

September 12, 2018

Regulatory Authority of Bermuda
Craig Appin House, 1st Floor
8 Wesley Street
Hamilton HM 11

Attention: Mr. Aaron Smith, Chief Executive

TARIFF FILING

Dear Sirs,

This is to advise you that we wish to make the following changes to the fuel adjustment rate ("FAR"):

Increase from the existing rate of 13.50 cents per kilowatt-hour sold for September 2018 to 14.00 cents per kilowatt-hour sold for October 2018.

Our current submission is provided using the minimum filing report (MFR) format established by the former Energy Commission. Please note the Commercial Renewable System Excess Energy Rate (CRSEER) representing the rate BELCO would pay commercial owners for excess energy generated but not consumed and exported to BELCO no longer used has been calculated and included in our August 2018 FAR MFR submission as directed per Regulatory Authority letter dated 18 April 2017.

The actual fuel adjustment cost recovery position as at 31st August 2018 was \$759,053 under recovered as compared to the \$113,753 under recovery position projected in our last filing. The \$645,300 unfavorable variance is due to:

- The total actual barrels of fuel consumed in August were 3,113 barrels higher than projected, resulting in a negative impact on the recovery position of \$262,115;
- Net price variance positively impacted the recovery position by \$2,322; and
- Actual August electric sales were 2,980,294 KWH's lower than projected. This variance resulted in a net negative impact on the fuel recovery position of \$385,507.

Our detailed working paper supporting this analysis has been included in the MFR (please refer to Page 17 "FAR Recovery Variance Analysis") as requested per the Authority's email dated 25 January 2017.



BELCO

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Should you have any questions concerning the above, please do not hesitate to contact us.

Yours sincerely,

BERMUDA ELECTRIC LIGHT COMPANY LIMITED

for 

Robert Schaefer,
Senior Vice President, Chief Financial Officer

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BELCO



Bermuda Electric Light Company Limited

Fuel Adjustment Submission

FOR PUBLIC DISCLOSURE

October 2018

This submission is filed by Bermuda Electric Light Company Limited (“BELCO”) with the Regulatory Authority of Bermuda (the “Authority”) using the minimum filing requirements (“MFR”) format established by the Energy Commission in its directive letter sent to BELCO dated December 30, 2013.

In accordance with Section 33 of the Regulatory Authority Act 2011, BELCO claims confidentiality over certain information provided to the Authority. That information is therefore excluded from the redacted version of this filing on the grounds that disclosure of the information would have, or could reasonably be expected to have, an adverse effect on BELCO’s commercial interests

Fuel Adjustment Submission

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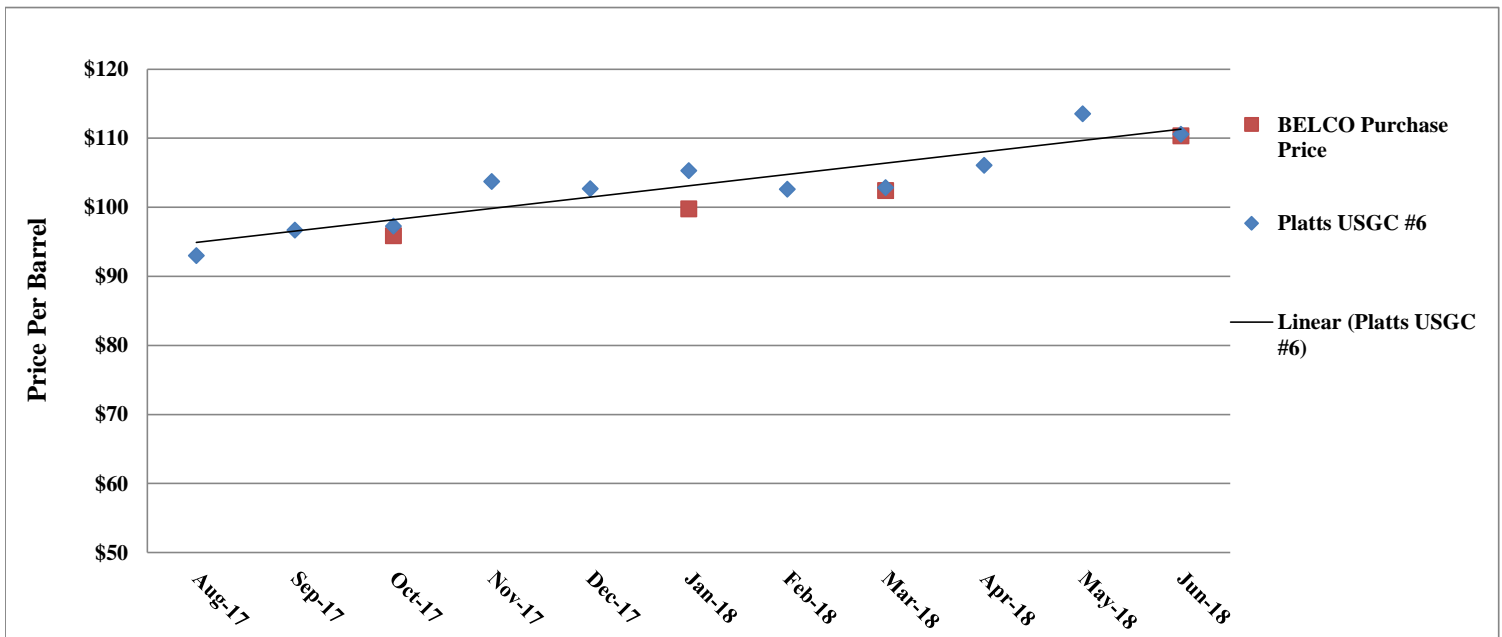


