



February 25, 2019

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 – March 1, 2019 to March 31, 2019

The Regulatory Authority of Bermuda (the “Authority”) has reviewed the March 2019 Fuel Adjustment Rate (“FAR”) filing submitted by Bermuda Electric Light Co. Ltd. (“BELCO”) on 8 February 2019 to maintain the existing FAR of \$0.1300 and approves the proposed 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*

February 8, 2019

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

Attention: Mr. Denton Williams, 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 March 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 31st January 2019 was \$71,034 over recovered as compared to the \$275,684 under recovery position projected in our last filing. The \$346,719 favorable variance is due to:

- The total actual barrels of fuel consumed in January were 3,915 barrels lower than projected, resulting in a positive impact on the recovery position of \$391,304;
- Net price variance positively impacted the recovery position by \$1,558; and
- Actual January electric sales were 346,043 KWH's lower than projected. This variance resulted in a net negative impact on the fuel recovery position of \$46,143.

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.

The logo for BELCO, featuring the word "BELCO" in white capital letters on a green and blue geometric background.

441 295 5111

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

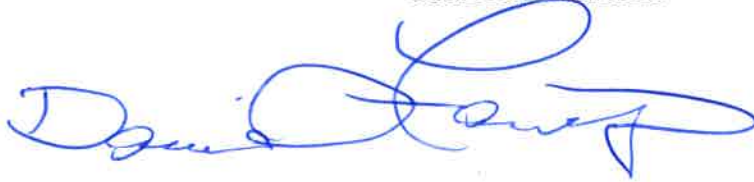
27 SERPENTINE RD
HAMILTON, HM 07
BERMUDA

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
BERMUDA

27 SERPENTINE RD
HAMILTON, HM 07
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BELCO



Bermuda Electric Light Company Limited

Fuel Adjustment Submission

FOR PUBLIC DISCLOSURE

March 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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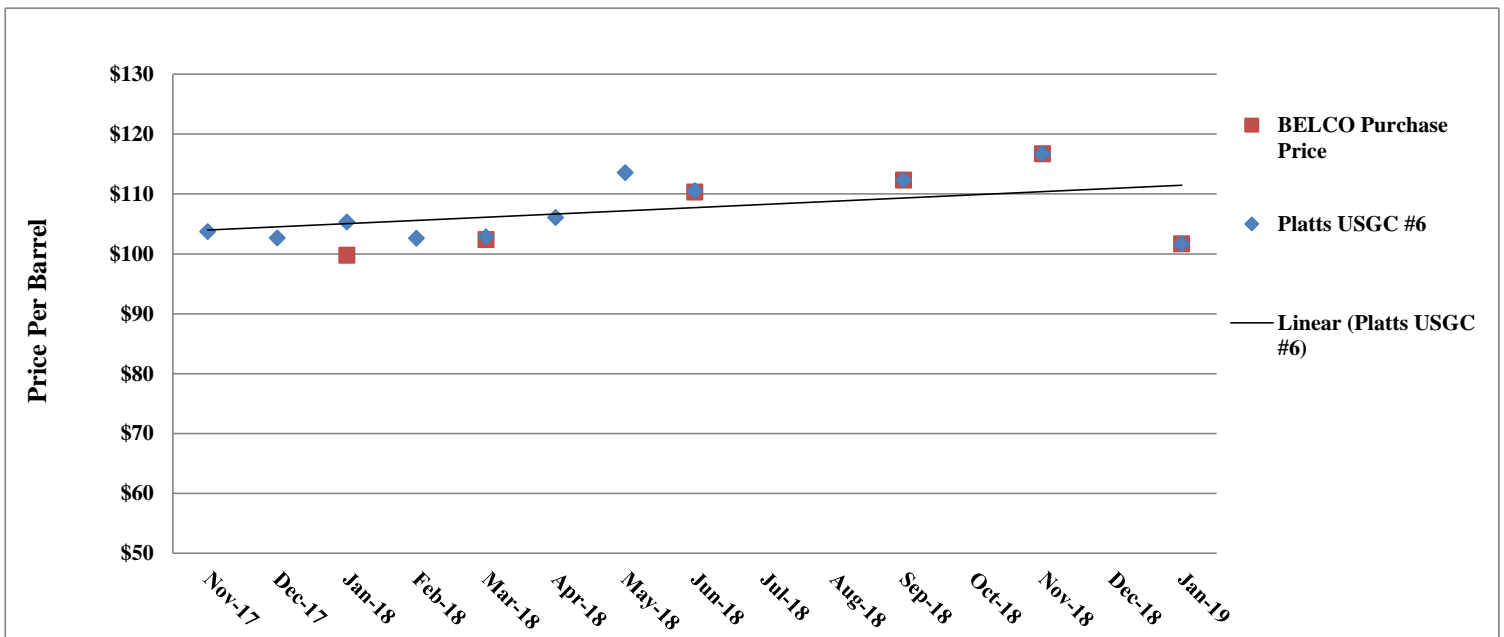


