Schedule
12/13/2013	13-14	-9	NB Power Hold to Schedule
12/17/2013	06-7	-12.9	NB Power Hold to Schedule
12/17/2013	07-8	-13.4	NB Power Hold to Schedule
12/17/2013	08-9	-13.9	NB Power Hold to Schedule
12/17/2013	15-16	-10.5	Curtailment by NB Power
12/17/2013	16-17	-11.2	Curtailment by NB Power
12/17/2013	17-18	-13.4	Curtailment by NB Power
12/17/2013	18-19	-15.8	Curtailment by NB Power
12/17/2013	19-20	-17.3	Curtailment by NB Power
12/17/2013	20-21	-18.8	Curtailment by NB Power
12/17/2013	21-22	-20.8	Curtailment by NB Power
12/17/2013	22-23	-20.7	Curtailment by NB Power
12/20/2013	10-11	-8.7	Off Load Submarine Cables
12/20/2013	11-12	-8.9	Off Load Submarine Cables
12/20/2013	12-13	-8.6	Off Load Submarine Cables
12/20/2013	13-14	-8.2	Off Load Submarine Cables
12/20/2013	14-15	-8.2	Off Load Submarine Cables
12/20/2013	15-16	-8.4	Off Load Submarine Cables
12/20/2013	16-17	-8.7	Off Load Submarine Cables
12/20/2013		-8.8	Off Load Submarine Cables
12/20/2013			Off Load Submarine Cables
12/20/2013		-8.4	Off Load Submarine Cables
12/20/2013			Off Load Submarine Cables
12/20/2013			Off Load Submarine Cables
12/21/2013		0.1	Off Load Submarine Cables
12/21/2013	16-17	0.1	Off Load Submarine Cables

Date	Time	Temperature in Celcius	Reason for Generation
12/21/2013	17-18	0.4	Off Load Submarine Cables
12/21/2013	18-19	0.6	Off Load Submarine Cables
12/21/2013	19-20	0.7	Off Load Submarine Cables
12/21/2013	20-21	0.9	Off Load Submarine Cables
12/29/2013	16-17	-8.2	Off Load Submarine Cables
12/29/2013	17-18	-8.3	Off Load Submarine Cables
12/29/2013	18-19	-8.3	Off Load Submarine Cables
12/31/2013	11-12	-15.5	Off Load Submarine Cables
12/31/2013	12-13	-15	Off Load Submarine Cables
12/31/2013	13-14	-14.6	Off Load Submarine Cables
12/31/2013	15-16	-14.9	Off Load Submarine Cables
12/31/2013	16-17	-15.9	Off Load Submarine Cables
12/31/2013	17-18	-16.8	Off Load Submarine Cables
12/31/2013	18-19	-17.4	Off Load Submarine Cables
12/31/2013	19-20	-18.3	Off Load Submarine Cables
12/31/2013	20-21	-18.3	Off Load Submarine Cables

			2014
		Temperature	
Date	Time	in Celcius	Reason for Generation
01/02/2014			Off Load Submarine Cables
01/02/2014			Off Load Submarine Cables
01/02/2014			Off Load Submarine Cables
01/02/2014			Off Load Submarine Cables
01/02/2014 01/02/2014			Off Load Submarine Cables Off Load Submarine Cables
01/02/2014			Off Load Submarine Cables
01/02/2014		-22.8	Off Load Submarine Cables
01/02/2014			Off Load Submarine Cables
01/02/2014			Off Load Submarine Cables
01/03/2014			Off Load Submarine Cables
01/03/2014			Off Load Submarine Cables
01/05/2014	16-17	-4.7	Off Load Submarine Cables
01/05/2014	17-18	-4.8	Off Load Submarine Cables
01/05/2014			Off Load Submarine Cables
01/05/2014	19-20	-8.1	Off Load Submarine Cables
01/05/2014			Off Load Submarine Cables
01/05/2014			Off Load Submarine Cables
01/13/2014			Off Load Submarine Cables
01/16/2014			Off Load Submarine Cables
01/16/2014		0.6	Off Load Submarine Cables
01/18/2014		1	Off Load Submarine Cables
01/18/2014			Off Load Submarine Cables
01/23/2014			Off Load Submarine Cables Off Load Submarine Cables
01/23/2014 01/23/2014			Off Load Submarine Cables
01/23/2014		-11.9	Off Load Submarine Cables
01/23/2014			Off Load Submarine Cables
01/24/2014			Off Load Submarine Cables
01/24/2014			Off Load Submarine Cables
01/24/2014			Off Load Submarine Cables
02/03/2014			Off Load Submarine Cables
02/03/2014	17-18	-5	Off Load Submarine Cables
02/03/2014	18-19	-6.1	Off Load Submarine Cables
02/03/2014	19-20	-6.1	Off Load Submarine Cables
02/03/2014			Off Load Submarine Cables
02/03/2014			Off Load Submarine Cables
02/04/2014			Off Load Submarine Cables
