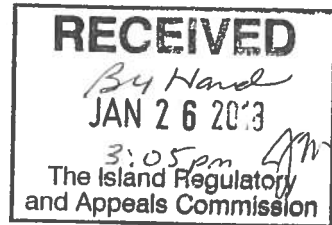


January 26, 2018

Mr. Scott MacKenzie  
Island Regulatory & Appeals Commission  
PO Box 577  
Charlottetown PE C1A 7L1



Dear Mr. MacKenzie:

**Responses to City of Summerside's questions submitted on December 15, 2017  
Re: Open Access Transmission Tariff ("OATT") Application**

Please find attached the Company's response to questions prepared and submitted by the City of Summerside on December 15, 2017 regarding Open Access Transmission Tariff ("OATT") Application.

The costs included in the OATT have not been updated since the Company has not yet received the final New Brunswick Schedule 9 charge assessment for the new interconnection between PEI and New Brunswick. When the Company receives this information, it will calculate the new OATT charges and will provide these to the Commission.

If you have any questions, please do not hesitate to contact me at 902-629-3763.

Yours truly,

MARITIME ELECTRIC



Enrique Riveroll  
Manager, Regulatory & Financial Planning

ER01  
Encl. as noted

## Responses to City of Summerside's December 15, 2017 Questions

### Question #1:

In an email of June 30, 2017, MECL provided an estimate of the impact of removing radial lines from the OATT facilities. Further to this information, please provide answers to the following questions:

- a. Please confirm which specific lines were included in the calculations attached to the June 30, 2017 email.

### **Response:**

The following radial lines were removed from the Open Access Transmission Tariff (OATT) facilities for the estimate, as was shown in the Excel workbook that formed part of Maritime Electric's June 30, 2017 response:

- T-1, tap to New Glasgow Substation (now known as Bagnall Road Substation)
- T-3, Borden to Albany
- T-4, Lorne Valley to Scotchfort
- T-5, Sherbrooke to Wellington
- T-8, Lorne Valley to Cardigan\*\*
- T-8, Cardigan to Georgetown
- T-8 Cardigan to Dingwells Mills\*\*
- T-8, Dingwells Mills to Souris
- T-10, Lorne Valley to Victoria Cross
- T-10, Victoria Cross to Dover
- T-11, Sherbrooke to Summerside
- T-15, tap to Airport Substation
- T-21, Wellington to O'Leary
- T-21, O'Leary to Alberton

\*\* With the completion of transmission line Y-104 in the second half of 2017, these lines now form part of a loop (i.e. they are no longer radial lines).

## Responses to City of Summerside's December 15, 2017 Questions

### Question #1:

- b. Please identify which assets were included in the calculations attached to the June 30, 2017 email for each line that was considered (i.e., breakers, switches, conductors, poles, transformers, etc.)

### **Response:**

The June 30, 2017 e-mail included the following explanation of how the estimate of the impact of removing radial lines from the OATT facilities was done.

"Maritime Electric uses a pooled accounting method for its transmission facilities. Amortization is applied to the entire basket of facilities, and not to each individual facility. The pooled accounting method is common across the electric utility industry.

In addition, individual poles and portions of lines have been replaced over the years due to vehicle collisions, storm damage, equipment failure, or to accommodate roadway construction. Breaking out the exact remaining value of each asset listed by the City of Summerside is impossible since the accounting has not been undertaken in an amenable manner.

In spite of the forgoing, attached is a high level estimate of the impact of removing radial lines from the OATT facilities. It has been developed as an alternative response to Summerside's request for detailed cost data on the radial portions of the transmission system.

The basic idea in the attached workbook is to estimate the construction cost new for all the transmission lines. Radial lines' total cost is then applied to the 2014 costs for OATT facilities lines in order to break out an estimated cost for radial lines. For year 2014 costs, removing radial lines from the OATT facilities would result in Maritime Electric customers paying approximately \$200,000 more annually, with corresponding decreases of \$50,000 for Summerside and \$150,000 for the West Cape wind farm."

The assets that were included in the estimate were conductors, poles and fixtures (fixtures are the hardware and insulators attached to poles). The replacement cost new for the radial lines considered was \$16.2 million, as shown in the Excel workbook attached to the June 30, 2017 e-mail.

For simplicity, the circuit breakers for the lines and the in-line disconnect switches associated with distribution substations were not included in the estimate. Each of lines T-3, T-5, T-8 (at Lorne Valley), T-10 (at Lorne Valley), T-11 and T-21 (at Wellington) has a circuit breaker, for a total of 6 circuit breaker positions. There are 12 in-line disconnect switches for tap-offs for six distribution substations. The estimated replacement cost new for the six circuit breaker positions is \$1.2 million, and the replacement cost new for the 12 disconnect switches is \$0.12 million. Including these elements would not significantly affect the estimate of the impact of removing radial lines from the OATT facilities, because the replacement cost new for these elements is less than 10% of the \$16.2 replacement cost new for the radial lines.

Maritime Electric's view is that the question of whether radial lines should be included or removed from the OATT facilities is a policy issue. Maritime Electric believes that the postage

## Responses to City of Summerside's December 15, 2017 Questions

stamp approach is appropriate for PEI, particularly given the Province's small size. Under the postage stamp approach, radial lines are included as part of the OATT facilities, and all users of the transmission system pay the same rate for comparable service.

Should the PEI Government or the Island Regulatory and Appeals Commission ("IRAC") decide, as a matter of policy, against the use of the postage stamp approach, then Maritime Electric will undertake the work needed to provide a more detailed breakout of radial lines facilities. For the purposes of informing policy, Maritime Electric's view is that the June 30, 2017 estimate of the impact of removing radial lines from the OATT facilities is of sufficient accuracy.

If the revenue requirement for radial lines were to be removed from the calculation of the OATT charges, the expected result is that Maritime Electric's customers will pay a higher rate for transmission service than will Summerside (because Summerside would then be paying for a smaller portion of the transmission system under the OATT).

## Responses to City of Summerside's December 15, 2017 Questions

### Question #2:

In relation to the answer in response to question 7, as shown in correspondence dated January 4, 2017, MECL indicated that Line Y-104 was proposed in 2005 as part of the expansion plan to accommodate future wind development to the eastern region of the Province. Does MECL intend to include the costs of Y-104 in the OATT rate determinants for revenue required or does it intend to direct charge that asset to the wind developers as per previous arrangements with West Cape Energy/Suez?

### Response:

Transmission line Y-104 serves two purposes:

1. It serves part of the load in eastern PEI as the replacement for line T-4.
2. It is part of a transmission system development plan that will enable the installation of up to 150 MW of wind power in eastern PEI.

Y-104 is a 138 kV transmission line which extends from the West Royalty Substation to the Church Road Substation, near Dingwells Mills. The Y-104 transmission line project, including the Church Road Substation, has an estimated cost of \$14.5 million, of which \$11.0 million is for the line itself and \$3.5 million is for the Church Road Substation and the 138 kV breaker and associated equipment at the West Royalty Substation end of the line.

If there was to be little or no wind generation in eastern PEI, the 69 kV transmission line T-4 would probably have been rebuilt at 138 kV (and renamed Y-104) and the 138 kV/69 kV transformer at Church Road would have been installed at the Lorne Valley Station instead (T-4 was a 69 kV transmission line that extended from the Charlottetown Substation via Scotchfort to Lorne Valley).

As built, line Y-104 is 82.5 km long, whereas T-4 was 43.1 km long. The extra 39.4 km for Y-104 to accommodate wind power development in eastern PEI represents \$5.2 million on a pro rata basis and Maritime Electric's intention is that this \$5.2 million will be included with the designated transmission facilities associated with wind farms serving only Maritime Electric load for OATT purposes (i.e. it will not be included with OATT facilities). Maritime Electric intends to include the \$9.3 million for the load serving portion of Y-104 (as replacement for T-4) in OATT facilities.

The Church Road Substation forms part of the looped transmission system serving load in eastern PEI and thus an estimated \$3.0 million will be included with OATT facilities for it (the cost for the substation if located at Lorne Valley instead would have been slightly lower because one less 138 kV breaker would have been needed).

The above numbers are estimates, and their purpose is to provide an indication of the impact of the Y-104 project on the OATT revenue requirement.

To provide context, the questions and responses referred to in the question are shown below. The two one line diagrams referred to are attached to this response as Attachment '1' and Attachment '2'.

## Responses to City of Summerside's December 15, 2017 Questions

The following is from Maritime Electric's December 15, 2016 response to December 7, 2016 questions from Summerside:

Question 7:

Can you provide a one line diagram of the MECL 69 kV and 138 kV grid, both before and after completion of line Y-104?

*Response:*

The requested one-line diagrams are provided as separate attachments.

In anticipation of the follow up question that the City will ask, Maritime Electric is also providing the following:

The Y-104 transmission line project, including the Church Road Substation, has an estimated cost of \$14.5 million, of which \$11.0 million is for the line itself and \$3.5 million is for the Church Road Substation and the 138 kV breaker and associated equipment at the West Royalty Substation end of the line.

If there was no wind generation at the PEI Energy Corporation's Eastern Kings and Hermanville wind farms, the 69 kV transmission line T-4 would probably have been rebuilt at 138 kV and the 138 kV/69 kV transformer at Church Road would have been installed at the Lorne Valley Station instead.

Line Y-104 is 82.5 km long, whereas T-4 is 43.1 km long. The extra 39.4 km for Y-104 represents \$5.2 million on a pro rata basis and Maritime Electric's intention is that this \$5.2 million will be included with the designated transmission facilities associated with wind farms serving only Maritime Electric load for OATT purposes. The \$9.3 million for Y-104 that Maritime Electric will propose to be included in the OATT revenue requirement will result in an estimated 14% increase in Network and Point-to-Point transmission service charges, probably starting in 2019.

The above numbers are estimates and their purpose is to provide an indication of the impact of the Y-104 project on the OATT revenue requirement."

## Responses to City of Summerside's December 15, 2017 Questions

The following is from Maritime Electric's January 25, 2017 response to January 4, 2017 questions from Summerside:

Follow up with respect to Question 7:

I would ask that you provide a copy of the system impact study that was completed prior to the commencement of construction for the Y-104 line. Additionally, if there are additional or supplementary system impact studies for this line, please provide them as well.

*Response:*

Please see the attached 2005 document "138 kV Transmission Expansion Plan for Large Scale Wind Development on Prince Edward Island".

Line Y-104 was proposed in 2005 as part of the above expansion plan for Maritime Electric's transmission system that would accommodate the development of up to 300 MW of wind power in PEI. The basic idea was to accommodate 150 MW of wind power at each end of the Island by constructing a new 138 kV transmission line out to each of the eastern and western ends of PEI. At the time, the 138 kV system extended only as far west as the Sherbrooke Substation and to the east only as far as the West Royalty Substation.

In nominal terms, a new 138 kV transmission line to the western part of PEI would handle 100 MW of wind power while the existing 69 kV system would handle 50 MW, for a total of 150 MW. Similarly, a new 138 kV transmission line to the eastern part of PEI along with the existing 69 kV system would handle 150 MW of wind power in the eastern part of the Island.

Y-104 is the designation for the 138 kV line to the eastern part of PEI. The first section of new 138 kV line was constructed in 2006 in order to connect the Eastern Kings wind farm to the system. This section of line was initially operated at 69 kV because it was connected to the existing 69 kV system at the Dingwells Mills Substation.

Maritime Electric's 2006 Capital Budget Application called for the line to the Eastern Kings wind farm to be constructed for (future) 138 kV operation. To support the request for approval by IRAC of the higher cost for 138 kV construction, the Company included the above identified 2005 expansion plan with the 2006 Capital Budget Application. This 2005 138 kV expansion plan is the planning document for line Y-104.

The last section of 138 kV transmission line construction associated with the eastern PEI portion of the 2005 expansion plan is scheduled for 2017. When complete, the transmission system in eastern PEI will be essentially as proposed in 2005."

## Responses to City of Summerside's December 15, 2017 Questions

### Question #3:

**Has MECL performed the FERC Seven Factor Test on the lines identified by William Dunn as being radial? If yes, what are the results and are there any other lines not identified by Mr. Dunn that would be radial according to the FERC Seven Factor Test? If not, please advise as to why MECL has not performed such an analysis.**

### **Response:**

Maritime Electric has not performed the Federal Energy Regulatory Commission ("FERC") Seven Factor Test on the lines identified by William Dunn as being radial. The reason for not doing so is that Maritime Electric's proposed OATT is based on the postage stamp approach, under which all users of the transmission system pay the same rate for comparable service. Under the postage stamp approach, all transmission lines serving customer load, including radial transmission lines, are included as OATT facilities, and thus there is no need to consider them separately using the FERC Seven Factor Test.

In some jurisdictions the cost of radial transmission lines used solely for serving load is assigned to just the load they serve. In those situations the FERC Seven Factor Test can be used to help decide if a radial transmission line is used solely for serving load, or if it serves other functions in addition to serving load. Should the PEI Government or IRAC decide, as a matter of policy, against the use of the postage stamp approach, then the Seven Factor Test may be helpful in deciding which radial lines should not be treated as part of the OATT facilities.

If the revenue requirement for radial lines were to be removed from the calculation of the OATT charges, the expected result is that Maritime Electric's customers will pay a higher rate for transmission service than will Summerside for comparable service (because Summerside would then be paying for a smaller portion of the transmission system under the OATT).



## Responses to City of Summerside's December 15, 2017 Questions

### Question #4:

Did MECL do a jurisdictional analysis of its own on the inclusion of radial lines in an OATT, based on factor such as market activity and number of users within those jurisdictions, or did it rely on the opinion of Mr. Marshall in the development of the current OATT in this regard?

### Response:

Maritime Electric did not do a survey of how radial lines are treated in other jurisdictions as part of preparing its July 2016 OATT filing. Maritime Electric's view is that the postage stamp approach is appropriate for PEI, particularly given the Province's small size.

To provide context on the appropriateness of the postage stamp approach, Maritime Electric requested Mr. Bill Marshall to do a survey of how radial lines are treated under the transmission tariffs in the other Canadian Provinces. The results of Mr. Marshall's survey are summarized in the table below. As can be seen, the costs for load serving radial lines are allocated to the transmission function and recovered through the OATT in 5 out of 8 other Canadian provinces, which shows that the postage stamp approach is widely used (In 2016 Newfoundland was electrically isolated from the rest of North America and did not have an OATT).

<b>Canadian Pro Forma OATTs (3)</b>					
<b>Cost Allocation by Function</b>					
<b>Jurisdiction</b>	<b>Substation Step-Down Transformers</b>	<b>Load-Serving Radial Lines</b>	<b>Transmission Network</b>	<b>Generator Connection Assets</b>	<b>Generator Step-Up Transformers</b>
British Columbia	D	D	T	G	G
Alberta	D	D	T	G	G
Saskatchewan	D	T	T	G	G
Manitoba	D	D	T	G	G
Ontario	T	T	T	T	T
Quebec	T	T	T	T	T
New Brunswick	D	T	T	G	G
Nova Scotia	D	T	T	G	G
FERC	D	D/T	T	G	G
MECL Application	D	T	T	G	G
"D" means that the associated costs are allocated directly to Distribution or to an in province Transmission service that is separate from the OATT					
"T" means that the associated costs are allocated to transmission and collected via the OATT					
"G" means that the associated costs are directly allocated to Generators					

## Responses to City of Summerside's December 15, 2017 Questions

### Question #5:

Can MECL provide an illustration of a scenario which excludes radial lines and the discontinuing of wind energy exporters so as to show the consequent impacts on the allocation of the revenue requirement for OATT users?

### Response:

The requested scenario has been developed in two steps. The first step is shown in the table below, which summarizes the estimate that was provided to Summerside on June 30, 2017 of the impact of removing radial lines from the OATT facilities. This estimate assumed the existing level of wind exports.

2018-01-08	Step 1 - estimated impact of removing radial lines				
	From	With	Add back	Estimated	Net
	MECL's	radial lines	individual cost	overall	
	July 2017	removed	responsibilities	cost	
OATT filing		for radial lines	responsibilities		
					change
2014 revenue requirement ( \$ x 1,000 )					
- for OATT postage stamp approach	7,307	7,307			
- less Jun 30 estimate for radial lines	-	1,122			
	7,307	6,185			
2014 transmission usage ( MW )					
- Maritime Electric customers	189.0	189.0			
- Summerside	16.7	16.7			
- West Cape wind farm	33.7	33.7			
	239.4	239.4			
Share of rev. req. based on usage ( \$ x 1,000 )					
- Maritime Electric customers	5,769	4,883	1,097	5,980	211
- Summerside	510	431	25	456	(53)
- West Cape wind farm	1,029	871	-	871	(158)
	7,307	6,185	1,122	7,307	(0)

If radial lines were removed from the OATT facilities, Summerside would take on cost responsibility for T-11, and Maritime Electric would take on cost responsibility for the remainder of the radial lines listed in Question 1(a). This is reflected in the column in the above table where individual cost responsibilities for radial lines are added back.

Step 2 is shown in the next table. The starting point for Step 2 is the overall cost responsibilities as estimated in Step 1. With no wind exports, the contribution toward transmission system costs currently being made by West Cape would be reallocated between Maritime Electric and Summerside.

## Responses to City of Summerside's December 15, 2017 Questions

2018-01-08	Step 2 - estimated additional impact of no wind exports		
	From Step 1 -		Estimated
	estimate of		overall cost
	individual cost	Reallocation	responsibilities
	responsibilities	of West Cape	with radial lines
	with radial	share if no	removed and
	lines removed	wind exports	no wind exports
<b>2014 transmission usage ( MW )</b>			
- Maritime Electric customers	189.0	189.0	
- Summerside	16.7	16.7	
- West Cape wind farm	33.7	-	
	239.4	205.7	
<b>Share of rev. req. based on usage ( \$ x 1,000 )</b>			
- Maritime Electric customers	5,980	800	6,780
- Summerside	456	71	527
- West Cape wind farm	871	(871)	-
	7,307	-	7,307

## Responses to City of Summerside's December 15, 2017 Questions

### Question #6:

MECL is proposing to offer a discounted rate to non-dispatchable generators on non-congested lines in the OATT. In relation to this discount, please provide answers to the following questions:

- a. Please provide the justification for offering such a discount.

### Response:

Maritime Electric believes that charging electricity exports the off-peak hourly rate during on-peak hours rather than the (higher) on-peak hourly rate achieves two benefits:

1. There is a fairer sharing of transmission system costs between wind generation exporters and the PEI electricity users.
2. The resulting lower cost for transmission usage by exports supports the PEI Government's policy of encouraging the development of wind power in the Province for export.

The remainder of this response provides the background for Maritime Electric's approach.

The PEI Energy Framework and Renewable Energy Strategy issued in June 2004 by the PEI Government stated that Maritime Electric would be required to file an OATT with IRAC. An OATT defines the terms, conditions and price for access to an electric utility's transmission system for third party users on the same basis as the utility uses its transmission system for serving its own load. A benefit of having an OATT in place would be to provide certainty for potential wind farm developers in regard to their ability to deliver their generation to off-Island purchasers.

In response to IRAC Order UE06-02, Maritime Electric made its initial OATT filing in November 2006. The November 2006 filing was based on 2005 transmission system costs. In 2007, Maritime Electric held meetings with stakeholders to explain the OATT and receive feedback. One of the stakeholders was Ventus, the developer of the West Cape wind farm (Ventus subsequently sold the West Cape wind farm to GDF Suez which in turn transitioned to Engie, the current owner). The West Cape wind farm was developed as a merchant wind farm with the output to be largely sold off-Island.

Part of the feedback received from Ventus was that under the OATT, as filed, the cost for use of the transmission system to export the output from the West Cape wind farm was estimated at \$1.5 million annually. Ventus suggested that this was disproportionately high compared to the 2005 total annual transmission system cost of \$6.0 million. The result would have been PEI load (i.e. all PEI electricity consumers) paying only \$4.5 million of annual transmission system costs. Maritime Electric agreed with Ventus' assessment that this appeared to be an unfair sharing of transmission system costs between West Cape and the PEI load, and in the October 2007 revised OATT filing Maritime Electric proposed the use of non-Appalachian pricing for exports by non-dispatchable generators when there was surplus capacity available on the transmission system for exports. The revised OATT filing incorporated this and a number of other changes based on feedback received from stakeholders.

## Responses to City of Summerside's December 15, 2017 Questions

Under non-Appalachian pricing, exports by non-dispatchable generators are charged the off-peak hourly rate during on-peak hours as well as during off-peak hours. Non-dispatchable generators are electricity generators whose output cannot be controlled to match the electricity load. The output from a wind turbine is determined by how strong the wind is blowing, not by the amount of electricity load that needs to be served. The result of paying the off-peak hourly rate during on-peak hours is that the West Cape wind farm would pay approximately \$1.0 million annually for transmission system usage rather than the initially estimated \$1.5 million.

In March 2008, IRAC approved the charges under Maritime Electric's October 2007 filed OATT on an interim basis, including the application of non-Appalachian pricing for non-dispatchable exports. In July 2009 IRAC approved revised charges, also on an interim basis, that reflected the coming into service of Phase 2 at the West Cape wind farm. These charges are currently still in effect. In the July 2016 OATT filing Maritime Electric, under advisement from Mr. Marshall, proposed altering the eligibility for non-Appalachian pricing for energy exports on non-congested paths from only non-dispatchable generators to all generators to ensure there was no discrimination against dispatchable generators.

Appalachian pricing is the name given to a widely used approach to higher charges for transmission usage during on-peak hours than during off-peak hours. A transmission system is normally sized to handle the peak load. Thus the capacity of a transmission system, and the associated cost, is generally a direct function of the peak load. Since electricity usage is normally highest during "on-peak" hours (i.e. between 7:00 a.m. and 11:00 p.m. for Monday through Friday), one way to achieve a user pay approach to transmission service is to have higher charges during on-peak hours for hourly or daily transmission service than during off-peak hours. Under Appalachian pricing, the on-peak hourly and on-peak daily charges are such that the annual cost for a 1 MW use of the transmission system during only all on-peak hours in the year is the same as for a 1 MW use of the transmission system during all hours of the year at off-peak rates. The calculation of the charges in Maritime Electric's OATT is based on Appalachian pricing, as seen in the table below:

<b>Summary of Transmission Service Rates</b>			
<b>Point-to-Point Services</b>	<b>Units</b>	<b>Transmission Service</b>	<b>Scheduling, System Control and Dispatch</b>
Yearly	\$/MW-year	31,644	1,363
Monthly	\$/MW-month	2,637	113.57
Weekly	\$/MW-week	608.53	26.21
On-Peak Daily	\$/MW-day	121.71	5.24
Off-Peak Daily	\$/MW-day	86.70	3.73
On-Peak Hourly	\$/MW-hour	7.61	0.33
Off-Peak Hourly	\$/MW-hour	3.61	0.16
Network Service	\$/MW-month	2,637	113.57

## Responses to City of Summerside's December 15, 2017 Questions

### Question #6:

b. Does MECL intend to offer this discount in perpetuity?

#### **Response:**

The off-peak hourly rate for Point-to-Point transmission service will continue to be available during all hours for exports as long as there is no congestion on the transmission system for exports (i.e. as long as there is surplus transmission capacity available for deliveries of electricity from PEI to New Brunswick).

The term 'congestion' refers to situations where transmission constraints reduce transmission flows or throughput below levels desired by market participants or government policy (e.g., to comply with reliability rules).<sup>1</sup> The 'PEI Transmission System' for which the Maritime Electric OATT applies includes all submarine cables connecting PEI to the mainland as well as all on-Island transmission facilities. It does not include transmission facilities located on the mainland which connect PEI to the mainland grid.

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<sup>1</sup> U.S. Department of Energy "National Electric Transmission Congestion Study", September 2015, Page ix

## Responses to City of Summerside's December 15, 2017 Questions

### Question #6:

- c. If non-dispatchable generators on non-congested lines were not receiving the proposed discount, what impact would it have on OATT Revenue?

### Response:

If the off-peak hourly rate for Point-to-Point transmission service was not available during all hours (i.e. non-Appalachian pricing was not available) for exports when there is no congestion, there would be no impact on OATT revenue overall. The annual revenue requirement (i.e. the annual cost for the transmission system) would remain the same. What would change would be the sharing of costs among transmission system users. Currently there are three users of the Maritime Electric transmission system. If non-Appalachian pricing was not available, the West Cape wind farm would be paying approximately \$500,000 more per year for transmission service, and Maritime Electric and Summerside would pay correspondingly less.

## Responses to City of Summerside's December 15, 2017 Questions

### Question #6:

- d. Does MECL have any information to support the need or requirement for a discount to be offered to non-dispatchable generators on non-congested lines?

### *Response:*

See the response to Question 6(a).



## Responses to City of Summerside's December 15, 2017 Questions

### Question #6:

- e. Please provide an estimate of the reduction in wind exports from PEI that would occur if discounts for usage of the transmission system by wind generators were eliminated, together with any calculations or supporting information needed to prepare this estimate.

### *Response:*

Maritime Electric does not have an answer to this question. The questions appears to ask, "Would Engie shut down the West Cape wind farm if wind power exports were no longer eligible for a reduced transmission charge?" or, "Would Engie have scaled back the size of the West Cape wind farm if wind power exports had not been eligible for a reduced transmission charge?" Engie is the owner of the West Cape wind farm. This one wind farm accounts for almost all of the wind power exports from PEI. Maritime Electric suggests that the question is more appropriately addressed to Engie.

## Responses to City of Summerside's December 15, 2017 Questions

### Question #6:

- f. Has MECL conducted a jurisdictional analysis to determine the amount, level or percentage of discount offered in other markets? If so, please provide a summary of the analysis? If not, please confirm how the current discount rate was determined.

### *Response:*

Maritime Electric has not done a survey of other jurisdictions in regard to discounts for transmission service. What Maritime Electric has done is to make the off-peak hourly rate for Point-to-Point transmission service available during all hours to exports as long as there is no congestion on the transmission system for exports (i.e. as long as there is surplus transmission capacity available for deliveries of electricity from PEI to New Brunswick).

To provide further clarity, Maritime Electric does not apply an adjustment or discount when calculating the monthly transmission bill for exports. Rather, it is the provision in the OATT that the off-peak hourly \$/MWh charge applies to all generation that is exported, even during on-peak hours, as long as there is no congestion. Because the off-peak hourly \$/MWh charge is lower than the on-peak hourly \$/MWh charge, the result is a lower monthly bill for transmission service for the exporter. This is referred to as non-Appalachian pricing.

Maritime Electric continues to propose the use of non-Appalachian pricing as a way of encouraging the development of merchant wind power in PEI, and thus additional usage of the transmission system. The FERC pro forma Tariff recognizes the validity of offering a discount when there is no congestion if doing so can be expected to result in an increase in transmission system usage, and thus lower cost for all users.

## Responses to City of Summerside's December 15, 2017 Questions

### Question #7:

Please provide a breakdown of usage of the transmission system by wind generators during peak periods in each of the past 5 years as follows:

- a. MWh usage during periods with no-congestion and when, therefore, off-peak transmission service rates apply.

### **Response:**

During the past five years, there have been no periods when there was congestion on the Maritime Electric transmission system for exports to New Brunswick (congestion occurs when the requests for transmission service exceed the available transmission capacity). Thus, under non-Appalachian pricing for exports, rates for non-firm transmission service have always been applicable for exports of on-Island generation, both during on-peak hours and during off-peak hours.

For delivery of on-Island generation (either wind or oil-fired) to serve on-Island load, Appalachian pricing applies. This means that on-peak transmission rates apply during all on-peak hours and off-peak (non-firm) transmission rates apply during all off-peak hours.

See response to Question 6(a) for an explanation of Appalachian pricing and why it applies to exports as long as there is no congestion on the transmission system for exports (i.e. as long as there is surplus transmission capacity available for deliveries of electricity from PEI to NB).

## Responses to City of Summerside's December 15, 2017 Questions

### Question #7:

- b. MWh usage during periods with congestion and when, therefore, on-peak transmission service rates apply.

See response to Question 7(a).

## Responses to City of Summerside’s December 15, 2017 Questions

**Question 8:**

Can MECL provide an illustration of what rates would be like in the OATT without any merchant wind exporting electricity?

**Response:**

The rate for transmission service under the OATT is expressed in \$/MW-year. It is calculated by dividing the annual cost for the transmission system (\$/year) by the transmission usage (MW). The amount of transmission usage for 2014 is shown in the table below (Maritime Electric’s July 2016 updated OATT filing is based on 2014 transmission system costs). Also shown is the calculation for 2014 transmission usage had there been no merchant wind exports.

<b>Network and Point-to-Point Transmission Usage for 2014 (Firm Service or Equivalent)</b>		
	Actual (MW)	If no merchant wind exports (MW)
Long term firm Point-to-Point	-	-
Maritime Electric Network (average 12CP)	189.0	189.0
Summerside Network (average 12CP)	-	-
Summerside short term firm	10.0	10.0
Summerside non-firm	6.7	6.7
Merchant wind non-firm	<u>33.7</u>	-
Total	239.4	205.7

*Note: Average 12CP is the average of the 12 monthly coincident peaks for the year.*

As shown in the response to Question 18 under the heading “\$7,307,000 revenue requirement for 2014”, \$7,307,000 is the 2014 transmission system cost amount to be recovered through charges for Network and Point-to-Point transmission service. Based on 2014 transmission usage, the proposed rate for long term firm service in Maritime Electric’s July 2016 filing is \$30,522/MW-year (\$7,307,000/239.4 MW). If there had been no merchant wind in 2014, the proposed rate would have been \$35,523/MW-year (\$7,307,000/205.7 MW) approximately 16% higher.

