



December 27, 2018

BY EMAIL

Bermuda Electric Light Co. Ltd.
P.O. Box HM 1026
Hamilton HM DX

Attn: David Faries, VP Finance & Financial Controller

Dear Mr. Faries,

Re: Fuel Adjustment Rate Filing –January 1, 2019 to January 31, 2019

The Regulatory Authority of Bermuda (the “Authority”) has reviewed the January 2019 Fuel Adjustment Rate (“FAR”) filing submitted by Bermuda Electric Light Co. Ltd. (“BELCO”) on 11 December 2018 to maintain the existing FAR of \$0.1300 and approves the existing FAR.

Yours sincerely,

Markez Laws
Regulatory Finance Analyst

*Cc: Monique Lister—Senior Legal Advisor
Nigel Burgess – Senior Manager Electricity Analysis and Planning
Jozelle Opoku – Head of Regulatory Finance*

December 11, 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"):

Maintain the existing rate of 13.00 cents per kilowatt-hour sold for January 2019.

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 30th November 2018 was \$519,217 over recovered as compared to the \$720,244 over recovery position projected in our last filing. The \$201,027 unfavorable variance is due to:

- The total actual barrels of fuel consumed in November were 1,650 barrels higher than projected, resulting in a negative impact on the recovery position of \$180,278;
- Net price variance negatively impacted the recovery position by \$2,991; and
- Actual November electric sales were 120,415 KWH's lower than projected. This variance resulted in a net negative impact on the fuel recovery position of \$17,758.

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

441.295.5111

P.O. BOX HM 1026
HAMILTON, HM DX
BERMUDA

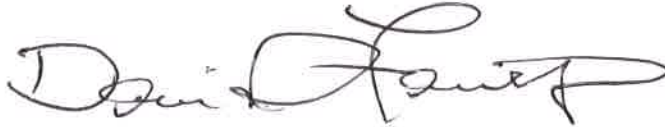
27 SERPENTINE RD
HAMILTON, HM 07
BERMUDA

BELCO.BM

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

Yours sincerely,

BERMUDA ELECTRIC LIGHT COMPANY LIMITED



David Faries, CPA, CA, JP
Vice President, Finance & Group Controller

441 295 5111

P.O. BOX HM 1026
HAMILTON, HM DX
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BERMUDA

BELCO.BM



BELCO



Bermuda Electric Light Company Limited

Fuel Adjustment Submission

FOR PUBLIC DISCLOSURE

January 2019

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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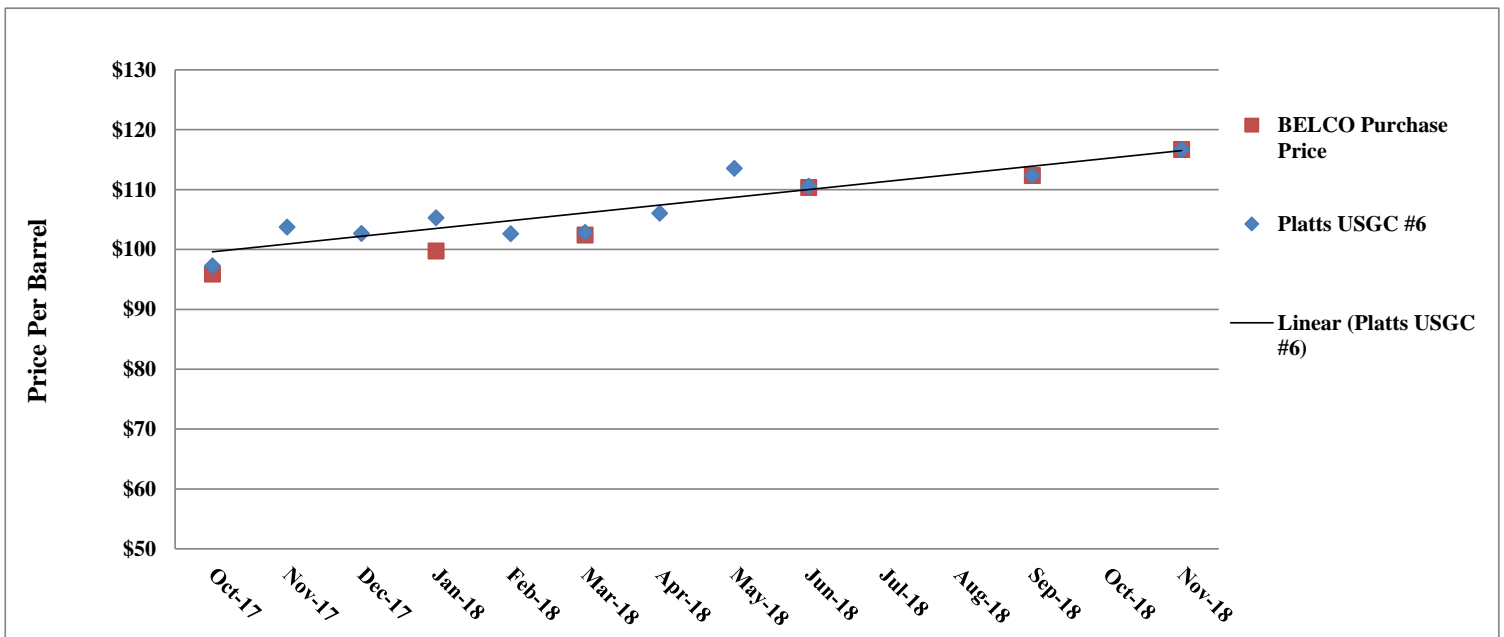