02/04/2014			Off Load Submarine Cables
02/04/2014			Off Load Submarine Cables
02/04/2014			Off Load Submarine Cables
02/04/2014			Off Load Submarine Cables
02/04/2014	1/-18	-5.8	Off Load Submarine Cables

		Tomporatura	
Date	Time	Temperature in Celcius	Reason for Generation
02/04/2014	18-19	-7	Off Load Submarine Cables
02/04/2014	19-20	-7.4	Off Load Submarine Cables
02/05/2014	08-9	-9.5	Off Load Submarine Cables
02/05/2014	09-10	-8.9	Off Load Submarine Cables
02/05/2014	10-11	-8.3	Off Load Submarine Cables
02/05/2014			Off Load Submarine Cables
02/05/2014			Off Load Submarine Cables
02/05/2014			Off Load Submarine Cables
02/05/2014			Off Load Submarine Cables
02/05/2014			Off Load Submarine Cables
02/05/2014			Off Load Submarine Cables
02/05/2014			Off Load Submarine Cables
02/05/2014 02/05/2014		-8 -8.9	Off Load Submarine Cables Off Load Submarine Cables
02/05/2014			Off Load Submarine Cables
02/05/2014			Off Load Submarine Cables
02/03/2014			Off Load Submarine Cables
02/06/2014			Off Load Submarine Cables
02/06/2014			Off Load Submarine Cables
02/06/2014		-14.7	Off Load Submarine Cables
02/09/2014			Off Load Submarine Cables
02/09/2014		-13.6	Off Load Submarine Cables
02/09/2014	19-20	-14.5	Off Load Submarine Cables
02/09/2014	20-21	-16.5	Off Load Submarine Cables
02/09/2014	21-22	-18.6	Off Load Submarine Cables
02/10/2014	06-7	-12.3	Off Load Submarine Cables
02/10/2014	07-8	-12.7	Off Load Submarine Cables
02/10/2014		-13.6	Off Load Submarine Cables
02/10/2014		-11	Off Load Submarine Cables
02/10/2014			Off Load Submarine Cables
02/10/2014			Off Load Submarine Cables
02/10/2014			Off Load Submarine Cables
02/10/2014			Off Load Submarine Cables
02/10/2014 02/10/2014			Off Load Submarine Cables Off Load Submarine Cables
02/10/2014			Off Load Submarine Cables Off Load Submarine Cables
02/10/2014			Off Load Submarine Cables
02/10/2014			Off Load Submarine Cables
02/10/2014			Off Load Submarine Cables
02/12/2014			Off Load Submarine Cables
02/12/2014			Off Load Submarine Cables
02/12/2014			Off Load Submarine Cables
02/12/2014			Off Load Submarine Cables
02/12/2014	22-23	-14.6	Off Load Submarine Cables

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Date	Time	Temperature in Celcius	Reason for Generation
02/18/2014		-12.5	Curtailment by NB Power
02/18/2014		-13.6	Curtailment by NB Power
02/18/2014		-11.7	Curtailment by NB Power
02/18/2014			Curtailment by NB Power
02/18/2014			Curtailment by NB Power
02/19/2014	17-18	-2.6	Off Load Submarine Cables
02/19/2014	18-19	-3	Off Load Submarine Cables
02/19/2014	19-20	-3	Off Load Submarine Cables
02/26/2014	17-18	-8.4	Off Load Submarine Cables
02/26/2014	18-19	-9.1	Off Load Submarine Cables
02/26/2014			Off Load Submarine Cables
02/26/2014			Off Load Submarine Cables
02/26/2014			Off Load Submarine Cables
02/27/2014			Off Load Submarine Cables
02/27/2014			Off Load Submarine Cables
03/05/2014			Off Load Submarine Cables
03/05/2014		-13.8	Off Load Submarine Cables
03/05/2014			Off Load Submarine Cables
03/05/2014			Off Load Submarine Cables
03/05/2014			Off Load Submarine Cables
03/05/2014 03/10/2014		-19.7 -12.4	Off Load Submarine Cables Off Load Submarine Cables
03/10/2014		-12. <del>4</del> -11.2	Unit Testing
04/05/2014			Lepreau Tripped Off
04/05/2014			Lepreau Tripped Off
04/05/2014			Lepreau Tripped Off
04/12/2014		3.6	NB Power Hold to Schedule
04/12/2014		2.1	NB Power Hold to Schedule
04/12/2014		3	NB Power Hold to Schedule
04/18/2014		1.4	Curtailment by NB Power
04/18/2014		2.2	Curtailment by NB Power
04/18/2014	11-12	3	Curtailment by NB Power
04/18/2014	12-13	3.6	Curtailment by NB Power
04/23/2014	15-16	10.6	Unit Testing