Heavy Fuel Oil Purchased

Versus

Platt's U.S. Gulf Coast Waterborne mid-No. 6, 3% Sulfur Heavy Fuel Oil

Previous Twelve Months

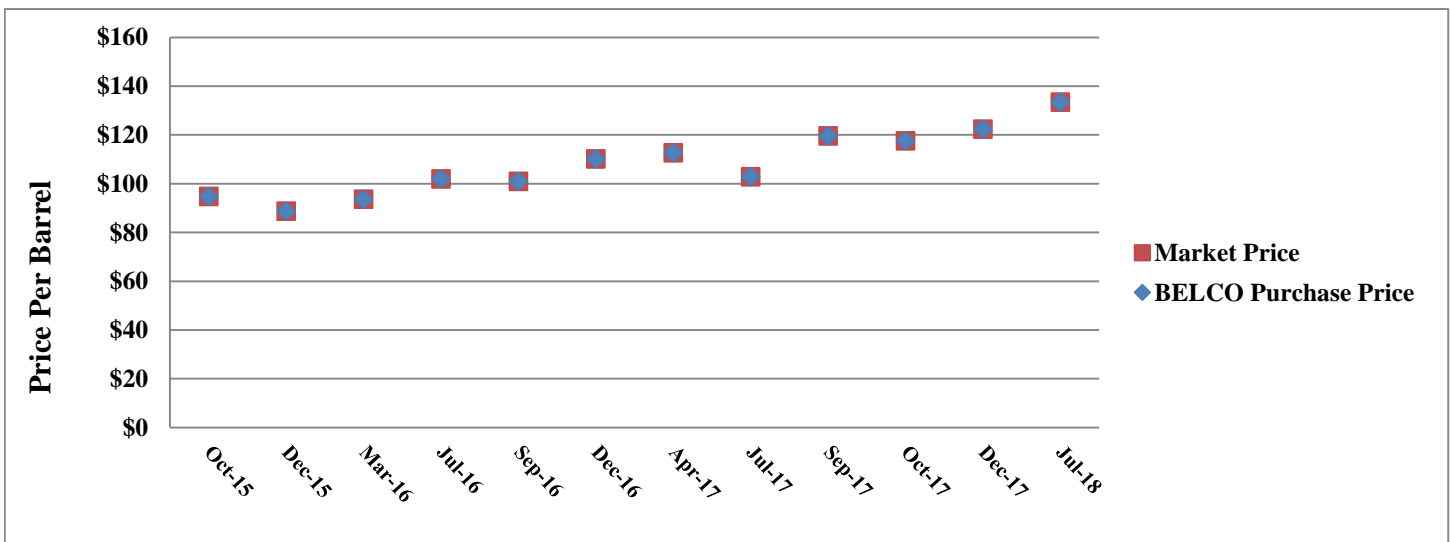


N.B. In accordance with the Fuel Supply Agreement for Platt's U.S. Gulf Coast Waterborne mid-No. 6, 3% Sulfur Heavy Fuel Oil between BELCO and Shell Western Trading Limited, the contracted price is stipulated as the 30-day average for Platt's U.S. Gulf Coast Waterborne mid-No. 6, 3% Sulfur Heavy Fuel Oil.



Diesel Fuel Oil Purchased

Previous Twelve Shipments



N.B. In accordance with the Fuel Supply Agreement for No. 2 Diesel Oil between BELCO and Coral Petroleum Company Limited, the contracted price is stipulated as the Platt's U.S. Gulf Coast Waterborne mid Ultra Low Sulfur Diesel, 3-day average center Bill of Lading Date which is the date the fuel is loaded on to the vessel. As BELCO does not enter into forward contracts for the supply of diesel fuel, the price BELCO pays is equal to the Platt's price.

BELCO

Heavy Fuel Oil Inventory Activity

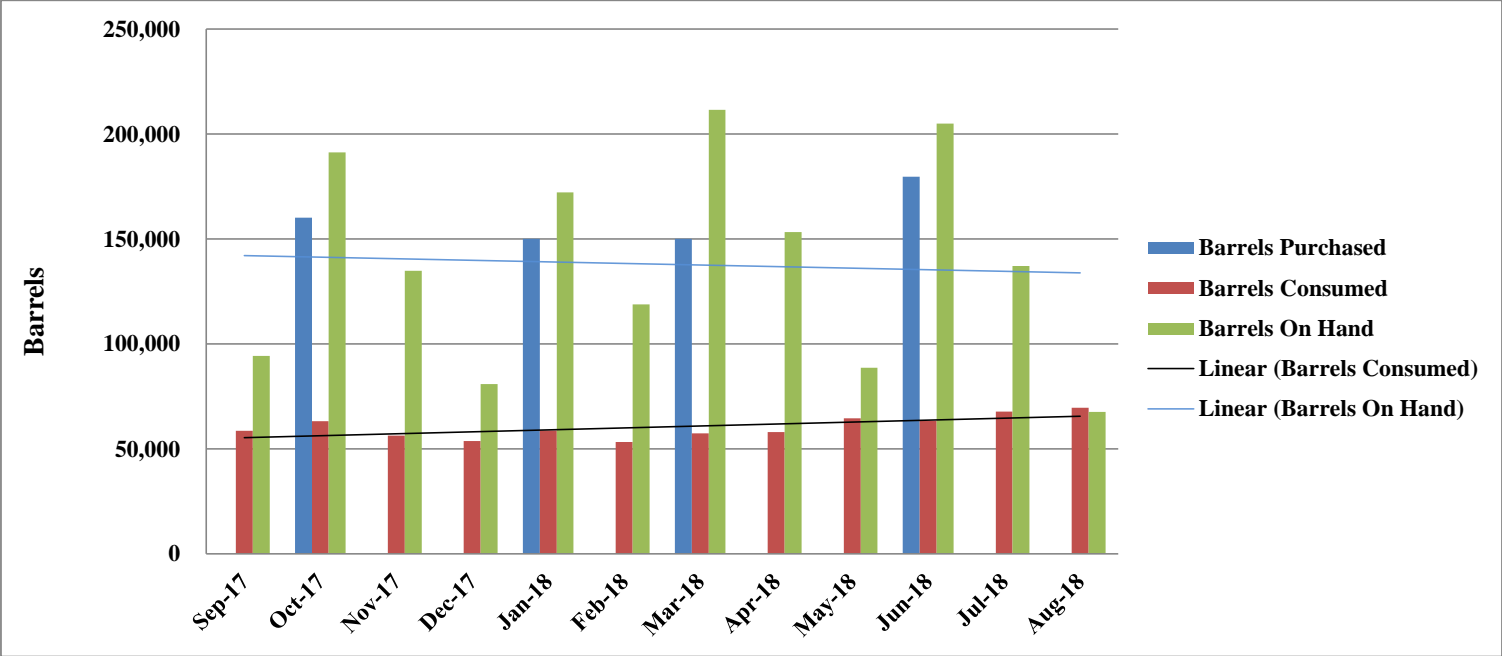
Previous Twelve Months

<u>Date</u>	<u>Barrels Purchased</u>	<u>Barrels Consumed</u>	<u>Barrels On Hand</u>
September, 2017	-	58,670.00	94,293.80
October, 2017	160,225.96	63,314.00	191,205.76
November, 2017	-	56,357.00	134,848.76
December, 2017	-	53,872.50	80,976.26
January, 2018	150,085.77	58,870.00	172,192.03
February, 2018	-	53,291.00	118,901.03
March, 2018	150,091.50	57,494.00	211,498.53
April, 2018	-	58,121.00	153,377.53
May, 2018	-	64,615.00	88,762.53
June, 2018	179,633.98	63,386.00	205,010.51
July, 2018	-	67,766.00	137,244.51
August, 2018	-	69,598.00	67,646.51