## Responses to City of Summerside's December 15, 2017 Questions

### Question #9:

Please provide an estimate of the market value of wind exports from PEI in each of the past 5 years. Please provide supporting calculations.

### *Response:*

Question 1 of the December 7, 2016 questions from Summerside to Maritime Electric was, "Can you provide an indication as to the margins that you believe Suez may be achieving? There was reference to the "back of an envelope" calculation, but if an indication as to the range of margin can be provided, it would be appreciated." The question asked Maritime Electric to provide an estimate of the profit margin that Suez (now known as 'Engie') is realizing on its export sales from the West Cape wind farm. Maritime Electric's response was, "It would be inappropriate for Maritime Electric to provide a number. The City can always contact Suez directly."

The request for Maritime Electric to provide an estimate of the market value of wind exports from PEI appears to be essentially the same as Question 1 of December 7, 2016. Engie West Cape wind farm is the only exporter of wind generation in PEI (except perhaps for occasional small amounts of surplus by Summerside or Maritime Electric). Maritime Electric's response is the same. It would be inappropriate for Maritime Electric to provide a number. The City can always contact Engie directly.

## Responses to City of Summerside's December 15, 2017 Questions

### Question #10:

Please also provide a data file showing total wind exports in each hour of the year for the past five years.

### *Response:*

Engie West Cape wind farm is the only exporter of wind generation in PEI (except perhaps for occasional small amounts of surplus by Summerside or Maritime Electric). To provide a third party with the "total" wind exports in each hour of the year for the past five years would be to effectively provide that third party with the hourly wind exports by the West Cape wind farm for the past five years. It would be inappropriate for Maritime Electric to provide this data. The City can always contact Engie directly.

## Responses to City of Summerside's December 15, 2017 Questions

### Question #11:

MECL has stated that it does not make external sales, but it does make external purchases and, in that regard, competes with the City of Summerside for both sources of supply and scheduling rights on the transmission system. As long as the cables and the internal transmission system between the cables and COS are unconstrained, then there are not likely to be issues between the parties. However, if there are constraints, how does MECL intend to treat MECL's and COS's power supply buyers and schedulers on an equal basis?

### Response:

When the OATT was initially filed in November 2006, Maritime Electric viewed the Interconnection facilities as similar to the rest of the PEI transmission system and determined that access to the cables during times of constraint would be based on the amount of firm transmission service being taken by each Transmission Customer under the Maritime Electric OATT.

At Summerside's request, and in recognition that the Interconnection facilities put in place in 1977 were partly funded by the Federal Government for the benefit of all PEI electricity users, Maritime Electric changed its approach and entered into an agreement with Summerside whereby Maritime Electric and Summerside had access to their load share ratio of the capacity of the Interconnection facilities to the extent needed to supply their respective loads, regardless of the extent to which Summerside does or does not use firm transmission service. A strict adherence to the OATT would have limited Summerside's access to the capacity of the interconnection facilities during periods of congestion to the amount of firm transmission service that Summerside had contracted for under the Maritime Electric OATT.

This approach has been continued in the 2017 Interconnection Debt Collection Agreement for the new submarine cables which stipulates that each of Maritime Electric and Summerside will have assured access to the import capacity of the interconnection between PEI and New Brunswick in the same proportion as the their respective shares of the PEI five year average 12 month coincident peak ('12CP') load.

In addition to the above, the approval of Maritime Electric's OATT will provide the main assurance to Summerside that the City will be treated fairly in regard to the transmission system. The purpose of an OATT is to provide non-discriminatory access to the transmission system for all users. Under the OATT, if there is congestion on the Maritime Electric transmission system between the submarine cables and Summerside, Summerside's access to the transmission system will depend on the amount of firm transmission reservations that the City has in place. The same will apply to Maritime Electric.

However, it must be kept in mind that the Maritime Electric OATT applies only to Maritime Electric's transmission system (including the interconnection facilities owned by the Province of PEI). In New Brunswick it is the NB Power OATT that applies. This means that the amount of Interconnection capacity (between NB and PEI) that Maritime Electric or Summerside can actually make use of in any hour may be limited by the amount of firm transmission reservations that they have in place in New Brunswick under the NB Power OATT.



## Responses to City of Summerside's December 15, 2017 Questions

### Question #12:

In Mr. Marshall's testimony, he indicates that "Implementation of intra-hour [i.e., 15 minute] schedules must be coordinated with NB Power which is expected to take about six (6) months following their approval." In this regard, please provide answers to the following questions:

- a. Please provide information with respect to the status of this co-ordination.

### **Response:**

Energy requirements are currently scheduled on an hourly basis. Hourly projected energy requirements for the following day are submitted to NB Power by 9:00am of the current day. This is in order that NB Power can put system resources in place to closely align to the next day's projected load patterns.

Maritime Electric can then adjust its schedules up to 65 minutes ahead of the hour in question, and NB Power can adjust its schedules to provide the required resources accordingly. Once this final schedule is sent and approved, it is set for that hour. Any alterations in energy flow to or from New Brunswick will be treated as 'imbalance energy'.

Intra-hour scheduling consists of more frequent scheduling, even during the hour in question. 15 minute schedules would mean that, during one particular hour, four adjustments can be made to the hourly schedule. More frequent scheduling is being considered as it is thought that it would better align system resources with load due to the fluctuations on the system from both load and the recently increasing use of non-dispatchable renewable energy resources like wind and solar. Intra-hour scheduling would attempt to provide a better and more efficient use of system generating resources.

NB Power has not implemented intra-hour schedules, and NB Power has indicated to Maritime Electric that there are no definite plans to move forward with intra-hour scheduling in New Brunswick. There have been discussions between NB Power and ISO New England about the need for implementing intra-hour scheduling to accommodate the proposed Atlantic Link project, but that project is still awaiting results of the Massachusetts Clean Energy RFP.

Should NB Power implement this scheduling practice, Maritime Electric may be required to consider a similar system. At present Maritime Electric is not contemplating instituting intra-hour schedules.

## Responses to City of Summerside's December 15, 2017 Questions

### Question #12:

b. Is the reference to "approval" an approval of IRAC or NB Power?

#### **Response:**

Mr. Marshall's use of the word 'approval' refers to approval of intra-hour scheduling in New Brunswick.

## Responses to City of Summerside's December 15, 2017 Questions

### Question #13:

**OATT Schedule 10 relates to Residual Uplift. The last paragraph of this Schedule indicates that "The Transmission Customer shall pay (or be paid) the Residual Uplift to the (by the) Transmission Provider in accordance with the Transmission Provider's rules." What are these rules?**

### **Response:**

Schedule 10 – Residual Uplift is a schedule that allows the Transmission Provider to recover system costs when there is no other place in the OATT to recover those costs. For example, there is currently no section within the OATT that deals with costs incurred by Maritime Electric to operate generation that is run to maintain the hourly NB-PEI intertie schedules when wind exports fail to meet their schedules. Maritime Electric has recovered these costs through Schedule 10 – Residual Uplift.

Since the OATT was initially filed in 2006, Residual Uplift has only been charged to recover costs experienced by Maritime Electric when Maritime Electric has had to operate on-Island generation to cover wind export shortfalls. Maritime Electric does not believe that the City of Summerside has ever been charged for Residual Uplift under Schedule 10.

The wording for the Maritime Electric OATT Schedule 10 – Residual Uplift was taken directly out of the NB OATT when Maritime Electric initially developed its OATT. The NB OATT has recently been updated, and the NB OATT Schedule 10 now reads as follows:

*"The Residual Uplift provides a periodic settlement of various Transmission Provider expenses and revenues that are not reflected in other schedules in this OATT. The net value of these expenses and revenues can be either positive or negative in any given settlement period.*

*The Residual Uplift shall be calculated for each settlement period in accordance with the Transmission Provider's electricity business rules.*

*The Transmission Customer shall pay (or be paid) the Residual Uplift to the (by the) Transmission Provider in accordance with the Transmission Provider's Electricity Business Rules."*

Maritime Electric does not have Electricity Business Rules, nor does it have Transmission Provider rules. The last sentence in Maritime Electric's Schedule 10 – Residual Uplift will be changed from "... in accordance with the Transmission Provider's rules" to "... in accordance with Section 7 of the Tariff".

## Responses to City of Summerside's December 15, 2017 Questions

### Question #14:

Once the OATT and its associated documents are approved and posted on the MECL website, will MECL notify all Transmission Customers whenever any of these documents are updated?

### *Response:*

Maritime Electric cannot change any terms or conditions contained within the OATT without approval from IRAC. As such, Maritime Electric will go through the approved procedures in regards to changes required within the OATT. Maritime Electric will post all approved OATT documents on the Maritime Electric OASIS website, where all Transmission Customers will have equal access to the information at the same time.

Maritime Electric proposed that the Standards of Conduct be removed from the OATT application and filed separately with IRAC for approval in the July 2016 OATT filing. It is Maritime Electric's intention to update the Standards of Conduct as necessary and file such changes with IRAC. Maritime Electric will inform all Transmission Customers of such changes in due course.

## Responses to City of Summerside's December 15, 2017 Questions

### Question #15:

**In several instances in the Standards of Conduct (i.e., Sections 1.b&d, 6.i, 8, etc.), MECL can have waivers or exemptions granted by IRAC for matters which do not need to be disclosed. Please confirm the rationale or requirement for these waivers and exemptions not to be disclosed?**

### **Response:**

The Standards of Conduct included as 'Appendix L' of the Application closely resemble those of NB Power, which in turn are based on FERC Order 717 "Standards of Conduct for Transmission Providers". Maritime Electric's desire to as closely as possible resemble the FERC Pro Forma orders was the driver behind including these provisions.

Order 717 lists 'confidential customer information or Critical Energy Infrastructure Information' as reasons for information not to be publically disclosed. Maritime Electric's wording in Section 1.d is more generic; however it is essentially identical to the wording used by NB Power in its Standards of Conduct.

Maritime Electric's rationale is not dissimilar to the principles in FERC's order; that is to protect both commercially sensitive information and information that should remain confidential so as to not impact the security, safety or reliability of the system.

Neither Maritime Electric nor NB Power has filed any such waivers or exemptions in the past.

## Responses to City of Summerside's December 15, 2017 Questions

### Question #16:

**How will an over/under collection of revenue to costs be handled for the OATT and its services?**

### **Response:**

Over- and under-collection of revenues applies to both past and future OATT and system costs.

In response to Maritime Electric's October 2007 OATT filing, IRAC issued order UE08-03 which ordered "the October 3, 2007 Open Access Transmission Tariff filed by the Company is approved effective June 30, 2008 as an interim tariff rate for the transmission of electricity by the Company and the collection of which rates are, until a final rate is set, subject to such commercial collection agreements as the Company and its OATT customers may from time to time agree upon."

Maritime Electric has continued to honour a previous commercial arrangement with the City of Summerside for the cost of transmission service. In the meantime Maritime Electric is tracking the difference between the actual and remitted amounts for Summerside's transmission service. The following statement is included at the end of each monthly email sent by the OATT Administrator to Summerside approving Summerside's upcoming monthly transmission reservation: "...the City of Summerside will be billed the filed Maritime Electric OATT rates however will only be required to pay 95% of the present OATT in effect in New Brunswick until the filed Maritime Electric OATT is approved. At that time, City of Summerside will be required to pay the outstanding balance plus interest at the Royal Bank of Canada prime rate back to July 1<sup>st</sup>, 2008."

Once the OATT has received final approval, Maritime Electric is proposing that future over/under collection of revenue will be handled with all Transmission Customers as was proposed by Maritime Electric in response to a question from the City of Summerside at the March 6, 2007 Stakeholder Technical Session, a response which was filed with IRAC as part of the October 2007 submission and is included below in its entirety:

"Question #4:

COS – How will Maritime Electric deal with the overpayment and underpayment of the transmission revenue/costs? How will this be overseen?

Response:

Maritime Electric is proposing to utilize a "true-up" calculation to address any over/underpayments of transmission revenue/costs. Any such calculation or mechanism will be subject to approval to IRAC prior to implementation. It is proposed that by March 15<sup>th</sup> after the end of each year, Maritime Electric will calculate the true-up amount and file with IRAC a notice of the adjustment to the Tariff rate. To the extent that actual revenues from Short-Term Firm Service and Non-Firm Service are different from the estimated amount used in the Tariff filing, the rate for the 12 month period commencing April 1<sup>st</sup> will be adjusted to take into account this difference in revenues.

## Responses to City of Summerville's December 15, 2017 Questions

The example shown in the table below is for a situation where the actual revenues from Short-Term Firm Service and Non-Firm Service for the year are less than the estimated amount used in the Tariff filing. An analogous calculation would apply for a year in which the actual revenues were higher than the estimated amount.

<b>Recovery of Transmission Revenue Requirement</b>			
	<b>Total</b>	<b>Total "Credits" amount on Schedule 1-1 under Tab 3</b>	<b>From Long-term Point -to-Point and Network Service</b>
As per November 2006 filing	\$ 6,052,000	\$ 234,000	\$ 5,818,000
Actual amount for a year	\$ 6,038,000	\$ 220,000	\$ 5,818,000
Difference	\$ 14,000	\$ 14,000	
Amount to be used in adjusting Tariff rates for next 12 month period (220,000 – 14,000 = 206,000)	\$ 6,052,000	\$ 206,000	\$ 5,846,000

## Responses to City of Summerside's December 15, 2017 Questions

**Question #17:**

Currently the City of Summerside takes a combination of firm and non-firm point to point services. If the City of Summerside was to elect to receive Network Services, please provide answers to the following questions:

- a. What effect would this have on the OATT transmission cost allocation?

**Response:**

There would be no change in the OATT transmission revenue requirement had Summerside used Network service in 2014 instead of a combination of firm and non-firm Point-to-Point service. The process of assigning costs to the transmission system is described in the response to Question 18, under the heading of "\$7,307,000 revenue requirement for 2014". This process does not depend on the type of transmission service that Summerside uses.

However, what would change is the calculation of the rate for transmission service. The rate for transmission service under the OATT is expressed in \$/MW-year. It is calculated by dividing the annual cost for the transmission system (\$/year) by the transmission usage (MW). The amount of transmission usage for 2014 is shown in the table below. In 2014, Summerside used a combination of firm and non-firm Point-to-Point transmission service. Also shown is the calculation for 2014 transmission usage had Summerside used Network service instead.

<b>Network and Point-to-Point Transmission Usage for 2014 (Firm Service or Equivalent)</b>		
	Actual (MW)	Summerside using Network (MW)
Long term firm Point-to-Point	-	-
Maritime Electric Network (average 12CP)	189.0	189.0
Summerside Network (average 12CP)	-	14.7
Summerside short term firm	10.0	-
Summerside non-firm	6.7	-
Merchant wind non-firm	<u>33.7</u>	<u>33.7</u>
<b>Total</b>	<b>239.4</b>	<b>237.4</b>

*Note: Average 12CP is the average of the 12 monthly coincident peaks for the year.*

The amount of transmission usage for 2014 would have been slightly smaller (237.4 MW instead of 239.4 MW) had Summerside used Network service, and thus the rate (in \$/MW-year) would be slightly higher. However, based on 2014 usage, Summerside would expect to pay less for Network service because the amount of service required (14.7 MW) would have been less than the combined 16.7 MW for the combination of short term firm and non-firm service actually used.



## Responses to City of Summerside's December 15, 2017 Questions

### Question #17:

- b. Would there be any effect on the determination of the application of the FERC calculations for assessing the appropriate demand cost allocation (i.e., 1cp, 3cp, 12cp, etc.)?

### Response:

There would be no change in the results of the application of the Federal Energy Regulatory Commission (FERC) tests for the applicability of using 1CP, 3CP or 12CP as the measure of transmission system usage. These tests are based on the monthly PEI system peak loads, which are not affected by the type of transmission service that Summerside uses.

## Responses to City of Summerside's December 15, 2017 Questions

### Question #18:

The long-term impact of the OATT Tariff and the policies it represents to the Prince Edward Island electricity markets is significant. For example, documents filed to date, indicate an estimate of possible future costs, based on 2014's revenue requirement determinant of \$7,307,000.00, escalating to \$10,272,000.00 in 2017. As a historical comparison, in 2005 the cost estimate was \$6,020,000. Thus the revenue requirement is looking to increase in excess of \$4,000,000.00. Can MECL supply objective cost data which clearly validates the \$10,272,000.00 level cited in the documents filed to date?

### Response:

The estimate of \$10,272,000 as an indication of the level of revenue requirement for 2017 was provided by Maritime Electric to Summerside as part of Maritime Electric's June 30, 2017 response to Summerside's questions of May 10, 2017. Shown below is the relevant worksheet from the Excel workbook that was provided as part of Maritime Electric's response.

Radial lines estimate									
17-06-28									
								Indicative	
	2014	Indicative additional annual costs by 2017							2017
	Postage	Replenish	NB Power			T-1 tap	T-15 tap	Postage	
	Stamp OATT	Cables	Schedule 9	O&M		for New	for	Stamp OATT	
	facilities	Contingncy	for new	for new	Y-104	Glasgow	Airport	facilities	
	costs	Fund	cables	cables	in service	Substation	Substation	costs	
	(\$ x 1,000)	(\$ x 1,000)	(\$ x 1,000)	(\$ x 1,000)	(\$ x 1,000)	(\$ x 1,000)	(\$ x 1,000)	(\$ x 1,000)	
Interconnection	748	300	1,575	100				2,723	
Substations	2,352				300			2,652	
Lines	3,820				580	81	30	4,511	
Communications	214							214	
OATTAdministration	172							172	
	7,307							10,272	

Each of the items making up the \$10,272,000 indicative estimate for 2017 is discussed below.

### \$7,307,000 Revenue Requirement for 2014

The \$7,307,000 revenue requirement for 2014 was determined using results from Maritime Electric's 2014 Cost Allocation Study. The Cost Allocation Study is a systematic way of assigning Maritime Electric's total cost of providing electricity service among the various rate classes. The primary use for the Cost Allocation Study is in setting rates for electricity service for the Company's various classes of customers. However, a secondary use for the Study is to provide the starting point for calculating the charges to be applied for transmission service under Maritime Electric's OATT.

The Cost Allocation Study uses a three step methodology – Functionalization, Classification and Allocation. The Functionalization step breaks out the Company's total costs by function; e.g. generation, transmission, distribution, plus the various customer related activities such as meter reading and billing. The results of the Functionalization step provide the portion of Maritime Electric's costs that are related to the transmission system.

## Responses to City of Summerside's December 15, 2017 Questions

The 2014 Cost Allocation Study assigned a total of \$9,104,000 to the transmission function. However, only a portion of these costs are applicable to all users of the transmission system. The table below shows the breakout of costs not applicable to all users of the transmission system, leaving \$7,307,000 as the amount to be recovered under the OATT from all transmission system users through charges for Point-to-Point transmission service and Network transmission service.

<b>Breakdown of 2014 costs assigned to the transmission function</b>	
	(\$ x 1,000)
Miscellaneous designated facilities	54
Maritime Electric contracted wind related	1,121
Merchant wind related	325
OATT related (shared by all transmission system users)	7,307
Energy Control Centre related	<u>298</u>
<b>Total</b>	<b>9,104</b>

### \$300,000 to Replenish the Submarine Cables Contingency Fund

In 2012 the \$3.0 million submarine cables contingency fund was depleted in order to pay for the repairs to oil leaks in the submarine cables. Since March 1, 2013, Maritime Electric has been remitting \$300,000 annually to the PEI Energy Corporation to build the submarine cables contingency fund back up to the required \$3.0 million amount over a period of 10 years. The annual amount of \$300,000 is being collected through rates from Maritime Electric's customers.

When Maritime Electric filed its updated OATT Application in July 2016, a decision had not been made on the extent to which new interconnection costs would be recovered through OATT charges. For this reason the \$300,000 was not included in the revenue requirement for the transmission system in the Company's filing. Since then the PEI Government has decided that the replenishment of the contingency fund and the NB Power Schedule 9 charges associated with the new transmission facilities constructed by NB Power in New Brunswick as part of the Interconnection Upgrade Project will be recovered through OATT charges, while the Energy Corporation will invoice Maritime Electric and Summerside separately for the debt repayment associated with the Interconnection Upgrade Project. Thus the \$300,000 is now an additional cost to be recovered through OATT charges.

Also since July 2016, but not reflected in the June 30, 2017 response, under the revised Interconnection Lease Agreement between the PEI Energy Corporation and Maritime Electric, the amount of the submarine cables contingency fund has been increased to \$5.0 million. To realize this objective in a timely manner, effective March 1, 2019 the amount that Maritime Electric remits to the Energy Corporation will increase to \$375,000 annually, and thus the amount to be recovered through OATT charges will increase to \$375,000.

### \$1,575,000 for NB Power Schedule 9 Charges

The heading in the Excel worksheet table states that the Schedule 9 charges are for "new cables". This is not strictly correct. To be precise, the Schedule 9 charges are for the new transmission facilities constructed in New Brunswick as part of the Interconnection Upgrade Project.

## Responses to City of Summerside's December 15, 2017 Questions

A portion of the \$140 million budget for the Interconnection Upgrade Project was for the construction of new transmission facilities in New Brunswick in order to connect the new submarine cables to the NB Power transmission system. The estimated cost for these transmission facilities was \$29.6 million. PEI paid for the cost to construct these new transmission facilities, with the construction done by NB Power.

In addition to the construction cost, there are ongoing direct and indirect costs associated with these new transmission facilities for operations, maintenance and administration (OM&A). Under the terms of NB Power's OATT, NB Power will perform these activities and recover the cost for doing so from the PEI Energy Corporation (since these transmission facilities are dedicated to serving the PEI electricity load). The mechanism for this cost recovery is the OATT Schedule 9 charge. The annual charge is 5.32% of the estimated \$29.6 million construction cost, or \$1,575,000. The PEI Government has decided that this cost will be recovered from PEI transmission system users through Maritime Electric's OATT charges.

Maritime Electric expects that NB Power will have a final, or near final, construction cost for these new transmission facilities before the IRAC hearing in March 2018 and the amount of the NB Schedule 9 charges will be revised accordingly.

### \$100,000 O&M for New Cables

This is a provisional amount for operations and maintenance costs associated with the two new submarine cables and the expanded Borden Substation, where the new cables connect to Maritime Electric's transmission system.

### \$300,000 and \$580,000 for Y-104 In Service

The Y-104 transmission line project is a multi-year construction project that was completed in 2017. Y-104 is a 138 kV transmission line that extends from the West Royalty Substation to the Church Road Substation, located in Saint Charles in eastern PEI. One of the purposes that Y-104 serves is to replace the 69 kV transmission line T-4, which extended from the Charlottetown Substation via Scotchfort to Lorne Valley, and which had reached the end of its useful life.

The Y-104 transmission line project, including the Church Road Substation, has an estimated cost of \$14.5 million, of which \$11.0 million is for the line itself and \$3.5 million is for the Church Road Substation and the 138 kV breaker position at the West Royalty Substation end of the line.

If there was to be no wind generation in eastern PEI, the 69 kV transmission line T-4 would probably have been rebuilt at 138 kV (and renamed Y-104) and the 138 kV/69 kV transformer at Church Road would have been installed at the Lorne Valley Station instead. At Lorne Valley the substation would have cost an estimated \$3.0 million (one less 138 kV breaker position would have been needed). The indicative annual financing, operating and maintenance cost is 10% of the estimated construction cost, or \$300,000.

Line Y-104 is 82.5 km long, whereas T-4 is 43.1 km long. The extra 39.4 km for Y-104 represents \$5.2 million on a pro rata basis ( $\$11.0 \text{ million} \times 39.4 \text{ km} / 82.5 \text{ km}$ ) and Maritime Electric's intention is that this \$5.2 million will be included with the designated transmission facilities associated with wind farms serving only Maritime Electric load for OATT purposes (i.e. it will not be included with OATT facilities). The remaining \$5.8 million for the line (as

## Responses to City of Summerside's December 15, 2017 Questions

replacement for T-4) will be included in the OATT revenue requirement. The indicative annual financing, operating and maintenance cost is 10% of the construction cost, or \$580,000.

### \$81,000 for T-1 Tap for New Glasgow Substation

The New Glasgow Substation (now the Bagnall Road Substation) is a new load serving substation that was put into service in late 2017. The Bagnall Road Substation is connected to transmission line T-1 by a 4.2 km section of new 69 kV transmission line (referred to as a "tap"). The estimated construction cost for this tap is \$810,000. The indicative annual financing, operating and maintenance cost is 10% of the construction cost or \$81,000.

### \$30,000 for T-15 Tap for Airport Substation

The Airport Substation is a new load serving substation that was put into service in 2016. The Airport Substation is connected to transmission line T-15 by a 2.6 km section of new 69 kV transmission line (referred to as a "tap"). The estimated construction cost for this tap is \$300,000. The indicative annual financing, operating and maintenance cost is 10% of the construction cost, or \$30,000.

The indicative figure of 10% equates to roughly 8% for annual financing costs, and roughly 2% for annual operating and maintenance costs which is a typical figure for a new transmission facility.

## Responses to City of Summerside's December 15, 2017 Questions

### Question #19:

Please provide information on congestion events on the PEI transmission system during the past 5 years. For each year and for each event, please provide:

- a. The number of hours of congestion.
- b. The required adjustments to system operations to mitigate the congestion event.
- c. The quantity of imports and/or exports curtailed and the party or parties to whom curtailment actions were applied.

### Response:

The responses to parts a., b., and c. have been combined into one response.

The term 'congestion' refers to situations where transmission constraints reduce transmission flows or throughput below levels desired by market participants or government policy (e.g., to comply with reliability rules).<sup>2</sup> The 'PEI Transmission System' for which the Maritime Electric OATT applies includes all submarine cables connecting PEI to the mainland as well as all on-Island transmission facilities. It does not include transmission facilities located on the mainland which connect PEI to the mainland grid.

Prior to July 2017 there were two submarine cables, each with a 100 MW thermal rating, linking PEI to the mainland. They were operated such that the combined load on the two cables was limited to 195 MW, giving the combined cables a 2.5% operating margin to account for momentary load and wind fluctuations. When Island power imports were expected to exceed 195 MW, on-Island thermal generation was dispatched in order to maintain the cable loading level at or below 195 MW.

Over the past five calendar years (2013-2017) all congestion events on Maritime Electric's Transmission System were related to thermal limitations of the PEI-NB submarine cables as can be seen in Attachment '3' to this response, a summary of which is seen in the table below. There were no events on the PEI Transmission System that resulted in congestion which curtailed energy exports.

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<sup>2</sup> U.S. Department of Energy "National Electric Transmission Congestion Study", September 2015, Page IX.

## Responses to City of Summerside's December 15, 2017 Questions

	(A)	(B)	(C)	(D)	(E)	
	Hours of Curtailment	MECL Curtailed	COS Curtailed	MECL Generated	COS Generated	Reason For Curtailment
<b>2017</b>	159	1,807.0	225.6	2,406.4	187.0	All on Island Curtailments were due to Cable Management
<b>2016</b>	182	1,786.6	250.8	2,442.6	300.6	All on Island Curtailments were due to Cable Management
<b>2015</b>	265	3,549.3	456.7	5,010.0	229.2	All on Island Curtailments were due to Cable Management
<b>2014</b>	188	2,398.3	286.0	3,095.0	222.6	All on Island Curtailments were due to Cable Management
<b>2013</b>	70	668.9	95.7	1,360.2	88.4	All on Island Curtailments were due to Cable Management

**Notes:**

- (A) *Number of hours when congestion was present.*
- (B) *Number of megawatt hours that Maritime Electric had curtailed during these congestion events.*
- (C) *Number of megawatts hours that City of Summerside had curtailed during these congestion events.*
- (D) *Number of megawatt hours that Maritime Electric generated during these congestion events. Note that generation may be higher than required curtailment due to the minimum output level at which a generator can safely operate, also known as the base load amount.*
- (E) *Number of megawatt hours that City of Summerside generated during these congestion events. Note that City of Summerside generation is often lower than the curtailment levels due to agreements between Maritime Electric and Summerside for generation sharing or because Maritime Electric covered their generation during training runs at the Charlottetown Thermal Generating Station. These real-time agreements between Maritime Electric's Energy Control Centre and the City's staff are not uncommon.*

See the response to Question 11 for information regarding allocation of Interconnection capacity during periods of congestion. The size of curtailments varies due to the individual load levels of Maritime Electric and the City of Summerside, as well as on-Island generation. In any given hour, Maritime Electric or Summerside may not require its entire allotted pro rata share of the import capability over the Interconnection due to a number of factors, including but not limited to loss of load, on-Island generation supply or load fluctuations. Past practice has been that Maritime Electric or Summerside is given the opportunity to access this unused allocated pro rata share of import capability at the posted Tariff rates.

## Responses to City of Summerside's December 15, 2017 Questions

### Question #20:

Some sub-Section (e)(1)(i) [Section 1 paragraph numbering seems inconsistent] of Attachment P on filed page 627 exempts a posting of transmission and ancillary services requests when it indicates that such posting "does not apply to request for next hour service made during Phase 1." Please define Phase 1.

### *Response:*

The phrase "does not apply to requests for next hour service made during Phase 1" should be replaced with "does not apply to requests for next hour service made under paragraph (e)(1)(i) of this section."



## Responses to City of Summerside's December 15, 2017 Questions

### Question #21:

The MECL OATT (especially Attachment P) refers numerous times to an MECL OASIS which will contain all kinds of information, including real-time information. The OATT then exempts MECL (in Sections 1.28 and 4) from having an OASIS as used in other electricity markets and, instead, will simply manually update an MECL website from time to time. Please verify what real-time information will be made available on the MECL website.

