#### BERMUDA ELECTRIC LIGHT COMPANY LIMITED

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PLEASE QUOTE OUR REF.

March 10, 2015

The Energy Commission c/o The Ministry of Energy, Telecommunications and E-Commerce PO Box HM 101 Hamilton, HM AX

Attention: Mr. Michael Leverock, Chairman

#### **TARIFF FILING**

Dear Mr. Leverock,

This is to advise you that we wish to make the following changes to the fuel adjustment rate ("FAR") and Commercial renewable system excess energy rate ("CRSEER"):

- 1. FAR Maintain the existing FAR of 12.5 cents per kilowatt-hour sold for April 2015; and
- 2. CRSEER Increase from 17.3 cents per kilowatt-hour for March 2015 to 17.51 cents per kilowatt-hour for all meters read during the month of April 2015.

The CRSEER represents the rate BELCO will pay commercial owners for excess energy they have generated but not consumed and have exported to BELCO.

As directed by the Energy Commission in accordance with Schedule 1 Paragraph 16 of the Energy Act 2009, our submission in support of this request is attached for your review.

The actual fuel adjustment cost recovery position as at February 28th, 2015 was \$1,135,560 under recovered as compared to the projected \$1,475,817 under recovery position reported last month. The \$340,257 favorable variance is due to:

- Actual barrels of fuel consumed in February were less than projected by 2,553 barrels. This <u>positively</u> impacted the recovery position by \$311,338;
- Net price variance <u>positively</u> impacted the recovery position by \$5,247;
- Actual February electric sales were 966,260 KWH's more than projected <u>positively</u> impacting the recovery position by \$111,680; and
- Fuel interest finance cost incurred in February <u>negatively</u> impacting the recovery position by \$88,008.

As always, we are available to meet with the Energy Commission to discuss our FAR submission. We will continue to monitor our projections to ensure that our submitted FAR requests enable us to achieve a break-even position on fuel costs. Should you have any questions concerning the above, please do not hesitate to contact us.

Yours sincerely,

BERMUDA ELECTRIC LIGHT COMPANY LIMITED

David Faries, C.A., J.P.

Vice President, Finance & Group Controller



# Bermuda Electric Light Company Limited

Fuel Adjustment Submission

# **FOR PUBLIC DISCLOSURE**

April 2015

This information is provided to the Bermuda Energy Commission as directed by them on December 30, 2013, in accordance with Schedule 1, Paragraph 16 of the Bermuda Energy Act 2009. This information should be read in conjunction with documents filed by Ascendant Group Limited with the Bermuda Stock Exchange. Please refer to the Company's website at <a href="https://www.belco.bm">www.belco.bm</a> for further information describing Bermuda Electric Light Company Limited. 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.



# Fuel Adjustment Submission

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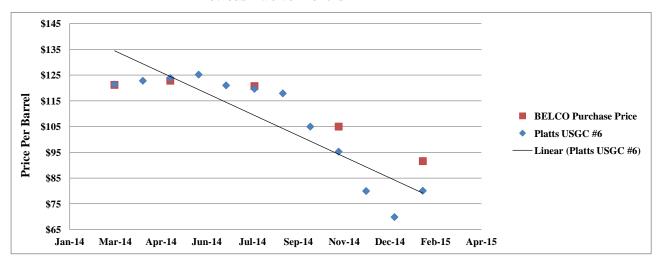


### **Heavy Fuel Oil Purchased**

#### Versus

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

#### **Previous Twelve Months**

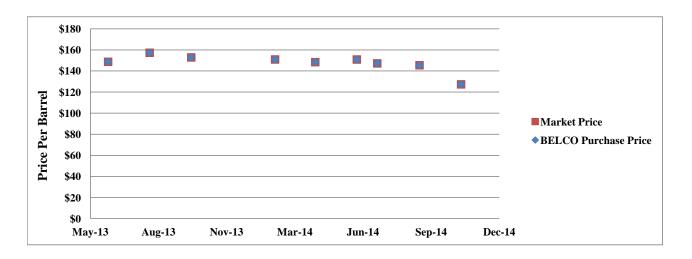


N.B. In accordance with the Fuel Supply Agreement for Platt's U.S. Gulf Coast Waterborne mid-No. 6, 3% Sulfur Heavy Fuel Oil between BELCO and Shell Western Trading Limited, the contracted price is stipulated as the 30-day average for Platt's U.S. Gulf Coast Waterborne mid-No. 6, 3% Sulfur Heavy Fuel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



### **Diesel Fuel Oil Purchased**

### **Previous Twelve Months**



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.