Heavy Fuel Oil Purchased

Versus

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

Previous Twelve Months

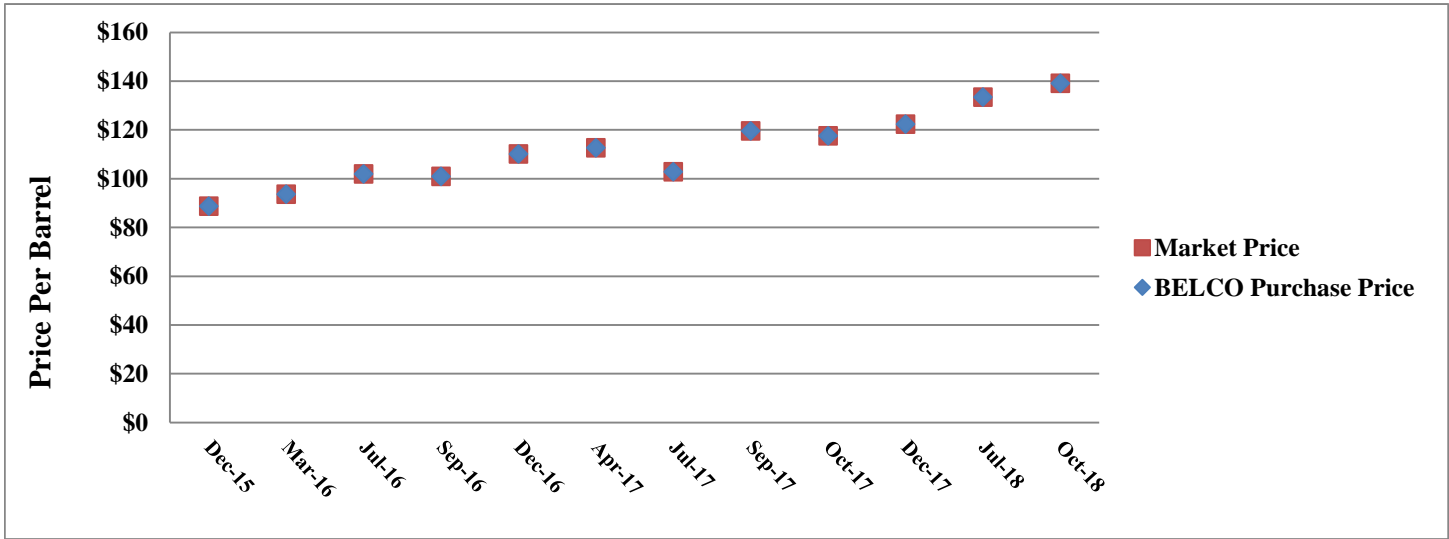


N.B. In accordance with the Fuel Supply Agreement for Platt's U.S. Gulf Coast Waterborne mid-No. 6, 3% Sulfur Heavy Fuel Oil between BELCO and Shell Western Trading Limited, the contracted price is stipulated as the 30-day average for Platt's U.S. Gulf Coast Waterborne mid-No. 6, 3% Sulfur Heavy Fuel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