### *Response:*

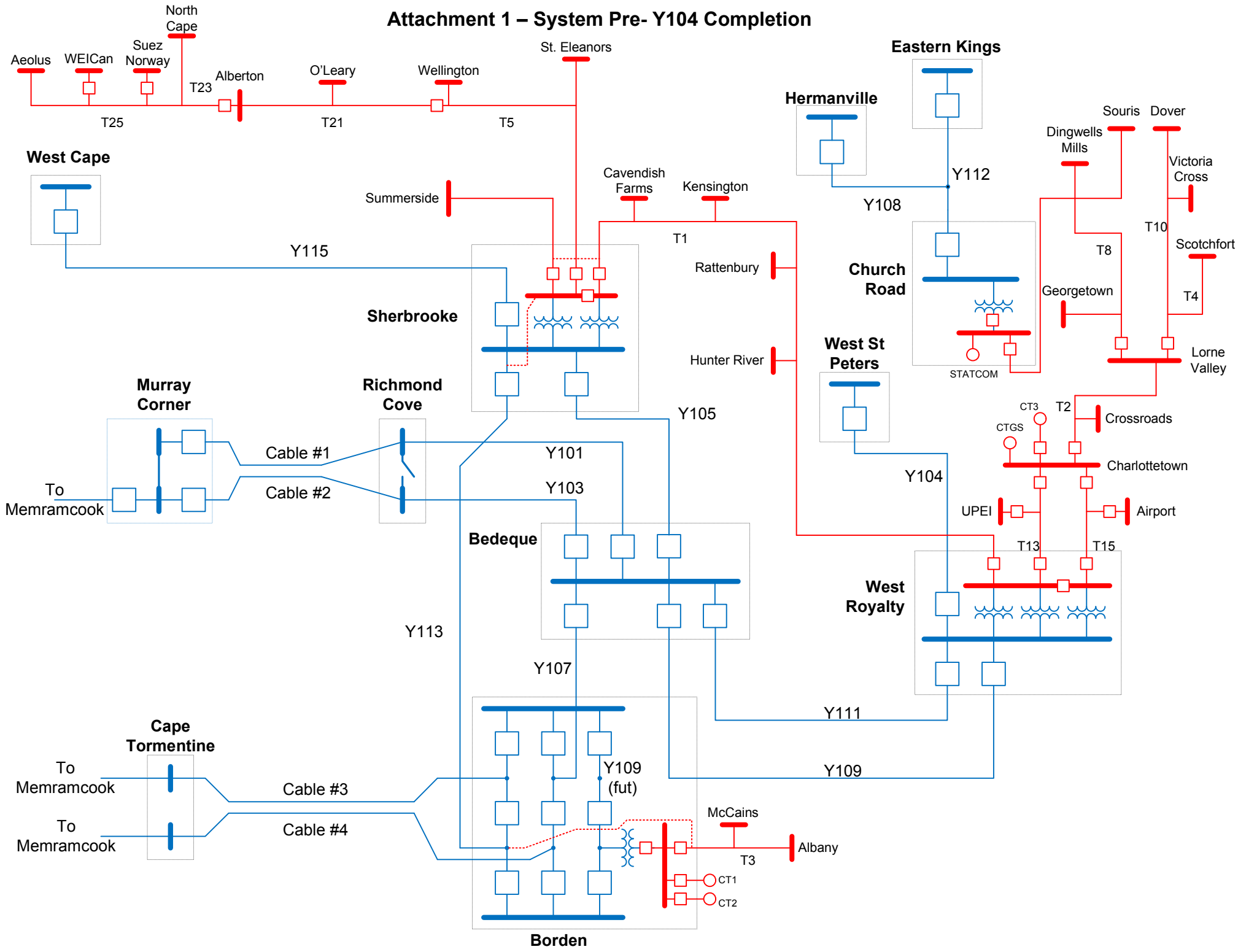
Maritime Electric has one Network customer and two Point-to-Point customers and no internal marketing function activity. All of the information and processing required to provide non-discriminatory transmission access is and will continue to be, provided manually through the Maritime Electric OATT administrator and posted on the Maritime Electric OASIS. Automating this system with current system conditions would incur additional costs for little apparent gain. If and when transmission activity increases, Maritime Electric will revisit the need for a fully automatic OASIS.

The following real-time information will be made available on the Maritime Electric website:

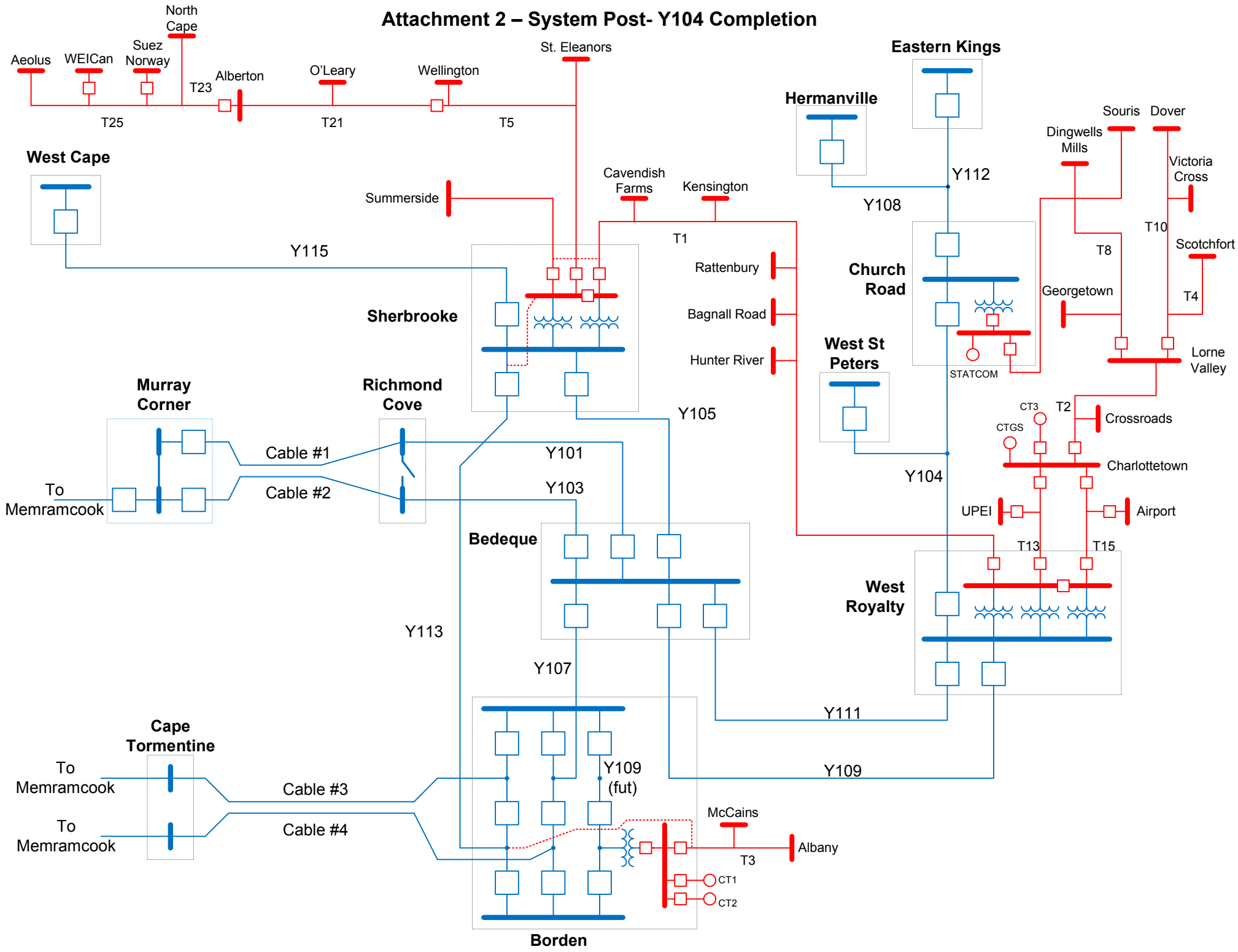
- Morning Report – temperature, wind and weather forecast (summary of previous day)
- Day Ahead Island Load Forecast based on Schedules
- Last Rolling 24 Hour Island Load Actuals
- System Backcast – Previous day summary
- Loss percentage
- Scheduled Outages, and
- Limits/curtailments.

This is similar to the information provided by the Northern Maine Independent System Administrator, Inc. ('NMISA') on its OASIS.

# Attachment 1 – System Pre- Y104 Completion



# Attachment 2 – System Post- Y104 Completion



Year	Month	Day	Hour	Island Load	MECL Load	Allowed	MECL Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	COS Load	Allowed	COS Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	Mecl Generation	COS Generation
2013	01	06	17	218.44	195.98	174.95	5.99	189.99	15.04	0.00	0.00	15.04	22.46	20.05	0.00	22.46	2.41	0.00	0.00	2.41	31.40	3.32
2013	01	06	18	209.79	188.56	175.26	7.01	181.55	6.29	0.00	0.00	6.29	21.23	19.74	0.00	21.23	1.50	0.00	0.00	1.50	24.01	1.37
2013	01	12	17	196.94	176.09	174.36	1.76	174.33	0.00	0.03	0.00	0.00	20.85	20.64	0.00	20.85	0.21	0.00	0.03	0.17	0.00	0.00
2013	01	26	17	219.72	196.70	179.50	14.23	182.47	2.97	0.00	0.00	2.97	23.02	21.01	0.00	23.02	2.01	0.00	0.00	2.01	11.78	1.44
2013	01	29	09	208.37	185.46	173.56	3.81	181.64	8.08	0.00	0.00	8.08	22.91	21.44	0.54	22.37	0.93	0.00	0.00	0.93	18.75	0.57
2013	01	29	10	204.93	182.34	174.04	5.07	177.27	3.23	0.00	0.00	3.23	22.59	21.56	0.06	22.53	0.97	0.00	0.00	0.97	10.60	0.00
2013	01	29	11	204.66	182.44	173.83	5.45	176.99	3.16	0.00	0.00	3.16	22.22	21.17	0.00	22.22	1.05	0.00	0.00	1.05	9.79	0.00
2013	01	29	17	217.59	195.14	174.89	10.68	184.46	9.58	0.00	0.00	9.58	22.44	20.11	0.20	22.24	2.13	0.00	0.00	2.13	18.05	0.00
2013	01	29	18	215.88	193.74	175.00	6.98	186.76	11.76	0.00	0.00	11.76	22.14	20.00	0.00	22.14	2.14	0.00	0.00	2.14	18.11	1.08
2013	01	29	19	210.37	188.53	174.76	5.60	182.93	8.18	0.00	0.00	8.18	21.84	20.24	0.00	21.84	1.60	0.00	0.00	1.60	18.12	0.52
2013	01	29	20	203.13	182.14	174.86	3.68	178.46	3.60	0.00	0.00	3.60	20.99	20.15	0.00	20.99	0.84	0.00	0.00	0.84	13.79	0.00
2013	2	06	07	204.64	183.68	175.03	0.00	183.68	8.66	0.00	0.00	8.66	20.96	19.97	0.00	20.96	0.99	0.00	0.00	0.99	81.75	9.02
2013	2	06	08	204.50	182.93	175.39	0.00	182.93	7.54	0.00	0.00	7.54	21.57	20.68	0.00	21.57	0.89	0.00	0.00	0.89	82.04	9.00
2013	2	06	09	201.42	178.98	175.25	0.00	178.98	3.73	0.00	0.00	3.73	22.44	21.98	0.00	22.44	0.47	0.00	0.00	0.47	24.19	1.17
2013	2	06	10	197.42	174.93	173.00	0.00	174.93	1.93	0.00	0.00	1.93	22.49	22.24	0.00	22.49	0.25	0.00	0.00	0.25	9.48	0.00
2013	2	06	11	196.53	174.06	172.71	0.00	174.06	1.35	0.00	0.00	1.35	22.47	22.29	0.00	22.47	0.17	0.00	0.00	0.17	7.98	0.00
2013	2	08	08	214.50	191.94	174.49	6.89	185.05	10.56	0.00	0.00	10.56	22.56	20.51	0.61	21.95	1.44	0.00	0.00	1.44	83.42	9.04
2013	2	08	09	211.51	189.09	174.34	5.42	183.68	9.34	0.00	0.00	9.34	22.41	20.66	0.02	22.39	1.73	0.00	0.00	1.73	81.98	8.34
2013	2	08	10	208.98	185.68	173.26	3.01	182.67	9.42	0.00	0.00	9.42	23.30	21.74	0.00	23.30	1.56	0.00	0.00	1.56	16.75	0.46
2013	2	08	11	206.46	183.60	173.41	2.54	181.06	7.65	0.00	0.00	7.65	22.86	21.59	0.00	22.86	1.27	0.00	0.00	1.27	7.30	0.00
2013	2	08	12	200.43	178.15	173.33	2.86	175.29	1.96	0.00	0.00	1.96	22.27	21.67	0.00	22.27	0.60	0.00	0.00	0.60	2.57	0.00
2013	2	08	13	197.95	175.69	173.08	1.60	174.09	1.01	0.00	0.00	1.01	22.25	21.92	0.00	22.25	0.33	0.00	0.00	0.33	0.00	0.00
2013	2	08	15	199.87	177.69	173.36	0.31	177.38	4.02	0.00	0.00	4.02	22.18	21.64	0.00	22.18	0.54	0.00	0.00	0.54	2.91	0.00
2013	2	08	16	206.97	184.51	173.84	0.00	184.51	10.67	0.00	0.00	10.67	22.46	21.16	0.00	22.46	1.30	0.00	0.00	1.30	11.60	0.00
2013	2	08	17	216.89	194.18	174.58	0.00	194.18	19.60	0.00	0.00	19.60	22.71	20.42	0.00	22.71	2.29	0.00	0.00	2.29	20.16	0.79
2013	2	08	18	220.92	197.86	175.04	0.00	197.86	22.82	0.00	0.00	22.82	23.05	20.40	0.00	23.05	2.66	0.00	0.00	2.66	23.65	1.34
2013	2	08	19	214.65	192.08	176.02	0.00	192.08	16.06	0.00	0.00	16.06	22.57	20.68	0.33	22.24	1.56	0.00	0.00	1.56	17.27	1.26
2013	2	08	20	209.46	187.61	176.81	0.34	187.28	10.47	0.00	0.00	10.47	21.85	20.59	0.38	21.47	0.87	0.00	0.00	0.87	14.97	0.00
2013	2	13	17	195.94	175.83	174.98	0.70	175.13	0.14	0.00	0.00	0.14	20.11	20.02	0.00	20.11	0.10	0.00	0.00	0.10	0.53	0.00
2013	2	13	18	200.72	180.55	175.40	0.05	180.49	5.09	0.00	0.00	5.09	20.17	19.60	0.00	20.17	0.57	0.00	0.00	0.57	4.41	0.00
2013	2	13	19	195.69	176.12	175.50	0.39	175.73	0.23	0.00	0.00	0.23	19.57	19.50	0.00	19.57	0.07	0.00	0.00	0.07	0.63	0.00
2013	2	14	18	200.12	180.09	175.48	3.48	176.62	1.13	0.00	0.00	1.13	20.03	19.52	0.00	20.03	0.51	0.00	0.00	0.51	4.71	0.00
2013	12	05	16	206.84	185.59	178.67	0.15	185.44	6.77	0.00	0.00	6.77	21.25	20.46	0.20	21.05	0.59	0.00	0.00	0.59	12.96	0.13
2013	12	05	17	218.43	196.66	188.31	1.12	195.54	7.22	0.00	0.06	7.16	21.77	20.85	0.99	20.78	0.00	0.06	0.00	0.00	17.70	1.20
2013	12	09	09	206.43	184.05	174.15	5.99	178.06	3.90	0.00	0.00	3.90	22.38	21.18	0.48	21.91	0.73	0.00	0.00	0.73	9.93	0.00
2013	12	09	10	203.24	181.49	174.14	2.76	178.73	4.60	0.00	0.00	4.60	21.74	20.86	0.00	21.74	0.88	0.00	0.00	0.88	13.26	0.00
2013	12	09	11	199.83	178.25	173.94	1.17	177.08	3.14	0.00	0.00	3.14	21.58	21.06	0.00	21.58	0.52	0.00	0.00	0.52	13.24	0.00
2013	12	09	14	195.26	174.33	174.09	0.00	174.33	0.24	0.00	0.00	0.24	20.93	20.91	0.00	20.93	0.03	0.00	0.00	0.03	12.98	0.00
2013	12	09	15	201.83	180.14	174.04	0.00	180.14	6.09	0.00	0.00	6.09	21.69	20.96	0.00	21.69	0.73	0.00	0.00	0.73	14.64	0.00
2013	12	09	16	223.64	200.17	174.54	0.00	200.17	25.63	0.00	0.00	25.63	23.47	20.46	0.00	23.47	3.01	0.00	0.00	3.01	28.10	1.02
2013	12	09	17	234.37	210.25	180.84	0.00	210.25	29.41	0.00	0.00	29.41	24.12	20.74	0.29	23.83	3.08	0.00	0.00	3.08	32.78	3.02
2013	12	09	18	228.62	205.31	186.04	2.28	203.03	16.99	0.00	0.00	16.99	23.31	21.12	0.35	22.96	1.84	0.00	0.00	1.84	28.22	2.57
2013	12	13	07	215.51	193.39	175.14	12.64	180.75	5.61	0.00	0.00	5.61	22.12	20.03	0.12	22.00	1.97	0.00	0.00	1.97	9.26	0.00
2013	12	13	08	219.31	195.56	178.90	15.13	180.43	1.53	0.00	0.00	1.53	23.75	21.72	0.54	23.21	1.48	0.00	0.00	1.48	16.16	0.00
2013	12	13	11	213.73	190.29	181.37	4.66	185.63	4.26	0.00	2.04	2.22	23.44	22.34	3.14	20.30	0.00	2.04	0.00	0.00	15.00	0.00
2013	12	17	15	197.83	176.16	173.64	2.01	174.15	0.51	0.00	0.00	0.51	21.67	21.36	0.22	21.45	0.09	0.00	0.00	0.09	8.41	0.00
2013	12	17	16	211.50	187.95	173.28	2.01	185.94	12.66	0.00	0.00	12.66	23.56	21.72	0.00	23.56	1.84	0.00	0.00	1.84	18.86	1.43
2013	12	17	17	233.42	208.11	173.85	4.53	203.58	29.72	0.00	0.00	29.72	25.31	21.15	0.00	25.31	4.17	0.00	0.00	4.17	32.25	3.06
2013	12	17	18	232.96	208.13	174.22	4.94	203.18	28.97	0.00	0.00	28.97	24.83	20.78	0.00	24.83	4.05	0.00	0.00	4.05	28.70	3.17
2013	12	17	19	229.83	205.30	174.19	2.45	202.85	28.66	0.00	0.00	28.66	24.53	20.81	0.00	24.53	3.72	0.00	0.00	3.72	27.33	3.27
2013	12	17	20	226.45	202.57	174.44	0.62	201.95	27.51	0.00	0.00	27.51	23.88	20.56	0.00	23.88	3.32	0.00	0.00	3.32	27.28	3.06
2013	12	17	21	218.48	195.35	174.35	0.20	195.14	20.79	0.00	0.00	20.79	23.14	20.65	0.00	23.13	2.48	0.00	0.00	2.48	27.12	3.08
2013	12	20	10	200.55	178.74	173.79	3.28	175.46	1.67	0.00	0.00	1.67	21.81	21.21	0.00	21.81	0.60	0.00	0.00	0.60	3.30	0.00
2013	12	20	11	201.64	179.67	173.75	0.89	178.78	5.03	0.00	0.00	5.03	21.97	21.25	0.00	21.97	0.72	0.00	0.00	0.72	13.31	0.00
2013	12	20	12	198.18	176.27	173.44	0.09	176.18	2.74	0.00	0.00	2.74	21.91	21.56	0.00	21.91	0.35	0.00	0.00	0.35	14.96	0.00
2013	12	20	13	198.90	177.24	173.77	0.51	176.73	2.96	0.0												

Year	Month	Day	Hour	Island Load	MECL Load	Allowed	MECL Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	COS Load	Allowed	COS Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	Mecl Generation	COS Generation							
2013	12	20	18	228.83	205.00	187.07	0.23	204.77	17.70	0.00	0.00	17.70	23.84	21.75	1.16	22.68	0.93	0.00	0.00	0.93	22.23	2.15							
2013	12	20	19	221.98	198.78	188.44	3.28	195.50	7.06	0.00	0.41	6.65	23.20	22.00	1.61	21.59	0.00	0.41	0.00	0.00	14.67	2.15							
2013	12	21	16	206.64	185.13	174.70	7.62	177.51	2.81	0.00	0.00	2.81	21.51	20.30	0.00	21.51	1.21	0.00	0.00	1.21	10.10	0.00							
2013	12	21	17	219.44	197.27	175.30	5.39	191.88	16.58	0.00	0.00	16.58	22.17	19.70	0.00	22.17	2.47	0.00	0.00	2.47	20.00	0.00							
2013	12	21	18	213.67	192.19	175.81	2.59	189.60	13.79	0.00	0.00	13.79	21.49	19.66	0.00	21.49	1.83	0.00	0.00	1.83	18.12	0.00							
2013	12	21	19	207.11	186.35	177.46	5.62	180.74	3.28	0.00	0.00	3.28	20.76	19.77	0.05	20.71	0.94	0.00	0.00	0.94	13.77	0.00							
2013	12	31	12	204.97	183.01	174.22	6.30	176.71	2.49	0.00	0.00	2.49	21.95	20.90	0.30	21.65	0.75	0.00	0.00	0.75	4.02	0.00							
2013	12	31	16	219.85	196.47	174.42	8.08	188.39	13.96	0.00	0.00	13.96	23.38	20.76	0.26	23.12	2.36	0.00	0.00	2.36	14.11	2.00							
2013	12	31	17	235.92	211.43	182.17	11.38	200.05	17.88	0.00	0.00	17.88	24.49	21.10	0.11	24.38	3.28	0.00	0.00	3.28	25.36	2.68							
2013	12	31	18	230.72	207.36	183.86	11.64	195.72	11.86	0.00	0.00	11.86	23.36	20.71	0.38	22.98	2.26	0.00	0.00	2.26	19.70	2.28							
2013 Totals																		668.94						95.66		1360.20		88.40	

2014	01	02	14	221.41	197.40	176.05	8.36	189.04	12.99	0.00	0.00	12.99	24.01	21.41	0.53	23.48	2.07	0.00	0.00	2.07	10.18	11.39
2014	01	02	15	227.10	202.89	174.21	7.52	195.37	21.16	0.00	0.00	21.16	24.21	20.79	0.42	23.78	3.00	0.00	0.00	3.00	10.12	11.44
2014	01	02	16	243.88	217.58	176.61	8.72	208.86	32.24	0.00	0.00	32.24	26.30	21.35	0.58	25.73	4.38	0.00	0.00	4.38	11.15	11.46
2014	01	02	17	235.39	208.12	173.59	6.74	201.39	27.79	0.00	0.00	27.79	27.27	22.74	1.51	25.75	3.01	0.00	0.00	3.01	0.17	11.45
2014	01	02	18	243.30	216.99	178.13	7.06	209.94	31.80	0.00	0.00	31.80	26.31	21.59	2.34	23.97	2.38	0.00	0.00	2.38	15.50	11.45
2014	01	02	19	243.86	218.43	180.16	8.98	209.46	29.29	0.00	0.00	29.29	25.43	20.97	1.36	24.07	3.10	0.00	0.00	3.10	8.47	11.45
2014	01	02	20	239.06	214.66	181.00	4.67	209.99	28.98	0.00	0.00	28.98	24.40	20.58	2.40	22.00	1.43	0.00	0.00	1.43	8.44	11.45
2014	01	02	21	228.04	204.67	181.66	6.48	198.20	16.54	0.00	0.00	16.54	23.37	20.74	2.56	20.81	0.07	0.00	0.00	0.07	2.01	11.43
2014	01	05	16	203.24	181.96	174.57	0.60	181.35	6.78	0.00	0.00	6.78	21.29	20.43	0.00	21.29	0.86	0.00	0.00	0.86	9.31	0.00
2014	01	05	17	219.10	196.74	175.10	0.01	196.73	21.63	0.00	0.00	21.63	22.36	19.90	0.00	22.36	2.46	0.00	0.00	2.46	22.58	0.00
2014	01	05	18	217.49	195.54	175.31	0.00	195.54	20.22	0.00	0.00	20.22	21.96	19.69	0.00	21.96	2.27	0.00	0.00	2.27	20.40	0.00
2014	01	05	19	213.11	191.67	175.38	0.00	191.67	16.29	0.00	0.00	16.29	21.45	19.62	0.00	21.45	1.82	0.00	0.00	1.82	18.03	0.00
2014	01	05	20	207.10	186.29	175.41	0.00	186.29	10.88	0.00	0.00	10.88	20.81	19.59	0.00	20.81	1.22	0.00	0.00	1.22	17.36	0.00
2014	01	05	21	196.50	176.78	175.43	0.00	176.78	1.35	0.00	0.00	1.35	19.73	19.57	0.00	19.73	0.15	0.00	0.00	0.15	8.09	0.00
2014	01	16	16	199.30	178.32	174.48	4.05	174.27	0.00	0.21	0.00	0.00	20.98	20.52	0.00	20.98	0.45	0.00	0.21	0.24	5.72	0.00
2014	01	16	17	206.91	185.56	178.28	6.73	178.82	0.54	0.00	0.00	0.54	21.36	20.52	0.75	20.61	0.09	0.00	0.00	0.09	11.75	0.00
2014	01	18	17	200.30	179.97	175.21	0.04	179.93	4.71	0.00	0.00	4.71	20.32	19.79	0.00	20.32	0.54	0.00	0.00	0.54	12.47	0.00
2014	01	23	17	225.34	201.83	186.08	8.07	193.77	7.69	0.00	0.00	7.69	23.51	21.68	1.54	21.97	0.29	0.00	0.00	0.29	14.98	0.00
2014	01	24	15	201.57	179.86	174.00	4.83	175.03	1.03	0.00	0.00	1.03	21.71	21.00	0.22	21.50	0.49	0.00	0.00	0.49	2.44	0.00
2014	01	24	16	210.36	187.95	175.34	3.02	184.93	9.59	0.00	0.00	9.59	22.41	20.90	0.00	22.41	1.50	0.00	0.00	1.50	15.32	0.00
2014	01	24	17	226.28	202.83	186.63	1.29	201.54	14.91	0.00	0.00	14.91	23.45	21.58	0.00	23.45	1.87	0.00	0.00	1.87	19.05	0.00
2014	01	29	08	213.79	191.14	179.15	6.52	184.61	5.46	0.00	0.00	5.46	22.65	21.23	1.32	21.33	0.10	0.00	0.00	0.10	35.93	0.00
2014	01	29	09	215.30	192.39	174.24	5.63	186.76	12.51	0.00	0.00	12.51	22.92	20.76	1.38	21.53	0.78	0.00	0.00	0.78	36.12	0.00
2014	01	29	10	214.66	191.48	173.95	4.34	187.14	13.19	0.00	1.80	11.40	23.18	21.05	3.92	19.26	0.00	1.80	0.00	0.00	36.21	0.00
2014	01	29	11	217.47	194.01	179.07	0.90	193.11	14.04	0.00	2.59	11.44	23.46	21.65	4.40	19.06	0.00	2.59	0.00	0.00	36.27	0.00
2014	01	29	12	215.77	192.46	185.15	2.13	190.32	5.17	0.00	1.23	3.95	23.31	22.42	2.11	21.20	0.00	1.23	0.00	0.00	36.33	0.00
2014	01	29	13	213.68	190.67	178.32	4.77	185.90	7.58	0.00	0.60	6.98	23.01	21.52	2.09	20.93	0.00	0.60	0.00	0.00	36.32	0.00
2014	01	29	16	217.20	193.87	180.35	8.28	185.59	5.24	0.00	0.00	5.24	23.33	21.70	1.28	22.05	0.35	0.00	0.00	0.35	36.35	0.00
2014	01	29	17	227.54	203.66	179.16	3.15	200.51	21.35	0.00	0.00	21.35	23.88	21.01	0.70	23.17	2.17	0.00	0.00	2.17	36.23	0.00
2014	01	29	18	227.12	204.04	182.01	4.09	199.95	17.94	0.00	0.00	17.94	23.07	20.58	0.65	22.42	1.84	0.00	0.00	1.84	36.16	0.00
2014	01	29	19	220.49	197.97	184.34	2.72	195.25	10.91	0.00	0.05	10.86	22.52	20.97	1.60	20.92	0.00	0.05	0.00	0.00	36.08	0.00
2014	02	03	16	201.81	180.56	174.46	1.00	179.56	5.09	0.00	0.00	5.09	21.25	20.54	0.28	20.97	0.44	0.00	0.00	0.44	6.01	0.00
2014	02	03	17	214.90	192.72	174.88	1.20	191.53	16.65	0.00	0.00	16.65	22.17	20.12	0.30	21.87	1.75	0.00	0.00	1.75	17.13	0.00
2014	02	03	18	216.05	194.54	175.58	1.36	193.18	17.60	0.00	0.00	17.60	21.51	19.42	0.07	21.44	2.03	0.00	0.00	2.03	20.05	0.00
2014	02	03	19	211.45	190.83	175.99	1.56	189.28	13.29	0.00	0.00	13.29	20.62	19.01	0.37	20.25	1.24	0.00	0.00	1.24	17.44	0.00
2014	02	03	20	205.79	185.59	175.86	1.97	183.62	7.77	0.00	0.00	7.77	20.20	19.14	0.22	19.99	0.84	0.00	0.00	0.84	14.98	0.00
2014	02	04	07	204.28	184.30	178.43	0.00	184.30	5.87	0.00	0.00	5.87	19.98	19.35	0.00	19.98	0.64	0.00	0.00	0.64	11.05	0.00
2014	02	04	10	197.57	176.01	173.79	0.38	175.63	1.84	0.00	0.00	1.84	21.56	21.29	0.00	21.56	0.27	0.00	0.00	0.27	14.96	0.00
2014	02	04	17	212.64	190.96	175.12	4.13	186.83	11.71	0.00	0.00	11.71	21.68	19.88	0.00	21.68	1.80	0.00	0.00	1.80	14.86	0.00
2014	02	04	18	215.16	193.65	175.51	5.25	188.40	12.89	0.00	0.00	12.89	21.51	19.49	0.00	21.51	2.02	0.00	0.00	2.02	13.57	0.00
2014	02	05	08	211.35	189.47	174.81	6.85	182.62	7.81	0.00	0.00	7.81	21.89	20.19	0.91	20.97	0.78	0.00	0.00	0.78	6.89	0.00
2014	02	05	09	210.19	188.11	174.52	2.45	185.67	11.15	0.00	0.00	11.15	22.07	20.48	0.65	21.43	0.95	0.00	0.00	0.95	10.40	0.00
2014	02	05	10	208.10	185.94	174.24	2.51	183.43	9.20	0.00	0.00	9.20	22.16	20.76	0.15	22.01	1.24	0.00	0.00	1.24	8.44	0.00
2014	02	05	11	208.16	185.92	174.17	0.93	185.00	10.83	0.00	0.00	10.83	22.24	20.83	0.00	22.24	1.41	0.00	0.00	1.41	8.36	0.00
2014	02	05	12	204.80	182.95	174.19	0.10	182.85	8.66	0.00												