04/23/2014		8.9	Unit Testing
04/25/2014		-0.1	NB Power Hold to Schedule
04/25/2014		0.2	NB Power Hold to Schedule
05/01/2014		7.3	NB Power Hold to Schedule
05/01/2014			NB Power Hold to Schedule
05/07/2014			On Island Transmission outage/maintenance
05/08/2014		-2.5	On Island Transmission outage/maintenance
05/08/2014		-2	On Island Transmission outage/maintenance
05/08/2014		-3 0.7	On Island Transmission outage/maintenance
05/08/2014	03-4	0.7	On Island Transmission outage/maintenance

		Tomporeture	
Date	Time	Temperature in Celcius	Reason for Generation
06/09/2014	12-13	17.5	Unit Testing
06/10/2014		15.4	Unit Testing
06/27/2014	13-14	17.4	Curtailment by NB Power
06/27/2014	14-15	18.1	Curtailment by NB Power
06/27/2014	15-16	18.3	Curtailment by NB Power
06/27/2014	16-17	18.9	Curtailment by NB Power
06/27/2014	17-18	18.7	Curtailment by NB Power
06/27/2014		18.3	Curtailment by NB Power
07/04/2014		28	NB Power Hold to Schedule
07/04/2014		28.7	NB Power Hold to Schedule
07/04/2014		28.6	NB Power Hold to Schedule
07/12/2014		24.1	NB Power Hold to Schedule
07/12/2014		25.2	NB Power Hold to Schedule
07/24/2014		17.5	Unit Testing
07/24/2014		17.3	Unit Testing
08/04/2014		22.8	On Island Transmission outage/maintenance
08/04/2014		24.3	On Island Transmission outage/maintenance
08/04/2014		24.9	On Island Transmission outage/maintenance
08/04/2014		25.5	On Island Transmission outage/maintenance
08/04/2014		24.3	On Island Transmission outage/maintenance
08/04/2014 08/06/2014		24 19.1	On Island Transmission outage/maintenance NB Power Hold to Schedule
08/06/2014		19.1	NB Power Hold to Schedule
08/00/2014		18.1	NB Power Hold to Schedule
08/07/2014		20.7	NB Power Hold to Schedule
08/07/2014		20.7	NB Power Hold to Schedule
09/30/2014		14.1	Curtailment by NB Power
09/30/2014		13.4	Curtailment by NB Power
09/30/2014		13.2	Curtailment by NB Power
10/06/2014		13.2	Curtailment by NB Power
10/06/2014		14.7	Curtailment by NB Power
10/06/2014			Curtailment by NB Power
10/06/2014		15.7	Curtailment by NB Power
10/06/2014	13-14	15.8	Curtailment by NB Power
10/06/2014	14-15	15.6	Curtailment by NB Power
10/06/2014	15-16	16.1	Curtailment by NB Power
10/06/2014	16-17	15.7	Curtailment by NB Power
10/06/2014	17-18	14.8	Curtailment by NB Power
10/06/2014	18-19	11.6	Curtailment by NB Power
10/06/2014		12.6	Curtailment by NB Power
10/25/2014		8	NB Power Hold to Schedule
10/25/2014		8	NB Power Hold to Schedule
10/26/2014		8.9	Curtailment by NB Power
10/26/2014	11-12	9.3	Curtailment by NB Power

Date         Time         Temperature in Celcius         Reason for Generation           10/26/2014         12-13         10.2         Curtailment by NB Power           10/26/2014         13-14         9.9         Curtailment by NB Power           10/28/2014         19-20         6.1         Curtailment by NB Power           10/28/2014         20-21         5.9         Curtailment by NB Power           10/28/2014         21-22         5.8         Curtailment by NB Power           10/30/2014         13-14         11.5         Unit Testing           10/30/2014         14-15         10.8         Unit Testing           10/31/2014         07-8         4         Curtailment by NB Power           10/31/2014         08-9         4.9         Curtailment by NB Power           10/31/2014         09-10         6.7         Curtailment by NB Power	
10/26/2014       13-14       9.9       Curtailment by NB Power         10/28/2014       19-20       6.1       Curtailment by NB Power         10/28/2014       20-21       5.9       Curtailment by NB Power         10/28/2014       21-22       5.8       Curtailment by NB Power         10/30/2014       13-14       11.5       Unit Testing         10/30/2014       14-15       10.8       Unit Testing         10/31/2014       07-8       4       Curtailment by NB Power         10/31/2014       08-9       4.9       Curtailment by NB Power	Date