Heavy Fuel Oil Purchased

Versus

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

Previous Twelve Monthss

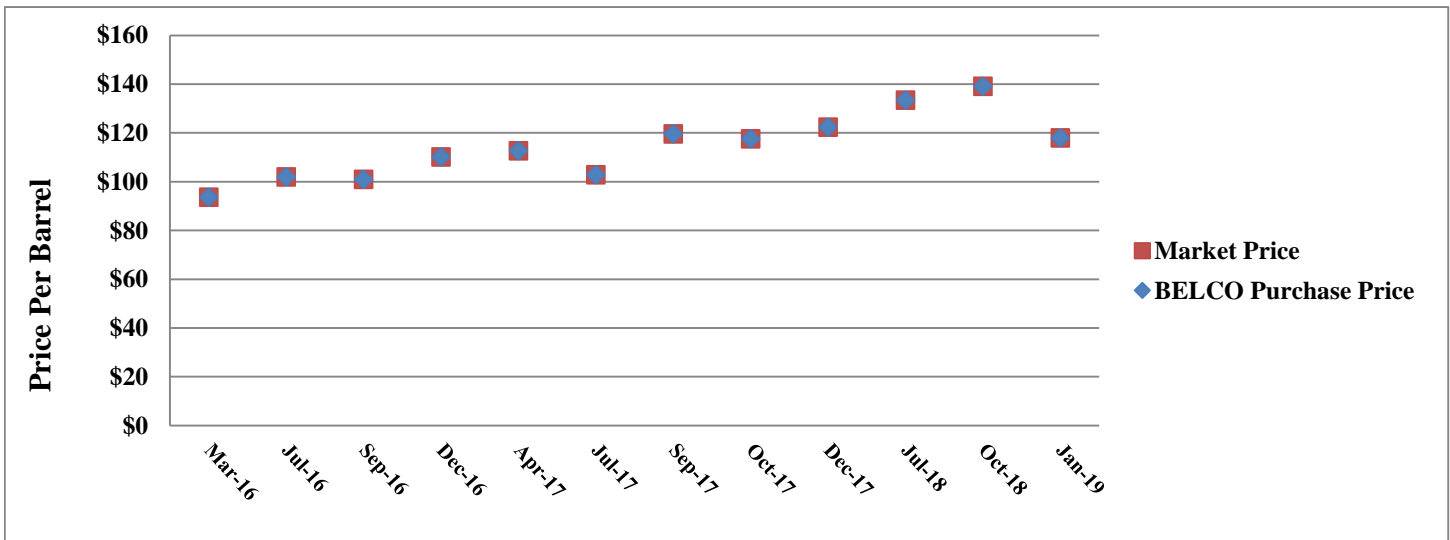


N.B. In accordance with the Fuel Supply Agreement for Platt's U.S. Gulf Coast Waterborne mid-No. 6, 3% Sulfur Heavy Fuel Oil between BELCO and Shell Western Trading Limited, the contracted price is stipulated as the 30-day average for Platt's U.S. Gulf Coast Waterborne mid-No. 6, 3% Sulfur Heavy Fuel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

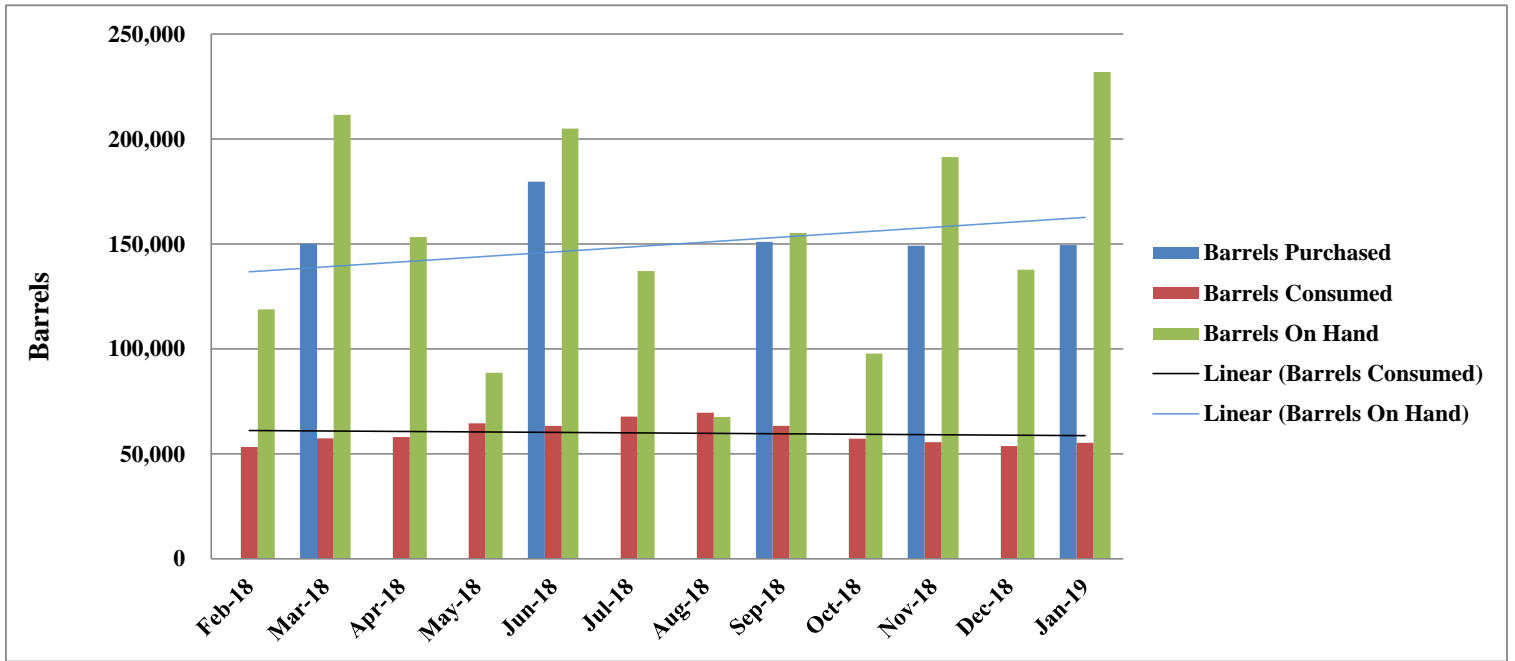
Previous Twelve Months

<u>Date</u>	<u>Barrels Purchased</u>	<u>Barrels Consumed</u>	<u>Barrels On Hand</u>
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
December, 2018	-	53,736.37	137,743.93
January, 2019	149,575.27	55,288.23	232,030.97