Attachment 3 - Island System Curtailments 2013-2017

Year	Month	Day	Hour	Island Load	MECL Load	Allowed	MECL Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	COS Load	Allowed	COS Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	Mecl Generation	COS Generation
2014	02	05	16	215.50	192.98	174.62	0.00	192.98	18.35	0.00	0.00	18.35	22.52	20.38	0.00	22.52	2.14	0.00	0.00	2.14	18.83	0.00
2014	02	05	17	225.74	202.93	175.30	0.16	202.77	27.47	0.00	0.00	27.47	22.80	19.70	0.00	22.80	3.10	0.00	0.00	3.10	27.96	0.00
2014	02	05	18	224.33	201.97	176.56	2.45	199.53	22.96	0.00	0.00	22.96	22.36	19.55	0.17	22.19	2.65	0.00	0.00	2.65	24.14	0.00
2014	02	05	19	219.67	197.55	180.87	5.29	192.26	11.39	0.00	0.00	11.39	22.12	20.25	0.77	21.35	1.10	0.00	0.00	1.10	17.35	0.00
2014	02	09	17	206.42	185.36	175.11	6.29	179.07	3.96	0.00	0.00	3.96	21.06	19.89	0.00	21.06	1.16	0.00	0.00	1.16	4.41	0.00
2014	02	09	18	216.18	194.26	175.22	2.33	191.93	16.71	0.00	0.00	16.71	21.93	19.78	0.00	21.93	2.15	0.00	0.00	2.15	13.44	0.00
2014	02	09	19	216.55	194.48	175.13	3.35	191.13	16.01	0.00	0.00	16.01	22.07	19.87	0.00	22.07	2.20	0.00	0.00	2.20	13.74	0.00
2014	02	09	20	212.76	191.22	175.26	0.60	190.62	15.37	0.00	0.00	15.37	21.54	19.74	0.72	20.82	1.08	0.00	0.00	1.08	11.47	0.00
2014	02	10	07	209.17	187.99	175.26	2.80	185.20	9.94	0.00	0.00	9.94	21.18	19.74	0.00	21.18	1.44	0.00	0.00	1.44	12.00	0.00
2014	02	10	08	213.11	190.41	174.23	1.35	189.06	14.83	0.00	0.00	14.83	22.70	20.77	0.00	22.70	1.93	0.00	0.00	1.93	16.12	0.00
2014	02	10	09	210.74	188.17	174.11	1.47	186.69	12.59	0.00	0.00	12.59	22.58	20.89	0.04	22.54	1.65	0.00	0.00	1.65	15.00	0.00
2014	02	10	10	206.31	184.10	174.01	0.81	183.29	9.28	0.00	0.00	9.28	22.21	20.99	0.00	22.21	1.22	0.00	0.00	1.22	14.99	0.00
2014	02	10	11	203.97	181.68	173.69	1.53	180.15	6.46	0.00	0.00	6.46	22.29	21.31	0.00	22.29	0.98	0.00	0.00	0.98	15.01	0.00
2014	02	10	12	199.07	177.37	173.75	1.90	175.47	1.72	0.00	0.00	1.72	21.70	21.25	0.00	21.70	0.44	0.00	0.00	0.44	6.48	0.00
2014	02	10	16	206.51	184.67	174.38	4.36	180.31	5.93	0.00	0.00	5.93	21.84	20.62	0.45	21.39	0.77	0.00	0.00	0.77	6.80	0.00
2014	02	10	17	218.75	196.38	175.06	1.84	194.54	19.48	0.00	0.00	19.48	22.37	19.94	0.38	21.99	2.05	0.00	0.00	2.05	21.46	0.00
2014	02	10	18	222.50	200.03	175.31	3.53	196.50	21.19	0.00	0.00	21.19	22.47	19.69	0.62	21.84	2.15	0.00	0.00	2.15	22.62	0.00
2014	02	10	19	220.66	198.43	175.36	12.92	185.51	10.15	0.00	0.00	10.15	22.23	19.64	0.00	22.23	2.58	0.00	0.00	2.58	20.02	0.00
2014	02	10	20	217.83	195.75	175.23	14.41	181.33	6.10	0.00	0.00	6.10	22.08	19.77	0.00	22.08	2.31	0.00	0.00	2.31	15.10	0.00
2014	02	12	17	219.84	197.28	174.99	10.62	186.66	11.67	0.00	0.00	11.67	22.56	20.01	0.00	22.56	2.55	0.00	0.00	2.55	15.53	0.00
2014	02	12	18	229.01	205.75	175.20	2.22	203.54	28.34	0.00	0.00	28.34	23.26	19.80	0.00	23.26	3.45	0.00	0.00	3.45	28.87	0.00
2014	02	12	19	228.53	205.49	175.34	2.93	202.56	27.22	0.00	0.00	27.22	23.05	19.66	0.34	22.70	3.04	0.00	0.00	3.04	20.60	0.00
2014	02	12	20	224.32	201.67	179.45	5.42	196.25	16.80	0.00	0.00	16.80	22.65	20.15	1.33	21.32	1.17	0.00	0.00	1.17	15.64	0.00
2014	02	18	09	199.25	177.16	173.38	2.35	174.81	1.43	0.00	0.00	1.43	22.09	21.62	0.10	21.99	0.37	0.00	0.00	0.37	42.56	0.74
2014	02	18	10	195.95	174.42	173.57	0.64	173.78	0.21	0.00	0.00	0.21	21.53	21.43	0.00	21.53	0.10	0.00	0.00	0.10	11.55	3.05
2014	02	19	17	202.13	181.89	176.07	2.81	179.08	3.01	0.00	0.00	3.01	20.24	19.59	0.00	20.24	0.65	0.00	0.00	0.65	12.91	0.00
2014	02	19	18	205.96	185.47	177.71	0.84	184.63	6.92	0.00	0.00	6.92	20.49	19.63	0.00	20.49	0.86	0.00	0.00	0.86	15.00	0.00
2014	02	26	18	210.39	189.02	175.19	1.81	187.21	12.02	0.00	0.00	12.02	21.38	19.81	0.68	20.70	0.88	0.00	0.00	0.88	6.48	0.00
2014	02	26	19	212.15	190.77	175.35	0.64	190.13	14.78	0.00	0.00	14.78	21.38	19.65	0.16	21.22	1.57	0.00	0.00	1.57	12.30	0.00
2014	02	26	20	208.81	187.59	175.18	1.02	186.57	11.39	0.00	0.00	11.39	21.23	19.82	0.00	21.23	1.40	0.00	0.00	1.40	9.66	0.00
2014	02	26	21	200.38	180.03	175.20	0.97	179.06	3.86	0.00	0.00	3.86	20.35	19.80	0.00	20.35	0.55	0.00	0.00	0.55	3.80	0.00
2014	02	27	20	202.15	181.95	175.52	4.80	177.15	1.63	0.00	0.00	1.63	20.20	19.48	0.00	20.20	0.71	0.00	0.00	0.71	1.50	0.00
2014	03	05	16	203.64	182.17	174.44	6.53	175.64	1.20	0.00	0.00	1.20	21.47	20.56	0.00	21.47	0.91	0.00	0.00	0.91	2.25	0.00
2014	03	05	17	210.52	188.92	174.99	4.10	184.82	9.83	0.00	0.00	9.83	21.60	20.01	0.00	21.60	1.59	0.00	0.00	1.59	15.01	0.00
2014	03	05	18	222.69	200.15	175.26	2.01	198.14	22.88	0.00	0.00	22.88	22.54	19.74	0.00	22.54	2.80	0.00	0.00	2.80	22.30	2.50
2014	03	05	19	226.41	203.58	175.55	1.30	202.27	26.72	0.00	0.00	26.72	22.83	19.69	0.00	22.83	3.14	0.00	0.00	3.14	24.99	2.03
2014	03	05	20	222.78	200.10	184.29	5.62	194.48	10.19	0.00	0.00	10.19	22.68	20.89	0.00	22.68	1.79	0.00	0.00	1.79	16.60	2.02
2014	03	09	20	198.32	178.88	175.89	0.52	178.35	2.47	0.00	0.00	2.47	19.44	19.11	0.00	19.44	0.33	0.00	0.00	0.33	0.00	0.00
2014	08	05	17	195.94	177.76	176.90	0.33	177.43	0.52	0.00	0.09	0.44	18.18	18.10	0.18	18.01	0.00	0.09	0.00	0.00	0.00	0.00
2014	11	14	16	204.91	184.14	179.48	3.31	180.83	1.35	0.00	0.50	0.85	20.77	20.25	1.03	19.75	0.00	0.50	0.00	0.00	15.00	0.00
2014	11	17	13	195.09	174.71	174.64	0.00	174.71	0.07	0.00	0.00	0.07	20.38	20.37	0.00	20.38	0.01	0.00	0.00	0.01	0.00	0.00
2014	11	26	16	202.94	182.24	175.54	5.18	177.05	1.51	0.00	0.00	1.51	20.70	19.94	0.00	20.70	0.76	0.00	0.00	0.76	4.57	0.38
2014	11	26	17	208.98	188.07	175.48	2.40	185.67	10.19	0.00	0.00	10.19	20.92	19.52	0.00	20.92	1.40	0.00	0.00	1.40	10.06	1.03
2014	11	26	18	204.09	183.87	175.68	1.55	182.32	6.64	0.00	0.00	6.64	20.22	19.32	0.00	20.22	0.90	0.00	0.00	0.90	10.06	1.02
2014	11	26	19	201.56	181.78	175.86	0.36	181.42	5.56	0.00	0.00	5.56	19.78	19.14	0.00	19.78	0.64	0.00	0.00	0.64	10.04	0.00
2014	12	02	16	231.44	207.56	174.88	25.25	182.31	7.43	0.00	0.00	7.43	23.87	20.12	0.00	23.87	3.76	0.00	0.00	3.76	17.95	2.26
2014	12	02	17	242.85	218.17	175.18	14.54	203.63	28.45	0.00	0.00	28.45	24.69	19.82	0.06	24.63	4.80	0.00	0.00	4.80	34.88	3.15
2014	12	02	18	235.72	212.07	175.44	10.42	201.65	26.22	0.00	0.00	26.22	23.65	19.56	0.12	23.53	3.97	0.00	0.00	3.97	31.18	3.13
2014	12	02	19	230.33	207.27	175.48	5.88	201.40	25.92	0.00	0.00	25.92	23.06	19.52	0.00	23.06	3.54	0.00	0.00	3.54	25.62	3.15
2014	12	02	20	223.93	201.36	175.35	1.10	200.26	24.92	0.00	0.00	24.92	22.57	19.65	0.00	22.57	2.92	0.00	0.00	2.92	23.01	3.14
2014	12	02	21	210.68	189.70	175.58	0.03	189.66	14.08	0.00	0.00	14.08	20.98	19.42	0.00	20.98	1.56	0.00	0.00	1.56	14.71	1.07
2014	12	05	10	213.70	190.98	174.49	9.48	181.49	7.00	0.00	0.00	7.00	22.73	20.76	0.50	22.22	1.46	0.00	0.00	1.46	8.64	0.70
2014	12	05	11	210.51	188.39	175.13	5.65	182.74	7.61	0.00	0.00	7.61	22.12	20.56	0.00	22.12	1.56	0.00	0.00	1.56	10.01	1.97
2014	12	05	12	206.60	184.56	174.20	5.07	179.49	5.29	0.00	0.00	5.29	22.04	20.80	0.00	22.04	1.24	0.00	0.00	1.24	10.00	1.19
2014	12	05	13	201.06	179.36	173.96	2.92	176.44	2.49	0.00	0.00	2.49	21.70	21.04	0.00	21.70	0.65	0.00	0.00	0.65	9.99	0.00
2014	12	05	14	199.05	177.67</																	

Year	Month	Day	Hour	Island Load	MECL Load	Allowed	MECL Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	COS Load	Allowed	COS Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	Mecl Generation	COS Generation
2014	12	05	19	224.70	201.93	175.68	1.95	199.98	24.30	0.00	0.00	24.30	22.77	19.81	0.00	22.77	2.96	0.00	0.00	2.96	26.89	0.00
2014	12	05	20	219.53	197.15	176.78	2.79	194.35	17.58	0.00	0.00	17.58	22.38	20.07	0.00	22.38	2.31	0.00	0.00	2.31	21.11	0.00
2014	12	05	21	210.80	189.68	181.77	2.07	187.61	5.84	0.00	0.00	5.84	21.12	20.24	0.09	21.03	0.79	0.00	0.00	0.79	14.38	0.00
2014	12	08	08	221.18	197.22	188.71	1.91	195.31	6.60	0.00	0.17	6.43	23.96	22.92	1.20	22.76	0.00	0.17	0.00	0.00	8.87	0.00
2014	12	08	09	221.16	196.67	178.89	1.63	195.04	16.15	0.00	0.00	16.15	24.49	22.27	1.42	23.06	0.79	0.00	0.00	0.79	14.90	0.00
2014	12	08	10	211.71	187.77	173.02	1.57	186.19	13.17	0.00	0.00	13.17	23.94	22.06	0.61	23.33	1.27	0.00	0.00	1.27	15.31	0.00
2014	12	08	11	209.89	186.70	173.46	1.50	185.20	11.74	0.00	0.00	11.74	23.19	21.54	0.05	23.14	1.59	0.00	0.00	1.59	20.12	0.92
2014	12	08	12	208.05	185.15	173.54	0.10	185.05	11.51	0.00	0.00	11.51	22.89	21.46	0.00	22.89	1.44	0.00	0.00	1.44	23.77	1.01
2014	12	08	13	204.11	181.81	173.70	0.00	181.81	8.11	0.00	0.00	8.11	22.30	21.30	0.00	22.30	0.99	0.00	0.00	0.99	24.40	0.00
2014	12	08	14	202.05	180.08	173.79	0.00	180.08	6.29	0.00	0.00	6.29	21.98	21.21	0.00	21.98	0.77	0.00	0.00	0.77	25.36	0.00
2014	12	08	15	205.77	183.70	174.09	0.00	183.70	9.61	0.00	0.00	9.61	22.07	20.91	0.00	22.07	1.15	0.00	0.00	1.15	27.06	0.00
2014	12	08	16	225.27	201.13	174.10	0.00	201.13	27.03	0.00	0.00	27.03	24.14	20.90	0.00	24.14	3.24	0.00	0.00	3.24	32.65	0.00
2014	12	08	17	247.67	222.45	175.14	0.00	222.45	47.31	0.00	0.00	47.31	25.23	19.86	0.00	25.23	5.36	0.00	0.00	5.36	46.52	4.71
2014	12	08	18	243.50	219.09	175.45	0.00	219.09	43.64	0.00	0.00	43.64	24.41	19.55	0.00	24.41	4.86	0.00	0.00	4.86	41.66	3.84
2014	12	08	19	241.17	217.17	175.60	0.02	217.16	41.56	0.00	0.00	41.56	24.00	19.40	0.00	24.00	4.59	0.00	0.00	4.59	40.38	3.99
2014	12	08	20	235.38	211.54	175.24	0.53	211.00	35.76	0.00	0.00	35.76	23.85	19.76	0.00	23.85	4.09	0.00	0.00	4.09	37.64	4.02
2014	12	08	21	223.26	200.83	175.48	0.56	200.27	24.79	0.00	0.00	24.79	22.43	19.60	0.00	22.43	2.83	0.00	0.00	2.83	26.53	2.02
2014	12	08	22	203.48	182.86	177.48	0.15	182.71	5.24	0.00	0.00	5.24	20.62	20.01	0.00	20.62	0.61	0.00	0.00	0.61	17.78	0.00
2014	12	09	07	210.40	188.78	174.96	6.71	182.06	7.11	0.00	0.00	7.11	21.62	20.04	1.23	20.39	0.35	0.00	0.00	0.35	11.77	0.00
2014	12	09	08	212.23	189.61	178.45	5.55	184.06	5.61	0.00	0.00	5.61	22.62	21.29	0.94	21.68	0.39	0.00	0.00	0.39	13.38	0.00
2014	12	13	17	207.75	186.86	175.39	0.00	186.86	11.47	0.00	0.00	11.47	20.89	19.61	0.00	20.89	1.28	0.00	0.00	1.28	13.74	0.00
2014	12	13	18	203.62	183.06	175.31	0.00	183.06	7.75	0.00	0.00	7.75	20.56	19.69	0.00	20.56	0.87	0.00	0.00	0.87	11.43	0.00
2014	12	13	19	197.96	177.90	175.24	0.03	177.87	2.63	0.00	0.00	2.63	20.06	19.76	0.00	20.06	0.30	0.00	0.00	0.30	2.35	0.00
2014	12	16	08	202.78	181.55	174.59	0.91	180.64	6.05	0.00	0.00	6.05	21.23	20.41	0.00	21.23	0.81	0.00	0.00	0.81	10.55	0.00
2014	12	16	09	203.47	181.84	174.27	0.01	181.83	7.56	0.00	0.00	7.56	21.63	20.73	0.00	21.63	0.90	0.00	0.00	0.90	10.54	0.00
2014	12	16	10	202.36	180.76	174.19	0.07	180.69	6.50	0.00	0.00	6.50	21.60	20.81	0.00	21.60	0.79	0.00	0.00	0.79	10.54	0.00
2014	12	16	11	201.54	180.31	174.46	0.01	180.30	5.85	0.00	0.00	5.85	21.23	20.54	0.00	21.23	0.69	0.00	0.00	0.69	10.29	0.00
2014	12	16	12	198.04	177.04	174.32	0.00	177.04	2.72	0.00	0.00	2.72	21.00	20.68	0.00	21.00	0.32	0.00	0.00	0.32	10.01	0.00
2014	12	16	13	197.44	176.26	174.09	0.00	176.26	2.17	0.00	0.00	2.17	21.17	20.91	0.00	21.17	0.26	0.00	0.00	0.26	10.02	0.00
2014	12	16	14	197.87	176.94	174.37	0.00	176.94	2.57	0.00	0.00	2.57	20.93	20.63	0.00	20.93	0.30	0.00	0.00	0.30	10.01	0.00
2014	12	16	15	203.41	182.22	174.68	0.00	182.22	7.54	0.00	0.00	7.54	21.19	20.32	0.00	21.19	0.88	0.00	0.00	0.88	13.06	0.28
2014	12	16	16	222.98	199.76	174.69	0.00	199.76	25.07	0.00	0.00	25.07	23.22	20.31	0.00	23.22	2.91	0.00	0.00	2.91	25.72	1.05
2014	12	16	17	233.34	209.71	175.25	0.00	209.71	34.46	0.00	0.00	34.46	23.63	19.75	0.00	23.63	3.88	0.00	0.00	3.88	34.38	2.79
2014	12	16	18	226.70	204.03	175.50	0.00	204.03	28.53	0.00	0.00	28.53	22.67	19.50	0.00	22.67	3.17	0.00	0.00	3.17	32.50	3.06
2014	12	16	19	222.31	199.91	175.35	0.00	199.91	24.56	0.00	0.00	24.56	22.40	19.65	0.00	22.40	2.75	0.00	0.00	2.75	25.35	3.04
2014	12	16	20	218.25	196.11	175.22	0.00	196.11	20.89	0.00	0.00	20.89	22.14	19.78	0.00	22.14	2.36	0.00	0.00	2.36	21.09	3.02
2014	12	16	21	205.93	185.36	175.52	0.00	185.36	9.83	0.00	0.00	9.83	20.57	19.48	0.00	20.57	1.09	0.00	0.00	1.09	17.46	1.82
2014	12	17	07	197.13	177.48	175.56	0.00	177.48	1.91	0.00	0.00	1.91	19.65	19.44	0.00	19.65	0.21	0.00	0.00	0.21	2.58	0.00
2014	12	17	08	203.04	182.15	174.93	0.00	182.15	7.22	0.00	0.00	7.22	20.90	20.07	0.00	20.90	0.83	0.00	0.00	0.83	6.46	0.00
2014	12	17	10	201.56	180.34	174.47	0.00	180.34	5.87	0.00	0.00	5.87	21.22	20.53	0.00	21.22	0.69	0.00	0.00	0.69	4.18	1.04
2014	12	17	11	200.19	179.45	174.79	0.00	179.45	4.66	0.00	0.00	4.66	20.74	20.21	0.00	20.74	0.54	0.00	0.00	0.54	0.57	0.27
2014	12	17	12	197.86	177.40	174.84	0.00	177.40	2.57	0.00	0.00	2.57	20.46	20.16	0.00	20.46	0.30	0.00	0.00	0.30	1.09	0.00
2014	12	17	13	196.10	175.88	174.89	0.95	174.93	0.04	0.00	0.00	0.04	20.22	20.11	0.00	20.22	0.11	0.00	0.00	0.11	2.37	0.00
2014	12	17	14	195.48	175.03	174.60	0.00	175.03	0.43	0.00	0.00	0.43	20.45	20.40	0.00	20.45	0.05	0.00	0.00	0.05	3.34	0.00
2014	12	17	15	201.41	180.52	176.13	0.21	180.30	4.17	0.00	0.00	4.17	20.90	20.39	0.43	20.46	0.08	0.00	0.00	0.08	6.16	0.00
2014	12	17	16	219.70	197.01	178.21	2.45	194.56	16.36	0.00	0.00	16.36	22.69	20.52	0.09	22.60	2.08	0.00	0.00	2.08	17.86	1.20
2014	12	17	17	229.91	206.60	176.30	5.88	200.72	24.42	0.00	0.00	24.42	23.31	19.89	0.13	23.17	3.29	0.00	0.00	3.29	25.01	3.01
2014	12	17	18	223.73	201.31	182.11	11.87	189.44	7.33	0.00	0.00	7.33	22.42	20.28	0.20	22.22	1.94	0.00	0.00	1.94	17.77	2.82
2014	12	18	17	219.80	197.12	174.88	14.63	182.49	7.61	0.00	0.00	7.61	22.68	20.12	0.33	22.35	2.23	0.00	0.00	2.23	14.99	2.89
2014	12	18	18	215.26	193.19	175.00	13.37	179.81	4.81	0.00	0.00	4.81	22.08	20.00	0.30	21.78	1.78	0.00	0.00	1.78	15.01	1.22
2014	12	18	19	211.55	190.36	175.47	11.25	179.11	3.64	0.00	0.00	3.64	21.19	19.53	0.01	21.18	1.65	0.00	0.00	1.65	14.97	0.00
2014	12	18	20	207.24	186.43	175.42	9.93	176.50	1.08	0.00	0.00	1.08	20.81	19.58	0.00	20.81	1.23	0.00	0.00	1.23	14.97	0.00
2014	12	20	17	221.38	198.86	176.42	14.18	184.68	8.26	0.00	0.00	8.26	22.52	19.98	2.53	19.99	0.01	0.00	0.00	0.01	14.99	1.04
2014	12	20	18	215.77	194.07	178.71	11.15	182.92	4.21	0.00	0.81	3.40	21.70	19.98	2.53	19.17	0.00	0.81	0.00	0.00	14.99	1.05
2014	12	21	16	210.47	189.06	175.17	0.09	188.97	13.81	0.00	0.00	13.81	21.41	19.83	0.00	21.41	1.57	0.00	0.00	1.57	12.46	1.54
2014	12	21	17	225.27	202.18	175.02																