10/28/2014       19-20       6.1       Curtailment by NB Power         10/28/2014       20-21       5.9       Curtailment by NB Power         10/28/2014       21-22       5.8       Curtailment by NB Power         10/30/2014       13-14       11.5       Unit Testing         10/30/2014       14-15       10.8       Unit Testing         10/31/2014       07-8       4       Curtailment by NB Power         10/31/2014       08-9       4.9       Curtailment by NB Power	10/26/2014
10/28/2014       20-21       5.9       Curtailment by NB Power         10/28/2014       21-22       5.8       Curtailment by NB Power         10/30/2014       13-14       11.5       Unit Testing         10/30/2014       14-15       10.8       Unit Testing         10/31/2014       07-8       4       Curtailment by NB Power         10/31/2014       08-9       4.9       Curtailment by NB Power	10/26/2014
10/28/2014       21-22       5.8       Curtailment by NB Power         10/30/2014       13-14       11.5       Unit Testing         10/30/2014       14-15       10.8       Unit Testing         10/31/2014       07-8       4       Curtailment by NB Power         10/31/2014       08-9       4.9       Curtailment by NB Power	10/28/2014
10/30/2014 13-14 11.5 Unit Testing 10/30/2014 14-15 10.8 Unit Testing 10/31/2014 07-8 4 Curtailment by NB Power 10/31/2014 08-9 4.9 Curtailment by NB Power	10/28/2014
10/30/2014       14-15       10.8       Unit Testing         10/31/2014       07-8       4       Curtailment by NB Power         10/31/2014       08-9       4.9       Curtailment by NB Power	
10/31/2014 07-8 4 Curtailment by NB Power 10/31/2014 08-9 4.9 Curtailment by NB Power	
10/31/2014 08-9 4.9 Curtailment by NB Power	
■10/31/2014 09-10 6.7 Curtailment by NR Power	
,	
10/31/2014 10-11 7.9 Curtailment by NB Power	
10/31/2014 11-12 8.8 Curtailment by NB Power	
10/31/2014 18-19 4.7 Curtailment by NB Power 11/01/2014 09-10 6.5 NB Power Hold to Schedule	
11/01/2014 09-10 6.5 NB Power Hold to Schedule	
11/01/2014 10-11 0.4 NB Fower flow to schedule  11/01/2014 14-15 5.8 On Island Transmission outage/maintenance	
11/01/2014 15-16 5.6 On Island Transmission outage/maintenance	
11/01/2014 16-17 6.2 On Island Transmission outage/maintenance	
11/14/2014 15-16 0.2 Off Load Submarine Cables	
11/14/2014 16-17 0.1 Off Load Submarine Cables	
11/14/2014 17-18 0.1 Off Load Submarine Cables	
11/26/2014 16-17 4.3 Curtailment by NB Power	
11/26/2014 17-18 3.5 Curtailment by NB Power	11/26/2014
11/26/2014 18-19 3.7 Curtailment by NB Power	11/26/2014
11/26/2014 19-20 0.8 Curtailment by NB Power	11/26/2014
11/26/2014 20-21 0 Curtailment by NB Power	11/26/2014
11/29/2014 16-17 -5.7 Unit Testing	11/29/2014
11/29/2014 17-18 -6.9 Unit Testing	11/29/2014
12/02/2014 16-17 -7.5 Off Load Submarine Cables	
12/02/2014 17-18 -7.4 Off Load Submarine Cables	
12/02/2014 18-19 -7.2 Off Load Submarine Cables	
12/02/2014 19-20 -7.2 Off Load Submarine Cables	
12/02/2014 20-21 -6.8 Off Load Submarine Cables	
12/02/2014 21-22 -7 Off Load Submarine Cables	
12/05/2014 10-11 -9.3 Off Load Submarine Cables	
12/05/2014 11-12 -8.2 Off Load Submarine Cables 12/05/2014 12-13 -7.4 Off Load Submarine Cables	
12/05/2014 12-13 -7.4 Off Load Submarine Cables  12/05/2014 13-14 -7.2 Off Load Submarine Cables	
12/05/2014 13-14 -7.2 Off Load Submarine Cables  12/05/2014 14-15 -6.9 Off Load Submarine Cables	