Graph of Heavy Fuel Oil Inventory Activity

Previous Twelve Months





Diesel Fuel Oil Inventory Activity

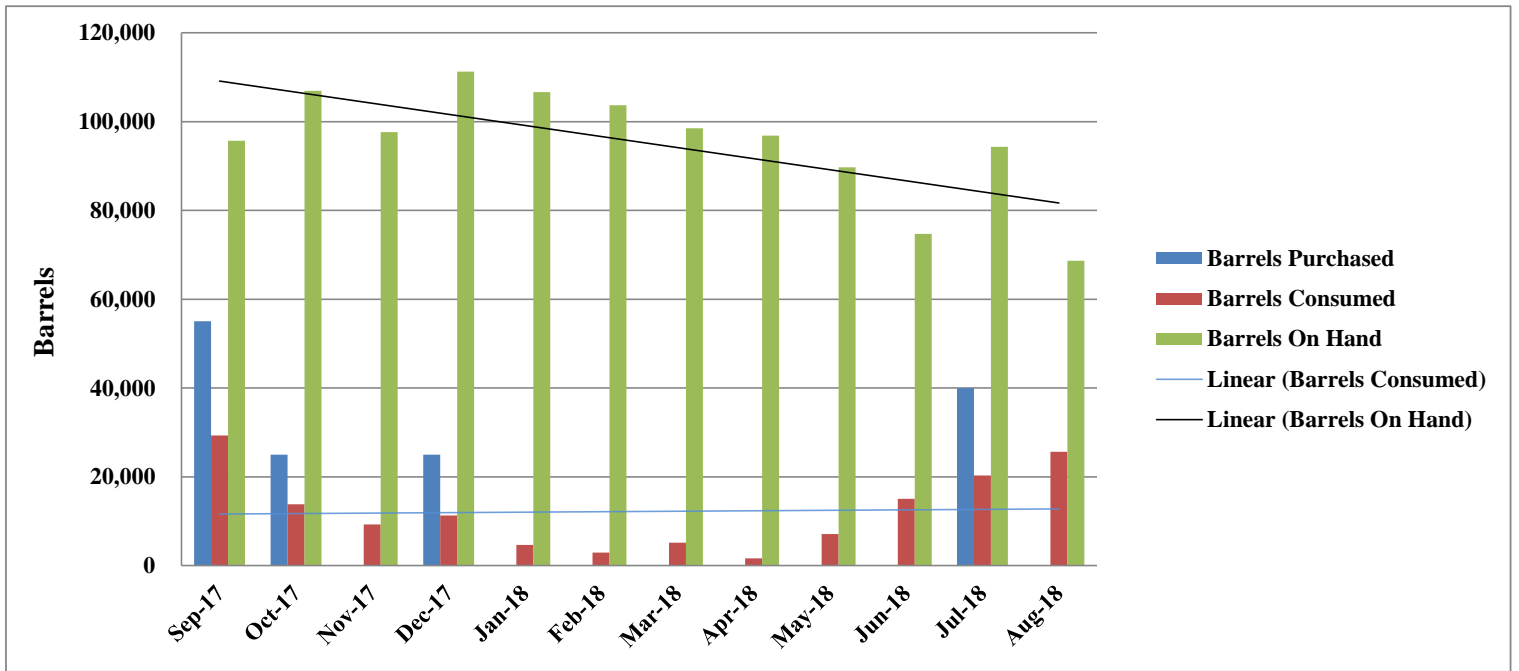
Previous Twelve Months

<u>Date</u>	<u>Barrels Purchased</u>	<u>Barrels Consumed</u>	<u>Barrels On Hand</u>
September, 2017	55,047.45	29,352.15	95,728.69
October, 2017	25,022.67	13,840.55	106,910.81
November, 2017	-	9,292.15	97,618.66
December, 2017	24,991.00	11,332.18	111,277.48
January, 2018	-	4,642.56	106,634.92
February, 2018	-	2,951.47	103,683.45
March, 2018	-	5,150.31	98,533.14
April, 2018	-	1,650.35	96,882.79
May, 2018	-	7,154.97	89,727.82
June, 2018	-	15,027.01	74,700.81
July, 2018	39,967.59	20,336.75	94,331.65
August, 2018		25,676.02	68,655.63



Graph of Diesel Fuel Oil Inventory Activity

Previous Twelve Months





Heavy Fuel Oil Costs Per Shipment

In accordance with Part 4, Paragraph 26A Clause (1)(c)(i) of the Bermuda Energy Act 2009, certain information provided to the Bermuda Energy Commission has been designated as confidential on the grounds that it could result in material financial loss or gain to any person and therefore has been excluded.