Year	Month	Day	Hour	Island Load	MECL Load	Allowed	MECL Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	COS Load	Allowed	COS Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	Mecl Generation	COS Generation
2014	12	22	07	195.42	175.33	174.96	0.06	175.28	0.32	0.00	0.00	0.32	20.08	20.04	0.00	20.08	0.04	0.00	0.00	0.04	2.59	0.27
2014	12	22	08	204.71	182.94	174.26	0.05	182.90	8.63	0.00	0.00	8.63	21.77	20.74	0.00	21.77	1.03	0.00	0.00	1.03	13.38	1.99
2014	12	22	09	207.66	185.17	173.88	0.03	185.14	11.26	0.00	0.00	11.26	22.49	21.12	0.00	22.49	1.37	0.00	0.00	1.37	12.01	1.99
2014	12	22	10	208.03	185.51	173.89	0.00	185.50	11.61	0.00	0.00	11.61	22.52	21.11	0.00	22.52	1.41	0.00	0.00	1.41	12.96	1.99
2014	12	22	11	207.39	185.20	174.14	0.04	185.16	11.03	0.00	0.00	11.03	22.19	20.86	0.00	22.19	1.33	0.00	0.00	1.33	14.98	2.74
2014	12	22	12	204.65	182.62	174.01	0.40	182.23	8.21	0.00	0.00	8.21	22.03	20.99	0.00	22.03	1.04	0.00	0.00	1.04	14.98	2.26
2014	12	22	13	203.92	181.82	173.87	0.00	181.82	7.95	0.00	0.00	7.95	22.10	21.13	0.00	22.10	0.97	0.00	0.00	0.97	15.00	0.00
2014	12	22	14	202.75	180.98	174.07	0.00	180.98	6.91	0.00	0.00	6.91	21.77	20.93	0.00	21.77	0.83	0.00	0.00	0.83	10.55	0.00
2014	12	22	15	207.58	185.80	174.53	0.00	185.80	11.26	0.00	0.00	11.26	21.79	20.47	0.00	21.79	1.32	0.00	0.00	1.32	12.34	0.45
2014	12	22	16	224.09	200.63	174.58	0.01	200.62	26.04	0.00	0.00	26.04	23.47	20.42	0.00	23.47	3.05	0.00	0.00	3.05	22.62	3.38
2014	12	22	17	234.81	210.61	174.90	0.00	210.61	35.71	0.00	0.00	35.71	24.21	20.10	0.00	24.21	4.10	0.00	0.00	4.10	35.03	4.72
2014	12	22	18	229.38	206.49	175.54	0.00	206.49	30.95	0.00	0.00	30.95	22.89	19.46	0.00	22.89	3.43	0.00	0.00	3.43	29.51	3.64
2014	12	22	19	225.55	203.06	175.55	0.00	203.06	27.51	0.00	0.00	27.51	22.49	19.45	0.00	22.49	3.05	0.00	0.00	3.05	24.98	3.18
2014	12	22	20	218.29	196.26	175.33	0.00	196.26	20.94	0.00	0.00	20.94	22.02	19.67	0.00	22.02	2.35	0.00	0.00	2.35	20.95	1.83
2014	12	22	21	207.81	187.17	175.64	0.00	187.17	11.53	0.00	0.00	11.53	20.64	19.36	0.00	20.64	1.27	0.00	0.00	1.27	14.43	0.27
2014	12	23	16	208.03	185.47	173.86	0.00	185.47	11.61	0.00	0.00	11.61	22.56	21.14	0.00	22.56	1.41	0.00	0.00	1.41	11.03	0.58
2014	12	23	17	220.56	196.94	175.82	0.00	196.94	21.12	0.00	0.00	21.12	23.62	21.09	0.00	23.62	2.53	0.00	0.00	2.53	19.96	1.99
2014	12	23	18	216.56	193.91	177.74	0.12	193.79	16.04	0.00	0.00	16.04	22.65	20.77	0.00	22.65	1.89	0.00	0.00	1.89	16.51	1.99
2014	12	23	19	212.32	189.89	176.98	0.40	189.49	12.50	0.00	0.00	12.50	22.43	20.91	0.00	22.43	1.52	0.00	0.00	1.52	15.00	1.99
2014	12	23	20	207.29	185.64	178.21	1.12	184.51	6.30	0.00	0.00	6.30	21.66	20.79	0.00	21.66	0.87	0.00	0.00	0.87	12.62	1.41
2014 Totals												2398.34						286.02		3095.03		222.64
2015	01	03	19	234.51	210.65	175.33	34.73	175.92	0.58	0.00	0.00	0.58	23.86	19.86	0.14	23.72	3.86	0.00	0.00	3.86	5.51	0.00
2015	01	03	20	227.61	205.66	176.20	13.93	191.74	15.54	0.00	0.00	15.54	21.95	18.80	0.00	21.95	3.14	0.00	0.00	3.14	18.00	0.00
2015	01	03	21	217.65	196.83	176.35	3.51	193.32	16.98	0.00	0.00	16.98	20.82	18.65	0.28	20.54	1.88	0.00	0.00	1.88	17.67	0.00
2015	01	03	22	205.11	185.64	176.49	1.34	184.30	7.81	0.00	0.00	7.81	19.47	18.51	0.00	19.47	0.96	0.00	0.00	0.96	12.78	0.00
2015	01	07	06	209.59	187.36	174.32	7.80	179.56	5.24	0.00	0.00	5.24	22.23	20.68	0.00	22.23	1.55	0.00	0.00	1.55	7.78	0.00
2015	01	07	07	230.63	208.33	176.14	10.99	197.34	21.19	0.00	0.00	21.19	22.30	18.86	0.00	22.30	3.45	0.00	0.00	3.45	24.51	0.00
2015	01	07	08	233.83	211.37	176.27	9.86	201.51	25.24	0.00	0.00	25.24	22.45	18.73	0.00	22.45	3.73	0.00	0.00	3.73	27.06	0.00
2015	01	07	09	230.90	209.71	177.10	4.35	205.35	28.25	0.00	0.00	28.25	21.19	17.90	0.00	21.19	3.29	0.00	0.00	3.29	29.72	0.00
2015	01	07	10	225.71	204.33	176.53	4.32	200.01	23.48	0.00	0.00	23.48	21.38	18.47	0.00	21.38	2.91	0.00	0.00	2.91	26.06	0.00
2015	01	07	11	223.36	201.90	176.27	4.11	197.79	21.53	0.00	0.00	21.53	21.46	18.73	0.00	21.46	2.72	0.00	0.00	2.72	23.52	0.00
2015	01	07	12	216.22	194.81	175.69	4.07	190.74	15.05	0.00	0.00	15.05	21.41	19.31	0.00	21.41	2.10	0.00	0.00	2.10	16.75	0.00
2015	01	07	13	210.46	188.87	174.99	2.10	186.76	11.77	0.00	0.00	11.77	21.60	20.01	0.00	21.60	1.59	0.00	0.00	1.59	15.01	0.00
2015	01	07	14	209.07	187.55	174.93	0.75	186.79	11.87	0.00	0.00	11.87	21.52	20.07	0.00	21.52	1.45	0.00	0.00	1.45	15.03	0.00
2015	01	07	15	214.87	194.17	176.22	0.11	194.07	17.85	0.00	0.00	17.85	20.70	18.78	0.00	20.70	1.91	0.00	0.00	1.91	18.25	0.00
2015	01	07	16	230.45	209.53	177.30	0.03	209.50	32.20	0.00	0.00	32.20	20.91	17.70	0.00	20.91	3.22	0.00	0.00	3.22	34.21	0.00
2015	01	07	17	245.16	225.05	179.00	0.20	224.85	45.85	0.00	0.00	45.85	20.11	16.00	0.00	20.11	4.11	0.00	0.00	4.11	48.73	0.00
2015	01	07	18	243.58	221.46	177.30	0.00	221.46	44.17	0.00	0.00	44.17	22.11	17.70	0.00	22.11	4.41	0.00	0.00	4.41	45.01	1.73
2015	01	07	19	242.33	219.03	176.25	0.00	219.03	42.78	0.00	0.00	42.78	23.30	18.75	0.00	23.30	4.55	0.00	0.00	4.55	41.19	2.92
2015	01	07	20	237.55	214.72	176.26	0.00	214.72	38.47	0.00	0.00	38.47	22.83	18.74	0.00	22.83	4.09	0.00	0.00	4.09	37.14	2.93
2015	01	07	21	227.91	204.85	175.27	0.29	204.56	29.29	0.00	0.00	29.29	23.06	19.73	0.00	23.06	3.33	0.00	0.00	3.33	28.05	2.92
2015	01	07	22	212.61	189.77	174.05	0.65	189.12	15.07	0.00	0.00	15.07	22.84	20.95	0.39	22.45	1.50	0.00	0.00	1.50	19.06	2.75
2015	01	12	09	213.10	190.34	174.18	9.74	180.60	6.42	0.00	0.00	6.42	22.76	20.83	0.14	22.62	1.79	0.00	0.00	1.79	5.94	0.00
2015	01	12	10	210.83	190.25	177.48	1.14	189.11	11.63	0.00	0.00	11.63	20.58	19.20	0.00	20.58	1.38	0.00	0.00	1.38	14.97	0.00
2015	01	12	11	211.84	191.33	176.13	0.59	190.75	14.62	0.00	0.00	14.62	20.50	18.87	0.00	20.50	1.63	0.00	0.00	1.63	14.98	0.00
2015	01	12	12	209.80	189.02	177.17	0.29	188.73	11.55	0.00	0.00	11.55	20.79	19.49	0.00	20.79	1.30	0.00	0.00	1.30	15.02	0.00
2015	01	12	13	208.96	187.97	176.10	0.27	187.70	11.60	0.00	0.00	11.60	20.98	19.66	0.00	20.98	1.33	0.00	0.00	1.33	14.96	0.00
2015	01	12	14	209.38	188.40	175.46	0.16	188.24	12.78	0.00	0.00	12.78	20.98	19.54	0.00	20.98	1.44	0.00	0.00	1.44	15.00	0.00
2015	01	12	15	212.63	191.69	175.80	0.00	191.69	15.89	0.00	0.00	15.89	20.94	19.20	0.00	20.94	1.74	0.00	0.00	1.74	16.00	0.00
2015	01	12	16	222.89	202.56	177.22	0.00	202.56	25.35	0.00	0.00	25.35	20.33	17.78	0.00	20.33	2.54	0.00	0.00	2.54	26.07	0.00
2015	01	12	17	231.11	210.59	179.62	1.53	209.06	29.43	0.00	0.00	29.43	20.52	17.50	0.16	20.36	2.86	0.00	0.00	2.86	34.55	1.90
2015	01	12	18	227.20	204.49	184.30	3.19	201.29	17.00	0.00	0.00	17.00	22.71	20.47	0.50	22.21	1.75	0.00	0.00	1.75	18.73	3.84
2015	01	12	19	222.14	198.88	183.47	6.22	192.66	9.18	0.00	0.00	9.18	23.26	21.46	0.74	22.52	1.07	0.00	0.00	1.07	12.49	4.09
2015	01	14	10	217.95	193.42	180.03	11.74	181.68	1.64	0.00	0.24	1.41	24.53	22.83	1.94	22.59	0.00	0.24	0.00	0.00	3.75	0.00
2015	01	15	07	219.17	197.99	176.16	0.78	197.22	21.06	0.00	0.00	21.06	21.18	18.84	0.00	21.18	2.34	0.00	0.00	2.34	21.49	0.



Year	Month	Day	Hour	Island Load	MECL Load	Allowed	MECL Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	COS Load	Allowed	COS Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	Mecl Generation	COS Generation
2015	01	15	12	207.01	185.67	174.90	0.00	185.67	10.77	0.00	0.00	10.77	21.34	20.10	0.00	21.34	1.24	0.00	0.00	1.24	15.00	0.00
2015	01	15	13	202.64	181.04	174.23	0.00	181.04	6.81	0.00	0.00	6.81	21.59	20.78	0.00	21.59	0.81	0.00	0.00	0.81	14.99	0.00
2015	01	15	14	201.96	179.78	173.59	0.00	179.78	6.19	0.00	0.00	6.19	22.18	21.41	0.00	22.18	0.76	0.00	0.00	0.76	14.98	0.00
2015	01	15	15	205.93	183.85	174.09	0.00	183.85	9.75	0.00	0.00	9.75	22.08	20.91	0.00	22.08	1.17	0.00	0.00	1.17	14.98	0.00
2015	01	15	16	216.75	194.82	175.27	0.00	194.82	19.55	0.00	0.00	19.55	21.93	19.73	0.00	21.93	2.20	0.00	0.00	2.20	18.79	0.00
2015	01	15	17	230.24	206.19	174.63	0.64	205.55	30.92	0.00	0.00	30.92	24.05	20.37	0.00	24.05	3.68	0.00	0.00	3.68	33.02	0.16
2015	01	15	18	227.91	203.10	173.78	0.70	202.41	28.63	0.00	0.00	28.63	24.81	21.23	0.00	24.81	3.58	0.00	0.00	3.58	29.08	1.55
2015	01	15	19	222.84	197.98	175.78	0.04	197.94	22.16	0.00	0.00	22.16	24.86	22.07	0.00	24.86	2.79	0.00	0.00	2.79	26.60	2.09
2015	01	15	20	217.58	193.67	182.34	1.13	192.54	10.20	0.00	0.00	10.20	23.92	22.52	0.56	23.36	0.84	0.00	0.00	0.84	16.02	2.07
2015	01	21	16	215.11	191.87	174.43	17.63	174.24	0.00	0.19	0.00	0.00	23.24	21.13	0.75	22.49	1.36	0.00	0.19	1.17	5.73	0.00
2015	01	21	17	231.04	208.31	175.84	12.64	195.68	19.84	0.00	0.00	19.84	22.72	19.18	0.14	22.59	3.41	0.00	0.00	3.41	21.97	0.00
2015	01	21	18	229.45	207.90	177.20	18.39	189.52	12.32	0.00	0.00	12.32	21.55	18.37	0.19	21.36	2.99	0.00	0.00	2.99	18.00	0.45
2015	01	21	19	227.17	205.59	176.91	19.68	185.91	9.00	0.00	0.00	9.00	21.58	18.57	0.19	21.39	2.82	0.00	0.00	2.82	15.01	0.92
2015	01	21	20	223.28	202.10	176.80	14.30	187.80	11.00	0.00	0.00	11.00	21.18	18.53	0.08	21.10	2.57	0.00	0.00	2.57	15.00	0.92
2015	01	21	21	211.67	191.53	177.86	9.60	181.94	4.08	0.00	0.00	4.08	20.13	18.70	0.09	20.04	1.35	0.00	0.00	1.35	14.01	0.92
2015	01	22	06	195.45	174.87	174.47	0.08	174.79	0.33	0.00	0.00	0.33	20.58	20.53	0.00	20.58	0.05	0.00	0.00	0.05	2.74	0.00
2015	01	22	07	216.69	196.34	176.69	0.08	196.27	19.57	0.00	0.00	19.57	20.34	18.31	0.00	20.34	2.04	0.00	0.00	2.04	19.57	0.00
2015	01	22	08	223.82	199.73	174.01	0.21	199.52	25.51	0.00	0.00	25.51	24.09	20.99	0.00	24.09	3.10	0.00	0.00	3.10	24.01	2.81
2015	01	22	09	221.83	197.29	173.98	1.53	195.75	21.77	0.00	0.00	21.77	24.55	21.65	0.75	23.80	2.15	0.00	0.00	2.15	19.43	3.03
2015	01	22	10	217.62	192.18	176.28	5.86	186.31	10.03	0.00	0.00	10.03	25.44	23.34	0.68	24.76	1.43	0.00	0.00	1.43	15.27	3.03
2015	01	22	11	217.40	192.53	172.80	7.39	185.14	12.34	0.00	0.00	12.34	24.87	22.33	0.83	24.05	1.72	0.00	0.00	1.72	14.97	1.51
2015	01	22	12	212.25	189.33	174.09	9.32	180.01	5.92	0.00	0.00	5.92	22.92	21.07	1.46	21.46	0.39	0.00	0.00	0.39	14.98	0.00
2015	01	22	13	211.67	188.52	175.61	5.70	182.82	7.21	0.00	0.14	7.07	23.16	21.57	1.73	21.43	0.00	0.14	0.00	0.00	14.98	0.00
2015	01	22	16	223.30	199.40	174.37	25.11	174.29	0.00	0.08	0.00	0.00	23.90	20.90	2.32	21.58	0.68	0.00	0.08	0.60	15.00	0.00
2015	01	26	16	218.12	196.09	175.30	15.19	180.90	5.59	0.00	0.00	5.59	22.03	19.70	0.21	21.83	2.13	0.00	0.00	2.13	11.07	0.00
2015	01	26	17	235.68	212.17	175.55	7.74	204.43	28.88	0.00	0.00	28.88	23.51	19.45	0.00	23.51	4.06	0.00	0.00	4.06	30.29	1.87
2015	01	26	18	239.72	214.99	174.88	6.89	208.10	33.22	0.00	0.00	33.22	24.74	20.12	0.00	24.74	4.62	0.00	0.00	4.62	33.07	3.82
2015	01	26	19	236.41	212.11	174.96	7.70	204.40	29.45	0.00	0.00	29.45	24.30	20.04	0.00	24.30	4.26	0.00	0.00	4.26	30.00	4.03
2015	01	26	20	231.97	207.56	174.48	7.69	199.87	25.39	0.00	0.00	25.39	24.41	20.52	0.00	24.41	3.89	0.00	0.00	3.89	23.09	4.03
2015	01	26	21	222.64	198.74	174.22	5.98	192.76	18.54	0.00	0.00	18.54	23.90	20.95	0.22	23.69	2.73	0.00	0.00	2.73	18.91	3.64
2015	01	29	16	200.47	179.04	174.16	5.04	174.00	0.00	0.15	0.00	0.00	21.43	20.84	0.00	21.43	0.58	0.00	0.15	0.43	1.14	0.00
2015	01	29	17	214.56	192.78	175.21	2.17	190.61	15.40	0.00	0.00	15.40	21.78	19.79	0.00	21.78	1.98	0.00	0.00	1.98	16.22	0.20
2015	01	29	18	219.15	196.24	174.61	0.83	195.42	20.80	0.00	0.00	20.80	22.91	20.39	0.00	22.91	2.53	0.00	0.00	2.53	19.96	1.57
2015	01	29	19	216.99	193.91	174.26	1.17	192.74	18.47	0.00	0.00	18.47	23.07	20.74	0.00	23.07	2.34	0.00	0.00	2.34	17.28	2.03
2015	01	29	20	212.10	189.58	174.29	4.82	184.75	10.46	0.00	0.00	10.46	22.53	20.71	0.00	22.53	1.82	0.00	0.00	1.82	14.99	2.00
2015	01	29	21	204.79	181.49	172.81	8.71	172.78	0.00	0.03	0.00	0.00	23.30	22.19	0.00	23.30	1.11	0.00	0.03	1.08	4.18	1.97
2015	01	30	07	208.00	186.38	174.76	3.28	183.10	8.33	0.00	0.00	8.33	21.62	20.27	0.00	21.62	1.35	0.00	0.00	1.35	14.99	0.00
2015	01	30	08	214.98	191.22	173.44	1.75	189.47	16.03	0.00	0.00	16.03	23.76	21.56	0.00	23.76	2.21	0.00	0.00	2.21	15.37	0.92
2015	01	30	09	214.77	190.71	173.15	0.59	190.12	16.97	0.00	0.00	16.97	24.06	21.85	0.00	24.06	2.22	0.00	0.00	2.22	17.96	1.03
2015	01	30	10	211.52	187.85	173.18	0.07	187.78	14.60	0.00	0.00	14.60	23.67	21.82	0.00	23.67	1.85	0.00	0.00	1.85	15.52	1.03
2015	01	30	11	208.31	184.97	173.16	0.00	184.97	11.82	0.00	0.00	11.82	23.33	21.84	0.00	23.33	1.49	0.00	0.00	1.49	14.97	1.03
2015	01	30	12	203.36	179.94	172.54	0.00	179.94	7.40	0.00	0.00	7.40	23.42	22.46	0.00	23.42	0.96	0.00	0.00	0.96	14.99	1.04
2015	01	30	13	198.20	175.49	172.66	0.00	175.49	2.83	0.00	0.00	2.83	22.70	22.34	0.00	22.70	0.37	0.00	0.00	0.37	5.06	0.38
2015	01	30	15	196.36	174.25	173.05	0.04	174.21	1.16	0.00	0.00	1.16	22.10	21.95	0.00	22.10	0.15	0.00	0.00	0.15	0.69	0.00
2015	01	30	16	203.99	181.87	173.86	0.00	181.87	8.01	0.00	0.00	8.01	22.12	21.14	0.00	22.12	0.97	0.00	0.00	0.97	11.54	0.00
2015	01	30	17	216.24	194.29	175.21	0.00	194.29	19.09	0.00	0.00	19.09	21.95	19.79	0.00	21.95	2.16	0.00	0.00	2.16	19.25	0.51
2015	01	30	18	218.99	196.29	174.79	0.00	196.29	21.51	0.00	0.00	21.51	22.70	20.21	0.00	22.70	2.49	0.00	0.00	2.49	20.60	1.77
2015	01	30	19	215.54	192.91	174.53	0.00	192.91	18.38	0.00	0.00	18.38	22.63	20.47	0.00	22.63	2.16	0.00	0.00	2.16	15.63	2.02
2015	01	30	20	209.14	187.12	174.80	0.08	187.05	12.24	0.00	0.00	12.24	22.02	20.57	0.00	22.02	1.45	0.00	0.00	1.45	14.99	1.97
2015	01	30	21	201.16	179.18	177.62	0.00	179.18	1.56	0.00	0.62	0.94	21.98	21.79	0.81	21.17	0.00	0.62	0.00	0.00	3.30	1.76
2015	02	02	10	232.36	206.34	183.49	12.66	193.69	10.20	0.00	0.00	10.20	26.02	23.14	0.00	26.02	2.88	0.00	0.00	2.88	13.54	1.98
2015	02	02	11	235.00	209.21	174.16	8.09	201.13	26.97	0.00	0.00	26.97	25.79	21.47	0.00	25.79	4.32	0.00	0.00	4.32	25.22	4.03
2015	02	02	12	230.98	205.76	173.71	4.91	200.85	27.14	0.00	0.00	27.14	25.22	21.29	0.00	25.22	3.93	0.00	0.00	3.93	28.89	3.81
2015	02	02	13	230.34	204.97	173.52	1.93	203.04	29.52	0.00	0.00	29.52	25.37	21.48	0.00	25.37	3.89	0.00	0.00	3.89	32.80	0.17
2015	02	02	14	230.66	205.58	173.80	0.55	205.04	31.23	0.00	0.00	31.23	25.07	21.20	0.00	25.07	3.88	0.00	0.00	3.88	31.34	0.00
2015	02	02																				

Attachment 3 - Island System Curtailments 2013-2017

Year	Month	Day	Hour	Island Load	MECL Load	Allowed	MECL Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	COS Load	Allowed	COS Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	Mecl Generation	COS Generation
2015	02	04	07	222.53	201.49	177.98	14.75	186.74	8.76	0.00	0.00	8.76	21.04	18.58	0.51	20.53	1.94	0.00	0.00	1.94	66.01	4.03
2015	02	04	08	210.86	196.74	181.95	8.87	187.87	5.92	0.00	0.07	5.84	14.12	13.06	1.14	12.98	0.00	0.07	0.00	0.00	63.34	4.04
2015	02	04	09	210.52	193.66	179.38	1.27	192.39	13.01	0.00	0.00	13.01	16.86	15.62	0.35	16.51	0.89	0.00	0.00	0.89	59.40	4.03
2015	02	04	10	211.76	192.23	177.01	0.64	191.59	14.57	0.00	0.00	14.57	19.53	17.99	0.00	19.53	1.55	0.00	0.00	1.55	49.54	3.96
2015	02	04	11	208.15	188.43	176.53	4.29	184.14	7.61	0.00	0.00	7.61	19.72	18.47	0.00	19.72	1.25	0.00	0.00	1.25	33.38	3.97
2015	02	04	12	206.87	184.83	174.23	3.64	181.19	6.96	0.00	0.00	6.96	22.04	20.77	0.00	22.04	1.26	0.00	0.00	1.26	24.39	2.69
2015	02	07	08	215.01	192.56	174.64	6.38	186.19	11.54	0.00	0.00	11.54	22.44	20.36	0.46	21.98	1.62	0.00	0.00	1.62	17.90	0.00
2015	02	07	09	219.00	195.85	174.39	6.64	189.21	14.83	0.00	0.00	14.83	23.15	20.61	0.77	22.38	1.77	0.00	0.00	1.77	21.83	0.00
2015	02	07	10	214.66	191.69	174.13	12.06	179.64	5.50	0.00	0.00	5.50	22.97	20.87	1.81	21.16	0.30	0.00	0.00	0.30	19.69	0.00
2015	02	07	16	202.64	181.35	174.51	2.64	178.71	4.20	0.00	0.00	4.20	21.30	20.49	0.32	20.98	0.48	0.00	0.00	0.48	22.37	0.00
2015	02	07	17	220.49	197.19	174.39	3.28	193.91	19.52	0.00	0.00	19.52	23.31	20.61	0.00	23.31	2.69	0.00	0.00	2.69	29.06	0.00
2015	02	07	18	228.89	205.04	174.76	6.10	198.93	24.18	0.00	0.00	24.18	23.85	20.33	0.00	23.85	3.52	0.00	0.00	3.52	31.37	0.00
2015	02	08	10	208.02	186.29	179.00	4.50	181.79	2.79	0.00	0.03	2.76	21.74	20.89	0.88	20.86	0.00	0.03	0.00	0.00	15.38	0.00
2015	02	08	11	206.55	184.81	174.96	3.34	181.47	6.52	0.00	0.00	6.52	21.74	20.58	0.09	21.65	1.07	0.00	0.00	1.07	15.41	0.00
2015	02	08	12	204.41	182.42	174.22	2.35	180.07	5.85	0.00	0.00	5.85	21.99	21.00	0.00	21.99	0.99	0.00	0.00	0.99	15.37	0.00
2015	02	08	16	211.46	188.69	175.35	11.13	177.56	2.21	0.00	0.00	2.21	22.77	21.16	1.17	21.60	0.44	0.00	0.00	0.44	19.67	0.00
2015	02	08	17	228.50	204.26	176.76	10.37	193.90	17.14	0.00	0.00	17.14	24.24	20.98	1.17	23.07	2.10	0.00	0.00	2.10	22.16	1.51
2015	02	08	18	234.16	209.79	178.33	10.41	199.37	21.04	0.00	0.00	21.04	24.37	20.72	2.21	22.16	1.45	0.00	0.00	1.45	26.13	0.00
2015	02	08	19	230.77	206.66	180.37	9.25	197.41	17.04	0.00	0.00	17.04	24.11	21.04	2.13	21.98	0.94	0.00	0.00	0.94	24.13	0.00
2015	02	08	20	227.81	204.39	181.57	9.92	194.47	12.90	0.00	0.00	12.90	23.42	20.80	1.79	21.63	0.82	0.00	0.00	0.82	16.54	0.00
2015	02	09	15	212.15	188.61	177.69	9.34	179.27	1.58	0.00	1.31	0.27	23.54	22.18	2.67	20.87	0.00	1.31	0.00	0.00	19.05	0.00
2015	02	09	16	222.84	198.43	174.99	7.85	190.58	15.59	0.00	0.00	15.59	24.41	21.52	1.66	22.74	1.22	0.00	0.00	1.22	25.89	0.00
2015	02	09	17	238.15	212.90	176.28	6.39	206.51	30.23	0.00	0.00	30.23	25.25	20.90	1.17	24.08	3.17	0.00	0.00	3.17	38.70	0.00
2015	02	09	18	246.37	220.49	179.21	14.62	205.87	26.66	0.00	0.00	26.66	25.88	21.04	1.81	24.07	3.04	0.00	0.00	3.04	37.52	0.00
2015	02	09	19	243.50	217.93	191.43	23.66	194.26	2.84	0.00	0.04	2.80	25.57	22.46	3.15	22.42	0.00	0.04	0.00	0.00	23.49	0.00
2015	02	10	07	235.15	210.05	188.56	12.75	197.30	8.75	0.00	0.00	8.75	25.10	22.53	0.86	24.23	1.70	0.00	0.00	1.70	26.46	0.00
2015	02	10	08	236.20	210.37	191.63	14.73	195.64	4.01	0.00	0.00	4.01	25.83	23.53	0.93	24.91	1.37	0.00	0.00	1.37	24.95	0.00
2015	02	10	09	234.16	207.90	177.04	11.73	196.17	19.13	0.00	0.00	19.13	26.26	22.36	0.54	25.72	3.35	0.00	0.00	3.35	29.78	0.00
2015	02	10	10	232.39	206.31	173.11	7.39	198.92	25.81	0.00	0.00	25.81	26.08	21.89	0.74	25.35	3.46	0.00	0.00	3.46	34.57	0.00
2015	02	10	11	226.69	201.35	173.20	3.42	197.92	24.72	0.00	0.00	24.72	25.35	21.80	0.50	24.85	3.05	0.00	0.00	3.05	34.74	0.00
2015	02	10	12	219.47	194.79	173.06	2.39	192.39	19.33	0.00	0.00	19.33	24.69	21.94	0.64	24.05	2.11	0.00	0.00	2.11	29.85	0.00
2015	02	10	13	215.64	191.70	173.35	1.98	189.72	16.37	0.00	0.00	16.37	23.94	21.65	0.48	23.46	1.81	0.00	0.00	1.81	24.35	0.00
2015	02	10	14	213.04	189.23	173.20	1.04	188.19	14.98	0.00	0.00	14.98	23.81	21.80	0.53	23.28	1.49	0.00	0.00	1.49	24.41	0.00
2015	02	10	15	216.61	192.66	173.44	1.69	190.97	17.53	0.00	0.00	17.53	23.95	21.56	0.38	23.57	2.01	0.00	0.00	2.01	29.79	0.00
2015	02	10	16	225.02	200.30	173.58	2.76	197.54	23.96	0.00	0.00	23.96	24.72	21.42	0.69	24.03	2.61	0.00	0.00	2.61	35.21	0.00
2015	02	10	17	235.28	210.32	174.31	4.50	205.82	31.51	0.00	0.00	31.51	24.96	20.69	0.24	24.72	4.03	0.00	0.00	4.03	37.04	0.00
2015	02	10	18	238.71	213.96	174.80	8.13	205.84	31.04	0.00	0.00	31.04	24.75	20.22	0.21	24.54	4.32	0.00	0.00	4.32	45.61	0.00
2015	02	10	19	234.19	209.75	174.82	14.13	195.62	20.79	0.00	0.00	20.79	24.44	20.37	0.99	23.45	3.08	0.00	0.00	3.08	32.50	0.00
2015	02	10	20	228.70	204.94	175.31	11.27	193.67	18.36	0.00	0.00	18.36	23.76	20.33	0.96	22.80	2.47	0.00	0.00	2.47	28.40	0.00
2015	02	12	17	217.73	194.73	178.80	8.22	186.51	7.71	0.00	0.33	7.38	23.00	21.12	2.21	20.79	0.00	0.33	0.00	0.00	11.16	0.00
2015	02	12	18	225.87	202.16	178.15	7.68	194.49	16.34	0.00	0.00	16.34	23.70	20.89	1.01	22.70	1.81	0.00	0.00	1.81	17.87	0.00
2015	02	12	19	225.21	201.60	176.91	3.33	198.27	21.36	0.00	0.00	21.36	23.61	20.72	0.08	23.53	2.81	0.00	0.00	2.81	22.05	0.00
2015	02	12	20	221.88	198.98	175.17	1.55	197.44	22.26	0.00	0.00	22.26	22.90	20.16	0.00	22.90	2.74	0.00	0.00	2.74	24.90	0.00
2015	02	12	21	211.15	189.54	176.06	5.91	183.63	7.57	0.00	0.00	7.57	21.60	20.07	0.72	20.88	0.82	0.00	0.00	0.82	13.61	0.00
2015	02	14	09	219.78	196.08	174.53	12.90	183.18	8.64	0.00	0.00	8.64	23.70	21.10	0.75	22.95	1.85	0.00	0.00	1.85	15.04	0.00
2015	02	14	10	218.22	194.61	174.37	7.71	186.90	12.53	0.00	0.00	12.53	23.62	21.16	0.75	22.86	1.70	0.00	0.00	1.70	16.92	0.00
2015	02	14	11	216.37	192.89	174.01	4.59	188.30	14.29	0.00	0.00	14.29	23.48	21.19	0.96	22.52	1.34	0.00	0.00	1.34	17.33	0.00
2015	02	14	12	212.60	189.41	173.78	4.17	185.23	11.45	0.00	0.00	11.45	23.19	21.28	0.74	22.46	1.18	0.00	0.00	1.18	17.49	0.00
2015	02	14	13	204.63	182.20	173.78	2.49	179.71	5.93	0.00	0.00	5.93	22.43	21.39	0.33	22.10	0.70	0.00	0.00	0.70	18.05	0.00
2015	02	14	14	200.96	179.06	175.54	0.34	178.72	3.17	0.00	0.00	3.17	21.90	21.47	0.00	21.89	0.43	0.00	0.00	0.43	17.21	0.00
2015	02	14	15	200.35	178.53	177.02	0.00	178.53	1.52	0.00	0.00	1.52	21.82	21.63	0.00	21.82	0.19	0.00	0.00	0.19	15.06	0.00
2015	02	14	16	205.60	183.24	179.02	0.20	183.04	4.02	0.00	0.00	4.02	22.36	21.84	0.00	22.36	0.52	0.00	0.00	0.52	15.04	0.00
2015	02	14	17	221.04	197.40	175.30	0.93	196.46	21.16	0.00	0.00	21.16	23.64	20.99	0.00	23.64	2.65	0.00	0.00	2.65	23.67	0.00
2015	02	14	18	229.84	205.56	179.09	3.32	202.24	23.14	0.00	0.00	23.14	24.28	21.15	0.00	24.28	3.13	0.00	0.00	3.13	27.07	0.00
2015	02	14	19	226.11	202.51	180.85	3.96	198.55	17.70	0.00	0.00	17.70	23.60	21.08	0.35	23.25	2.18	0.00	0.00	2.18	20.65	0.00
2015	02																					