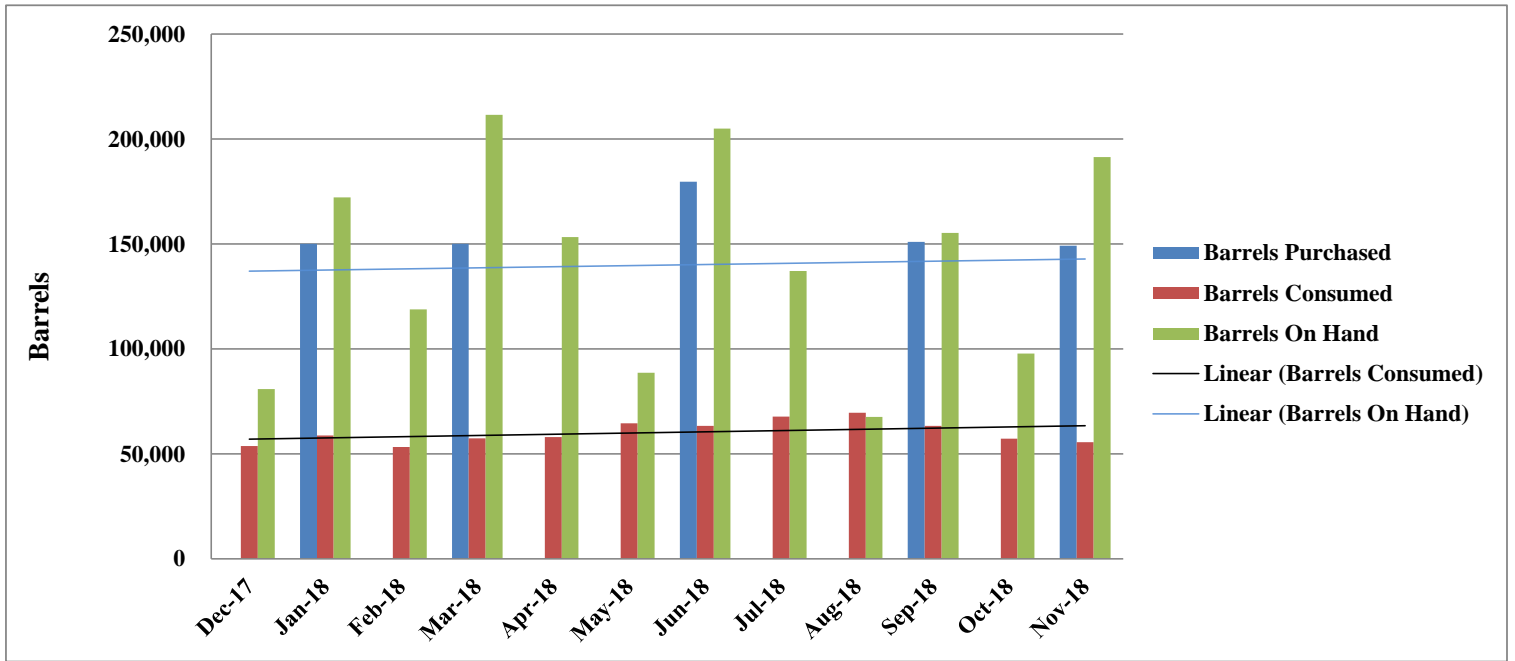
Previous Twelve Months

<u>Date</u>	<u>Barrels Purchased</u>	<u>Barrels Consumed</u>	<u>Barrels On Hand</u>
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
September, 2018	151,041.71	63,446.00	155,242.22
October, 2018	-	57,353.55	97,888.67
November, 2018	149,179.63	55,588.00	191,480.30



Graph of Heavy Fuel Oil Inventory Activity

Previous Twelve Months





Diesel Fuel Oil Inventory Activity

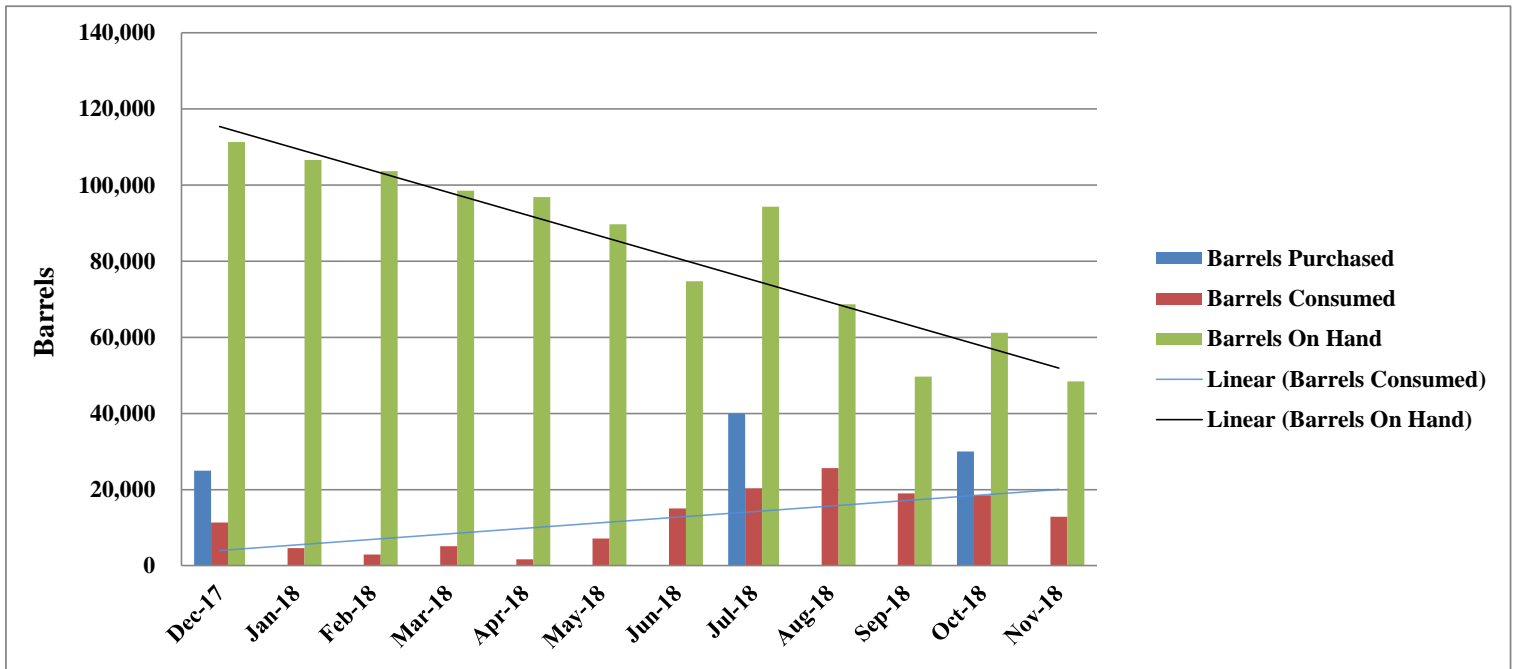
Previous Twelve Months

<u>Date</u>	<u>Barrels Purchased</u>	<u>Barrels Consumed</u>	<u>Barrels On Hand</u>
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
September, 2018	-	18,960.72	49,694.91
October, 2018	29,993.15	18,461.22	61,226.84
November, 2018		12,816.47	48,410.37



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.