Graph of Heavy Fuel Oil Inventory Activity

Previous Twelve Months





Diesel Fuel Oil Inventory Activity

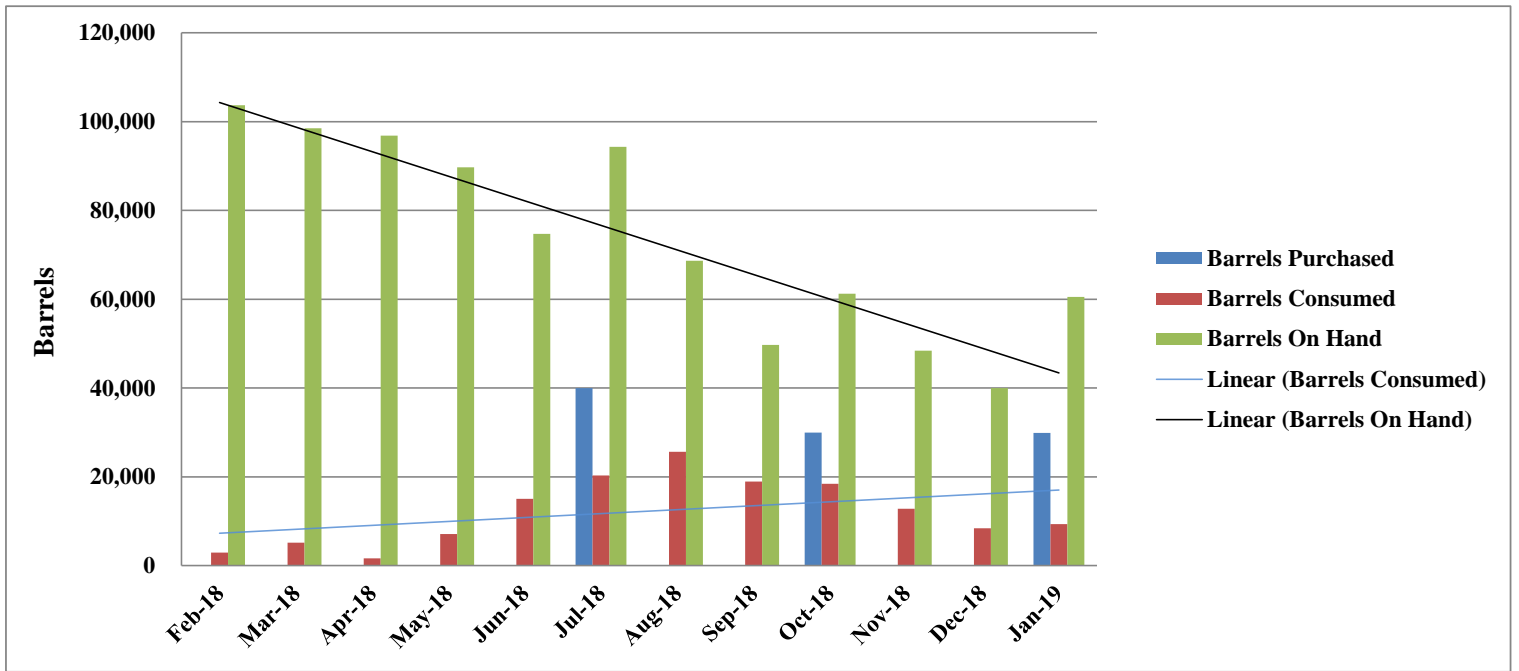
Previous Twelve Months

<u>Date</u>	<u>Barrels Purchased</u>	<u>Barrels Consumed</u>	<u>Barrels On Hand</u>
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
December, 2018		8,405.87	40,004.50
January, 2019	29,920.00	9,376.46	60,548.04



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.