Year	Month	Day	Hour	Island Load	MECL Load	Allowed	MECL Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	COS Load	Allowed	COS Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	Mecl Generation	COS Generation
2015	02	17	17	208.37	185.54	173.64	0.06	185.48	11.84	0.00	0.00	11.84	22.83	21.36	0.00	22.83	1.46	0.00	0.00	1.46	16.12	0.00
2015	02	17	18	217.86	194.27	173.88	0.00	194.27	20.39	0.00	0.00	20.39	23.60	21.12	0.16	23.44	2.32	0.00	0.00	2.32	22.27	0.00
2015	02	17	19	214.83	191.85	175.78	0.00	191.85	16.08	0.00	0.00	16.08	22.98	21.05	0.46	22.51	1.46	0.00	0.00	1.46	16.83	0.00
2015	02	17	20	210.26	187.95	176.53	0.45	187.50	10.97	0.00	0.00	10.97	22.30	20.95	0.29	22.01	1.07	0.00	0.00	1.07	14.99	0.00
2015	02	17	21	202.55	181.25	174.74	0.11	181.14	6.41	0.00	0.00	6.41	21.30	20.54	0.30	21.00	0.46	0.00	0.00	0.46	13.22	0.00
2015	02	18	07	210.80	188.23	175.55	1.39	186.84	11.29	0.00	0.00	11.29	22.57	21.05	0.00	22.57	1.52	0.00	0.00	1.52	15.02	0.00
2015	02	18	08	218.19	194.20	173.76	1.10	193.10	19.34	0.00	0.00	19.34	23.99	21.46	0.04	23.95	2.49	0.00	0.00	2.49	20.51	0.00
2015	02	18	09	218.33	193.98	173.25	0.42	193.57	20.31	0.00	0.00	20.31	24.35	21.75	0.08	24.26	2.52	0.00	0.00	2.52	22.99	0.00
2015	02	18	10	214.75	190.61	173.09	0.00	190.61	17.51	0.00	0.00	17.51	24.14	21.93	0.00	24.14	2.22	0.00	0.00	2.22	21.87	0.00
2015	02	18	11	211.13	187.89	173.85	0.02	187.86	14.02	0.00	0.00	14.02	23.24	21.51	0.00	23.24	1.74	0.00	0.00	1.74	19.97	0.00
2015	02	18	12	204.22	181.88	173.67	0.76	181.11	7.44	0.00	0.00	7.44	22.34	21.33	0.00	22.34	1.01	0.00	0.00	1.01	15.46	0.00
2015	02	18	13	198.44	176.46	173.40	0.01	176.45	3.05	0.00	0.00	3.05	21.98	21.60	0.00	21.98	0.38	0.00	0.00	0.38	15.02	0.00
2015	02	18	14	195.71	173.98	173.35	0.00	173.98	0.63	0.00	0.00	0.63	21.73	21.65	0.00	21.73	0.08	0.00	0.00	0.08	15.02	0.00
2015	02	18	16	203.53	181.21	177.17	2.76	178.45	1.29	0.00	0.00	1.29	22.32	21.82	0.04	22.28	0.46	0.00	0.00	0.46	14.96	0.00
2015	02	18	17	213.90	191.02	179.15	6.54	184.48	5.33	0.00	0.00	5.33	22.88	21.46	0.53	22.35	0.89	0.00	0.00	0.89	15.00	0.00
2015	02	18	18	222.39	199.18	174.68	5.68	193.50	18.82	0.00	0.00	18.82	23.21	20.36	0.85	22.37	2.01	0.00	0.00	2.01	17.38	0.00
2015	02	18	19	219.45	196.32	178.60	11.78	184.54	5.94	0.00	0.00	5.94	23.13	21.04	1.17	21.96	0.92	0.00	0.00	0.92	15.47	0.00
2015	02	18	20	213.92	191.24	181.52	8.81	182.43	0.91	0.00	0.00	0.91	22.68	21.53	0.83	21.85	0.32	0.00	0.00	0.32	13.83	0.00
2015	02	22	17	203.72	182.88	175.06	4.64	178.25	3.19	0.00	0.00	3.19	20.84	19.94	0.00	20.84	0.89	0.00	0.00	0.89	14.99	0.00
2015	02	22	18	210.49	189.04	175.13	6.00	183.05	7.91	0.00	0.00	7.91	21.45	19.87	0.00	21.45	1.58	0.00	0.00	1.58	15.00	0.00
2015	02	22	19	209.31	188.09	175.24	3.97	184.13	8.89	0.00	0.00	8.89	21.21	19.76	0.00	21.21	1.45	0.00	0.00	1.45	15.03	0.00
2015	02	22	20	202.14	181.78	175.40	1.38	180.40	5.00	0.00	0.00	5.00	20.36	19.65	0.18	20.18	0.53	0.00	0.00	0.53	12.92	0.00
2015	02	24	16	220.07	196.43	184.82	1.01	195.42	10.61	0.00	0.00	10.61	23.64	22.24	1.09	22.55	0.31	0.00	0.00	0.31	20.89	0.00
2015	02	24	17	226.99	203.00	187.84	3.49	199.51	11.67	0.00	0.00	11.67	23.98	22.19	1.58	22.40	0.21	0.00	0.00	0.21	31.06	0.00
2015	02	26	18	224.18	200.48	188.79	11.03	189.45	0.66	0.00	0.00	0.66	23.70	22.32	0.00	23.70	1.38	0.00	0.00	1.38	13.17	0.00
2015	03	09	07	213.07	191.07	174.87	0.23	190.85	15.98	0.00	0.00	15.98	22.00	20.13	0.27	21.73	1.60	0.00	0.00	1.60	16.66	0.00
2015	03	09	08	215.22	192.35	174.28	0.00	192.34	18.07	0.00	0.00	18.07	22.87	20.72	0.00	22.87	2.15	0.00	0.00	2.15	19.97	0.00
2015	03	09	09	209.56	186.95	173.96	0.00	186.95	12.99	0.00	0.00	12.99	22.61	21.04	0.00	22.61	1.57	0.00	0.00	1.57	15.93	0.50
2015	03	09	10	202.09	179.75	173.45	0.56	179.19	5.74	0.00	0.00	5.74	22.34	21.55	0.00	22.34	0.78	0.00	0.00	0.78	10.00	1.55
2015	03	09	11	197.66	176.14	173.76	1.61	174.52	0.76	0.00	0.00	0.76	21.53	21.24	0.00	21.53	0.29	0.00	0.00	0.29	8.65	0.00
2015	03	09	17	196.51	176.25	174.91	1.08	175.18	0.27	0.00	0.06	0.21	20.26	20.10	0.22	20.04	0.00	0.06	0.00	0.00	2.44	0.00
2015	03	09	19	200.78	180.35	177.01	2.79	177.56	0.55	0.00	0.00	0.55	20.44	20.06	0.00	20.44	0.38	0.00	0.00	0.38	9.99	0.00
2015	8	18	11	204.22	184.52	176.19	0.09	184.43	8.24	0.00	0.00	8.24	19.70	18.81	0.61	19.09	0.28	0.00	0.00	0.28	6.32	0.60
2015	8	18	12	205.02	184.88	175.85	0.03	184.86	9.01	0.00	0.00	9.01	20.14	19.15	0.35	19.79	0.63	0.00	0.00	0.63	6.89	1.44
2015	8	18	13	205.63	185.62	176.02	0.61	185.00	8.98	0.00	0.00	8.98	20.01	18.98	0.48	19.53	0.56	0.00	0.00	0.56	6.65	1.86
2015	8	18	14	204.76	184.55	175.76	1.67	182.88	7.12	0.00	0.00	7.12	20.21	19.24	0.07	20.14	0.90	0.00	0.00	0.90	13.61	1.34
2015	8	18	15	204.25	183.68	175.37	3.94	179.74	4.37	0.00	0.00	4.37	20.56	19.63	0.02	20.55	0.91	0.00	0.00	0.91	14.96	0.94
2015	8	18	16	207.17	186.45	175.50	5.75	180.70	5.20	0.00	0.00	5.20	20.72	19.50	0.02	20.70	1.20	0.00	0.00	1.20	15.01	0.89
2015	8	18	17	207.23	187.02	175.99	8.03	179.00	3.01	0.00	0.00	3.01	20.21	19.01	0.24	19.97	0.95	0.00	0.00	0.95	15.04	0.99
2015	8	19	09	196.45	177.87	176.56	0.00	177.87	1.31	0.00	0.00	1.31	18.58	18.44	0.00	18.58	0.14	0.00	0.00	0.14	10.70	0.00
2015	8	19	10	201.64	182.48	176.47	0.18	182.30	5.83	0.00	0.00	5.83	19.16	18.53	0.00	19.16	0.63	0.00	0.00	0.63	15.05	0.18
2015	8	19	11	205.78	185.90	176.16	1.52	184.38	8.22	0.00	0.00	8.22	19.88	18.84	0.00	19.88	1.04	0.00	0.00	1.04	14.96	0.94
2015	8	19	12	204.79	184.59	175.77	0.54	184.05	8.28	0.00	0.00	8.28	20.19	19.23	0.00	20.19	0.96	0.00	0.00	0.96	14.98	0.94
2015	8	19	13	203.38	183.28	175.73	0.01	183.27	7.54	0.00	0.00	7.54	20.10	19.27	0.00	20.10	0.83	0.00	0.00	0.83	15.07	1.03
2015	8	19	14	202.84	182.80	175.73	0.00	182.80	7.06	0.00	0.00	7.06	20.04	19.27	0.00	20.04	0.77	0.00	0.00	0.77	14.99	0.94
2015	8	19	15	203.93	183.63	175.59	0.00	183.63	8.04	0.00	0.00	8.04	20.30	19.41	0.00	20.30	0.89	0.00	0.00	0.89	15.04	0.94
2015	8	19	16	207.96	187.34	175.66	0.00	187.34	11.68	0.00	0.00	11.68	20.63	19.34	0.00	20.63	1.29	0.00	0.00	1.29	14.98	0.94
2015	8	19	17	207.87	187.73	176.10	0.00	187.73	11.63	0.00	0.00	11.63	20.14	18.90	0.00	20.14	1.25	0.00	0.00	1.25	15.01	0.99
2015	8	19	18	201.48	182.44	176.57	0.00	182.44	5.87	0.00	0.00	5.87	19.04	18.43	0.00	19.04	0.61	0.00	0.00	0.61	14.94	1.00
2015	8	19	19	196.56	177.01	175.60	0.07	176.94	1.33	0.00	0.00	1.33	19.55	19.40	0.00	19.55	0.15	0.00	0.00	0.15	15.00	1.89
2015	8	19	20	198.69	180.20	176.85	1.30	178.89	2.04	0.00	0.00	2.04	18.49	18.15	0.00	18.49	0.34	0.00	0.00	0.34	14.99	0.25
2015	11	18	16	207.26	186.25	175.24	12.17	174.08	0.00	1.16	0.00	0.00	21.00	19.76	0.00	21.00	1.24	0.00	1.16	0.08	9.69	0.63
2015	11	18	17	217.60	196.03	175.67	8.45	187.58	11.91	0.00	0.00	11.91	21.57	19.33	0.00	21.57	2.24	0.00	0.00	2.24	15.01	2.11
2015	11	18	18	210.65	190.00	175.89	7.94	182.07	6.18	0.00	0.00	6.18	20.65	19.11	0.00	20.65	1.53	0.00	0.00	1.53	15.00	2.01
2015	11	18	19	205.21	184.85	175.65	7.71	177.13	1.48	0.00	0.00	1.48	20.36	19.35	0.00	20.36	1.01	0.00	0.00	1.01	14.00	2.17
2015	11	30	10	211.89	189.34	174.52	13.93	175.41														

Year	Month	Day	Hour	Island Load	MECL Load	Allowed	MECL Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	COS Load	Allowed	COS Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	Mecl Generation	COS Generation
2015	11	30	15	212.20	189.98	175.73	0.25	189.73	14.01	0.00	0.00	14.01	22.22	20.55	0.00	22.22	1.67	0.00	0.00	1.67	17.04	1.28
2015	11	30	16	227.94	204.16	183.84	2.17	201.99	18.15	0.00	0.00	18.15	23.78	21.41	0.18	23.60	2.18	0.00	0.00	2.18	21.47	2.13
2015	11	30	17	238.08	213.96	193.52	7.18	206.77	13.25	0.00	0.00	13.25	24.12	21.82	0.46	23.66	1.84	0.00	0.00	1.84	20.93	2.52
2015	12	02	16	205.10	183.52	177.99	2.95	180.57	2.58	0.00	0.00	2.58	21.58	20.93	0.17	21.41	0.48	0.00	0.00	0.48	4.01	0.00
2015	12	08	16	205.37	183.98	174.69	2.98	180.99	6.31	0.00	0.00	6.31	21.40	20.32	0.66	20.74	0.42	0.00	0.00	0.42	10.38	0.00
2015	12	08	17	218.65	196.53	175.28	3.18	193.34	18.06	0.00	0.00	18.06	22.12	19.73	0.21	21.92	2.19	0.00	0.00	2.19	18.61	1.92
2015	12	08	18	213.04	191.60	175.58	6.83	184.76	9.18	0.00	0.00	9.18	21.44	19.65	0.38	21.06	1.41	0.00	0.00	1.41	15.08	1.42
2015	12	09	16	203.89	182.83	174.85	2.83	180.00	5.15	0.00	0.00	5.15	21.07	20.15	0.00	21.07	0.92	0.00	0.00	0.92	9.40	0.50
2015	12	09	17	215.70	193.91	175.30	3.76	190.15	14.85	0.00	0.00	14.85	21.79	19.70	0.00	21.79	2.09	0.00	0.00	2.09	17.73	2.01
2015	12	09	18	209.42	188.42	175.45	7.39	181.03	5.59	0.00	0.00	5.59	21.00	19.55	0.00	21.00	1.45	0.00	0.00	1.45	14.82	1.42
2015	12	09	19	204.42	184.07	175.59	7.93	176.15	0.55	0.00	0.00	0.55	20.34	19.41	0.00	20.34	0.94	0.00	0.00	0.94	4.76	0.59
2015	12	14	16	217.45	195.13	175.23	5.46	189.66	14.44	0.00	0.00	14.44	22.32	20.04	0.29	22.03	1.99	0.00	0.00	1.99	16.50	1.78
2015	12	14	17	228.66	205.89	176.07	5.69	200.20	24.13	0.00	0.00	24.13	22.77	19.47	0.00	22.77	3.30	0.00	0.00	3.30	25.00	2.49
2015	12	14	18	224.45	202.23	175.69	6.27	195.96	20.27	0.00	0.00	20.27	22.23	19.31	0.00	22.23	2.92	0.00	0.00	2.92	21.84	1.94
2015	12	14	19	218.87	197.28	177.40	3.26	194.02	16.62	0.00	0.00	16.62	21.59	19.41	0.00	21.59	2.18	0.00	0.00	2.18	18.33	1.45
2015	12	14	20	211.04	190.17	178.04	4.48	185.69	7.65	0.00	0.00	7.65	20.87	19.54	0.00	20.87	1.33	0.00	0.00	1.33	12.23	1.23
2015	12	17	07	196.96	177.55	175.78	0.28	177.27	1.49	0.00	0.00	1.49	19.41	19.22	0.16	19.25	0.03	0.00	0.00	0.03	4.73	1.27
2015	12	17	08	201.74	180.86	175.37	0.49	180.37	4.99	0.00	0.00	4.99	20.88	20.25	0.62	20.26	0.01	0.00	0.00	0.01	9.13	2.78
2015	12	21	10	211.52	188.61	174.49	8.07	180.54	6.04	0.00	0.00	6.04	22.90	21.19	0.49	22.41	1.22	0.00	0.00	1.22	4.33	0.80
2015	12	21	11	212.23	189.30	173.93	5.58	183.72	9.79	0.00	0.00	9.79	22.93	21.07	0.00	22.93	1.86	0.00	0.00	1.86	6.85	2.09
2015	12	21	12	209.82	187.56	174.31	1.17	186.39	12.08	0.00	0.00	12.08	22.26	20.69	0.00	22.26	1.57	0.00	0.00	1.57	9.76	1.59
2015	12	21	13	206.43	184.57	175.91	2.96	181.61	5.71	0.00	0.00	5.71	21.86	20.83	0.54	21.31	0.48	0.00	0.00	0.48	14.38	1.07
2015	12	23	16	201.04	179.42	174.03	0.00	179.42	5.39	0.00	0.00	5.39	21.62	20.97	0.00	21.62	0.65	0.00	0.00	0.65	7.08	0.00
2015	12	23	17	214.45	191.83	174.43	0.83	191.00	16.57	0.00	0.00	16.57	22.62	20.57	0.00	22.62	2.05	0.00	0.00	2.05	14.97	1.87
2015	12	23	18	210.10	188.36	174.82	0.89	187.47	12.65	0.00	0.00	12.65	21.74	20.18	0.00	21.74	1.56	0.00	0.00	1.56	12.57	2.03
2015	12	23	19	205.32	184.09	174.84	0.15	183.94	9.10	0.00	0.00	9.10	21.23	20.16	0.00	21.23	1.07	0.00	0.00	1.07	10.03	1.62
2015	12	23	20	199.67	179.11	174.92	0.73	178.38	3.46	0.00	0.00	3.46	20.56	20.08	0.00	20.56	0.48	0.00	0.00	0.48	2.61	0.34
2015	12	29	10	213.98	190.04	173.21	12.60	177.44	4.23	0.00	0.00	4.23	23.94	21.82	0.26	23.68	1.86	0.00	0.00	1.86	2.79	1.39
2015	12	29	11	216.04	192.26	173.54	6.04	186.22	12.68	0.00	0.00	12.68	23.78	21.46	0.34	23.44	1.98	0.00	0.00	1.98	8.85	1.97
2015	12	29	12	213.29	189.76	173.49	6.11	183.65	10.17	0.00	0.00	10.17	23.53	21.51	0.45	23.08	1.57	0.00	0.00	1.57	8.08	1.28
2015	12	29	13	212.57	188.92	173.30	1.59	187.33	14.03	0.00	0.00	14.03	23.65	21.70	0.18	23.47	1.78	0.00	0.00	1.78	9.85	1.58
2015	12	29	14	211.28	187.60	173.15	0.49	187.12	13.97	0.00	0.00	13.97	23.68	21.85	0.11	23.56	1.71	0.00	0.00	1.71	13.49	1.63
2015	12	29	15	212.16	188.93	173.64	1.78	187.15	13.50	0.00	0.00	13.50	23.23	21.36	0.00	23.23	1.88	0.00	0.00	1.88	15.45	1.25
2015	12	29	16	228.48	203.88	174.01	0.31	203.57	29.57	0.00	0.00	29.57	24.60	20.99	0.00	24.60	3.60	0.00	0.00	3.60	28.71	3.03
2015	12	29	17	240.83	215.63	174.59	1.04	214.59	39.99	0.00	0.00	39.99	25.20	20.41	0.00	25.20	4.80	0.00	0.00	4.80	40.19	4.56
2015	12	29	18	232.94	209.05	175.40	3.08	205.97	30.57	0.00	0.00	30.57	23.89	20.05	0.31	23.59	3.54	0.00	0.00	3.54	31.18	2.96
2015	12	29	19	224.07	200.74	184.75	8.63	192.11	7.36	0.00	0.00	7.36	23.33	21.47	0.16	23.17	1.69	0.00	0.00	1.69	15.09	2.17
2015	12	30	11	204.18	182.54	175.33	2.21	180.34	5.00	0.00	0.00	5.00	21.63	20.78	0.08	21.55	0.77	0.00	0.00	0.77	0.00	5.33
2015	12	30	12	202.27	180.39	174.86	1.18	179.21	4.34	0.00	0.00	4.34	21.88	21.21	0.00	21.88	0.67	0.00	0.00	0.67	0.00	5.52
2015	12	30	13	199.35	178.10	174.22	0.67	177.43	3.21	0.00	0.00	3.21	21.24	20.78	0.00	21.24	0.46	0.00	0.00	0.46	0.00	3.86
2015	12	30	14	197.42	176.21	174.05	0.01	176.20	2.15	0.00	0.00	2.15	21.21	20.95	0.00	21.21	0.26	0.00	0.00	0.26	0.00	2.00
2015	12	30	15	200.62	179.14	174.13	0.00	179.14	5.02	0.00	0.00	5.02	21.47	20.87	0.00	21.47	0.60	0.00	0.00	0.60	3.68	1.27
2015	12	30	16	215.13	192.83	174.78	0.00	192.83	18.04	0.00	0.00	18.04	22.30	20.22	0.00	22.30	2.09	0.00	0.00	2.09	18.69	0.00
2015	12	30	17	228.00	204.75	175.54	0.00	204.75	29.21	0.00	0.00	29.21	23.25	19.93	0.00	23.25	3.32	0.00	0.00	3.32	32.85	0.00
2015	12	30	18	221.63	199.24	178.54	0.02	199.22	20.69	0.00	0.00	20.69	22.39	20.06	0.00	22.39	2.33	0.00	0.00	2.33	21.31	0.00
2015	12	30	19	215.72	194.04	178.87	0.15	193.89	15.02	0.00	0.00	15.02	21.68	19.99	0.43	21.25	1.26	0.00	0.00	1.26	15.92	0.00
2015	12	30	20	207.82	186.95	179.60	1.03	185.91	6.32	0.00	0.00	6.32	20.88	20.05	0.29	20.59	0.53	0.00	0.00	0.53	15.44	0.00
2015 Totals												3549.33			456.74			5009.98		229.18		

2016	01	03	16	203.46	182.41	174.82	0.00	182.41	7.59	0.00	0.00	7.59	21.05	20.18	0.00	21.05	0.88	0.00	0.00	0.88	13.78	0.00
2016	01	03	17	215.03	193.13	175.15	0.00	193.13	17.99	0.00	0.00	17.99	21.89	19.85	0.00	21.89	2.04	0.00	0.00	2.04	20.00	0.00
2016	01	03	18	209.63	188.57	175.41	0.00	188.57	13.16	0.00	0.00	13.16	21.06	19.59	0.00	21.06	1.47	0.00	0.00	1.47	15.94	0.00
2016	01	03	19	203.59	183.11	175.38	0.06	183.04	7.67	0.00	0.00	7.67	20.49	19.62	0.00	20.49	0.86	0.00	0.00	0.86	11.28	0.00
2016	01	03	20	196.28	176.56	175.41	0.09	176.47	1.06	0.00	0.00	1.06	19.72	19.59	0.00	19.72	0.13	0.00	0.00	0.13	1.22	0.00
2016	01	08	08	205.09	183.40	175.98	4.80	178.60	2.62	0.00	0.00	2.62	21.68	20.81	0.09	21.59	0.79	0.00	0.00	0.79	2.86	0.88
2016	01	08	09	206.63	184.49	177.02	3.24	181.25	4.22	0.00	0.00	4.22	22.14	21.24	0.70	21.43	0.19	0.00	0.00	0.19	0.00	2.20
2016	01	08	10	204.64	182.45	174.09	1.85	180.60	6.51	0.00	0.00	6.51	22.19	21.17	0.43	21.						

Year	Month	Day	Hour	Island Load	MECL Load	Allowed	MECL Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	COS Load	Allowed	COS Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	Mecl Generation	COS Generation
2016	01	08	16	204.44	182.37	173.95	6.84	175.53	1.58	0.00	0.00	1.58	22.07	21.05	0.05	22.02	0.97	0.00	0.00	0.97	0.00	0.26
2016	01	08	17	223.37	200.72	175.23	8.49	192.23	17.01	0.00	0.00	17.01	22.65	19.77	0.30	22.35	2.57	0.00	0.00	2.57	15.87	1.98
2016	01	08	18	216.97	195.09	175.33	11.08	184.01	8.68	0.00	0.00	8.68	21.89	19.67	0.42	21.47	1.80	0.00	0.00	1.80	15.03	1.37
2016	01	08	19	210.67	189.35	175.26	12.72	176.62	1.36	0.00	0.00	1.36	21.32	19.74	1.04	20.28	0.55	0.00	0.00	0.55	10.56	0.36
2016	01	09	09	196.12	176.33	175.32	0.64	175.69	0.37	0.00	0.00	0.37	19.80	19.68	0.00	19.80	0.11	0.00	0.00	0.11	2.13	0.00
2016	01	09	10	198.39	178.18	175.27	0.33	177.86	2.59	0.00	0.00	2.59	20.21	19.88	0.00	20.21	0.33	0.00	0.00	0.33	4.99	0.00
2016	01	09	11	200.25	179.92	175.31	0.03	179.89	4.57	0.00	0.00	4.57	20.34	19.82	0.16	20.18	0.36	0.00	0.00	0.36	4.96	0.00
2016	01	09	12	196.48	176.46	175.14	0.12	176.34	1.20	0.00	0.00	1.20	20.02	19.87	0.00	20.02	0.15	0.00	0.00	0.15	4.77	0.00
2016	01	09	16	205.23	184.30	175.11	0.00	184.30	9.18	0.00	0.00	9.18	20.93	19.89	0.00	20.93	1.04	0.00	0.00	1.04	9.92	0.00
2016	01	09	17	218.34	196.11	175.14	0.00	196.11	20.96	0.00	0.00	20.96	22.23	19.86	0.00	22.23	2.38	0.00	0.00	2.38	19.52	2.00
2016	01	09	18	212.69	191.24	175.33	0.09	191.14	15.81	0.00	0.00	15.81	21.45	19.67	0.00	21.45	1.78	0.00	0.00	1.78	16.67	2.03
2016	01	09	19	203.79	183.12	175.23	2.08	181.04	5.81	0.00	0.00	5.81	20.67	19.78	0.00	20.67	0.89	0.00	0.00	0.89	9.30	0.21
2016	01	12	15	202.23	180.07	173.66	6.44	173.63	0.00	0.03	0.00	0.00	22.16	21.37	0.09	22.07	0.70	0.00	0.03	0.67	2.86	0.18
2016	01	12	16	217.80	194.40	174.07	0.93	193.47	19.40	0.00	0.00	19.40	23.41	20.96	0.00	23.41	2.45	0.00	0.00	2.45	20.04	2.46
2016	01	12	17	231.32	207.38	174.84	1.20	206.18	31.33	0.00	0.00	31.33	23.94	20.19	0.00	23.94	3.76	0.00	0.00	3.76	33.69	3.25
2016	01	12	18	225.54	202.50	175.19	0.86	201.64	26.45	0.00	0.00	26.45	23.04	19.93	0.26	22.78	2.85	0.00	0.00	2.85	28.66	2.14
2016	01	12	19	219.01	196.52	185.01	0.43	196.09	11.09	0.00	0.00	11.09	22.49	21.17	1.30	21.20	0.02	0.00	0.00	0.02	14.36	1.05
2016	01	16	07	197.62	177.03	174.68	0.00	177.03	2.35	0.00	0.00	2.35	20.59	20.32	0.00	20.59	0.27	0.00	0.00	0.27	3.46	0.00
2016	01	16	08	207.58	186.24	175.22	0.00	186.24	11.01	0.00	0.00	11.01	21.34	20.08	0.07	21.27	1.19	0.00	0.00	1.19	15.04	0.00
2016	01	16	09	213.09	191.15	174.96	0.24	190.91	15.95	0.00	0.00	15.95	21.95	20.09	0.22	21.72	1.63	0.00	0.00	1.63	15.02	0.00
2016	01	16	10	215.28	192.73	174.57	2.41	190.31	15.74	0.00	0.00	15.74	22.56	20.43	0.32	22.24	1.81	0.00	0.00	1.81	15.00	0.78
2016	01	16	11	215.08	192.59	174.67	5.94	186.65	11.98	0.00	0.00	11.98	22.48	20.39	0.25	22.24	1.85	0.00	0.00	1.85	15.00	1.02
2016	01	16	12	210.09	188.26	175.17	9.54	178.72	3.55	0.00	0.00	3.55	21.83	20.31	1.20	20.63	0.32	0.00	0.00	0.32	13.51	1.04
2016	01	18	16	215.33	192.27	183.00	6.01	186.25	3.26	0.00	0.00	3.26	23.06	21.95	0.51	22.56	0.61	0.00	0.00	0.61	11.03	0.00
2016	01	18	17	227.89	204.36	178.36	6.44	197.92	19.57	0.00	0.00	19.57	23.53	20.54	0.72	22.81	2.27	0.00	0.00	2.27	19.71	1.03
2016	01	18	18	224.01	201.16	189.79	4.61	196.56	6.76	0.00	0.26	6.50	22.85	21.56	1.55	21.29	0.00	0.26	0.00	0.00	12.60	0.95
2016	01	23	15	202.75	181.95	175.00	2.42	179.54	4.54	0.00	0.00	4.54	20.80	20.00	0.35	20.44	0.44	0.00	0.00	0.44	3.87	0.00
2016	01	23	16	212.82	191.04	175.06	2.43	188.61	13.55	0.00	0.00	13.55	21.78	19.96	0.08	21.70	1.74	0.00	0.00	1.74	15.00	1.26
2016	01	23	17	223.81	200.86	179.50	10.88	189.97	10.47	0.00	0.00	10.47	22.96	20.52	0.61	22.35	1.83	0.00	0.00	1.83	15.06	1.96
2016	01	25	16	213.27	191.11	174.74	18.00	173.11	0.00	1.63	0.00	0.00	22.16	20.26	0.00	22.16	1.90	0.00	1.63	0.27	4.80	0.00
2016	01	25	17	227.02	204.03	175.25	12.22	191.81	16.56	0.00	0.00	16.56	22.99	19.75	0.00	22.99	3.24	0.00	0.00	3.24	19.77	2.46
2016	01	25	18	227.43	204.85	175.64	6.16	198.69	23.05	0.00	0.00	23.05	22.57	19.36	0.00	22.57	3.22	0.00	0.00	3.22	25.01	2.99
2016	01	25	19	224.20	201.78	177.62	1.38	200.41	22.79	0.00	0.00	22.79	22.42	19.73	0.00	22.42	2.69	0.00	0.00	2.69	23.92	2.99
2016	01	25	20	218.82	196.86	183.14	3.87	193.00	9.86	0.00	0.00	9.86	21.95	20.42	0.48	21.47	1.05	0.00	0.00	1.05	17.91	1.45
2016	01	30	17	210.37	188.96	175.15	9.01	179.94	4.79	0.00	0.00	4.79	21.42	19.85	0.00	21.42	1.57	0.00	0.00	1.57	5.82	0.00
2016	01	30	18	209.22	187.95	176.15	6.14	181.82	5.67	0.00	0.00	5.67	21.27	19.93	0.00	21.27	1.34	0.00	0.00	1.34	15.03	0.00
2016	02	03	07	216.47	194.32	176.52	7.42	186.90	10.38	0.00	0.00	10.38	22.15	20.12	0.00	22.15	2.03	0.00	0.00	2.03	13.22	1.10
2016	02	03	08	220.89	197.26	174.30	7.05	190.21	15.91	0.00	0.00	15.91	23.62	20.87	0.00	23.62	2.75	0.00	0.00	2.75	15.00	2.08
2016	02	03	09	220.52	196.57	173.82	1.91	194.66	20.84	0.00	0.00	20.84	23.95	21.18	0.00	23.95	2.77	0.00	0.00	2.77	17.67	2.77
2016	02	03	10	218.75	194.83	173.68	1.08	193.76	20.08	0.00	0.00	20.08	23.92	21.32	0.00	23.92	2.60	0.00	0.00	2.60	18.45	2.24
2016	02	03	11	218.00	194.55	174.03	1.09	193.46	19.44	0.00	0.00	19.44	23.44	20.97	0.00	23.44	2.47	0.00	0.00	2.47	15.46	2.00
2016	02	03	12	214.89	191.89	174.13	1.71	190.18	16.05	0.00	0.00	16.05	23.00	20.87	0.12	22.88	2.01	0.00	0.00	2.01	15.09	1.99
2016	02	03	13	213.16	190.11	173.91	2.08	188.03	14.11	0.00	0.00	14.11	23.05	21.09	0.06	22.99	1.90	0.00	0.00	1.90	14.99	2.03
2016	02	03	14	212.87	190.05	174.10	0.04	190.00	15.91	0.00	0.00	15.91	22.82	20.90	0.08	22.73	1.83	0.00	0.00	1.83	14.99	2.04
2016	02	03	15	213.66	190.99	178.03	2.68	188.31	10.28	0.00	0.00	10.28	22.67	21.13	0.14	22.53	1.39	0.00	0.00	1.39	15.03	2.02
2016	02	11	07	209.42	188.39	175.41	5.06	183.32	7.91	0.00	0.00	7.91	21.04	19.59	0.58	20.46	0.87	0.00	0.00	0.87	9.69	2.21
2016	02	11	08	211.19	188.72	175.21	0.10	188.62	13.41	0.00	0.00	13.41	22.47	20.86	0.74	21.74	0.87	0.00	0.00	0.87	17.09	1.07
2016	02	11	10	201.70	179.50	175.47	1.93	177.57	2.10	0.00	0.00	2.10	22.19	21.69	0.15	22.04	0.35	0.00	0.00	0.35	1.98	0.00
2016	02	11	11	197.29	175.55	174.21	0.70	174.86	0.64	0.00	0.00	0.64	21.74	21.58	0.00	21.74	0.17	0.00	0.00	0.17	2.11	0.00
2016	02	11	16	203.70	182.28	174.50	0.00	182.28	7.78	0.00	0.00	7.78	21.42	20.50	0.33	21.09	0.59	0.00	0.00	0.59	13.77	0.00
2016	02	11	17	213.49	191.67	175.07	0.56	191.11	16.04	0.00	0.00	16.04	21.82	19.93	1.02	20.80	0.87	0.00	0.00	0.87	15.52	0.82
2016	02	11	18	217.28	194.90	174.92	0.13	194.78	19.86	0.00	0.00	19.86	22.37	20.08	1.70	20.68	0.60	0.00	0.00	0.60	20.02	0.43
2016	02	11	19	213.69	191.75	174.98	0.00	191.75	16.77	0.00	0.00	16.77	21.94	20.02	0.62	21.31	1.29	0.00	0.00	1.29	15.85	0.00
2016	02	11	20	206.56	185.45	175.07	4.43	181.02	5.94	0.00	0.00	5.94	21.11	19.93	0.16	20.95	1.02	0.00	0.00	1.02	11.81	0.00
2016	02	13	07	202.96	182.15	175.76	0.02	182.12	6.36	0.00	0.00	6.36	20.82	20.09	0.29	20.53	0.44	0.00	0.00	0.44	6.92	0.78
2016	02	13	08	213.44	191.49	176.93	1.00	190.49														