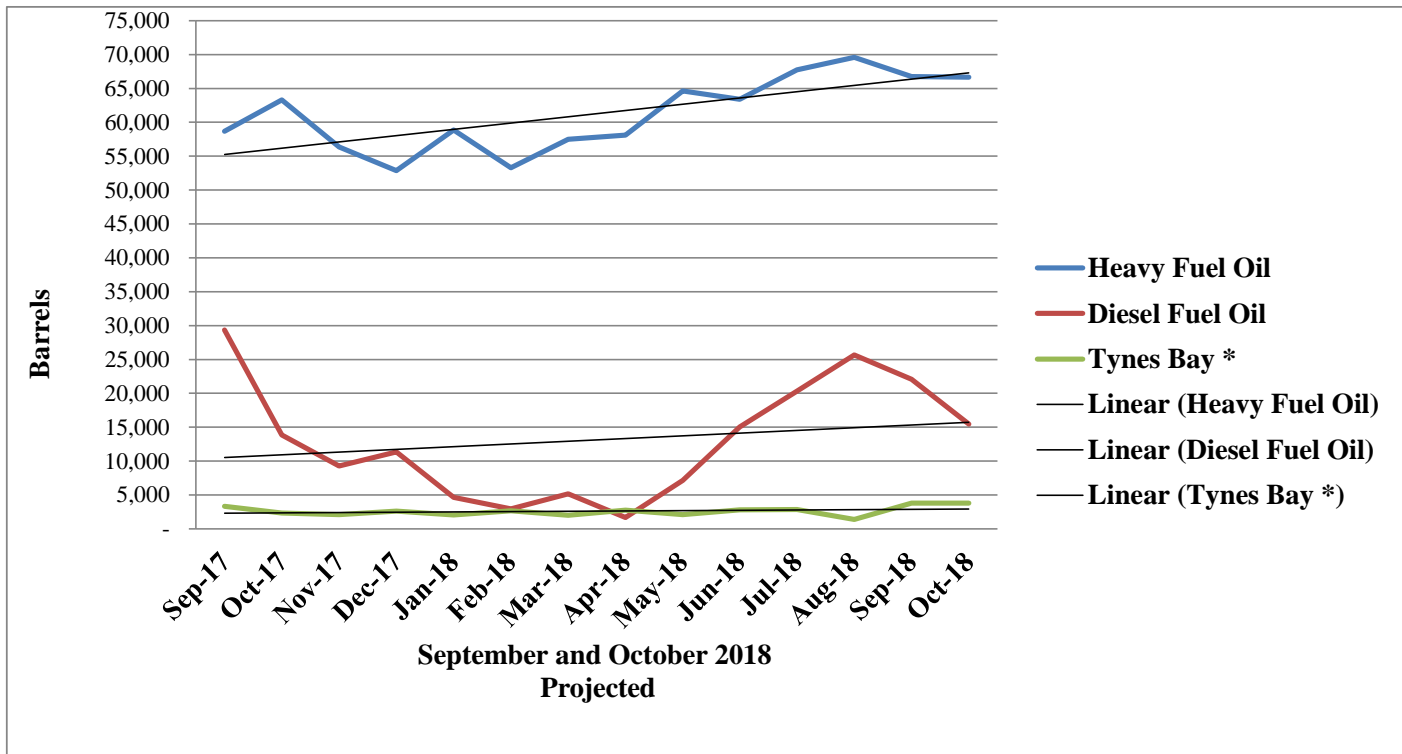


Diesel Fuel Oil Costs Per Shipment

In accordance with Part 4, Paragraph 26A Clause (1)(c)(i) of the Bermuda Energy Act 2009, certain information provided to the Bermuda Energy Commission has been designated as confidential on the grounds that it could result in material financial loss or gain to any person and therefore has been excluded.



Barrels of Fuel Consumed
Previous Twelve Months
Plus Two Month Forward Projection



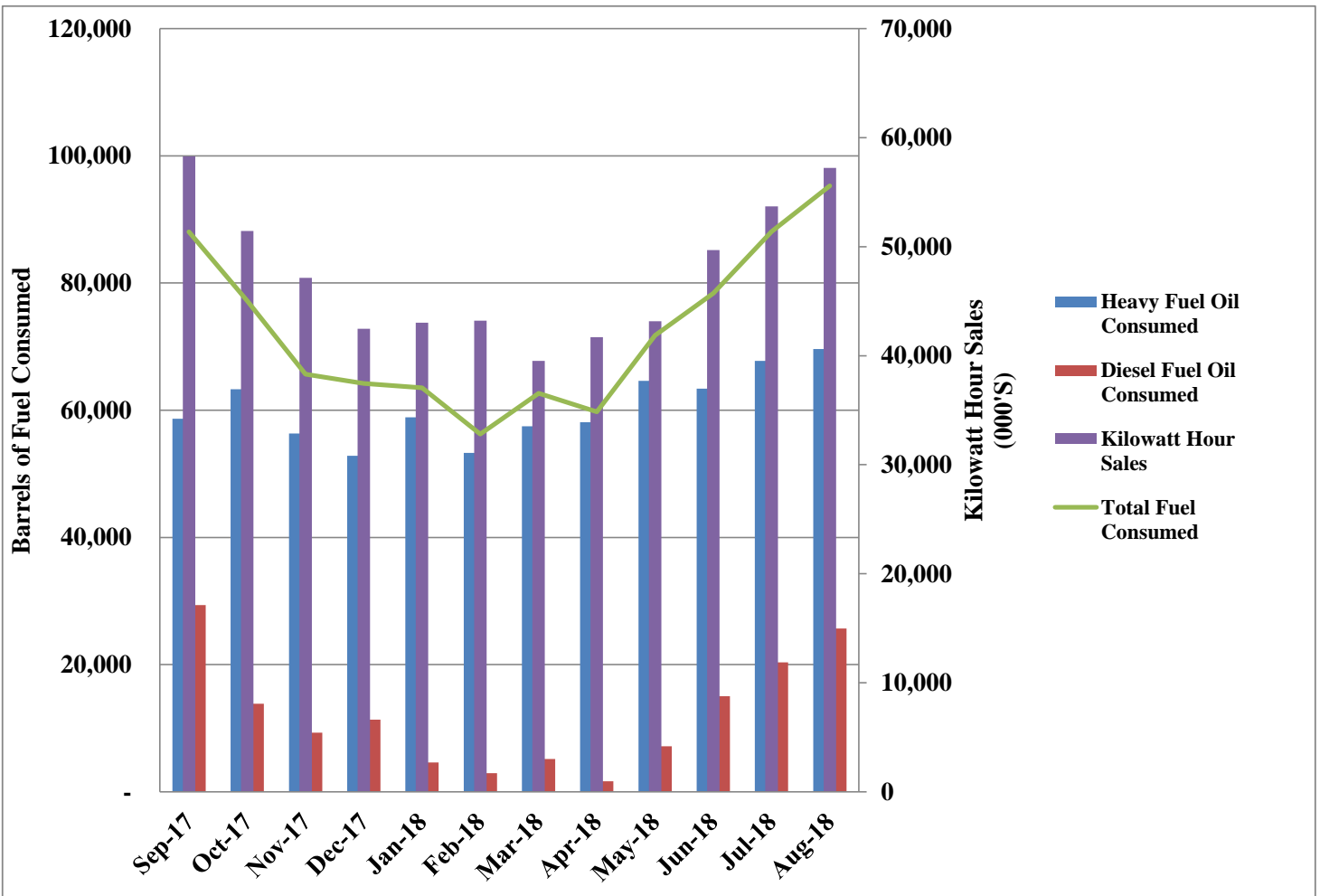
* BELCO calculates an efficiency rating for its generators on a monthly basis. This is calculated as the estimated kilowatt hours that will be generated that month divided by the estimated number of barrels of fuel that will be used. Therefore, the equivalent barrels of fuel is calculated for Tynes Bay as the amount of kilowatt hours delivered by Tynes Bay to BELCO divided by this budgeted efficiency rating.