12/05/2014 15-16 -6.5 Off Load Submarine Cables	
12/05/2014 16-17 -7 Off Load Submarine Cables	
12/05/2014 17-18 -7.7 Off Load Submarine Cables	
12/05/2014 18-19 -8.3 Off Load Submarine Cables	
12/05/2014 19-20 -10 Off Load Submarine Cables	

		Tomporeture	
Date	Time	Temperature in Celcius	Reason for Generation
12/05/2014	20-21	-10.2	Off Load Submarine Cables
12/05/2014	21-22	-11.4	Off Load Submarine Cables
12/05/2014	22-23	-11.2	Off Load Submarine Cables
12/08/2014	07-8	-8.6	Off Load Submarine Cables
12/08/2014		-8.7	Off Load Submarine Cables
12/08/2014			Off Load Submarine Cables
12/08/2014			Off Load Submarine Cables
12/08/2014			Off Load Submarine Cables
12/08/2014			Off Load Submarine Cables
12/08/2014			Off Load Submarine Cables
12/08/2014			Off Load Submarine Cables
12/08/2014			Off Load Submarine Cables
12/08/2014			Off Load Submarine Cables
12/08/2014 12/08/2014			Off Load Submarine Cables
12/08/2014			Off Load Submarine Cables Off Load Submarine Cables
12/08/2014			Off Load Submarine Cables
12/08/2014			Off Load Submarine Cables
12/08/2014			Off Load Submarine Cables
12/09/2014		-5.4	Curtailment by NB Power
12/09/2014		-3.8	Curtailment by NB Power
12/09/2014		-3	Curtailment by NB Power
12/09/2014			Curtailment by NB Power
12/09/2014			Curtailment by NB Power
12/09/2014			Curtailment by NB Power
12/09/2014	18-19	0.5	Curtailment by NB Power
12/09/2014	19-20	0.8	Curtailment by NB Power
12/13/2014	08-9	2.8	Curtailment by NB Power
12/13/2014	09-10	3.3	Curtailment by NB Power
12/13/2014	10-11	4.1	Curtailment by NB Power
12/13/2014			Curtailment by NB Power
12/13/2014			Off Load Submarine Cables
12/13/2014			Off Load Submarine Cables
12/13/2014			Off Load Submarine Cables
12/13/2014			Off Load Submarine Cables
12/16/2014			Off Load Submarine Cables
12/16/2014			Off Load Submarine Cables
12/16/2014			Off Load Submarine Cables
12/16/2014 12/16/2014		-1.5 -1.6	Off Load Submarine Cables Off Load Submarine Cables
12/16/2014		-1.6 -1.7	Off Load Submarine Cables
12/17/2014		-1.7 -1.7	Off Load Submarine Cables
12/17/2014			Off Load Submarine Cables
12/17/2014			Off Load Submarine Cables
12/1//2014	TO-TT	-0.3	On Load Submarine Cables

		Temperature	
Date	Time	in Celcius	Reason for Generation
12/17/2014	11-12	-0.9	Off Load Submarine Cables
12/17/2014	15-16	-0.3	Off Load Submarine Cables
12/17/2014	16-17	0	Off Load Submarine Cables
12/17/2014	17-18	-0.1	Off Load Submarine Cables
12/17/2014	18-19	-0.4	Off Load Submarine Cables
12/17/2014	19-20	-0.3	Off Load Submarine Cables
12/17/2014			Off Load Submarine Cables
12/18/2014	16-17	3.7	Off Load Submarine Cables
12/18/2014	17-18	3.4	Off Load Submarine Cables
12/18/2014		3.2	Off Load Submarine Cables
12/18/2014		2.4	Off Load Submarine Cables
12/18/2014			Off Load Submarine Cables
12/18/2014			Off Load Submarine Cables
12/20/2014			Off Load Submarine Cables
12/20/2014			Off Load Submarine Cables
12/20/2014			Off Load Submarine Cables
12/20/2014			Off Load Submarine Cables
12/21/2014			Off Load Submarine Cables
12/21/2014			Off Load Submarine Cables
12/21/2014			Off Load Submarine Cables
12/21/2014			Off Load Submarine Cables
12/21/2014			Off Load Submarine Cables
12/21/2014		-3	Off Load Submarine Cables
12/22/2014		-3.1	Off Load Submarine Cables
12/22/2014			Off Load Submarine Cables
12/22/2014			Off Load Submarine Cables
12/22/2014			Off Load Submarine Cables
12/22/2014		-3.1	Off Load Submarine Cables
12/22/2014			Off Load Submarine Cables
12/22/2014			Off Load Submarine Cables
12/22/2014			Off Load Submarine Cables
12/22/2014			Off Load Submarine Cables
12/22/2014			Off Load Submarine Cables
12/22/2014			Off Load Submarine Cables