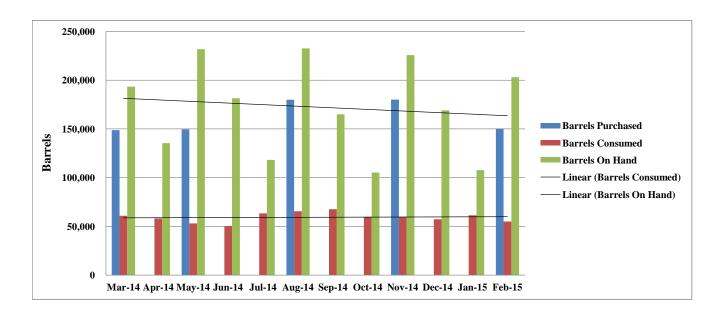


# **Heavy Fuel Oil Inventory Activity**

Date	<b>Barrels Purchased</b>	<b>Barrels Consumed</b>	<b>Barrels On Hand</b>
March, 2014	148,841.61	60,961.00	193,456.55
April, 2014	-	58,072.00	135,384.55
May, 2014	149,555.88	53,049.00	231,891.43
June, 2014	-	50,421.00	181,470.43
July, 2014	-	63,298.00	118,172.43
August, 2014	180,041.29	65,499.00	232,714.72
September, 2014	-	67,611.00	165,103.72
October, 2014	-	59,804.00	105,299.72
November, 2014	180,159.88	59,619.00	225,840.60
December, 2014	-	57,212.00	169,174.72
January, 2015	-	61,419.00	107,755.72
February, 2015	150,289.50	54,987.00	203,058.22



## **Graph of Heavy Fuel Oil Inventory Activity**



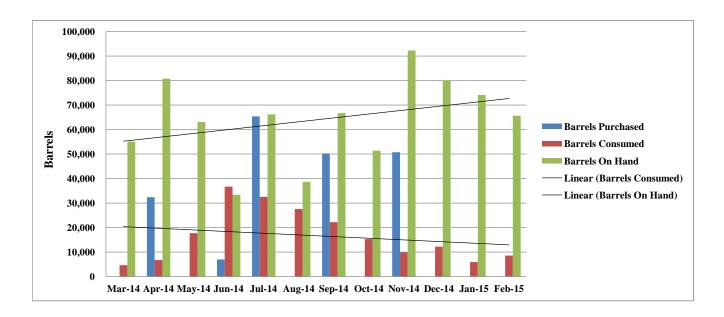


# **Diesel Fuel Oil Inventory Activity**

<b>Date</b>	Barrels Purchased	Barrels Consumed	Barrels On Hand
March, 2014	-	4,623.00	55,098.67
April, 2014	32,385.20	6,720.00	80,763.87
May, 2014	-	17,668.00	63,095.87
June, 2014	6,992.52	36,709.00	33,379.39
July, 2014	65,377.73	32,538.00	66,219.12
August, 2014	-	27,530.00	38,689.12
September, 2014	50,189.00	22,176.00	66,702.12
October, 2014	-	15,290.00	51,412.12
November, 2014	50,764.86	9,913.00	92,263.98
December, 2014	-	12,177.00	80,088.52
January, 2015	-	5,959.00	74,129.52
February, 2015	-	8,529.00	65,600.52



## **Graph of Diesel Fuel Oil Inventory Activity**





# **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**

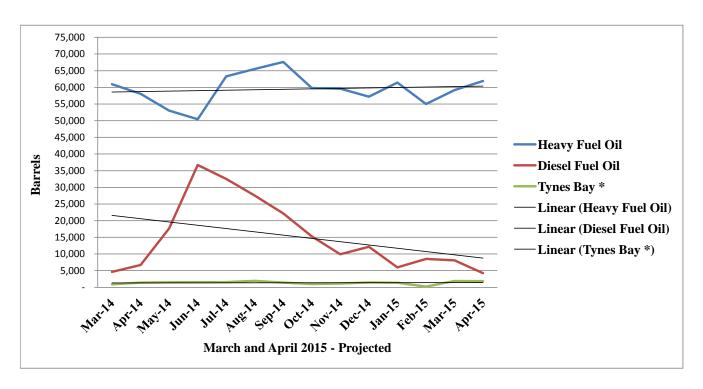
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#### **Barrels of Fuel Consumed**