Fuel Consumption

Versus

Kilowatt Hour Sales

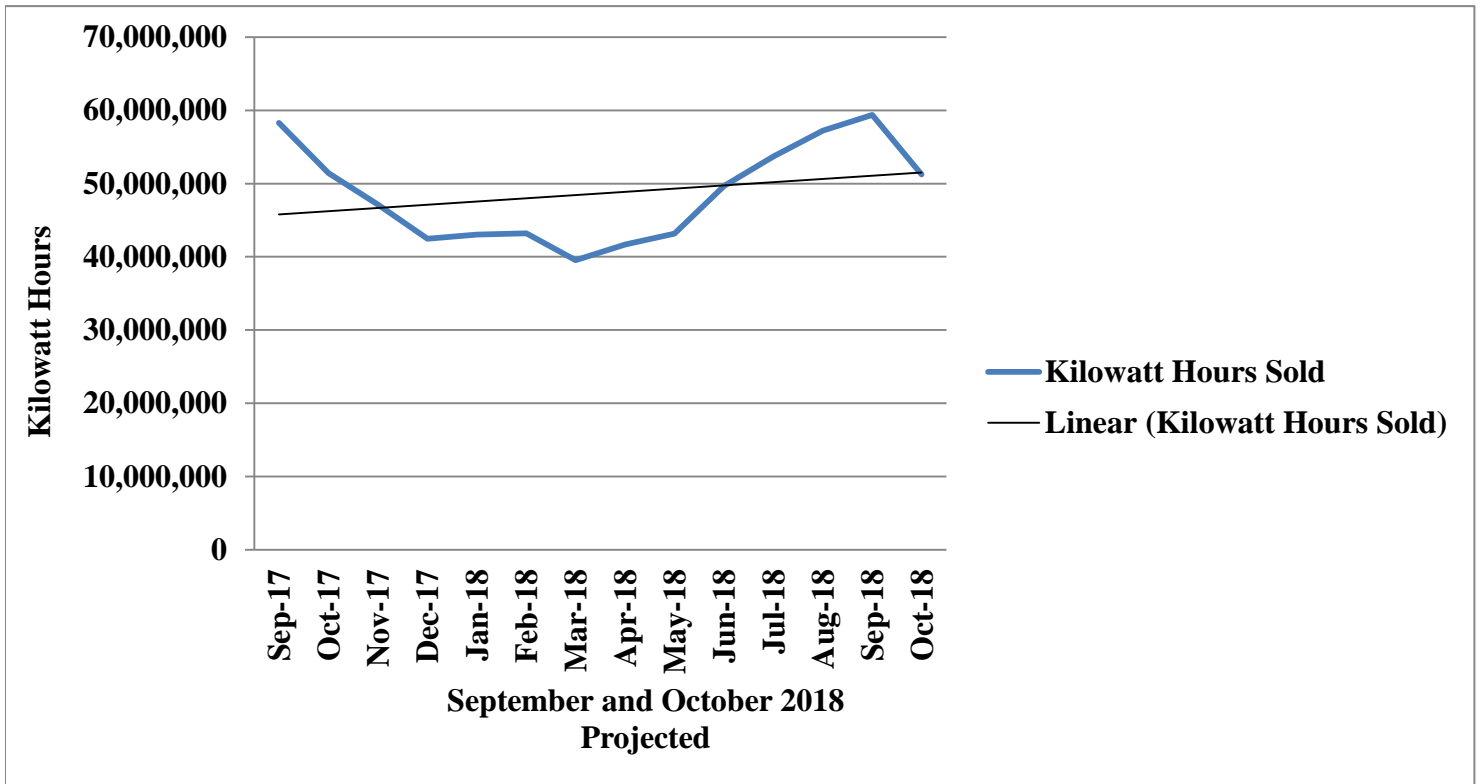


BELCO

Kilowatt Hour Sales

Previous Twelve Months

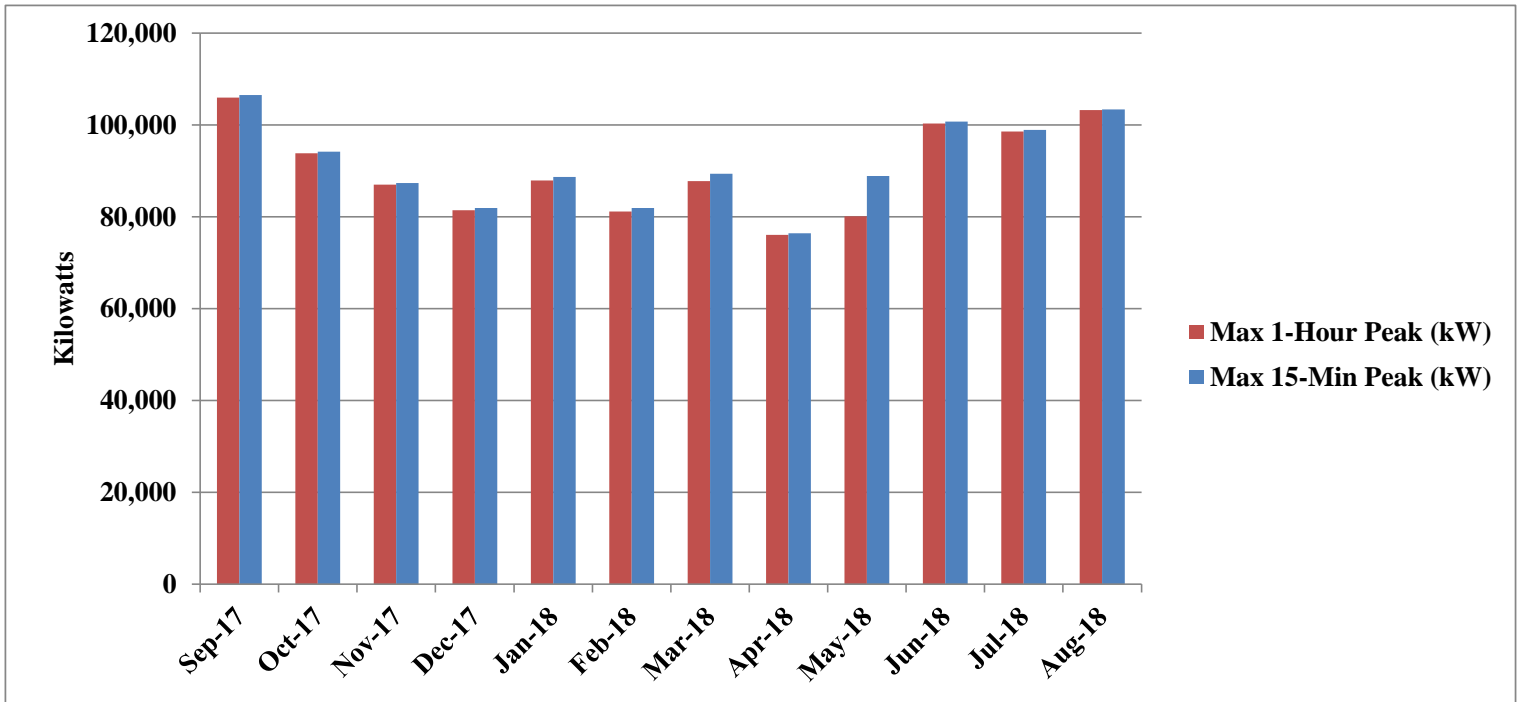
Plus Two Month Forward Projection





Maximum 15-Minute & Hourly Peak Kilowatt Hour Demand

Previous Twelve Months

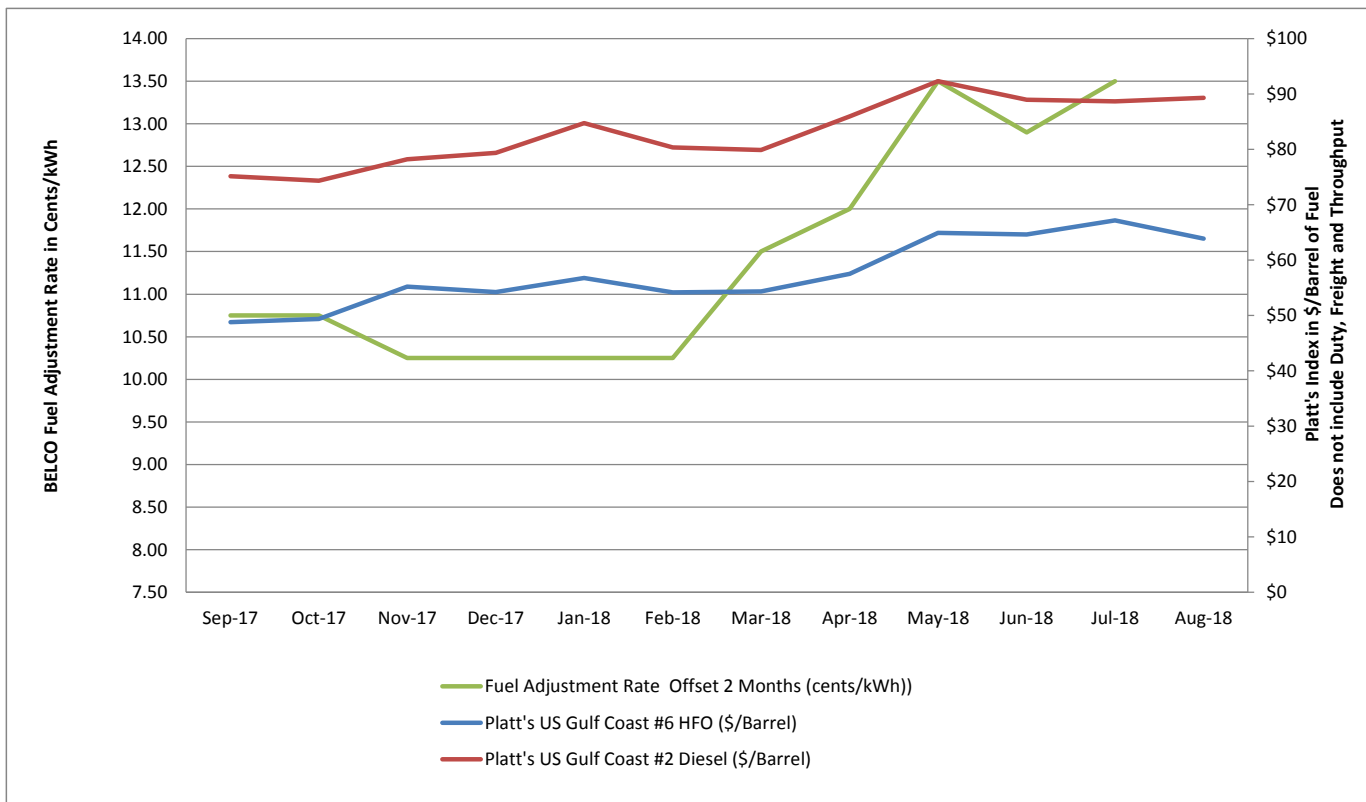




Fuel Adjustment Rate

Versus

Platt's Indices for Heavy and Diesel Fuel Oils



BELCO

Fuel Adjustment Over / (Under) Recovery

For the Month Ended 31 August 2018

	\$	\$	\$
Opening Balance at 1 August 2018			(154,683)
 <u>Fuel Consumption</u>			
Diesel - 4,350.39 @ \$119.5800	520,220		
Diesel - 21,325.63 @ \$117.8308	2,512,816		
Less: Fuel Consumption @ \$30/bbl	<u>(770,281)</u>	2,262,755	
 Heavy - 69,598 bbls @ \$110.3247	 7,678,378		
Less: Fuel Consumption @ \$30/bbl	<u>(2,087,940)</u>	5,590,438	
 Tynes Bay - 939,568 kWh @ \$0.185	 173,820		
Less: (939,568 kWh /674.4)1,393.19 bbls @ \$30/bbl	<u>(41,796)</u>	132,024	
		7,985,217	
 Deduct: Fuel Adjustment Revenue		<u>7,380,847</u>	
 August over / (under) recovery			(604,370)
 Ending Balance at 31 August 2018			 <u>(759,053)</u>