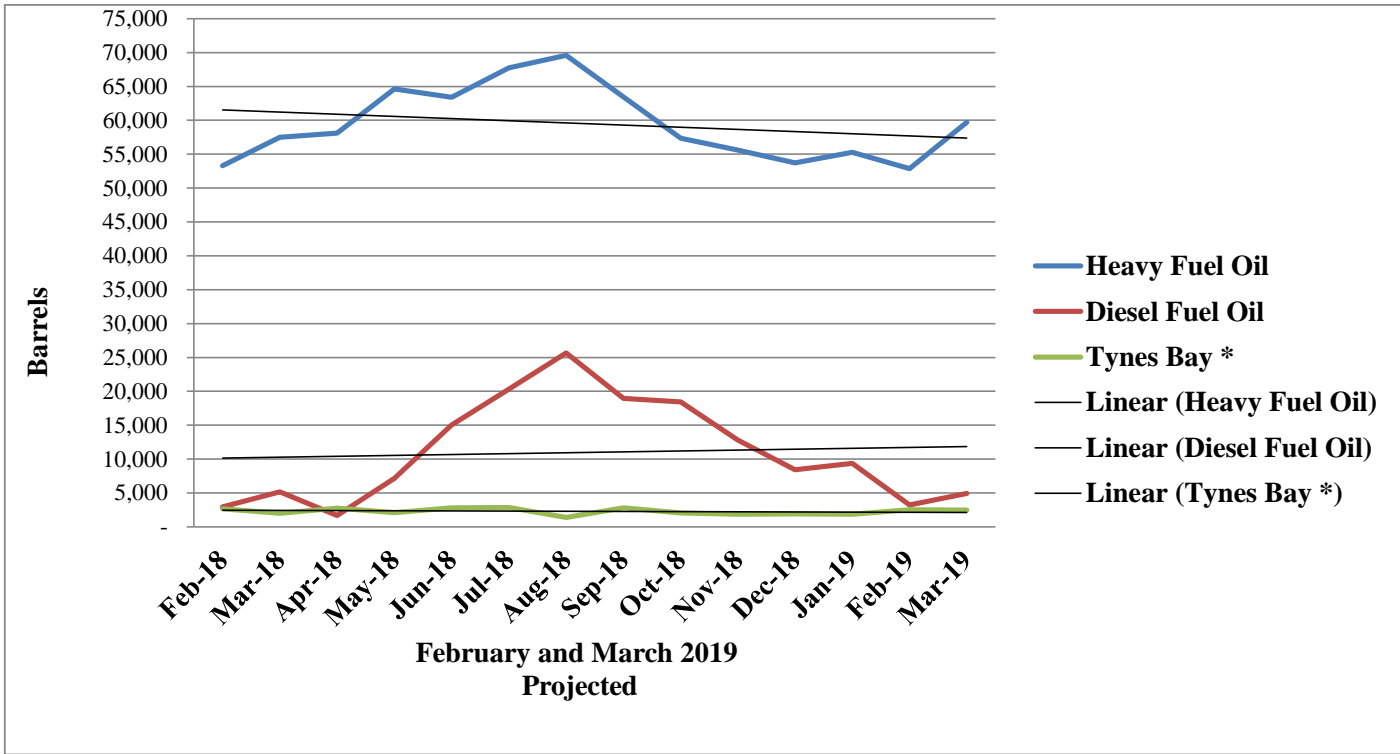


Diesel Fuel Oil Costs Per Shipment

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



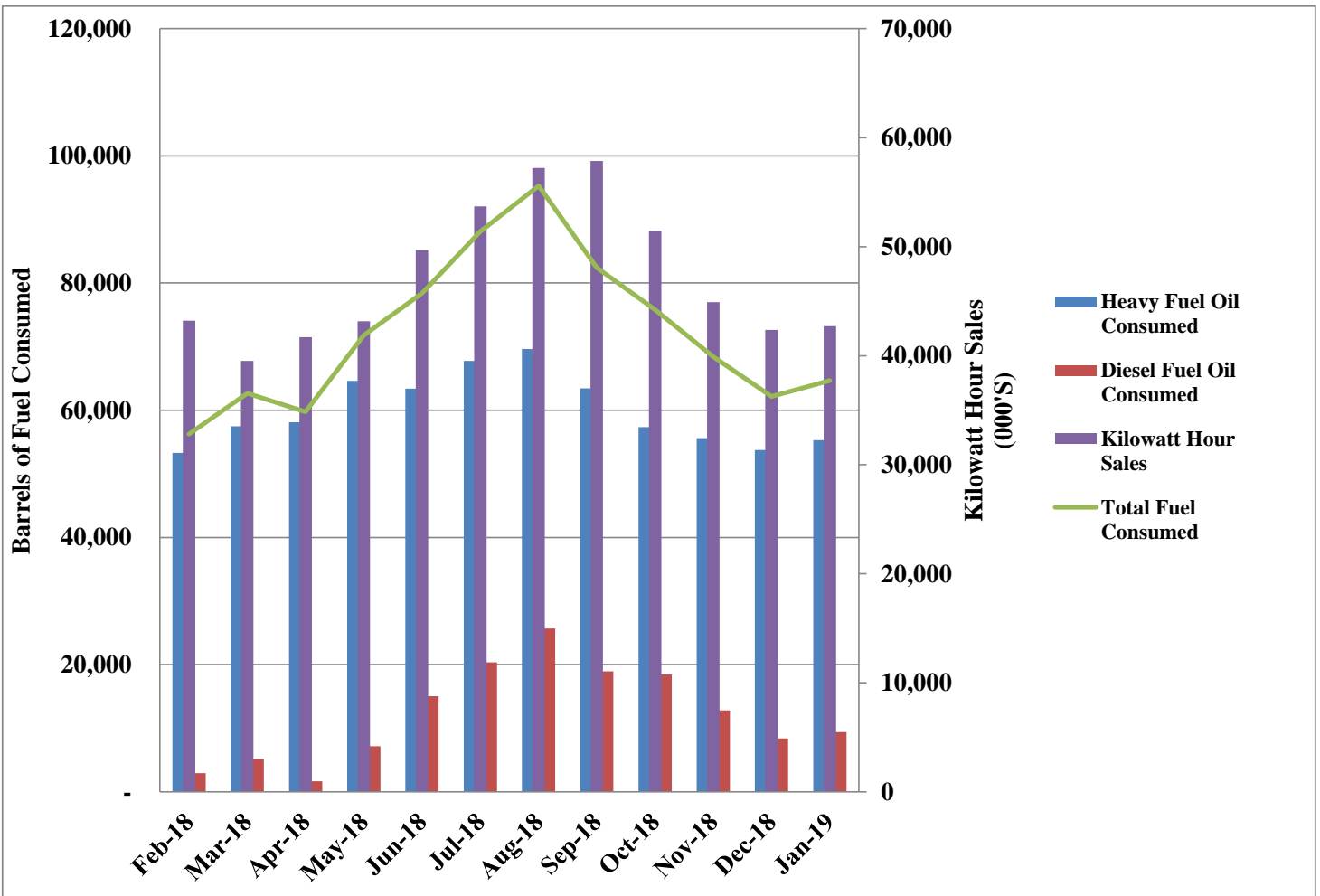
* BELCO calculates an efficiency rating for its generators on a monthly basis. This is calculated as the estimated kilowatt hours that will be generated that month divided by the estimated number of barrels of fuel that will be used. Therefore, the equivalent barrels of fuel is calculated for Tynes Bay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