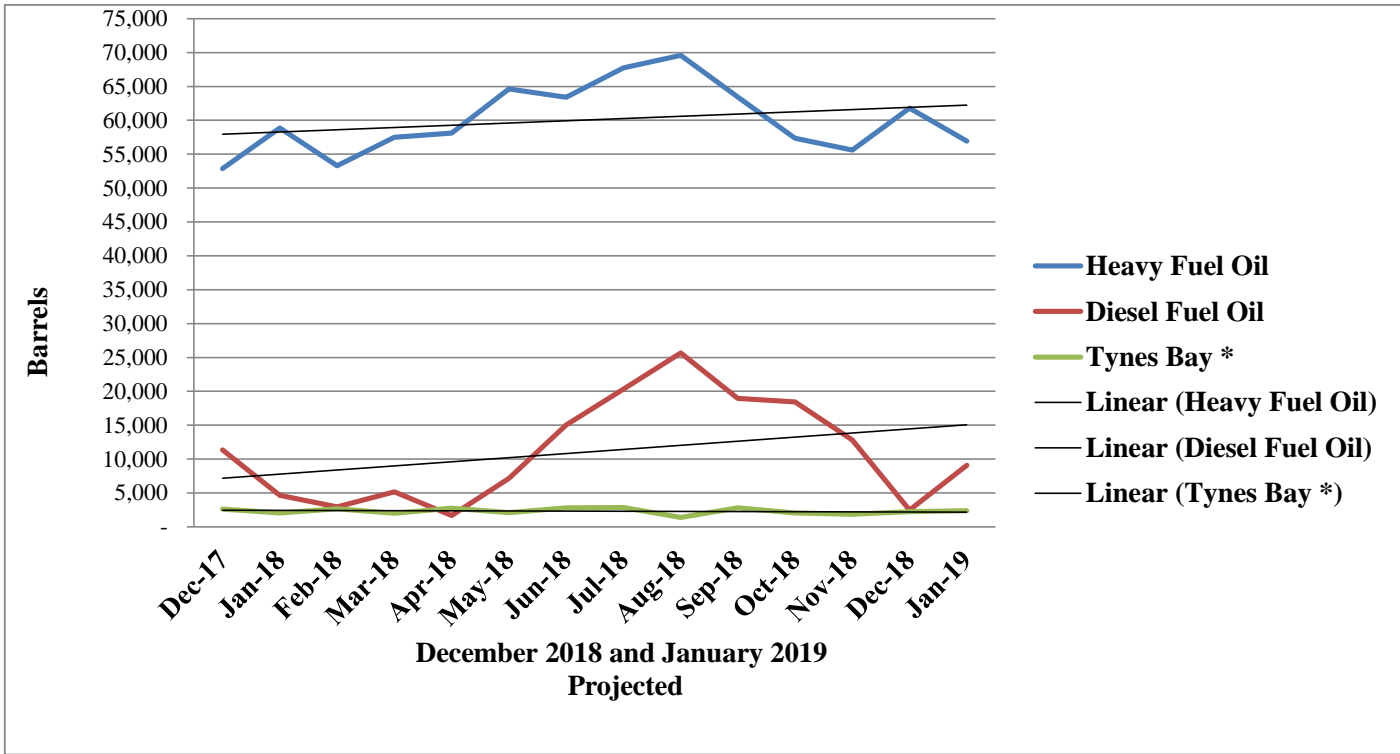


Diesel Fuel Oil Costs Per Shipment

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



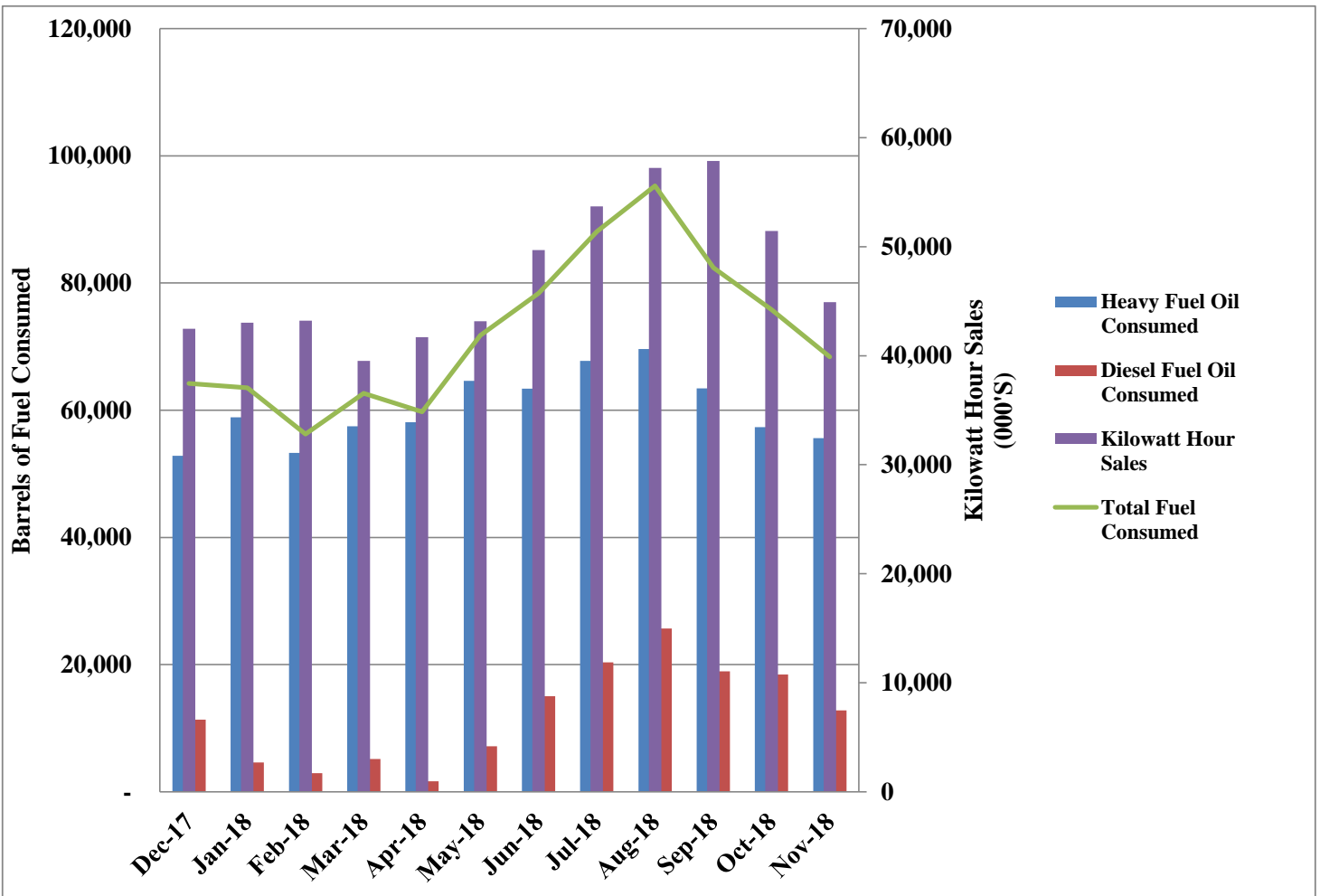
* BELCO calculates an efficiency rating for its generators on a monthly basis. This is calculated as the estimated kilowatt hours that will be generated that month divided by the estimated number of barrels of fuel that will be used. Therefore, the equivalent barrels of fuel is calculated for Tynes Bay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