12/22/2014			Off Load Submarine Cables
12/22/2014			Off Load Submarine Cables
12/22/2014			Off Load Submarine Cables
12/22/2014			Off Load Submarine Cables
12/22/2014			Off Load Submarine Cables
12/23/2014			Off Load Submarine Cables
12/23/2014			Off Load Submarine Cables
12/23/2014			Off Load Submarine Cables
12/23/2014			Off Load Submarine Cables
12/23/2014	ZU-Z1	-3.8	Off Load Submarine Cables

2015			
Date	Time	Temperature in Celcius	Reason for Generation
01/03/2015	19-20	-14.8	Off Load Submarine Cables
01/03/2015		-14.9	Off Load Submarine Cables
01/03/2015	21-22	-15.1	Off Load Submarine Cables
01/03/2015		-14.6	Off Load Submarine Cables
01/07/2015	06-7	-17.5	Off Load Submarine Cables
01/07/2015		-17.1	Off Load Submarine Cables
01/07/2015	08-9	-16.9	Off Load Submarine Cables
01/07/2015		-16.4	Off Load Submarine Cables
01/07/2015		-15.4	Off Load Submarine Cables
, ,	11-12	-14.4	Off Load Submarine Cables
01/07/2015		-13.2	Off Load Submarine Cables
01/07/2015	13-14 14-15	-12.2	Off Load Submarine Cables
01/07/2015 01/07/2015	_	-11.7 -11.7	Off Load Submarine Cables Off Load Submarine Cables
	16-17	-11.7 -11.8	Off Load Submarine Cables
, ,	17-18	-11.6 -12.6	Off Load Submarine Cables
01/07/2015	18-19	-12.0 -15.5	Off Load Submarine Cables
	19-20	-15.5	Off Load Submarine Cables
01/07/2015		-16.6	Off Load Submarine Cables
01/07/2015		-17	Off Load Submarine Cables
01/07/2015		-15.1	Off Load Submarine Cables
01/07/2015	23-24	-14.2	Off Load Submarine Cables
	19-20	-13.2	NB Power - Hold to Schedule
	20-21	-11	NB Power - Hold to Schedule
01/11/2015		-10.1	NB Power - Hold to Schedule
01/12/2015	09-10	-4.9	Off Load Submarine Cables
01/12/2015	10-11	-4.8	Off Load Submarine Cables
01/12/2015		-4.7	Off Load Submarine Cables
01/12/2015	12-13	-4.5	Off Load Submarine Cables
01/12/2015	13-14	-5	Off Load Submarine Cables
01/12/2015	14-15	-4.7	Off Load Submarine Cables
01/12/2015	15-16	-4.5	Off Load Submarine Cables
01/12/2015	16-17	-4.3	Off Load Submarine Cables
01/12/2015	17-18	-4.2	Off Load Submarine Cables
01/12/2015	18-19	-4	Off Load Submarine Cables
01/12/2015			Off Load Submarine Cables
01/12/2015			Off Load Submarine Cables
01/13/2015	19-20		Curtailment by NB Power
01/13/2015	20-21		Curtailment by NB Power
	10-11		Off Load Submarine Cables
01/14/2015	11-12		Off Load Submarine Cables
01/14/2015			Off Load Submarine Cables
01/15/2015	06-7	-12.6	Off Load Submarine Cables

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Date	Time	Temperature in Celcius	Reason for Generation
	07-8	-12.8	Off Load Submarine Cables
	08-9	-12.8	Off Load Submarine Cables
01/15/2015	09-10	-10.9	Off Load Submarine Cables
01/15/2015	10-11	-8.3	Off Load Submarine Cables
01/15/2015		0	Off Load Submarine Cables
	12-13	-5.5	Off Load Submarine Cables
1	13-14	-4.4	Off Load Submarine Cables
01/15/2015	14-15	-3.9	Off Load Submarine Cables
01/15/2015	15-16	-4.1	Off Load Submarine Cables
01/15/2015	16-17	-4.4	Off Load Submarine Cables
01/15/2015	17-18	-4.8	Off Load Submarine Cables
01/15/2015	18-19	-4.8	Off Load Submarine Cables
01/15/2015	19-20	-4.8	Off Load Submarine Cables
01/15/2015		-5.6	Off Load Submarine Cables
01/15/2015		-8.1	Off Load Submarine Cables
01/21/2015		-8.2	Off Load Submarine Cables
01/21/2015	17-18	-9	Off Load Submarine Cables
01/21/2015	18-19	-9.9	Off Load Submarine Cables
01/21/2015	19-20	-10.4	Off Load Submarine Cables
1 ' '	20-21	-10.8	Off Load Submarine Cables
01/21/2015		-10.8	Off Load Submarine Cables
01/21/2015	22-23	-11.2	Off Load Submarine Cables
01/22/2015	06-7	-9.1	Off Load Submarine Cables Off Load Submarine Cables
01/22/2015	07-8 08-9	-8.6 -8	Off Load Submarine Cables