Year	Month	Day	Hour	Island Load	MECL Load	Allowed	MECL Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	COS Load	Allowed	COS Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	Mecl Generation	COS Generation
2016	02	23	10	200.64	177.87	173.75	2.35	175.52	1.76	0.00	0.00	1.76	22.77	22.24	0.00	22.77	0.53	0.00	0.00	0.53	14.45	0.20
2016	02	23	11	198.13	176.19	173.49	1.60	174.59	1.10	0.00	0.00	1.10	21.94	21.61	0.00	21.94	0.34	0.00	0.00	0.34	9.66	0.00
2016	02	23	16	198.64	177.55	174.29	0.00	177.55	3.26	0.00	0.00	3.26	21.10	20.71	0.00	21.10	0.39	0.00	0.00	0.39	9.93	0.00
2016	02	23	17	203.55	182.63	174.96	0.00	182.63	7.67	0.00	0.00	7.67	20.92	20.04	0.00	20.92	0.88	0.00	0.00	0.88	17.46	0.00
2016	02	23	18	214.33	192.15	176.21	0.09	192.06	15.85	0.00	0.00	15.85	22.18	20.34	0.00	22.18	1.84	0.00	0.00	1.84	20.62	1.60
2016	02	23	19	215.08	192.72	180.26	1.43	191.30	11.04	0.00	0.00	11.04	22.36	20.91	0.00	22.36	1.45	0.00	0.00	1.45	17.96	1.14
2016	02	23	20	210.72	188.96	184.67	2.91	186.04	1.37	0.00	0.00	1.37	21.77	21.27	0.42	21.35	0.08	0.00	0.00	0.08	15.16	0.67
2016	03	04	17	202.90	181.87	174.79	1.53	180.34	5.56	0.00	0.00	5.56	21.03	20.21	0.00	21.03	0.82	0.00	0.00	0.82	8.81	0.00
2016	03	04	18	211.47	189.51	174.79	0.62	188.89	14.10	0.00	0.00	14.10	21.96	20.25	0.00	21.96	1.71	0.00	0.00	1.71	15.01	0.65
2016	03	04	19	211.40	189.49	174.82	0.51	188.98	14.16	0.00	0.00	14.16	21.91	20.22	0.21	21.71	1.49	0.00	0.00	1.49	15.05	1.02
2016	03	04	20	207.27	186.15	175.13	0.00	186.15	11.02	0.00	0.00	11.02	21.12	19.87	0.03	21.09	1.22	0.00	0.00	1.22	14.95	1.03
2016	03	04	21	198.01	177.91	175.21	0.55	177.36	2.15	0.00	0.00	2.15	20.10	19.79	0.15	19.95	0.16	0.00	0.00	0.16	5.51	0.50
2016	03	06	18	200.11	179.44	175.82	1.74	177.70	1.88	0.00	0.00	1.88	20.67	20.25	0.00	20.67	0.42	0.00	0.00	0.42	5.39	0.00
2016	03	09	07	198.42	178.47	177.67	0.00	178.47	0.80	0.00	0.11	0.69	19.95	19.86	0.20	19.75	0.00	0.11	0.00	0.00	1.08	0.00
2016	03	10	17	203.65	182.74	176.97	3.16	179.57	2.60	0.00	0.23	2.37	20.91	20.25	0.89	20.02	0.00	0.23	0.00	0.00	6.15	0.00
2016	03	10	18	207.43	186.35	175.19	2.76	183.59	8.41	0.00	0.00	8.41	21.08	19.81	0.00	21.08	1.26	0.00	0.00	1.26	15.01	0.87
2016	03	10	19	206.64	185.71	175.24	0.38	185.33	10.09	0.00	0.00	10.09	20.93	19.76	0.00	20.93	1.18	0.00	0.00	1.18	15.04	1.02
2016	03	10	20	201.42	181.08	175.30	0.00	181.08	5.77	0.00	0.00	5.77	20.34	19.70	0.00	20.34	0.65	0.00	0.00	0.65	12.21	0.81
2016	03	11	08	200.98	180.01	174.66	0.60	179.41	4.75	0.00	0.00	4.75	20.96	20.34	0.00	20.96	0.62	0.00	0.00	0.62	8.76	0.00
2016	03	11	09	201.87	180.41	174.27	0.56	179.86	5.58	0.00	0.00	5.58	21.46	20.73	0.64	20.82	0.09	0.00	0.00	0.09	14.59	0.00
2016	03	11	10	200.29	178.52	173.82	2.98	175.54	1.72	0.00	0.42	1.30	21.76	21.19	0.99	20.77	0.00	0.42	0.00	0.00	12.74	0.00
2016	03	21	11	209.80	187.60	174.41	8.73	178.88	4.47	0.00	0.00	4.47	22.20	20.64	0.67	21.53	0.89	0.00	0.00	0.89	0.00	4.24
2016	7	25	11	198.45	178.90	175.79	0.08	178.82	3.03	0.00	0.00	3.03	19.55	19.21	0.00	19.55	0.34	0.00	0.00	0.34	0.10	1.72
2016	7	25	12	198.40	178.57	175.52	0.04	178.54	3.02	0.00	0.00	3.02	19.82	19.48	0.00	19.82	0.34	0.00	0.00	0.34	0.00	3.57
2016	7	25	13	196.05	176.23	175.28	0.05	176.17	0.89	0.00	0.00	0.89	19.82	19.72	0.00	19.82	0.11	0.00	0.00	0.11	2.07	1.94
2016	7	25	15	195.76	176.14	175.46	0.25	175.89	0.43	0.00	0.00	0.43	19.61	19.54	0.00	19.61	0.08	0.00	0.00	0.08	4.95	0.00
2016	7	25	16	198.72	179.05	175.70	0.75	178.30	2.60	0.00	0.14	2.45	19.67	19.30	0.51	19.15	0.00	0.14	0.00	0.00	5.05	0.00
2016	7	25	17	198.87	179.96	176.51	1.50	178.45	1.94	0.00	0.00	1.94	18.91	18.55	0.01	18.90	0.35	0.00	0.00	0.35	4.40	0.00
2016	7	27	10	197.13	178.46	176.54	0.03	178.44	1.90	0.00	0.24	1.66	18.66	18.46	0.44	18.22	0.00	0.24	0.00	0.00	2.70	0.00
2016	7	27	11	199.57	180.58	176.45	0.25	180.34	3.89	0.00	0.00	3.89	18.99	18.55	0.25	18.74	0.19	0.00	0.00	0.19	5.50	0.00
2016	7	27	16	198.59	179.24	176.00	0.12	179.11	3.12	0.00	0.00	3.12	19.35	19.00	0.00	19.35	0.35	0.00	0.00	0.35	2.79	0.00
2016	7	27	17	199.19	180.48	177.30	0.97	179.51	2.22	0.00	0.00	2.22	18.71	18.38	0.00	18.71	0.33	0.00	0.00	0.33	4.96	0.00
2016	10	25	17	191.25	172.68	185.17	1.64	171.04	0.00	14.13	0.00	0.00	18.57	19.92	0.58	18.00	0.00	1.92	0.00	0.00	0.00	17.53
2016	10	25	18	196.95	178.40	180.37	2.86	175.54	0.00	4.83	0.00	0.00	18.54	18.75	0.26	18.29	0.00	0.46	0.00	0.00	0.00	17.81
2016	10	25	19	196.13	177.51	179.45	3.42	174.09	0.00	5.36	0.00	0.00	18.62	18.82	0.30	18.32	0.00	0.51	0.00	0.00	0.00	17.84
2016	10	25	20	190.51	172.38	176.46	7.00	165.39	0.00	11.07	0.00	0.00	18.12	18.55	0.00	18.12	0.00	0.43	0.00	0.00	0.00	17.64
2016	11	25	16	201.12	181.00	175.49	0.47	180.52	5.04	0.00	0.00	5.04	20.13	19.51	0.00	20.13	0.61	0.00	0.00	0.61	9.42	0.00
2016	11	25	17	208.49	187.71	175.57	0.84	186.88	11.31	0.00	0.00	11.31	20.77	19.43	0.00	20.77	1.34	0.00	0.00	1.34	14.96	0.86
2016	11	25	18	201.42	182.18	176.38	0.00	182.18	5.80	0.00	0.00	5.80	19.23	18.62	0.00	19.23	0.61	0.00	0.00	0.61	10.76	0.45
2016	11	29	16	203.79	182.37	174.51	6.79	175.58	1.08	0.00	0.00	1.08	21.42	20.49	0.00	21.42	0.92	0.00	0.00	0.92	4.30	0.42
2016	11	29	17	217.77	195.80	175.33	6.09	189.71	14.39	0.00	0.00	14.39	21.97	19.67	0.12	21.85	2.18	0.00	0.00	2.18	13.98	2.46
2016	11	29	18	210.33	189.35	175.55	2.09	187.25	11.71	0.00	0.00	11.71	20.98	19.45	0.00	20.98	1.53	0.00	0.00	1.53	0.00	7.34
2016	11	29	19	204.57	184.04	175.54	2.75	181.28	5.74	0.00	0.00	5.74	20.53	19.58	0.00	20.53	0.95	0.00	0.00	0.95	0.00	7.69
2016	12	05	15	209.28	187.83	175.17	12.68	175.15	0.00	0.02	0.00	0.00	21.44	20.00	0.08	21.36	1.36	0.00	0.02	1.34	7.50	0.17
2016	12	05	16	226.54	203.41	175.09	17.05	186.36	11.27	0.00	0.00	11.27	23.13	19.91	0.03	23.10	3.19	0.00	0.00	3.19	15.99	2.42
2016	12	05	17	234.70	211.39	175.63	22.81	188.58	12.95	0.00	0.00	12.95	23.31	19.37	0.00	23.31	3.94	0.00	0.00	3.94	20.58	2.97
2016	12	05	18	228.02	205.68	175.89	19.49	186.19	10.29	0.00	0.00	10.29	22.34	19.11	0.05	22.29	3.18	0.00	0.00	3.18	15.00	2.97
2016	12	05	19	222.89	200.86	175.73	16.51	184.35	8.62	0.00	0.00	8.62	22.03	19.27	0.02	22.02	2.74	0.00	0.00	2.74	14.99	2.96
2016	12	05	20	215.41	194.02	175.64	13.53	180.50	4.86	0.00	0.00	4.86	21.39	19.36	0.00	21.39	2.03	0.00	0.00	2.03	14.98	2.97
2016	12	07	08	206.94	185.08	174.40	9.28	175.79	1.40	0.00	0.00	1.40	21.86	20.60	0.00	21.86	1.26	0.00	0.00	1.26	4.45	0.00
2016	12	07	09	209.33	187.24	174.42	3.95	183.30	8.87	0.00	0.00	8.87	22.09	20.58	0.00	22.09	1.51	0.00	0.00	1.51	11.08	0.34
2016	12	07	10	206.12	184.13	174.24	2.31	181.82	7.58	0.00	0.00	7.58	21.99	20.81	0.03	21.96	1.15	0.00	0.00	1.15	6.92	1.02
2016	12	07	11	205.66	183.66	176.93	2.50	181.15	4.22	0.00	0.00	4.22	22.00	21.20	0.25	21.75	0.55	0.00	0.00	0.55	7.02	1.02
2016	12	07	12	202.75	180.99	176.46	1.31	179.69	3.23	0.00	0.00	3.23	21.76	21.21	0.05	21.71	0.50	0.00	0.00	0.50	5.81	0.29
2016	12	07	13	201.62	180.11	174.75	0.97	179.14	4.39	0.00	0.00	4.39	21.51	20.87	0.00	21.51	0.64	0.00	0.00	0.64	7.43	0.00
2016	12	07	14	199.94	178.67	175.23	0.22	178.45	3.22	0.00	0.											

Attachment 3 - Island System Curtailments 2013-2017

Year	Month	Day	Hour	Island Load	MECL Load	Allowed	MECL Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	COS Load	Allowed	COS Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	Mecl Generation	COS Generation					
2016	12	08	17	226.15	203.31	190.81	5.61	197.70	6.89	0.00	0.00	6.89	22.84	21.43	0.02	22.82	1.38	0.00	0.00	1.38	28.87	0.69					
2016	12	08	18	219.72	197.58	184.50	3.13	194.45	9.95	0.00	0.00	9.95	22.14	20.67	0.00	22.14	1.47	0.00	0.00	1.47	30.73	1.03					
2016	12	08	19	215.32	193.93	180.12	1.53	192.40	12.28	0.00	0.00	12.28	21.39	19.87	0.00	21.39	1.52	0.00	0.00	1.52	26.61	1.01					
2016	12	08	20	210.77	190.03	178.66	2.23	187.80	9.15	0.00	0.00	9.15	20.74	19.50	0.14	20.59	1.10	0.00	0.00	1.10	14.96	0.50					
2016	12	12	07	228.69	205.76	175.45	15.96	189.80	14.35	0.00	0.00	14.35	22.93	19.55	0.00	22.93	3.38	0.00	0.00	3.38	15.67	1.26					
2016	12	12	08	234.38	209.72	174.48	3.33	206.39	31.91	0.00	0.00	31.91	24.66	20.52	0.00	24.66	4.14	0.00	0.00	4.14	30.65	3.46					
2016	12	12	09	234.49	209.44	174.16	1.75	207.69	33.53	0.00	0.00	33.53	25.06	20.84	0.00	25.06	4.22	0.00	0.00	4.22	32.79	3.92					
2016	12	12	10	231.89	206.91	174.00	2.98	203.93	29.93	0.00	0.00	29.93	24.98	21.00	0.00	24.98	3.97	0.00	0.00	3.97	30.11	3.92					
2016	12	12	11	231.07	206.55	175.40	2.80	203.74	28.34	0.00	0.00	28.34	24.53	20.83	0.17	24.35	3.53	0.00	0.00	3.53	27.66	4.24					
2016	12	12	12	229.30	204.97	180.49	4.39	200.57	20.08	0.00	0.00	20.08	24.33	21.43	0.67	23.66	2.23	0.00	0.00	2.23	21.21	3.71					
2016	12	12	13	229.33	204.99	184.94	13.95	191.04	6.11	0.00	0.00	6.11	24.34	21.96	0.98	23.37	1.41	0.00	0.00	1.41	15.01	3.07					
2016	12	13	17	234.60	210.73	180.72	12.22	198.51	17.78	0.00	0.00	17.78	23.88	20.48	1.09	22.79	2.31	0.00	0.00	2.31	31.28	0.00					
2016	12	13	18	228.63	205.83	179.41	4.21	201.62	22.21	0.00	0.00	22.21	22.81	19.88	0.70	22.11	2.22	0.00	0.00	2.22	41.92	0.00					
2016	12	13	19	225.66	203.15	184.98	1.24	201.92	16.94	0.00	0.00	16.94	22.51	20.49	1.57	20.94	0.45	0.00	0.00	0.45	24.41	0.00					
2016	12	13	20	222.26	200.15	178.19	3.20	196.95	18.76	0.00	0.00	18.76	22.11	19.68	0.77	21.34	1.66	0.00	0.00	1.66	25.36	0.62					
2016	12	15	07	218.13	196.94	176.06	21.86	175.08	0.00	0.98	0.00	0.00	21.19	18.94	0.43	20.76	1.82	0.00	0.98	0.84	3.13	0.43					
2016	12	15	08	223.50	200.91	175.30	14.72	186.19	10.90	0.00	0.00	10.90	22.58	19.70	0.23	22.35	2.65	0.00	0.00	2.65	14.97	2.66					
2016	12	15	09	222.05	198.96	174.74	8.04	190.92	16.19	0.00	0.00	16.19	23.09	20.28	0.51	22.58	2.30	0.00	0.00	2.30	16.67	2.19					
2016	12	15	10	218.91	195.73	174.35	0.54	195.19	20.84	0.00	0.00	20.84	23.18	20.65	0.49	22.69	2.04	0.00	0.00	2.04	22.94	1.13					
2016	12	15	11	217.83	195.38	175.82	0.01	195.37	19.56	0.00	0.00	19.56	22.45	20.20	0.27	22.18	1.98	0.00	0.00	1.98	22.13	1.95					
2016	12	15	12	216.58	194.24	180.80	0.98	193.26	12.46	0.00	0.00	12.46	22.34	20.79	0.27	22.07	1.27	0.00	0.00	1.27	15.01	1.86					
2016	12	15	13	217.73	195.38	181.06	3.30	192.07	11.02	0.00	0.00	11.02	22.35	20.71	1.42	20.93	0.21	0.00	0.00	0.21	15.01	0.00					
2016	12	15	14	216.58	194.26	178.52	10.22	184.04	5.52	0.00	0.88	4.64	22.32	20.51	2.69	19.63	0.00	0.88	0.00	0.00	13.97	0.00					
2016	12	15	15	220.31	197.99	175.24	10.23	187.76	12.52	0.00	0.00	12.52	22.32	19.76	1.73	20.59	0.84	0.00	0.00	0.84	19.99	0.00					
2016	12	15	16	237.50	213.83	175.57	15.81	198.03	22.46	0.00	0.00	22.46	23.67	19.43	0.46	23.20	3.77	0.00	0.00	3.77	31.15	2.14					
2016	12	15	17	249.64	224.98	176.15	21.52	203.46	27.31	0.00	0.00	27.31	24.66	19.30	0.67	23.98	4.68	0.00	0.00	4.68	34.50	4.22					
2016	12	17	11	210.09	186.65	173.87	10.26	176.39	2.52	0.00	0.25	2.27	23.44	21.83	1.86	21.58	0.00	0.25	0.00	0.00	14.98	0.00					
2016	12	17	13	219.01	196.31	180.48	10.99	185.32	4.84	0.00	0.00	4.84	22.69	20.86	1.31	21.38	0.52	0.00	0.00	0.52	14.97	0.00					
2016	12	17	14	216.06	193.70	178.16	12.60	181.11	2.95	0.00	0.00	2.95	22.36	20.57	1.12	21.24	0.67	0.00	0.00	0.67	14.98	0.00					
2016	12	17	15	218.64	196.36	180.37	13.63	182.72	2.35	0.00	0.00	2.35	22.28	20.47	0.82	21.47	1.00	0.00	0.00	1.00	14.97	0.00					
2016	12	17	16	233.62	209.86	189.41	11.21	198.65	9.24	0.00	0.00	9.24	23.76	21.44	1.02	22.74	1.29	0.00	0.00	1.29	14.99	0.44					
2016	12	17	17	245.71	220.83	203.26	12.06	208.77	5.51	0.00	0.00	5.51	24.88	22.90	1.17	23.71	0.81	0.00	0.00	0.81	16.44	0.94					
2016	12	19	16	241.10	215.81	189.34	28.43	187.38	0.00	1.96	0.00	0.00	25.30	22.19	0.06	25.23	3.04	0.00	1.96	1.08	9.55	2.01					
2016	12	19	17	260.42	233.83	189.78	24.83	209.00	19.22	0.00	0.00	19.22	26.60	21.59	0.00	26.60	5.01	0.00	0.00	5.01	24.29	3.77					
2016	12	19	18	257.32	231.26	197.58	27.51	203.75	6.16	0.00	0.00	6.16	26.06	22.26	0.14	25.92	3.65	0.00	0.00	3.65	16.68	3.32					
2016	12	19	19	253.91	228.32	194.02	20.89	207.43	13.41	0.00	0.00	13.41	25.58	21.74	0.00	25.58	3.84	0.00	0.00	3.84	18.88	3.01					
2016	12	19	20	248.62	223.71	189.42	18.85	204.86	15.44	0.00	0.00	15.44	24.91	21.09	0.00	24.91	3.82	0.00	0.00	3.82	25.53	3.69					
2016	12	19	21	237.79	214.28	186.86	18.05	196.23	9.37	0.00	0.00	9.37	23.51	20.50	0.00	23.51	3.01	0.00	0.00	3.01	15.11	3.28					
2016	12	19	22	219.71	197.59	177.82	16.22	181.37	3.55	0.00	0.00	3.55	22.11	19.90	0.00	22.11	2.21	0.00	0.00	2.21	14.96	3.01					
2016	12	22	15	206.16	184.76	174.89	8.32	176.44	1.55	0.00	0.00	1.55	21.40	20.26	0.00	21.40	1.14	0.00	0.00	1.14	3.39	0.50					
2016	12	22	16	223.70	201.02	175.23	8.61	192.41	17.18	0.00	0.00	17.18	22.68	19.77	0.00	22.68	2.91	0.00	0.00	2.91	18.20	2.26					
2016	12	22	17	234.66	211.35	175.63	0.69	210.66	35.03	0.00	0.00	35.03	23.31	19.37	0.00	23.31	3.94	0.00	0.00	3.94	31.58	3.48					
2016	12	22	18	228.46	206.07	176.66	0.00	206.07	29.40	0.00	0.00	29.40	22.40	19.20	0.00	22.40	3.20	0.00	0.00	3.20	25.45	3.47					
2016	12	22	19	223.41	201.54	179.94	0.09	201.45	21.51	0.00	0.00	21.51	21.87	19.53	0.15	21.72	2.19	0.00	0.00	2.19	19.38	2.91					
2016	12	22	20	216.86	195.82	181.95	2.57	193.25	11.29	0.00	0.00	11.29	21.04	19.55	0.51	20.53	0.98	0.00	0.00	0.98	11.49	1.13					
2016	12	26	17	219.87	197.25	175.53	13.88	183.37	7.84	0.00	0.00	7.84	22.62	20.13	0.00	22.62	2.49	0.00	0.00	2.49	14.41	0.59					
2016	12	26	18	216.42	194.24	175.21	7.63	186.61	11.40	0.00	0.00	11.40	22.18	20.01	0.00	22.18	2.17	0.00	0.00	2.17	15.07	2.03					
2016	12	26	19	210.48	188.91	175.95	5.26	183.65	7.70	0.00	0.00	7.70	21.56	20.08	0.00	21.56	1.48	0.00	0.00	1.48	15.01	2.02					
2016	12	26	20	205.45	184.48	177.37	6.64	177.84	0.47	0.00	0.00	0.47	20.96	20.16	0.21	20.76	0.60	0.00	0.00	0.60	14.81	0.92					
2016	12	28	17	228.68	205.57	178.07	15.59	189.99	11.91	0.00	0.00	11.91	23.10	20.01	1.36	21.74	1.73	0.00	0.00	1.73	14.99	1.07					
2016	12	28	18	222.27	200.04	178.14	13.58	186.46	8.33	0.00	0.00	8.33	22.23	19.79	0.94	21.28	1.49	0.00	0.00	1.49	14.98	1.04					
2016 Totals															1786.60						250.79			2442.64		300.64	
2017	01	03	08	212.80	190.37	174.45	9.62	180.75	6.30	0.00	0.00	6.30	22.43	20.55	0.54	21.89	1.33	0.00	0.00	1.33	11.51	0.00					
2017	01	03	09	211.68	189.35	174.43	6.38	182.97	8.54	0.00	0.00	8.54	22.33	20.57	0.04	22.29	1.72	0.00	0.00	1.72	15.00	0.00					
2017	01	03	10	207.28	185.61	174.61	2.80	182.81	8.19	0.00	0.00	8.19	21.67	20.39	0.00	21.67	1.28	0.00	0.00	1.28	14.99	0.00					
2017	01	03	11	204.47	183.14	174.66	0.76	182.38	7.72	0.00	0.00	7.72	21.33	20													