Fuel Consumption

Versus

Kilowatt Hour Sales

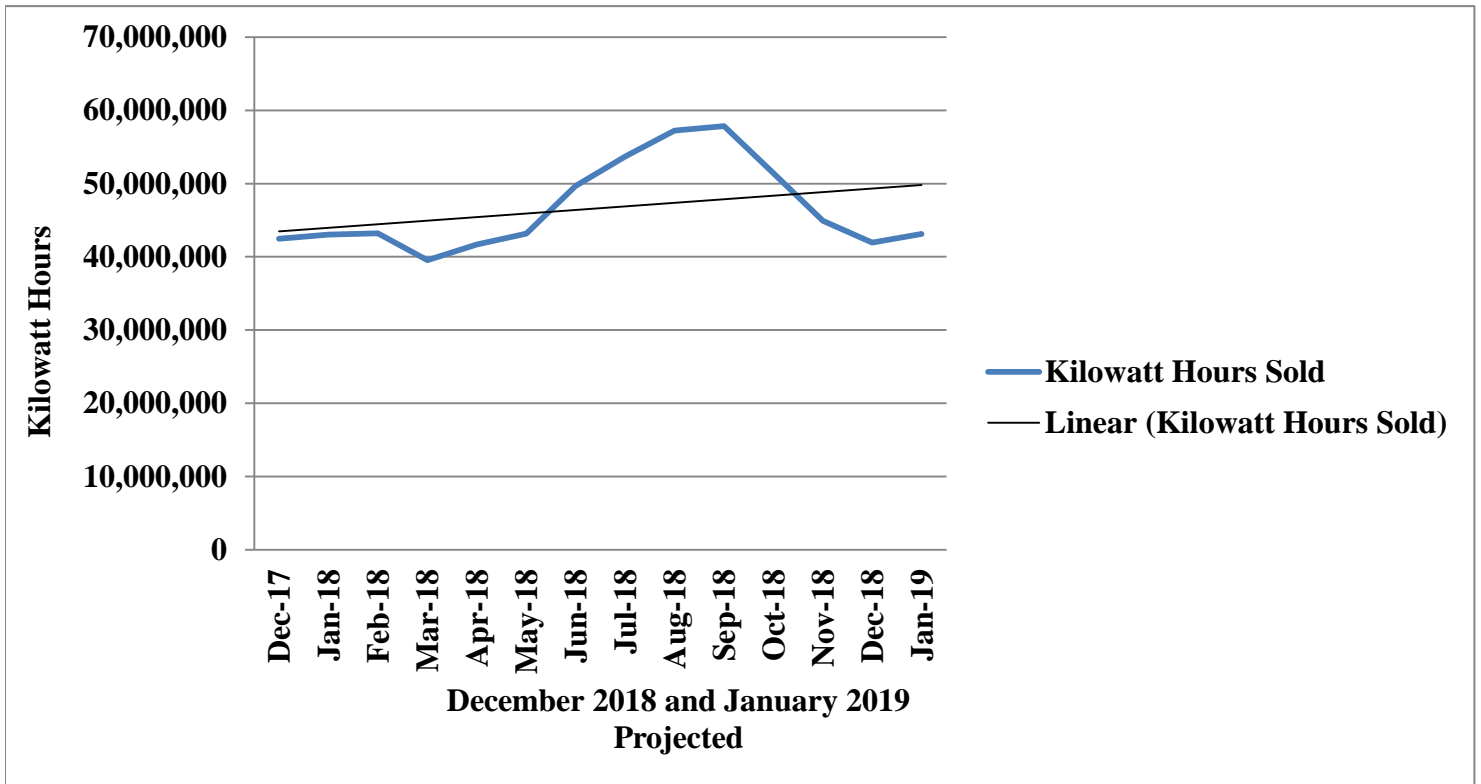


BELCO

Kilowatt Hour Sales

Previous Twelve Months

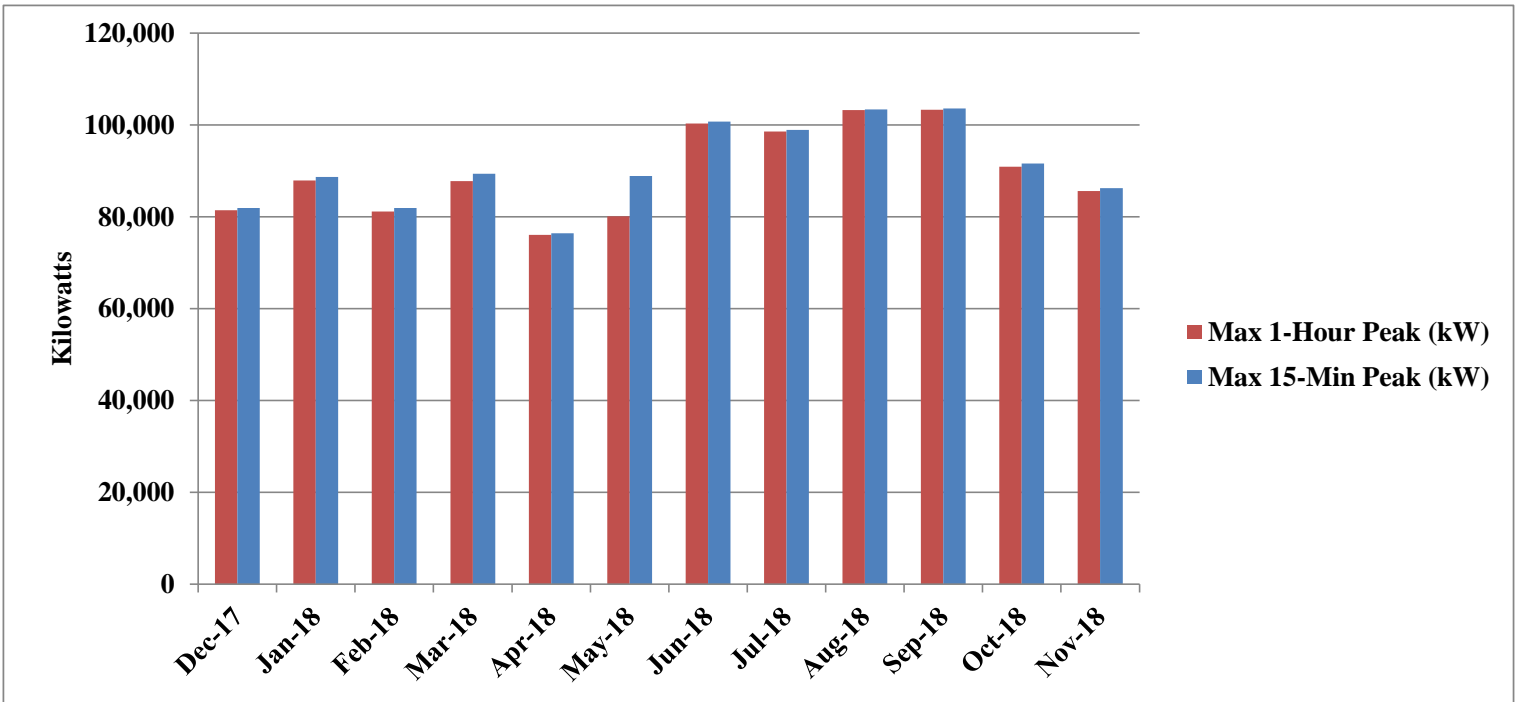
Plus Two Month Forward Projection





Maximum 15-Minute & Hourly Peak Kilowatt Hour Demand

Previous Twelve Months

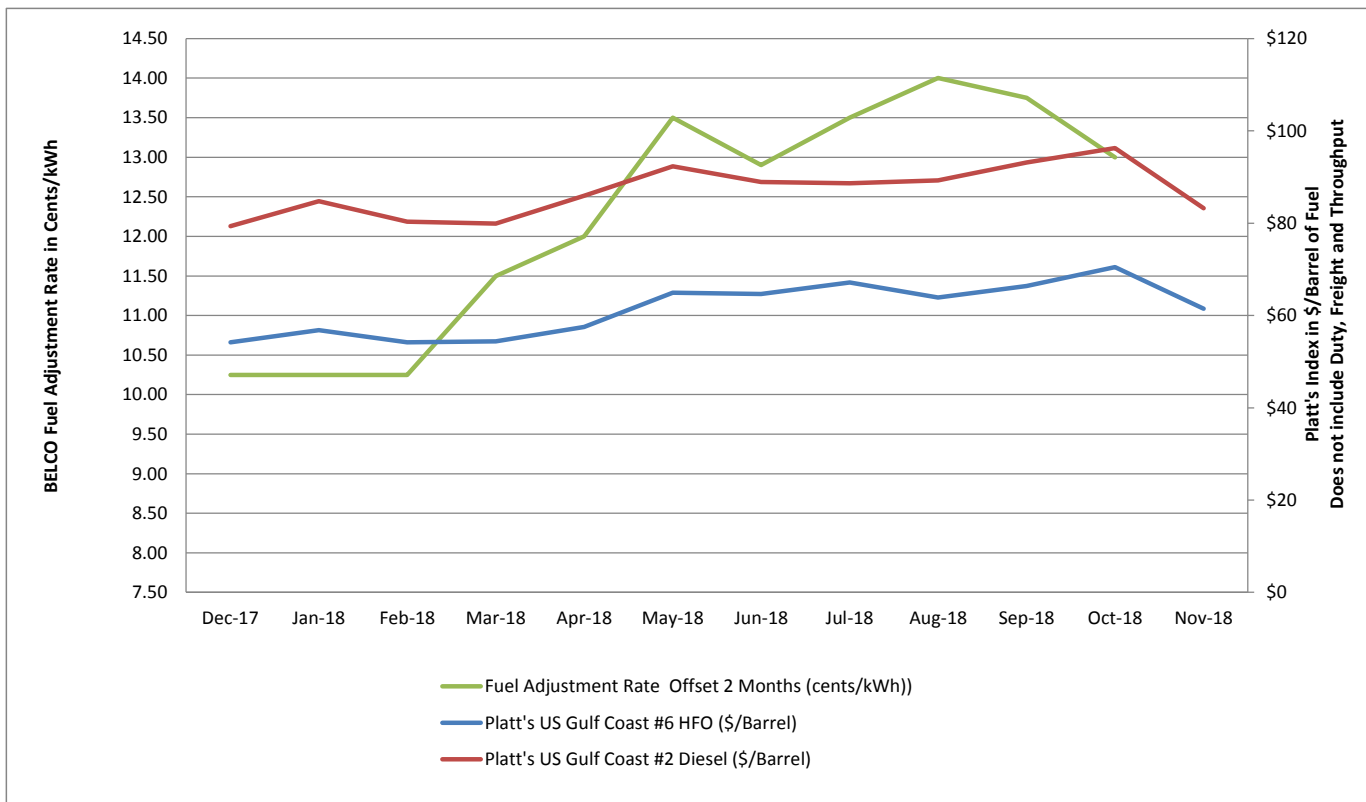




Fuel Adjustment Rate

Versus

Platt's Indices for Heavy and Diesel Fuel Oils



BELCO

Fuel Adjustment Over / (Under) Recovery

For the Month Ended 30 November 2018

	\$	\$	\$
Opening Balance at 1 November 2018			436,903
 <u>Fuel Consumption</u>			
Diesel - 12,816.47 @ \$133.3830	1,709,499		
Less: Fuel Consumption @ \$30/bbl	<u>(384,494)</u>	1,325,005	
Heavy - 55,588 bbls @ \$112.3273	6,244,050		
Less: Fuel Consumption @ \$30/bbl	<u>(1,667,640)</u>	4,576,410	
Tynes Bay - 1,332,704 kWh @ \$0.185	246,550		
Less: (1,332,704 kWh /720.3) 1,850.21 bbls @ \$30/bbl	<u>(55,506)</u>	191,044	
		6,092,459	
Deduct: Fuel Adjustment Revenue		<u>6,174,774</u>	
October over / (under) recovery			82,315
Ending Balance at 30 November 2018			<u>519,217</u>



Fuel Adjustment Over / (Under) Cost Recovery Variance Analysis

For the Month Ended 30 November 2018

Cost Analysis:

Projections:

	Diesel	Heavy	Tynes Bay	Total
Barrels	8,986	56,038	3,581	68,605
Total Fuel Adjustment Cost	\$ 929,000	\$ 4,610,426	\$ 369,765	\$ 5,909,191
Fuel Adjustment Cost / Barrel	\$ 103.38	\$ 82.27	\$ 103.26	\$ 86.13

Actual:

Barrels	12,816	55,588	1,850	70,255
Total Fuel Cost	\$ 1,709,499	\$ 6,244,048	\$ 246,550	\$ 8,200,097