Fuel Consumption

Versus

Kilowatt Hour Sales

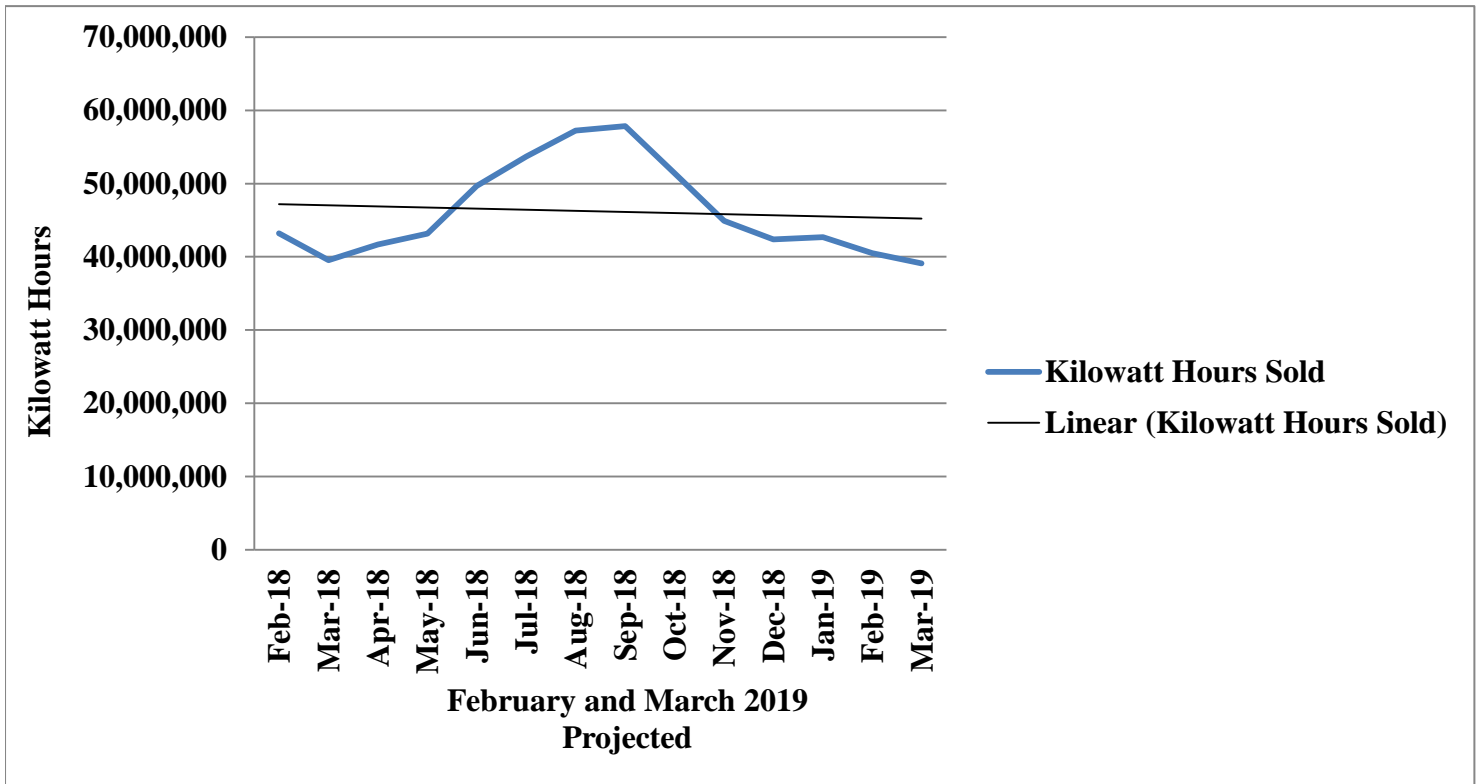


BELCO

Kilowatt Hour Sales

Previous Twelve Months

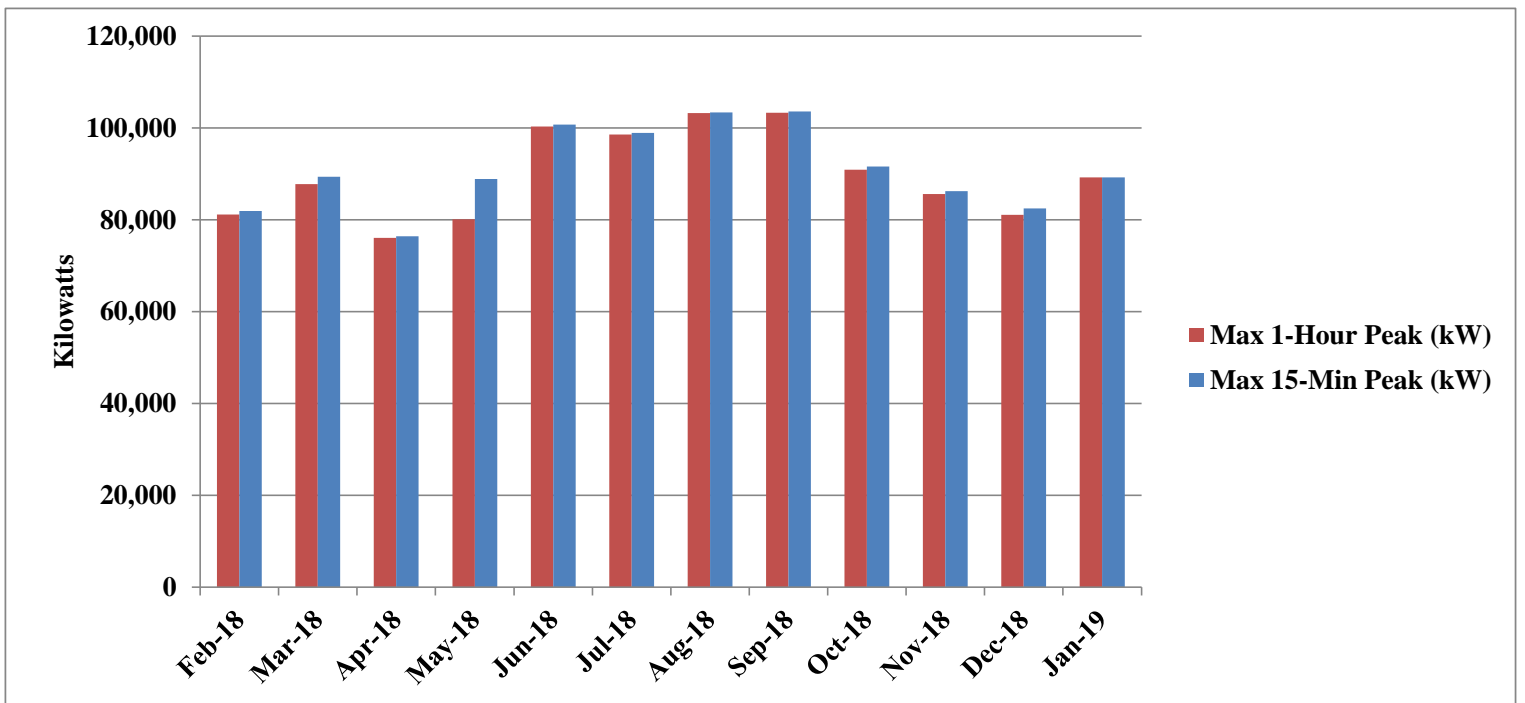
Plus Two Month Forward Projection





Maximum 15-Minute & Hourly Peak Kilowatt Hour Demand

Previous Twelve Months

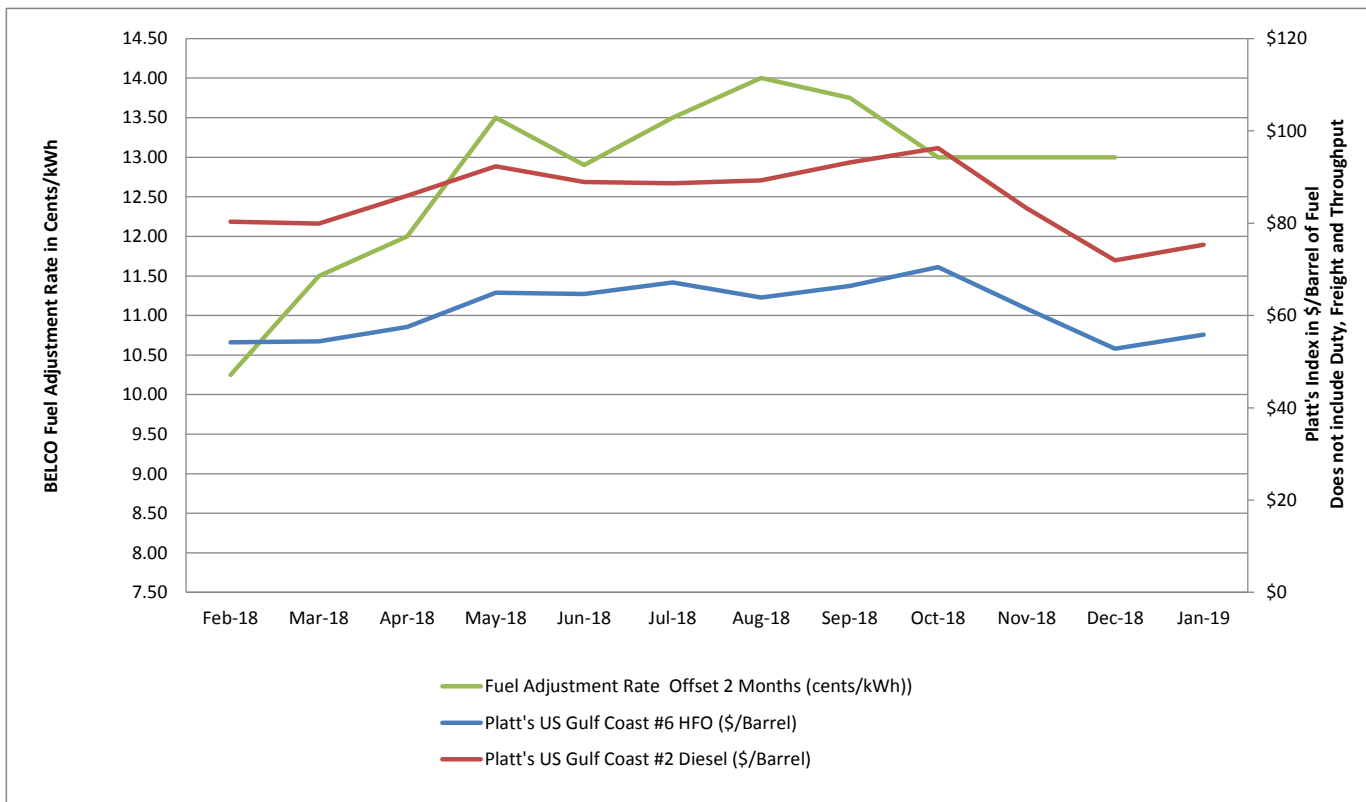




Fuel Adjustment Rate

Versus

Platt's Indices for Heavy and Diesel Fuel Oils



BELCO

Fuel Adjustment Over / (Under) Recovery

For the Month Ended 31 January 2019

	\$	\$	\$
Opening Balance at 1 January 2019			485,352
 <u>Fuel Consumption</u>			
Diesel - 9,376.46 @ \$133.3830	1,250,660		
Less: Fuel Consumption @ \$30/bbl	<u>(281,294)</u>	969,366	
Heavy - 55,288.23 bbls @ \$116.8127	6,458,367		
Less: Fuel Consumption @ \$30/bbl	<u>(1,658,647)</u>	4,799,720	
Tynes Bay - 1,361,128 kWh @ \$0.185	251,809		
Less: (1,361,128 kWh /724.99) 1,877.44 bbls @ \$30/bbl	<u>(56,323)</u>	195,486	
		<u>5,964,572</u>	
Deduct: Fuel Adjustment Revenue		<u>5,550,254</u>	
January over / (under) recovery			(414,318)
Ending Balance at 31 January 2019			<u>71,034</u>