Fuel Adjustment Over / (Under) Cost Recovery Variance Analysis

For the Month Ended 31 August 2018

Cost Analysis:

Projections:

	Diesel	Heavy	Tynes Bay	Total
Barrels	19,694	70,036	3,824	93,554
Total Fuel Adjustment Cost	\$ 1,737,349	\$ 5,625,621	\$ 362,454	\$ 7,725,424
Fuel Adjustment Cost / Barrel	\$ 88.22	\$ 80.32	\$ 94.77	\$ 82.58

Actual:

Barrels	25,676	69,598	1,393	96,667
Total Fuel Cost	\$ 3,033,036	\$ 7,678,376	\$ 173,820	\$ 10,885,232
Total Fuel Adjustment Cost	\$ 2,262,756	\$ 5,590,436	\$ 132,024	\$ 7,985,216
Fuel Adjustment Cost / Barrel	\$ 88.13	\$ 80.32	\$ 94.76	\$ 82.61

Sales Analysis:

FAR (cents/kwh)

12.90 Requested

12.90 Approved

Fuel Adjustment Sales

Projected:
Actual:
Variance
% Variance

Total KWH Sales	Total \$ Sales
60,204,300	\$ 7,766,355
57,224,006	\$ 7,380,847
(2,980,294)	\$ (385,507)
-4.95%	-4.96%

Summary - projected vs. actual variances:

	Diesel	HFO	Tynes Bay	Total (Rounded)
Quantity (Barrels):	(5,982)	438	2,431	(3,113)
Costs:				
Price variance	\$ 2,311	\$ -	\$ 11	\$ 2,322
Quantity variance	\$ (527,716)	\$ 35,182	\$ 230,419	\$ (262,115)
Total variance	\$ (525,405)	\$ 35,182	\$ 230,430	\$ (259,793)
Sales:				\$ (385,507)
Total projected vs. actual variance (August 2018)				\$ (645,300)

Fuel Adjustment Over / (Under) Cost Recovery (General Ledger Account 24205)	Projected \$	Actual \$
Opening Balance at 1 August 2018	(154,683)	(154,683)
Projected change in over / (under) recovery position	40,930	40,930
Variance (Actual vs. Projected) - see above		(645,300)
Actual change in over / (under) recovery position	40,930	(604,370)
Ending Balance at 31 August 2018	(113,753)	(759,053)



Fuel Consumption Projections

Forward Three Months

Shipment Date	Type	Hedged	Amount (Barrels)	Total Cost/Barrel*	FADJ (less \$30/bbl)
June 2018	Heavy	No	67,646.51	110.3247	80.3247
September 2018	Heavy	No	150,000.00	112.0000	82.0000
October 2017	Diesel	No	3,697.04	117.8308	87.8308
December 2017	Diesel	No	24,991.00	122.3334	92.3334
July 2018	Diesel	No	39,967.59	133.7894	103.7894

*September shipment estimated



Fuel Adjustment Over/(Under) Recovery Projections

At Existing Fuel Adjustment Rate

Three Months Forward

Over (Under) Recovery account as at end of previous month:						\$ (759,053)
Projected kWh Sales - September 2018	59,387,701		FADJ	13.50		\$ 8,017,340
Projected fuel consumed		Shipment Date	Barrels	FADJ Cost/Barrel	Total Cost	
	Diesel	October 2017	3,697	\$ (87.83)	\$ (324,713.98)	
	Diesel	December 2017	18,390	\$ (92.33)	\$ (1,698,006.86)	
	Heavy	June 2018	66,757	\$ (80.32)	\$ (5,362,236.00)	
	Tynes Bay	N/A	3,780	\$ (96.23)	\$ (363,781.20)	
	Total Barrels		92,624			268,602
Projected Over (Under) Recovery account as at end of this month:						(490,451)
Projected kWh Sales - October 2018	51,270,581		FADJ	13.50		\$ 6,921,528
Projected fuel consumed		Shipment Date	Barrels	FADJ Cost/Barrel	Total Cost	
	Diesel	December 2017	6,601	\$ (92.33)	\$ (609,496.23)	
	Diesel	July 2018	8,880	\$ (103.79)	\$ (921,645.72)	
	Heavy	June 2018	890	\$ (80.32)	\$ (71,449.62)	
	Heavy	September 2018	65,786	\$ (82.00)	\$ (5,394,492.18)	
	Tynes Bay	N/A	3,802	\$ (95.52)	\$ (363,142.50)	
	Total Barrels		85,959			(438,698)
Projected Over (Under) Recovery account as at end of this month:						(929,149)
Projected kWh Sales - November 2018	45,036,595		FADJ	13.50		\$ 6,079,940
Projected fuel consumed		Shipment Date	Barrels	FADJ Cost/Barrel	Total Cost	
	Diesel	July 2018	7,114	\$ (103.79)	\$ (738,357.79)	
	Heavy	September 2018	58,868	\$ (82.00)	\$ (4,827,176.00)	
	Tynes Bay	N/A	3,581	\$ (103.26)	\$ (369,765.30)	
	Total Barrels		69,563			144,641
Projected Over (Under) Recovery account as at end of this month:						(784,508)



Fuel Adjustment Over/(Under) Recovery Projections

At Requested Fuel Adjustment Rate

Three Months Forward

Over (Under) Recovery account as at end of previous month:						\$ (759,053)
Projected kWh Sales - September 2018	59,387,701		FADJ	13.50		\$ 8,017,340
Projected fuel consumed		Shipment Date	Barrels	FADJ Cost/Barrel	Total Cost	
	Diesel	October 2017	3,697	\$ (87.83)	\$ (324,713.98)	
	Diesel	December 2017	18,390	\$ (92.33)	\$ (1,698,006.86)	
	Heavy	June 2018	66,757	\$ (80.32)	\$ (5,362,236.00)	
	Tynes Bay	N/A	3,780	\$ (96.23)	\$ (363,781.20)	
	Total Barrels		92,624			268,602
Projected Over (Under) Recovery account as at end of this month:						(490,451)
Projected kWh Sales - October 2018	51,270,581		FADJ	14.00		\$ 7,177,881
Projected fuel consumed		Shipment Date	Barrels	FADJ Cost/Barrel	Total Cost	
	Diesel	December 2017	6,601	\$ (92.33)	\$ (609,496.23)	
	Diesel	July 2018	8,880	\$ (103.79)	\$ (921,645.72)	
	Heavy	June 2018	890	\$ (80.32)	\$ (71,449.62)	
	Heavy	September 2018	65,786	\$ (82.00)	\$ (5,394,492.18)	
	Tynes Bay	N/A	3,802	\$ (95.52)	\$ (363,142.50)	
	Total Barrels		85,959			(182,345)
Projected Over (Under) Recovery account as at end of this month:						(672,796)
Projected kWh Sales - November 2018	45,036,595		FADJ	14.50		\$ 6,530,306
Projected fuel consumed		Shipment Date	Barrels	FADJ Cost/Barrel	Total Cost	
	Diesel	July 2018	7,114	\$ (103.79)	\$ (738,357.79)	
	Heavy	September 2018	58,868	\$ (82.00)	\$ (4,827,176.00)	
	Tynes Bay	N/A	3,581	\$ (103.26)	\$ (369,765.30)	
	Total Barrels		69,563			595,007
Projected Over (Under) Recovery account as at end of this month:						(77,789)