Total Fuel Adjustment Cost	\$ 1,325,005	\$ 4,576,408	\$ 191,044	\$ 6,092,456
Fuel Adjustment Cost / Barrel	\$ 103.38	\$ 82.33	\$ 103.26	\$ 86.72

Sales Analysis:

FAR (cents/kwh)

13.75 Requested

13.75 Approved

Fuel Adjustment Sales

Projected:
Actual:
Variance
% Variance

Total KWH Sales	Total \$ Sales
45,036,595	\$ 6,192,532
44,916,180	\$ 6,174,774
(120,415)	\$ (17,758)
-0.27%	-0.29%

Summary - projected vs. actual variances:

	Diesel	HFO	Tynes Bay	Total (Rounded)
Quantity (Barrels):	(3,830)	450	1,731	(1,650)
Costs:				
Price variance	\$ 1	\$ (3,007)	\$ 15	\$ (2,991)
Quantity variance	\$ (396,007)	\$ 37,023	\$ 178,706	\$ (180,278)
Total variance	\$ (396,006)	\$ 34,016	\$ 178,721	\$ (183,269)
Sales:				\$ (17,758)
Total projected vs. actual variance (November 2018)				\$ (201,027)

Fuel Adjustment Over / (Under) Cost Recovery (General Ledger Account 24205)	Projected \$	Actual \$
Opening Balance at 1 November 2018	436,903	436,903
Projected change in over / (under) recovery position	283,341	283,341
Variance (Actual vs. Projected) - see above		(201,027)
Actual change in over / (under) recovery position	283,341	82,314
Ending Balance at 30 November 2018	720,244	519,217



Fuel Consumption Projections

Forward Three Months

Shipment Date	Type	Hedged	Amount (Barrels)	Total Cost/Barrel*	FADJ (less \$30/bbl)
September 2018	Heavy	No	42,300.67	112.3282	82.3282
November 2018	Heavy	No	149,179.63	116.7002	86.7002
July 2018	Diesel	No	18,417.22	133.3830	103.3830
October 2018	Diesel	No	29,993.15	138.4734	108.4734