#### **Previous Twelve Months**

### **Plus Two Month Forward Projection**



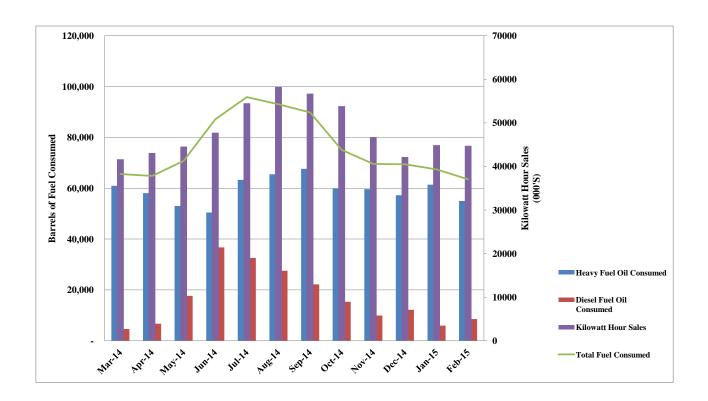
<sup>\*</sup> BELCO calculates an efficiency rating for its generators on a monthly basis. This is calculated as the estimated kilowatt hours that will be generated that month divided by the estimated number of barrels of fuel that will be used. Therefore, the equivalent barrels of fuel is calculated 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**

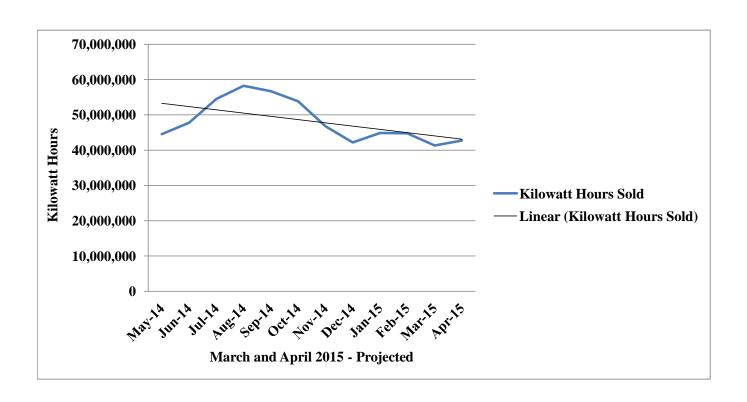




### **Kilowatt Hour Sales**

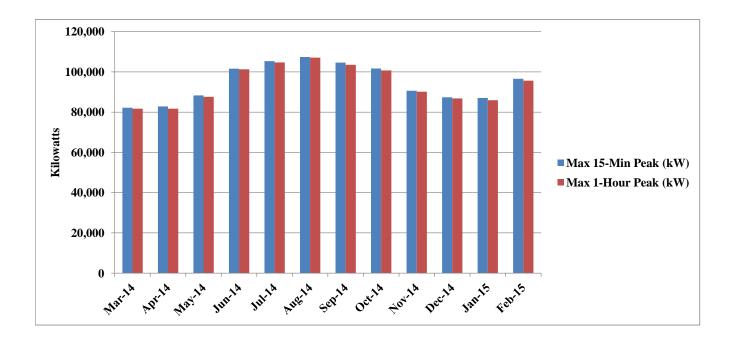
### **Previous Twelve Months**

# **Plus Two Month Forward Projection**





### Maximum 15-Minute & Hourly Peak Kilowatt Hour Demand





### **Fuel Adjustment Rate**

#### Versus

### Platt's Indices for Heavy and Diesel Fuel Oils





# Fuel Adjustment Over / (Under) Recovery

# For the Month Ended February 28th, 2015

		\$	\$	\$
Opening Balance at 1 February 2015				(1,085,006)
<u>Fuel Consumption</u>				
Diesel - 8,529 bbls @ 145.4164		1,240,256		
Less: Fuel Consumption @ \$30/bbl		(255,870)	984,386	
Heavy - 17,595.84 @ 119.7828		2,107,679		
Heavy - 37,391.16 @ 96.7074		3,616,002		
Less: Fuel Consumption @ \$30/bbl		(1,649,610)	4,074,071	
Tynes Bay - 162,080 kWh @ 0.185		29,985		
Less: (162,080 kWh /725.40) 223.44 bbls @ \$30/bbl		(6,703)	23,282	
			5,081,739	
Deduct: Fuel Adjustment Revenue (after discount)				
	\$5,370,816	@ .95315	5,119,193	
February over / (under) recovery		_		37,454
Interest Expense				(88,008)
Cost of Power Purchased from Commercial Providers				0
Ending Balance at 28 February 2015			-	(1,135,560)