01/22/2015 01/22/2015		-8 -6.6	Off Load Submarine Cables
01/22/2015	10-11	-0.0 -5.3	Off Load Submarine Cables
01/22/2015		-5.5 -5	Off Load Submarine Cables
01/22/2015		-4.9	Off Load Submarine Cables
01/22/2015			Off Load Submarine Cables
01/22/2015			Off Load Submarine Cables
01/22/2015			Off Load Submarine Cables
01/22/2015			Off Load Submarine Cables
01/22/2015	17-18	-4.3	Off Load Submarine Cables
01/22/2015	18-19	-4.4	Off Load Submarine Cables
01/26/2015	15-16	-11.1	Off Load Submarine Cables
01/26/2015	16-17	-11.8	Off Load Submarine Cables
01/26/2015	17-18	-12.8	Off Load Submarine Cables
01/26/2015	18-19	-13.9	Off Load Submarine Cables
01/26/2015			Off Load Submarine Cables
01/26/2015			Off Load Submarine Cables
01/26/2015			Off Load Submarine Cables
01/26/2015			Off Load Submarine Cables
01/29/2015	16-17	-6.1	Off Load Submarine Cables

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Date	Time	Temperature in Celcius	Reason for Generation
01/29/2015		-7.6	Off Load Submarine Cables
01/29/2015	18-19	-10	Off Load Submarine Cables
01/29/2015	19-20	-7.7	Off Load Submarine Cables
01/29/2015	20-21	-8.9	Off Load Submarine Cables
01/29/2015		-12.2	Off Load Submarine Cables
01/30/2015	06-7	-14	Off Load Submarine Cables
01/30/2015	07-8	-10.1	Off Load Submarine Cables
01/30/2015	08-9	-8.2	Off Load Submarine Cables
01/30/2015	09-10	-7.5	Off Load Submarine Cables
01/30/2015	10-11	-7.4	Off Load Submarine Cables
01/30/2015	11-12	-6.8	Off Load Submarine Cables
01/30/2015	12-13	-6.5	Off Load Submarine Cables
	13-14	-5.9	Off Load Submarine Cables
01/30/2015	15-16	-5.1	Off Load Submarine Cables
	16-17	-5.2	Off Load Submarine Cables
	17-18	-5.5	Off Load Submarine Cables
01/30/2015	18-19	-6.5	Off Load Submarine Cables
01/30/2015	19-20	-8.3	Off Load Submarine Cables
01/30/2015	20-21	-9.8	Off Load Submarine Cables
01/30/2015		-10.7	Off Load Submarine Cables
02/02/2015	09-10	-21.8	Off Load Submarine Cables
02/02/2015	10-11	-21 20.4	Off Load Submarine Cables Off Load Submarine Cables
02/02/2015	11-12 12-13	-20.4 -19.4	Off Load Submarine Cables
02/02/2015 02/02/2015	13-14	-19.4 -18.8	Off Load Submarine Cables
02/02/2015	14-15	-18.5	Off Load Submarine Cables
02/02/2015	15-16	-18.1	Off Load Submarine Cables
02/02/2015		-17.5	Off Load Submarine Cables
02/02/2015		-17.4	Off Load Submarine Cables
02/02/2015	18-19	-17.6	Off Load Submarine Cables
02/02/2015	19-20	-17.3	Off Load Submarine Cables
02/02/2015		-16.1	Off Load Submarine Cables
02/04/2015	06-7	-17.7	Curtailment by NB Power
02/04/2015	07-8	-17.6	Curtailment by NB Power
02/04/2015	08-9	-17.4	Curtailment by NB Power
02/04/2015	09-10	-16	Curtailment by NB Power
02/04/2015	10-11	-14.3	Curtailment by NB Power
02/04/2015	11-12	0	Curtailment by NB Power
02/04/2015	12-13	-11.2	Curtailment by NB Power
02/09/2015	17-18	-18.2	Off Load Submarine Cables
02/09/2015	18-19	-19.2	Off Load Submarine Cables
02/10/2015	17-18		Off Load Submarine Cables
	18-19		Off Load Submarine Cables
02/12/2015	17-18	-8.9	Off Load Submarine Cables

Date	Time	Temperature in Celcius	Reason for Generation
02/12/2015		-10.6	Off Load Submarine Cables
I ' '	19-20	-10.9	Off Load Submarine Cables
02/12/2015 02/12/2015	20-21	-11.6 -11.6	Off Load Submarine Cables Off Load Submarine Cables
02/12/2015		-11.6 -10.9	Off Load Submarine Cables
	08-9	-10.9	Off Load Submarine Cables
	09-10	-21.3	Off Load Submarine Cables
02/14/2015	10-11	-19.2	Off Load Submarine Cables
02/14/2015		-18.5	Off Load Submarine Cables
02/14/2015		-17.6	Off Load Submarine Cables
02/14/2015	13-14	-16.4	Off Load Submarine Cables
02/14/2015	14-15	-15.4	Off Load Submarine Cables
02/14/2015	15-16	-14.4	Off Load Submarine Cables