Year	Month	Day	Hour	Island Load	MECL Load	Allowed	MECL Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	COS Load	Allowed	COS Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	Mecl Generation	COS Generation
2017	01	03	16	218.80	196.12	175.32	0.15	195.97	20.65	0.00	0.00	20.65	22.68	20.28	0.74	21.95	1.67	0.00	0.00	1.67	21.40	0.55
2017	01	03	17	229.95	206.91	178.04	0.22	206.69	28.65	0.00	0.00	28.65	23.04	19.83	1.28	21.76	1.94	0.00	0.00	1.94	30.01	2.02
2017	01	03	18	223.43	201.32	178.32	1.91	199.41	21.09	0.00	0.00	21.09	22.10	19.58	0.85	21.26	1.68	0.00	0.00	1.68	22.54	2.02
2017	01	03	19	218.15	196.26	178.10	5.80	190.45	12.35	0.00	0.00	12.35	21.90	19.87	0.66	21.24	1.37	0.00	0.00	1.37	16.99	2.02
2017	01	07	16	221.26	197.98	178.62	5.54	192.43	13.81	0.00	0.00	13.81	23.28	21.01	0.00	23.28	2.28	0.00	0.00	2.28	16.82	0.00
2017	01	07	17	231.90	207.66	174.71	1.96	205.69	30.98	0.00	0.00	30.98	24.24	20.39	0.00	24.24	3.85	0.00	0.00	3.85	33.35	2.26
2017	01	07	18	222.73	199.44	174.64	3.07	196.37	21.73	0.00	0.00	21.73	23.29	20.39	0.00	23.29	2.90	0.00	0.00	2.90	24.93	3.01
2017	01	07	19	215.96	193.46	174.68	2.55	190.91	16.23	0.00	0.00	16.23	22.50	20.32	0.00	22.50	2.18	0.00	0.00	2.18	15.46	2.26
2017	01	07	20	209.25	187.03	174.66	0.46	186.57	11.91	0.00	0.00	11.91	22.23	20.76	0.00	22.23	1.47	0.00	0.00	1.47	14.99	2.01
2017	01	16	06	211.59	190.18	176.60	8.43	181.75	5.14	0.00	0.00	5.14	21.41	19.88	0.83	20.58	0.70	0.00	0.00	0.70	8.12	0.00
2017	01	16	07	234.19	210.09	177.65	11.86	198.23	20.58	0.00	0.00	20.58	24.10	20.38	1.30	22.80	2.43	0.00	0.00	2.43	34.07	1.79
2017	01	16	08	234.32	209.60	181.46	15.54	194.06	12.60	0.00	0.00	12.60	24.72	21.40	1.39	23.33	1.93	0.00	0.00	1.93	38.36	10.62
2017	01	18	07	216.79	195.16	175.54	3.79	191.36	15.82	0.00	0.00	15.82	21.63	19.46	0.00	21.63	2.17	0.00	0.00	2.17	17.47	0.84
2017	01	18	08	221.95	198.91	174.76	1.89	197.02	22.26	0.00	0.00	22.26	23.04	20.24	0.00	23.04	2.80	0.00	0.00	2.80	23.16	2.02
2017	01	18	09	221.02	197.55	174.30	1.01	196.54	22.25	0.00	0.00	22.25	23.47	20.70	0.00	23.47	2.76	0.00	0.00	2.76	21.78	2.02
2017	01	18	10	216.65	193.09	173.79	0.95	192.14	18.35	0.00	0.00	18.35	23.56	21.21	0.00	23.56	2.36	0.00	0.00	2.36	18.13	2.27
2017	01	18	11	215.62	192.65	174.23	0.17	192.48	18.25	0.00	0.00	18.25	22.97	20.77	0.00	22.97	2.20	0.00	0.00	2.20	16.70	2.04
2017	01	18	12	210.94	187.76	173.57	0.21	187.55	13.98	0.00	0.00	13.98	23.19	21.43	0.00	23.19	1.75	0.00	0.00	1.75	16.21	3.03
2017	01	18	13	207.22	185.12	174.20	0.62	184.50	10.30	0.00	0.00	10.30	22.10	20.80	0.00	22.10	1.30	0.00	0.00	1.30	14.99	1.58
2017	01	18	14	203.93	182.01	174.04	1.06	180.96	6.91	0.00	0.00	6.91	21.92	20.96	0.02	21.89	0.94	0.00	0.00	0.94	14.99	1.02
2017	01	18	15	205.95	184.16	174.37	1.35	182.80	8.43	0.00	0.00	8.43	21.79	20.63	0.00	21.79	1.16	0.00	0.00	1.16	14.98	1.03
2017	01	18	16	219.06	196.37	174.80	0.82	195.54	20.74	0.00	0.00	20.74	22.69	20.20	0.00	22.69	2.49	0.00	0.00	2.49	21.85	1.69
2017	01	18	17	235.04	211.27	175.27	0.47	210.80	35.53	0.00	0.00	35.53	23.78	19.73	0.00	23.78	4.05	0.00	0.00	4.05	34.66	3.43
2017	01	18	18	232.88	209.62	175.52	1.26	208.36	32.84	0.00	0.00	32.84	23.26	19.48	0.00	23.26	3.78	0.00	0.00	3.78	32.05	4.07
2017	01	18	19	228.17	205.66	176.10	2.52	203.14	27.04	0.00	0.00	27.04	22.51	19.27	0.00	22.51	3.24	0.00	0.00	3.24	28.28	3.07
2017	01	18	20	223.15	200.95	176.93	1.99	198.96	22.03	0.00	0.00	22.03	22.20	19.54	0.37	21.83	2.29	0.00	0.00	2.29	21.31	2.72
2017	01	18	21	213.32	192.44	176.36	0.76	191.68	15.32	0.00	0.00	15.32	20.88	19.14	0.90	19.99	0.85	0.00	0.00	0.85	14.99	1.13
2017	01	20	11	206.10	184.31	178.97	2.42	181.89	2.92	0.00	0.73	2.19	21.79	21.16	1.36	20.43	0.00	0.73	0.00	0.00	6.13	0.00
2017	01	20	12	201.55	180.23	176.42	1.12	179.12	2.70	0.00	1.90	0.80	21.32	20.87	2.35	18.97	0.00	1.90	0.00	0.00	12.74	0.00
2017	01	20	13	201.31	179.75	176.47	0.68	179.06	2.59	0.00	1.45	1.15	21.56	21.17	1.84	19.72	0.00	1.45	0.00	0.00	5.16	0.00
2017	01	20	14	200.58	179.12	174.83	1.19	177.93	3.10	0.00	1.50	1.59	21.47	20.96	2.02	19.45	0.00	1.50	0.00	0.00	0.00	0.00
2017	01	20	15	202.85	181.20	176.08	2.07	179.13	3.05	0.00	0.86	2.19	21.65	21.04	1.47	20.18	0.00	0.86	0.00	0.00	0.65	0.00
2017	01	20	16	210.26	188.06	175.21	12.89	175.17	0.00	0.04	0.00	0.00	22.20	20.68	1.41	20.79	0.11	0.00	0.04	0.07	10.97	0.00
2017	01	20	17	219.92	197.65	175.25	12.15	185.50	10.24	0.00	0.00	10.24	22.27	19.75	1.15	21.12	1.37	0.00	0.00	1.37	13.97	0.00
2017	01	20	18	215.72	193.95	175.32	10.69	183.26	7.94	0.00	0.00	7.94	21.77	19.68	0.54	21.22	1.55	0.00	0.00	1.55	13.99	0.00
2017	01	20	19	209.54	188.31	175.25	8.46	179.85	4.60	0.00	0.00	4.60	21.22	19.75	0.43	20.79	1.04	0.00	0.00	1.04	13.99	0.00
2017	01	21	11	204.32	183.12	175.40	2.41	180.71	5.31	0.00	0.71	4.60	21.21	20.31	1.60	19.61	0.00	0.71	0.00	0.00	6.73	0.00
2017	01	21	12	200.53	179.71	175.82	0.85	178.85	3.03	0.00	0.77	2.26	20.82	20.37	1.22	19.61	0.00	0.77	0.00	0.00	4.97	0.00
2017	01	21	17	215.15	193.32	183.53	1.86	191.46	7.93	0.00	0.21	7.72	21.84	20.73	1.31	20.53	0.00	0.21	0.00	0.00	10.04	0.00
2017	01	23	17	217.57	195.65	175.35	18.62	177.02	1.67	0.00	0.00	1.67	21.92	19.65	1.62	20.30	0.66	0.00	0.00	0.66	4.79	0.00
2017	01	23	18	216.70	194.90	175.38	13.36	181.54	6.16	0.00	0.00	6.16	21.80	19.62	1.66	20.14	0.52	0.00	0.00	0.52	14.98	0.00
2017	01	23	19	213.07	191.50	176.19	12.45	179.05	2.85	0.00	0.28	2.58	21.57	19.85	2.00	19.57	0.00	0.28	0.00	0.00	15.00	0.00
2017	01	30	17	210.67	188.81	184.06	4.71	184.10	0.04	0.00	0.00	0.04	21.86	21.31	0.00	21.86	0.55	0.00	0.00	0.55	4.95	0.00
2017	01	30	18	213.28	191.14	182.75	4.48	186.66	3.91	0.00	0.00	3.91	22.13	21.16	0.00	22.13	0.97	0.00	0.00	0.97	14.74	0.86
2017	01	31	17	224.87	201.86	175.09	19.25	182.61	7.53	0.00	0.00	7.53	23.00	19.95	0.66	22.35	2.40	0.00	0.00	2.40	10.47	1.00
2017	01	31	18	228.64	205.34	175.13	9.68	195.65	20.53	0.00	0.00	20.53	23.30	19.87	0.07	23.23	3.36	0.00	0.00	3.36	24.40	2.02
2017	01	31	19	226.05	202.97	175.09	5.90	197.08	21.99	0.00	0.00	21.99	23.08	19.91	0.00	23.08	3.17	0.00	0.00	3.17	21.13	2.03
2017	01	31	20	220.77	198.11	174.98	1.52	196.59	21.60	0.00	0.00	21.60	22.66	20.02	0.00	22.66	2.65	0.00	0.00	2.65	21.50	2.03
2017	01	31	21	212.64	190.92	175.09	1.28	189.64	14.55	0.00	0.00	14.55	21.71	19.91	0.00	21.71	1.80	0.00	0.00	1.80	15.23	1.40
2017	01	31	22	199.00	178.47	174.89	3.50	174.97	0.08	0.00	0.00	0.08	20.52	20.11	0.00	20.52	0.41	0.00	0.00	0.41	6.83	0.60
2017	2	01	06	203.59	183.50	175.75	0.10	183.39	7.64	0.00	0.00	7.64	20.09	19.25	0.00	20.09	0.85	0.00	0.00	0.85	8.99	0.00
2017	2	01	07	224.52	202.00	175.44	0.00	202.00	26.56	0.00	0.00	26.56	22.52	19.56	0.00	22.52	2.96	0.00	0.00	2.96	26.58	2.00
2017	2	01	08	228.77	204.99	174.73	0.00	204.99	30.26	0.00	0.00	30.26	23.78	20.27	0.00	23.78	3.51	0.00	0.00	3.51	34.30	2.18
2017	2	01	09	221.01	197.51	174.27	0.00	197.51	23.24	0.00	0.00	23.24	23.49	20.73	0.00	23.49	2.76	0.00	0.00	2.76	29.67	3.02
2017	2	01	10	212.46	189.76	174.16	0.00	189.76	15.60	0.00	0.00	15.60	22.71	20.84	0.00	22.71	1.87	0.00	0.00	1.87	21.41	3.01
2017	2	01	11	208.42</																		



Attachment 3 - Island System Curtailments 2013-2017

Year	Month	Day	Hour	Island Load	MECL Load	Allowed	MECL Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	COS Load	Allowed	COS Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	Mecl Generation	COS Generation
2017	2	01	17	221.85	199.14	175.69	2.71	196.43	20.73	0.00	0.00	20.73	22.72	20.04	0.42	22.30	2.26	0.00	0.00	2.26	23.13	0.92
2017	2	01	18	220.07	197.67	181.42	4.24	193.43	12.01	0.00	0.00	12.01	22.40	20.56	0.50	21.90	1.34	0.00	0.00	1.34	19.72	1.00
2017	2	01	19	215.36	193.41	183.94	4.50	188.92	4.97	0.00	0.00	4.97	21.95	20.88	0.40	21.55	0.67	0.00	0.00	0.67	15.02	1.00
2017	2	02	07	205.57	185.07	177.03	0.85	184.22	7.19	0.00	0.00	7.19	20.50	19.61	0.00	20.50	0.89	0.00	0.00	0.89	9.96	0.00
2017	2	02	08	210.52	189.12	175.25	0.04	189.08	13.84	0.00	0.00	13.84	21.40	19.83	0.00	21.40	1.57	0.00	0.00	1.57	15.02	0.41
2017	2	02	09	208.89	186.92	182.01	0.00	186.92	4.91	0.00	0.00	4.91	21.97	21.39	0.00	21.97	0.58	0.00	0.00	0.58	15.00	1.03
2017	2	02	10	207.20	185.03	178.02	0.03	184.99	6.98	0.00	0.68	6.29	22.17	21.34	1.52	20.65	0.00	0.68	0.00	0.00	14.98	0.60
2017	2	02	11	207.03	185.42	174.82	2.28	183.14	8.32	0.00	0.33	7.99	21.61	20.37	1.57	20.04	0.00	0.33	0.00	0.00	14.99	0.00
2017	2	02	17	217.78	195.54	175.12	5.30	190.24	15.12	0.00	0.00	15.12	22.24	19.91	0.64	21.60	1.68	0.00	0.00	1.68	12.35	0.59
2017	2	05	09	212.03	190.57	175.27	7.64	182.93	7.66	0.00	0.00	7.66	21.46	19.73	0.00	21.46	1.72	0.00	0.00	1.72	12.03	2.01
2017	2	05	10	212.39	190.64	175.03	4.40	186.24	11.21	0.00	0.00	11.21	21.75	19.97	0.38	21.37	1.40	0.00	0.00	1.40	12.59	2.01
2017	2	05	11	214.38	191.95	177.85	3.94	188.01	10.16	0.00	0.00	10.16	22.42	20.78	0.93	21.50	0.72	0.00	0.00	0.72	14.98	1.84
2017	2	07	16	227.13	203.03	174.66	27.64	175.39	0.73	0.00	0.00	0.73	24.10	20.74	0.00	24.10	3.37	0.00	0.00	3.37	5.52	1.52
2017	2	07	17	242.72	218.07	175.20	14.08	203.99	28.79	0.00	0.00	28.79	24.65	19.80	0.00	24.65	4.85	0.00	0.00	4.85	33.01	3.99
2017	2	07	18	248.94	223.94	175.42	8.59	215.36	39.93	0.00	0.00	39.93	24.99	19.58	0.00	24.99	5.42	0.00	0.00	5.42	42.40	5.04
2017	2	07	19	246.66	221.94	175.46	2.04	219.90	44.44	0.00	0.00	44.44	24.72	19.54	0.00	24.72	5.18	0.00	0.00	5.18	40.84	5.03
2017	2	07	20	240.33	215.97	179.24	0.24	215.74	36.50	0.00	0.00	36.50	24.36	20.21	0.00	24.36	4.14	0.00	0.00	4.14	35.69	4.35
2017	2	07	21	230.34	207.34	179.45	0.00	207.33	27.89	0.00	0.00	27.89	23.00	19.91	0.00	23.00	3.09	0.00	0.00	3.09	26.36	3.19
2017	2	07	22	214.18	192.40	177.28	0.23	192.17	14.89	0.00	0.00	14.89	21.78	20.07	0.04	21.74	1.67	0.00	0.00	1.67	17.37	2.01
2017	2	11	09	221.34	197.82	179.39	17.90	179.91	0.52	0.00	0.00	0.52	23.52	21.33	1.06	22.47	1.13	0.00	0.00	1.13	3.41	0.00
2017	2	11	10	218.44	195.18	174.41	8.12	187.06	12.65	0.00	0.00	12.65	23.26	20.78	0.06	23.20	2.41	0.00	0.00	2.41	15.03	2.30
2017	2	11	11	214.84	191.84	174.12	5.27	186.57	12.45	0.00	0.00	12.45	23.00	20.88	0.00	23.00	2.12	0.00	0.00	2.12	15.02	2.27
2017	2	11	12	210.24	187.63	174.03	3.27	184.37	10.33	0.00	0.00	10.33	22.61	20.97	0.00	22.61	1.64	0.00	0.00	1.64	14.99	1.46
2017	2	11	13	204.49	181.95	173.50	0.87	181.08	7.58	0.00	0.00	7.58	22.54	21.50	0.34	22.21	0.71	0.00	0.00	0.71	14.97	0.96
2017	2	11	14	203.41	181.06	173.57	0.31	180.75	7.18	0.00	0.00	7.18	22.35	21.43	0.29	22.06	0.63	0.00	0.00	0.63	14.98	0.00
2017	2	11	15	208.17	185.74	173.99	0.00	185.74	11.75	0.00	0.00	11.75	22.43	21.01	0.00	22.43	1.42	0.00	0.00	1.42	15.00	0.00
2017	2	11	16	218.99	195.90	174.44	0.00	195.90	21.46	0.00	0.00	21.46	23.09	20.56	0.00	23.09	2.53	0.00	0.00	2.53	20.02	1.45
2017	2	11	17	230.65	206.63	174.69	0.01	206.62	31.93	0.00	0.00	31.93	24.02	20.31	0.00	24.02	3.71	0.00	0.00	3.71	29.37	3.19
2017	2	11	18	235.89	211.52	174.85	0.06	211.46	36.61	0.00	0.00	36.61	24.38	20.15	0.00	24.38	4.23	0.00	0.00	4.23	35.00	4.08
2017	2	11	19	231.02	207.45	175.10	0.01	207.43	32.34	0.00	0.00	32.34	23.58	19.90	0.00	23.58	3.68	0.00	0.00	3.68	35.00	4.02
2017	2	11	20	223.99	200.95	174.94	0.00	200.95	26.01	0.00	0.00	26.01	23.05	20.06	0.00	23.05	2.98	0.00	0.00	2.98	29.96	3.23
2017	2	11	21	217.08	194.79	174.97	0.00	194.79	19.82	0.00	0.00	19.82	22.29	20.03	0.00	22.29	2.27	0.00	0.00	2.27	23.23	2.91
2017	2	11	22	207.29	186.24	175.20	0.00	186.24	11.04	0.00	0.00	11.04	21.05	19.80	0.00	21.05	1.25	0.00	0.00	1.25	15.61	2.05
2017	2	11	23	198.18	177.93	175.07	0.00	177.93	2.86	0.00	0.00	2.86	20.26	19.93	0.00	20.26	0.33	0.00	0.00	0.33	3.41	0.25
2017	2	12	05	195.99	176.31	175.41	0.00	176.31	0.89	0.00	0.00	0.89	19.69	19.59	0.00	19.69	0.10	0.00	0.00	0.10	0.00	0.00
2017	2	12	06	204.10	183.53	175.35	0.00	183.53	8.18	0.00	0.00	8.18	20.57	19.65	0.00	20.57	0.92	0.00	0.00	0.92	9.46	0.32
2017	2	12	07	212.10	190.75	175.37	0.00	190.75	15.38	0.00	0.00	15.38	21.36	19.63	0.00	21.36	1.72	0.00	0.00	1.72	15.00	1.24
2017	2	12	08	217.09	195.26	175.40	0.00	195.26	19.86	0.00	0.00	19.86	21.82	19.60	0.00	21.82	2.22	0.00	0.00	2.22	19.10	2.03
2017	2	12	09	213.91	193.34	176.24	0.08	193.25	17.01	0.00	0.00	17.01	20.58	18.76	0.27	20.31	1.55	0.00	0.00	1.55	17.96	1.69
2017	2	12	10	211.00	189.31	174.96	0.79	188.52	13.57	0.00	0.00	13.57	21.69	20.04	0.06	21.63	1.58	0.00	0.00	1.58	14.96	1.04
2017	2	12	11	205.44	184.03	174.78	2.07	181.96	7.18	0.00	0.00	7.18	21.41	20.34	0.10	21.31	0.98	0.00	0.00	0.98	15.02	1.03
2017	2	15	15	197.92	176.71	174.10	1.33	175.38	1.28	0.00	0.00	1.28	21.21	20.90	0.00	21.21	0.31	0.00	0.00	0.31	3.84	0.00
2017	2	15	16	206.09	184.33	174.42	0.84	183.50	9.08	0.00	0.00	9.08	21.75	20.58	0.00	21.75	1.17	0.00	0.00	1.17	13.49	0.00
2017	2	15	17	215.69	193.71	175.13	0.35	193.36	18.23	0.00	0.00	18.23	21.98	19.87	0.00	21.98	2.11	0.00	0.00	2.11	18.52	1.24
2017	2	15	18	219.71	197.38	175.18	0.04	197.34	22.16	0.00	0.00	22.16	22.33	19.82	0.00	22.33	2.51	0.00	0.00	2.51	23.37	2.03
2017	2	15	19	214.57	192.72	175.78	0.00	192.72	16.93	0.00	0.00	16.93	21.85	19.93	0.02	21.84	1.90	0.00	0.00	1.90	17.04	2.02
2017	2	15	20	207.95	186.49	174.89	1.45	185.04	10.15	0.00	0.00	10.15	21.46	20.13	0.96	20.50	0.38	0.00	0.00	0.38	14.97	1.17
2017	2	21	18	207.54	186.01	174.77	0.00	186.01	11.24	0.00	0.00	11.24	21.53	20.23	0.00	21.53	1.30	0.00	0.00	1.30	16.31	0.00
2017	2	21	19	207.32	185.60	180.01	0.36	185.24	5.23	0.00	0.00	5.23	21.71	21.06	0.00	21.71	0.65	0.00	0.00	0.65	16.42	0.00
2017	2	22	18	201.12	180.80	175.30	0.61	180.20	4.90	0.00	0.00	4.90	20.32	19.70	0.00	20.32	0.62	0.00	0.00	0.62	15.14	0.00
2017	2	22	19	199.49	179.43	175.39	0.45	178.98	3.59	0.00	0.00	3.59	20.06	19.61	0.00	20.06	0.45	0.00	0.00	0.45	12.29	0.00
2017	2	23	07	198.64	178.68	175.63	0.89	177.79	2.16	0.00	1.05	1.11	19.96	19.62	1.39	18.57	0.00	1.05	0.00	0.00	10.03	0.00
2017	03	07	07	211.76	190.06	176.84	7.29	182.77	5.93	0.00	0.00	5.93	21.70	20.19	0.00	21.70	1.51	0.00	0.00	1.51	14.39	0.53
2017	03	07	08	208.38	185.74	177.48	0.73	185.02	7.54	0.00	0.00	7.54	22.64	21.63	0.00	22.64	1.01	0.00	0.00	1.01	15.00	1.00
2017	03	07	09	201.07	178.60	176.64	0.14	178.46	1.82	0.00	0.00	1.82	22.47	22.23	0.00	22.47	0.25	0.00	0.00	0.25	13.30	0.83
2017	03	13	17	206.21	185.68	175.58	11.00	174.67	0.00													

Year	Month	Day	Hour	Island Load	MECL Load	Allowed	MECL Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	COS Load	Allowed	COS Wind	Actual	Curtailment ?	Excess	Borrowed	Curtailment	Mecl Generation	COS Generation	
2017	03	14	08	216.74	194.34	174.84	13.30	181.04	6.19	0.00	0.00	6.19	22.41	20.16	0.29	22.12	1.96	0.00	0.00	1.96	6.17	0.00	
2017	03	14	09	209.11	187.08	174.46	4.46	182.62	8.16	0.00	0.00	8.16	22.03	20.54	0.00	22.03	1.49	0.00	0.00	1.49	6.29	0.44	
2017	03	14	10	201.62	179.90	173.99	1.57	178.32	4.33	0.00	0.00	4.33	21.72	21.01	0.00	21.72	0.71	0.00	0.00	0.71	5.95	1.03	
2017	03	27	07	210.07	189.09	175.52	6.24	182.84	7.33	0.00	0.00	7.33	20.99	19.48	0.00	20.99	1.51	0.00	0.00	1.51	5.22	0.00	
2017	03	27	08	214.33	192.32	174.97	1.15	191.16	16.19	0.00	0.00	16.19	22.02	20.03	0.00	22.02	1.99	0.00	0.00	1.99	13.69	2.08	
2017	03	27	09	211.22	188.86	174.36	0.00	188.86	14.50	0.00	0.00	14.50	22.36	20.64	0.00	22.36	1.72	0.00	0.00	1.72	12.73	2.05	
2017	03	27	10	206.16	184.02	174.08	0.00	184.02	9.94	0.00	0.00	9.94	22.14	20.94	0.00	22.14	1.20	0.00	0.00	1.20	6.78	2.01	
2017	03	27	11	203.25	181.29	174.33	0.00	181.29	6.95	0.00	0.00	6.95	21.97	21.12	0.00	21.97	0.84	0.00	0.00	0.84	5.32	1.26	
2017	03	27	12	196.79	175.38	174.02	0.02	175.36	1.34	0.00	0.00	1.34	21.41	21.25	0.01	21.40	0.15	0.00	0.00	0.15	1.44	0.42	
2017	03	27	16	201.83	180.34	174.27	1.01	179.32	5.05	0.00	0.00	5.05	21.49	20.77	0.00	21.49	0.72	0.00	0.00	0.72	5.14	0.00	
2017	03	27	17	203.03	182.07	176.30	0.70	181.37	5.07	0.00	0.00	5.07	20.96	20.29	0.40	20.56	0.27	0.00	0.00	0.27	14.72	1.03	
2017	07	17	16	196.56	176.69	175.28	0.16	176.53	1.24	0.00	0.00	1.24	19.87	19.72	0.00	19.87	0.16	0.00	0.00	0.16	0.00	0.00	
2017	07	17	17	197.80	178.37	175.85	0.29	178.08	2.23	0.00	0.00	2.23	19.42	19.15	0.00	19.42	0.27	0.00	0.00	0.27	0.00	0.00	
2017	07	20	12	198.24	178.56	175.64	0.83	177.73	2.09	0.00	0.40	1.69	19.68	19.36	0.72	18.96	0.00	0.40	0.00	0.00	0.00	0.00	
2017	07	20	13	197.88	178.27	175.68	0.03	178.24	2.56	0.00	0.37	2.19	19.61	19.32	0.66	18.95	0.00	0.37	0.00	0.00	0.00	0.00	
2017	07	20	14	196.54	177.16	175.77	0.00	177.16	1.39	0.00	0.44	0.95	19.38	19.23	0.59	18.79	0.00	0.44	0.00	0.00	0.00	0.00	
2017	07	20	15	196.71	177.32	175.78	0.00	177.32	1.55	0.00	0.12	1.43	19.39	19.22	0.29	19.10	0.00	0.12	0.00	0.00	0.00	0.00	
2017	07	20	16	200.02	180.57	176.03	0.13	180.43	4.40	0.00	0.00	4.40	19.45	18.97	0.40	19.05	0.09	0.00	0.00	0.09	0.00	0.00	
2017	07	20	17	200.58	181.44	176.40	1.81	179.63	3.23	0.00	0.00	3.23	19.14	18.60	0.00	19.14	0.53	0.00	0.00	0.53	0.00	0.00	
2017	07	21	16	197.17	178.40	176.45	0.76	177.64	1.19	0.00	1.19	0.00	18.78	18.57	1.40	17.38	0.00	1.19	0.00	0.00	0.00	0.00	
2017	11	09	17	198.77	178.74	175.34	0.01	178.73	3.39	0.00	0.18	3.21	20.04	19.66	0.56	19.48	0.00	0.18	0.00	0.00	0.00	0.00	
2017	11	12	17	200.91	180.07	176.32	0.02	180.05	3.73	0.00	0.00	3.73	20.84	20.41	0.00	20.84	0.43	0.00	0.00	0.43	11.65	0.00	
2017	11	12	18	195.44	175.26	174.89	0.14	175.12	0.23	0.00	0.00	0.23	20.18	20.14	0.00	20.18	0.04	0.00	0.00	0.04	15.00	0.00	
2017	11	13	17	205.91	185.15	175.34	0.35	184.80	9.46	0.00	0.00	9.46	20.76	19.66	0.00	20.76	1.10	0.00	0.00	1.10	13.63	0.69	
2017	11	13	18	199.29	179.24	175.38	0.29	178.95	3.57	0.00	0.00	3.57	20.05	19.62	0.00	20.05	0.43	0.00	0.00	0.43	9.48	1.03	
2017	11	15	16	207.86	186.40	174.86	2.41	183.99	9.12	0.00	0.00	9.12	21.46	20.14	0.00	21.46	1.33	0.00	0.00	1.33	25.86	0.32	
2017	11	15	17	217.80	195.93	175.42	1.31	194.61	19.19	0.00	0.00	19.19	21.87	19.58	0.00	21.87	2.29	0.00	0.00	2.29	35.07	2.01	
2017	11	15	18	211.10	190.18	175.68	0.73	189.45	13.78	0.00	0.00	13.78	20.92	19.32	0.00	20.92	1.60	0.00	0.00	1.60	31.04	1.51	
2017	11	15	19	205.92	185.60	175.77	0.02	185.59	9.82	0.00	0.00	9.82	20.31	19.23	0.00	20.31	1.08	0.00	0.00	1.08	25.02	1.01	
2017	11	15	20	198.58	178.88	175.66	0.00	178.88	3.22	0.00	0.00	3.22	19.70	19.34	0.00	19.70	0.36	0.00	0.00	0.36	18.78	0.59	
2017	12	29	17	254.54	228.38	215.33	3.99	224.38	9.05	0.00	0.00	9.05	26.16	24.67	0.00	26.16	1.49	0.00	0.00	1.49	12.07	0.26	
2017	12	29	18	247.35	222.24	215.64	2.21	220.03	4.39	0.00	0.00	4.39	25.11	24.36	0.00	25.11	0.75	0.00	0.00	0.75	15.01	1.07	
2017 Totals												1807.02			225.62			2406.44			187.00		