Fuel Adjustment Over/(Under) Recovery Projections

At Existing Fuel Adjustment Rate

Three Months Forward

Over (Under) Recovery account as at end of previous month:						\$ 519,217
Projected kWh Sales - December 2018	41,936,229		FADJ	13.00	\$	5,451,710
Projected fuel consumed		Shipment Date	Barrels	FADJ Cost/Barrel	Total Cost	
	Diesel	July 2018	2,496	\$ (103.38)	\$ (258,043.97)	
	Heavy	September 2018	42,301	\$ (82.33)	\$ (3,482,536.11)	
	Heavy	November 2018	19,508	\$ (86.70)	\$ (1,691,376.11)	
	Tynes Bay	N/A	3,589	\$ (102.95)	\$ (369,514.80)	
	Total Barrels		67,894			(349,761)
Projected Over (Under) Recovery account as at end of this month:						169,456
Projected kWh Sales - January 2019	43,049,214		FADJ	13.00	\$	5,596,398
Projected fuel consumed		Shipment Date	Barrels	FADJ Cost/Barrel	Total Cost	
	Diesel	July 2018	9,103	\$ (103.38)	\$ (941,095.45)	
	Heavy	November 2018	56,933	\$ (86.70)	\$ (4,936,102.49)	
	Tynes Bay	N/A	2,258	\$ (104.12)	\$ (235,077.60)	
	Total Barrels		68,294			(515,878)
Projected Over (Under) Recovery account as at end of this month:						(346,421)
Projected kWh Sales - February 2019	40,497,543		FADJ	13.00	\$	5,264,681
Projected fuel consumed		Shipment Date	Barrels	FADJ Cost/Barrel	Total Cost	
	Diesel	July 2018	4,464	\$ (103.38)	\$ (461,501.71)	
	Heavy	November 2018	50,722	\$ (86.70)	\$ (4,397,607.54)	
	Tynes Bay	N/A	2,358	\$ (101.79)	\$ (240,050.10)	
	Total Barrels		57,544			165,521
Projected Over (Under) Recovery account as at end of this month:						(180,900)