# **Fuel Consumption Projections**

# **Forward Three Months**

Shipment			Amount	Total	FADJ (less
Date	Type	Hedged	(Barrels)	Cost/Barrel	\$30/bbl)
November 14	Heavy	No	22,608.84	96.7074	66.7074
November 14	Heavy	No	30,159.88	94.7584	64.7584
February 15	Heavy	Yes	30,000.00	88.9016	58.9016
February 15	Heavy	Yes	30,000.00	104.7978	74.7978
February 15	Heavy	Yes	30,000.00	102.2666	72.2666
February 15	Heavy	No	60,289.50	81.1107	51.1107
September 14	Diesel	No	14,835.66	145.4164	115.4164
November 14	Diesel	No	50,764.86	127.2852	97.2852



# **Fuel Adjustment Over/(Under) Recovery Projections**

## At Existing Fuel Adjustment Rate

### **Three Months Forward**

		Ove	er (Under) Recove	ry account as at end	of p	revious month:	\$ (1,135,560)
					•		
Projected kWh							
Sales - Mar							
2015	41,298,581		At 12.5 FADJ	@ 95315 (discount)	\$	4,920,468	
Projected fuel							
consumed		<b>Shipment Date</b>	Barrels	FADJ Cost/Barrel		<b>Total Cost</b>	
	Diesel	September 2014	8,112	\$ (115.42)	\$	(936,257.84)	
	Heavy	November 2014	22,609		\$	(1,508,176.93)	
	Heavy	November 2014	30,160		\$	(1,953,105.57)	
	Heavy	February 2015	6,382		\$	(375,926.50)	
	<b>Tynes Bay</b>	N/A	1,910	\$ (105.88)	\$	(202,250.42)	
	Total Barrels		69,173				(55,249)
		Projected	d Over (Under) Ro	ecovery account as at	en	d of this month:	(1,190,809)
Projected kWh							
Sales - Apr 2015	42,725,961		At 12.5 FADJ	@ 95315 (discount)	\$	5,090,531	
Projected fuel							
consumed		<b>Shipment Date</b>	Barrels	FADJ Cost/Barrel		<b>Total Cost</b>	
	Diesel	September 2014	4,248	\$ (115.42)	\$	(490,288.87)	
	Heavy	February 2015	23,618	\$ (58.90)	\$	(1,391,121.50)	
	Heavy	February 2015	30,000	\$ (74.80)	\$	(2,243,934.00)	
	Heavy	February 2015	8,272	\$ (72.27)	\$	(597,809.55)	
	Tynes Bay	N/A	1,863	\$ (104.81)	\$	(195,284.82)	
	Total Barrels		68,001				172,092
		Projected	d Over (Under) Re	ecovery account as at	en	d of this month:	(1,018,717)
		<u> </u>	·	·			
Projected kWh							
Sales - May							
2015	44,283,619		At 12.5 FADJ	@ 95315 (discount)	\$	5,276,116	
Projected fuel							
consumed		<b>Shipment Date</b>	Barrels	FADJ Cost/Barrel		<b>Total Cost</b>	
	Diesel	September 2014	2,476	\$ (115.42)	\$	(285,731.76)	
	Diesel	November 2014	428	\$ (97.29)	\$	(41,671.14)	
	Heavy	February 2015	21,728		\$	(1,570,188.45)	
	Heavy	February 2015	44,762	\$ (51.11)	\$	(2,287,831.46)	
	Tynes Bay	N/A	1,930	\$ (104.48)	\$	(201,651.29)	
	Total Barrels		71,324				889,042
		Projector	,	ecovery account as at	on	d of this month.	(129,675)