Fuel Adjustment Over / (Under) Cost Recovery Variance Analysis

For the Month Ended 31 January 2019

Cost Analysis:

Projections:

	Diesel	Heavy	Tynes Bay	Total
Barrels	11,958	56,242	2,258	70,458
Total Fuel Adjustment Cost	\$ 1,246,163	\$ 4,876,193	\$ 235,078	\$ 6,357,434
Fuel Adjustment Cost / Barrel	\$ 104.21	\$ 86.70	\$ 104.12	\$ 90.23

Actual:

Barrels	9,376	55,288	1,877	66,542
Total Fuel Cost	\$ 1,250,661	\$ 6,458,368	\$ 251,809	\$ 7,960,838
Total Fuel Adjustment Cost	\$ 969,367	\$ 4,799,719	\$ 195,485	\$ 5,964,572
Fuel Adjustment Cost / Barrel	\$ 103.38	\$ 86.81	\$ 104.12	\$ 89.64

Sales Analysis:

FAR (cents/kwh)

13.00 Requested

13.00 Approved

Fuel Adjustment Sales

Projected:
Actual:
Variance
% Variance

Total KWH Sales	Total \$ Sales
43,049,214	\$ 5,596,398
42,703,171	\$ 5,550,254
(346,043)	\$ (46,143)
-0.80%	-0.82%

Summary - projected vs. actual variances:

	Diesel	HFO	Tynes Bay	Total (Rounded)
Quantity (Barrels):	2,582	954	380	3,915
Costs:				
Price variance	\$ 7,770	\$ (6,213)	\$ 1	\$ 1,558
Quantity variance	\$ 269,026	\$ 82,686	\$ 39,592	\$ 391,304
Total variance	\$ 276,796	\$ 76,473	\$ 39,593	\$ 392,862
Sales:				\$ (46,143)
Total projected vs. actual variance (January 2019)				\$ 346,719

Fuel Adjustment Over / (Under) Cost Recovery (General Ledger Account 24205)	Projected \$	Actual \$
Opening Balance at 1 January 2019	485,352	485,352
Projected change in over / (under) recovery position	(761,036)	(761,036)
Variance (Actual vs. Projected) - see above		346,719
Actual change in over / (under) recovery position	(761,036)	(414,317)
Ending Balance at 31 January 2019	(275,684)	71,034



Fuel Consumption Projections

Forward Three Months

Shipment Date	Type	Hedged	Amount (Barrels)	Total Cost/Barrel	FADJ (less \$30/bbl)
November 2018	Heavy	No	82,455.70	116.8127	86.8127
January 2019	Heavy	No	149,575.27	101.6962	71.6962
July 2018	Diesel	No	634.89	133.3830	103.3830
October 2018	Diesel	No	29,993.15	138.7672	108.7672



Fuel Adjustment Over/(Under) Recovery Projections

At Existing Fuel Adjustment Rate

Three Months Forward

Over (Under) Recovery account as at end of previous month:						\$ 71,034
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	635	\$ (103.38)	\$ (65,636.83)	
	Diesel	October 2018	2,581	\$ (108.77)	\$ (280,740.11)	
	Heavy	November 2018	52,880	\$ (86.81)	\$ (4,590,655.58)	
	Tynes Bay	N/A	2,358	\$ (101.79)	\$ (240,050.10)	
	Total Barrels		58,454			87,598
Projected Over (Under) Recovery account as at end of this month:						158,632
Projected kWh Sales - March 2019	39,123,271		FADJ	13.00		\$ 5,086,025
Projected fuel consumed		Shipment Date	Barrels	FADJ Cost/Barrel	Total Cost	
	Diesel	October 2018	4,918	\$ (108.77)	\$ (534,917.09)	
	Heavy	November 2018	29,576	\$ (86.81)	\$ (2,567,546.37)	
	Heavy	January 2019	30,131	\$ (71.70)	\$ (2,160,299.71)	
	Tynes Bay	N/A	2,525	\$ (104.21)	\$ (263,079.35)	
	Total Barrels		67,150			(439,817)
Projected Over (Under) Recovery account as at end of this month:						(281,186)
Projected kWh Sales - April 2019	41,161,419		FADJ	13.00		\$ 5,350,984
Projected fuel consumed		Shipment Date	Barrels	FADJ Cost/Barrel	Total Cost	
	Diesel	October 2018	576	\$ (108.77)	\$ (62,649.91)	
	Heavy	January 2019	60,988	\$ (71.70)	\$ (4,372,607.85)	
	Tynes Bay	N/A	2,496	\$ (103.39)	\$ (258,108.30)	
	Total Barrels		64,060			657,618
Projected Over (Under) Recovery account as at end of this month:						376,433