Fuel Adjustment Over/(Under) Recovery Projections

At Requested Fuel Adjustment Rate

Three Months Forward

Over (Under) Recovery account as at end of previous month:						\$ 519,217
Projected kWh Sales - December 2018	41,936,229		FADJ	13.00		\$ 5,451,710
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	Total Barrels		57,544			165,521
Projected Over (Under) Recovery account as at end of this month:						(180,900)



Commercial Renewable System Excess Energy Rate ("CRSEER")

At Requested Fuel Adjustment Rate - Full Cost

Projected Over (Under) Recovery account as at end of December:						\$ 169,456
Projected kWh Sales - January 2019	43,049,214		CRSEER	17.76		\$ 7,645,540
Projected fuel consumed		Shipment Date	Barrels	FADJ Cost/Barrel	Total Cost	
	Diesel	July 2018	9,103	\$ (133.38)	\$ (1,214,185.45)	
	Heavy	November 2018	56,933	\$ (116.70)	\$ (6,644,092.49)	
	Tynes Bay	N/A	2,258	\$ (134.12)	\$ (302,808.00)	
	Total Barrels		68,294			(515,546)
Projected Over (Under) Recovery account as at end of this month:						(346,089)
Projected kWh Sales - February 2019	40,497,543		CRSEER	17.26		\$ 6,989,876
Projected fuel consumed		Shipment Date	Barrels	FADJ Cost/Barrel	Total Cost	
	Diesel	July 2018	4,464	\$ (133.38)	\$ (595,421.71)	
	Heavy	November 2018	50,722	\$ (116.70)	\$ (5,919,267.54)	
	Tynes Bay	N/A	2,358	\$ (131.79)	\$ (310,800.00)	
	Total Barrels		57,544			164,387
Projected Over (Under) Recovery account as at end of this month:						(181,703)

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

332

(802)

BELCO

Generators Available for Service

November 2018

Generator	Available	Type of fuel Consumed	Barrels of Fuel Consumed	Efficiency Rating*
E1	Yes	HFO	7306	717
E2	Yes	HFO	8657	660
E3	Yes	HFO	6581	716
E4	Yes	HFO	2403	711
E5	Yes	HFO	10899	727
E6	Yes	HFO	9966	738
E7	Yes	HFO	10567	724
E8	No	HFO	0	NA
D3	Yes	LFO	2316	634
D8	Yes	LFO	3157	637
D10	Yes	LFO	3281	613
D14	Yes	LFO	1268	587
GT4	No	LFO	0	NA
GT5	Yes	LFO	110	433
GT6	Yes	LFO	118	453
GT7	Yes	LFO	377	449
GT8	Yes	LFO	632	357

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



Generators Out of Service

November 2018

Unit	Category	Type	Forced Outage Details	Outage Date	Return Date
E4	Main Engine	FO (Immediate)	HTCW Low pressure	11/30/18	11/30/18
E1	Instrumentation & Control System	MO	Governor change and fuel leak repairs	11/27/18	11/29/18
E2	Main Engine	PO	8K Service	11/25/18	12/8/18
E3	Other Systems	MO	HTCW pipe replacement	11/24/18	11/24/18
D8	Electrical System	MO	MCC main cable repair	11/24/18	11/25/18
E2	Other Systems	MO	Cylinder #1 main bearing lube oil supply pipe repair	11/23/18	11/24/18
E7	Auxiliary Systems	FO (Immediate)	Amot valve replacement	11/19/18	11/19/18
D3	Main Engine	FO (Postpone)	Cylinder head removal due to water leaks	11/19/18	11/24/18
D8	Main Engine	MO	Alternator filter replacement.	11/18/18	11/18/18
E4	Main Engine	MO	crankcase inspection	11/17/18	11/19/18
D10	Main Engine	MO	Alternator filter replacement.	11/17/18	11/17/18
D14	Auxiliary Systems	MO	Lube oil filter replacement	11/16/18	11/16/18
E6	Main Engine	MO	Numerous corrective maintenance jobs.	11/13/18	11/15/18
GT8	Other Systems	PO	Annual service	11/10/18	11/12/18
D3	Auxiliary Systems	MO	D3 JCW pump thermograghy	11/10/18	11/10/18
D8	Main Engine	MO	D8 indicator cock on 6R repair	11/10/18	11/10/18
GT6	Other Systems	FO (Start-Up Failure)	GT6 FO due to starter motor failure	11/9/18	NA
GT7	Main Engine	PO	GT7 annual service	11/9/18	11/10/18
GT6	Main Engine	PO	Unit out for Annual Inspection	11/7/18	11/9/18
D10	Main Engine	MO	Broken stud replacement on cylinder #5L	11/7/18	11/10/18
E5	Other Systems	MO	Unit out for Nutshell and water washing line repairs and Stack inspection	11/6/18	11/7/18



Scheduled Generator Maintenance

Dec-18

Generator	Maintenance Type	Outage Date	Return Date
E8	18K	10/29/2018	12/17/2018



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