02/14/2015	16-17	-13.9	Off Load Submarine Cables
02/14/2015	17-18	-14	Off Load Submarine Cables
02/14/2015		-15.6	Off Load Submarine Cables
02/14/2015	19-20	-16	Off Load Submarine Cables
02/14/2015		-16.1	Off Load Submarine Cables
02/14/2015		-15.4	Off Load Submarine Cables
02/14/2015		-15.2	Off Load Submarine Cables
02/15/2015 02/15/2015	17-18	-5.6 -5.5	Off Load Submarine Cables Off Load Submarine Cables
02/15/2015	18-19	-5.3 -5.3	Off Load Submarine Cables
02/15/2015		-5.3	Off Load Submarine Cables
02/17/2015		-11.2	Off Load Submarine Cables
02/17/2015		-11.7	Off Load Submarine Cables
	18-19	-12.7	Off Load Submarine Cables
02/17/2015	19-20	-13.7	Off Load Submarine Cables
02/17/2015	20-21	-14.3	Off Load Submarine Cables
02/17/2015	21-22	-14.2	Off Load Submarine Cables
02/18/2015	06-7	-24.5	Off Load Submarine Cables
02/18/2015		-23.7	Off Load Submarine Cables
02/18/2015			Off Load Submarine Cables
		-13.4	
1			
			Off Load Submarine Cables
02/18/2015		-10.1	Off Load Submarine Cables
02/18/2015 02/18/2015 02/18/2015 02/18/2015 02/18/2015 02/18/2015 02/18/2015 02/18/2015 02/18/2015 02/18/2015	09-10 10-11 11-12 12-13 13-14 14-15 15-16 16-17 17-18 18-19	-14.4 -13.4 -11.6 -9.7 -8.4 -7.2 -7 -7.7 -8.9 -10	Off Load Submarine Cables

<b>5</b> .	<b>—</b> .	Temperature	5 ( 6 "
Date	Time	in Celcius	Reason for Generation
02/18/2015		-11.3	Off Load Submarine Cables
02/18/2015		-10.7	Off Load Submarine Cables
02/22/2015	16-17	-1.8	Off Load Submarine Cables
02/22/2015	17-18	-2.2	Off Load Submarine Cables
02/22/2015		-2.8	Off Load Submarine Cables
02/22/2015		-3.4	Off Load Submarine Cables
02/22/2015		-4.6	Off Load Submarine Cables
02/22/2015	21-22	-6.5	Off Load Submarine Cables
02/24/2015		-15.3	Off Load Submarine Cables
02/24/2015		-15.4	Off Load Submarine Cables
02/24/2015 02/24/2015	18-19 19-20	-16.5	Off Load Submarine Cables Off Load Submarine Cables
02/24/2015		-17.1 17.9	Off Load Submarine Cables Off Load Submarine Cables
02/24/2015	20-21	-17.8 -17	Off Load Submarine Cables
	17-18	-17 -10.5	Off Load Submarine Cables
02/26/2015	18-19	-10.5 -10.8	Off Load Submarine Cables
02/26/2015	19-20	-10.8	Off Load Submarine Cables
02/26/2015	20-21	-11.5 -11.4	Off Load Submarine Cables
	06-7	-11.4 -16.5	Off Load Submarine Cables
03/09/2015		-10.5	Off Load Submarine Cables
03/09/2015	08-9	-11.9	Off Load Submarine Cables
03/09/2015	09-10	-10.5 -8.2	Off Load Submarine Cables
03/09/2015	10-11	-6.2	Off Load Submarine Cables
	11-12	-4.8	Off Load Submarine Cables
03/09/2015		-3.4	Off Load Submarine Cables
03/09/2015		-3.9	Off Load Submarine Cables
03/09/2015	19-20	-3.5	Off Load Submarine Cables
03/09/2015		-3.9	Off Load Submarine Cables
03/31/2015		-0.4	NB Reserve Call
05/14/2015		10.6	Unit Testing
05/14/2015		12.6	Unit Testing
05/25/2015			Unit Testing
05/28/2015		18.6	NB Reserve Call
05/28/2015		18.5	NB Reserve Call
05/28/2015		19.2	NB Reserve Call
05/28/2015		22.2	NB Reserve Call
05/28/2015	16-17	22.5	NB Reserve Call
06/18/2015	07-8	14.7	NB Power - Hold to Schedule
06/18/2015	08-9	16.1	NB Power - Hold to Schedule
06/24/2015	11-12	16.2	Unit Testing
07/04/2015	13-14	24.6	NB Power - Hold to Schedule
07/04/2015	14-15	25.3	NB Power - Hold to Schedule
07/04/2015	17-18	25.5	NB Power - Hold to Schedule
07/04/2015	18-19	25.1	NB Power - Hold to Schedule

Date	Time	Temperature in Celcius	Reason for Generation
07/08/2015	17-18	22.2	Unit Testing
07/08/2015	18-19	20.7	Unit Testing
07/09/2015	07-8	16.5	NB Power - Hold to Schedule
07/09/2015	08-9	18.2	NB Power - Hold to Schedule
07/09/2015	09-10	19.2	NB Power - Hold to Schedule
07/10/2015	15-16	24	Curtailment by NB Power
07/10/2015	16-17	23.7	Curtailment by NB Power