Commercial Renewable System Excess Energy Rate ("CRSEER")

At Requested Fuel Adjustment Rate - Full Cost

Projected Over (Under) Recovery account as at end of August: \$						(490,451)
Projected kWh Sales - October 2018	51,270,581		CRSEER	19.03	\$	9,756,791
Projected fuel consumed		Shipment Date	Barrels	FADJ Cost/Barrel		Total Cost
	Diesel	December 2017	6,601	\$ (122.33)	\$	(807,527.43)
	Diesel	July 2018	8,880	\$ (133.79)	\$	(1,188,044.52)
	Heavy	June 2018	890	\$ (110.32)	\$	(98,134.92)
	Heavy	September 2018	65,786	\$ (112.00)	\$	(7,368,086.88)
	Tynes Bay	N/A	3,802	\$ (125.52)	\$	(477,189.00)
	Total Barrels		85,959			(182,191)
Projected Over (Under) Recovery account as at end of this month:						(672,643)
Projected kWh Sales - November 2018	45,036,595		CRSEER	19.13	\$	8,615,501
Projected fuel consumed		Shipment Date	Barrels	FADJ Cost/Barrel		Total Cost
	Diesel	July 2018	7,114	\$ (133.79)	\$	(951,777.79)
	Heavy	September 2018	58,868	\$ (112.00)	\$	(6,593,216.00)
	Tynes Bay	N/A	3,581	\$ (133.26)	\$	(477,189.00)
	Total Barrels		69,563			593,318
Projected Over (Under) Recovery account as at end of this month:						(79,325)

Note: CRSEER is calculated to have no impact on the FAR over (under) recovery balance

BELCO

Generators Available for Service

August 2018

Generator	Available	Type of fuel Consumed	Barrels of Fuel Consumed	Efficiency Rating*
E1	Yes	HFO	9429	690
E2	Yes	HFO	8920	677
E3	Yes	HFO	8183	707
E4	Yes	HFO	8156	694
E5	Yes	HFO	6709	706
E6	Yes	HFO	7174	715
E7	Yes	HFO	11900	728
E8	Yes	HFO	12229	733
D3	Yes	LFO	4573	603
D8	Yes	LFO	4438	612
D10	Yes	LFO	5625	608
D14	Yes	LFO	2197	592
GT4	Yes	LFO	106	375
GT5	Yes	LFO	2748	407
GT6	Yes	LFO	1211	441
GT7	Yes	LFO	1435	449
GT8	Yes	LFO	1244	433

* Efficiency Rating = Amount of kilowatt hours generated per barrel consumed



Generators Out of Service

August 2018

Unit	Type	Forced Outage Details	Outage Date	Return Date
E2	MO	Cyl 4 and 5 Stuffing Box Inspections	8/31/18	8/26/18
D14	MO	Cylinder head leaks cylinder #7 and #15	8/30/18	9/12/18
E5	MO	LO Auto Filters are not operating correctly	8/27/18	8/28/18
E2	FO (Postpone)	Cyl 4 cam box leaking	8/25/18	8/27/18
D8	FO (Postpone)	Unit out to change leaking cylinder head at 1LHS	8/23/18	8/24/18
E5	MO	Unit out to test Unit Breaker / Station Breaker change over and new AVR protection	8/22/18	8/23/18
D10	FO (Postpone)	Exhaust gas bellows failure at cylinder 6R	8/21/18	8/22/18
E6	PO	E6 6K service	8/20/18	9/2/18
E4	MO	Unit to MO for Opacity Equipment service	8/19/18	8/19/18
E6	FO (Immediate)	Unit Forced out due to broken T/C nutshell line on the A bank.	8/16/18	8/17/18
D14	FO (Immediate)	D14 forced out at 2159 due to JW leak discovered coming from the tell-tail on west side, engine driven pump.	8/16/18	8/21/18
E4	FO (Immediate)	Fuel leak on engine driven pump	8/14/18	8/15/18
E1	FO (Immediate)	E1 tripped due to 24 volt arc caused by attempting to secure the differential indicator line for the Moati filters on E2.	8/14/18	8/14/18
E6	MO	Cylinder 3B fuel outlet pipe leak.	8/13/18	8/14/18
E3	FO (Immediate)	Fuel leak to cylinder 3R supply line to fuel pump	8/12/18	8/12/18
E1	MO	Broken springs cylinders #4 and #6. also repair leak on HP actuator pipe on cylinder #4.	8/12/18	8/12/18
E1	FO (Postpone)	Cylinder #1 JKW bellow leaking	8/5/18	8/6/18
E1	FO (Immediate)	Scavenge door gasket failure on Cyl#1	8/4/18	8/5/18
E1	SE of PO	Port inspection and follow up jobs after Service	8/2/18	8/3/18
E2	FO (Immediate)	E2 forced out FO for stuffing box	8/1/18	8/4/18



Scheduled Generator Maintenance

Sep-18

Generator	Maintenance Type	Outage Date	Return Date
E7	12K service	9/4/2018	9/16/2018
E4	13.5K Service	9/18/2018	10/20/2018



Other Events Affecting the Fuel Adjustment Rate

- 1. Details of any insurance claims submitted by BELCO which directly impact the Fuel Adjustment Rate.**
No insured losses have been incurred by BELCO during the filing period that would result in a potential insurance claim.

- 2. Any major events that have a direct impact on the Fuel Adjustment Rate.**
None