Fuel Adjustment Over/(Under) Recovery Projections

At Requested Fuel Adjustment Rate

Three Months Forward

Over (Under) Recovery account as at end of previous month:						\$ 71,034
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	635	\$ (103.38)	\$ (65,636.83)	
	Diesel	October 2018	2,581	\$ (108.77)	\$ (280,740.11)	
	Heavy	November 2018	52,880	\$ (86.81)	\$ (4,590,655.58)	
	Tynes Bay	N/A	2,358	\$ (101.79)	\$ (240,050.10)	
	Total Barrels		58,454			87,598
Projected Over (Under) Recovery account as at end of this month:						158,632
Projected kWh Sales - March 2019	39,123,271		FADJ	13.00		\$ 5,086,025
Projected fuel consumed		Shipment Date	Barrels	FADJ Cost/Barrel	Total Cost	
	Diesel	October 2018	4,918	\$ (108.77)	\$ (534,917.09)	
	Heavy	November 2018	29,576	\$ (86.81)	\$ (2,567,546.37)	
	Heavy	January 2019	30,131	\$ (71.70)	\$ (2,160,299.71)	
	Tynes Bay	N/A	2,525	\$ (104.21)	\$ (263,079.35)	
	Total Barrels		67,150			(439,817)
Projected Over (Under) Recovery account as at end of this month:						(281,186)
Projected kWh Sales - April 2019	41,161,419		FADJ	12.00		\$ 4,939,370
Projected fuel consumed		Shipment Date	Barrels	FADJ Cost/Barrel	Total Cost	
	Diesel	October 2018	576	\$ (108.77)	\$ (62,649.91)	
	Heavy	January 2019	60,988	\$ (71.70)	\$ (4,372,607.85)	
	Tynes Bay	N/A	2,496	\$ (103.39)	\$ (258,108.30)	
	Total Barrels		64,060			246,004
Projected Over (Under) Recovery account as at end of this month:						(35,181)



Commercial Renewable System Excess Energy Rate ("CRSEER")

At Requested Fuel Adjustment Rate - Full Cost

Projected Over (Under) Recovery account as at end of January:						\$ 158,632
Projected kWh Sales - March 2019	39,123,271		CRSEER	18.15		\$ 7,100,874
Projected fuel consumed		Shipment Date	Barrels	FADJ Cost/Barrel	Total Cost	
	Diesel	October 2018	4,918	\$ (138.77)	\$ (682,457.09)	
	Heavy	November 2018	29,576	\$ (116.81)	\$ (3,454,817.37)	
	Heavy	January 2019	30,131	\$ (101.70)	\$ (3,064,238.71)	
	Tynes Bay	N/A	2,525	\$ (134.21)	\$ (338,818.25)	
	Total Barrels		67,150			(439,458)
Projected Over (Under) Recovery account as at end of this month:						(280,826)
Projected kWh Sales - April 2019	41,161,419		CRSEER	16.67		\$ 6,861,609
Projected fuel consumed		Shipment Date	Barrels	FADJ Cost/Barrel	Total Cost	
	Diesel	October 2018	576	\$ (138.77)	\$ (79,929.91)	
	Heavy	January 2019	60,988	\$ (101.70)	\$ (6,202,247.85)	
	Tynes Bay	N/A	2,496	\$ (133.39)	\$ (333,000.00)	
	Total Barrels		64,060			246,431
Projected Over (Under) Recovery account as at end of this month:						(34,395)

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

BELCO

Generators Available for Service

January 2019

Generator	Available	Type of fuel Consumed	Barrels of Fuel Consumed	Efficiency Rating*
E1	Yes	HFO	840	645
E2	Yes	HFO	10173	680
E3	Yes	HFO	6888	702
E4	Yes	HFO	7326	711
E5	Yes	HFO	10919	703
E6	Yes	HFO	8700	721
E7	Yes	HFO	9827	725
E8	No	HFO	2310	342
D3	Yes	LFO	2742	613
D8	Yes	LFO	2264	623
D10	Yes	LFO	3921	619
D14	Yes	LFO	418	585
GT4	Yes	LFO	0	NA
GT5	Yes	LFO	0	NA
GT6	No	LFO	0	NA
GT7	Yes	LFO	188	554
GT8	Yes	LFO	192	525

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



Generators Out of Service

January 2019

Unit	Category	Type	Forced Outage Details	Outage Date	Return Date
E4	Main Engine	FO (Postpone)	JCW leak at inlet bellow and Fuel leak on cylinder 4L	1/31/19	1/31/19
E5	Electrical System	MO	Troubleshooting of ground fault	1/31/19	2/1/19
E1	Auxiliary Systems	MO	Port inspection and follow up jobs	1/30/19	1/30/19
E8	Electrical System	MO	On load trip of new AVR	1/28/19	1/28/19
GT5	Electrical System	MO	Unit out for EMD to make connections for BESS.	1/26/19	1/26/19
D10	Auxiliary Systems	FO (Immediate)	Fuel Oil inlet pipe chafed.	1/26/19	1/28/19
E5	Main Engine	MO	EMD to test DC electrical system	1/26/19	1/26/19
E8	Auxiliary Systems	FO (Immediate)	Unit tripped due to HTCW pressure drop.	1/25/19	1/25/19
E6	Main Engine	MO	MO to fix bed plate.	1/24/19	2/2/19
E2	Auxiliary Systems	FO (Immediate)	Fuel pump Cylinder #2 leaking, suction valve failure.	1/24/19	1/24/19
D14	Main Engine	MO	MO on JCW/ICW pump shaft seals replacement	1/23/19	1/30/19
E6	Auxiliary Systems	FO (Postpone)	HTCW system three way valve leaking	1/21/19	1/21/19
E6	Auxiliary Systems	FO (Immediate)	HT pressure low	1/21/19	1/21/19
E7	Main Engine	MO	Injector 6A replacement	1/21/19	1/22/19
E5	Main Engine	MO	Maintenance Outage. Charge air coolers replacement.	1/19/19	1/20/19
E2	Auxiliary Systems	FO (Immediate)	Unit forced out due to fuel leak on cylinder #4 fuel pump supply line. Two bolts on the HP line found sheared.	1/17/19	1/24/19
E7	Main Engine	FO (Immediate)	Unit tripped off load as a result of the OMD and Splash Oil alarm activating.	1/11/19	1/15/19
E7	Main Engine	FO (Immediate)	JKW leak on cylinder 7A	1/8/19	1/8/19
E3	Main Engine	FO (Immediate)	Return pipe leaks on cylinder s #1 RHS and #8 LHS	01/04/19	01/04/19



Scheduled Generator Maintenance

Feb-19

Generator	Maintenance Type	Outage Date	Return Date
E7	18K	2/4/2019	1/23/2019
E6	9K	2/18/2019	2/24/2019



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