# Fuel Adjustment Over/(Under) Recovery Projections

## **At Requested Fuel Adjustment Rate**

### **Three Months Forward**

	Over (Under) Recovery account as at end of previous month: \$\((1,135,560)\)						
Projected kWh							
Sales - Mar							
2015	41,298,581		At 12.5 FADJ	@ 95315 (discount)	\$	4,920,468	
Projected fuel							
consumed		<b>Shipment Date</b>	Barrels	FADJ Cost/Barrel		Total Cost	
		G . 1 4044					
	Diesel	September 2014	8,112			(936,257.84)	
	Heavy	November 2014	22,609		\$	(1,508,176.93)	
	Heavy	November 2014	30,160		_	(1,953,105.57)	
	Heavy	February 2015	6,382			(375,926.50)	
	Tynes Bay	N/A	1,910	\$ (105.88)	\$	(202,250.42)	(55.240)
	Total Barrels		69,173	_			(55,249)
		Projec	cted Over (Under)	Recovery account as	s at	end of this month:	(1,190,809)
Projected kWh							
Sales - Apr 2015	42,725,961		At 12.5 FADJ	@ 95315 (discount)	\$	5,090,531	
Projected fuel							
consumed		<b>Shipment Date</b>	Barrels	FADJ Cost/Barrel		Total Cost	
	Diesel	September 2014	4,248		_	(490,288.87)	
	Heavy	February 2015	23,618			(1,391,121.50)	
	Heavy	February 2015	30,000			(2,243,934.00)	
	Heavy	February 2015	8,272		\$	(597,809.55)	
	Tynes Bay	N/A	1,863	\$ (104.81)	\$	(195,284.82)	
	Total Barrels		68,001				172,092
		Projec	cted Over (Under)	Recovery account as	sat	end of this month:	(1,018,717)
Projected kWh							
Sales - May							
2015	44,283,619		At 12.5 FADJ	@ 95315 (discount)	\$	5,276,116	
Projected fuel							
consumed		<b>Shipment Date</b>	Barrels	FADJ Cost/Barrel		Total Cost	
	Diesel	September 2014	2,476	\$ (115.42)	\$	(285,731.76)	
	Diesel	November 2014	428			(41,671.14)	
	Heavy	February 2015	21,728	, ,	<u> </u>	(1,570,188.45)	
	Heavy	February 2015	44,762			(2,287,831.46)	
	Tynes Bay	N/A	1,930	\$ (104.48)	\$	(201,651.29)	
	Total Barrels		71,324				889,042
		Projec	cted Over (Under)	Recovery account as	s at	end of this month:	(129,675)



## Fuel Adjustment Over/(Under) Recovery Projections

# At Requested Fuel Adjustment Rate - Full Cost

### **Three Months Forward**

Over (Under) Recovery account as at end of March: \$								
Projected kWh								
Sales - Apr 2015	42,725,961		At 17.51 FADJ	@ 95315 (discount)	\$	7,130,816		
Projected fuel								
consumed		Shipment Date	Barrels	FADJ Cost/Barrel		Total Cost		
	Diesel	September 2014	4,248	. ,		(617,728.87)		
	Heavy	February 2015	23,618			(2,099,653.10)		
	Heavy	February 2015	30,000			(3,143,934.00)		
	Heavy	February 2015	8,272	. ,		(845,977.95)		
	Tynes Bay	N/A	1,863	\$ (134.81)	\$	(251,181.90)		
	Total Barrels		68,001				172,340	
		Projec	ted Over (Under)	Recovery account as	s at e	nd of this month:	(1,018,469)	
						•		
Projected kWh								
Sales - May								
2015	44,283,619		At 17.57 FADJ	@ 95315 (discount)	\$	7,416,109		
Projected fuel								
consumed		<b>Shipment Date</b>	Barrels	FADJ Cost/Barrel		Total Cost		
	Diesel	September 2014	2,476	\$ (145.42)	\$	(360,001.56)		
	Diesel	November 2014	428	\$ (127.29)	\$	(54,521.34)		
	Heavy	February 2015	21,728	\$ (102.27)	\$	(2,222,020.05)		
	Heavy	February 2015	44,762	\$ (81.11)	\$	(3,630,699.86)		
	Tynes Bay	N/A	1,930	\$ (134.48)	\$	(259,554.63)		
	Total Barrels		71,324				889,312	
	Projected Over (Under) Recovery account as at end of this month:							



# **Generators Available for Service**

# February, 2015

Generator	Available	Type of fuel Consumed	Barrels of Fuel Consumed	Efficiency Rating*
E1- In Service	No	Heavy Fuel Oil	0	0
E2- In Service	Yes	Heavy Fuel Oil	9,301	683
E3- In Service	Yes	Heavy Fuel Oil	5,809	709
E4- In service	Yes	Heavy Fuel Oil	4,084	709
E5- In Service	Yes	Heavy Fuel Oil	10,215	703
E6- In Service	Yes	Heavy Fuel Oil	10,167	707
E7- In Service	Yes	Heavy Fuel Oil	9,640	735
E8- In Service	Yes	Heavy Fuel Oil	10,192	742
D3- In Service	Yes	Diesel Fuel Oil	562	606
D8- In Service	Yes	Diesel Fuel Oil	2,111	633
D10- In Service	Yes	Diesel Fuel Oil	1,817	606
GT6- In Service	No	Diesel Fuel Oil	0	0
GT7- In Service	Yes	Diesel Fuel Oil	151	457
GT8- In Service	No	Diesel Fuel Oil	0	0
D14- In Service	Yes	Diesel Fuel Oil	516	583
GT4- In Service	Yes	Diesel Fuel Oil	1,661	297
GT5- In Service	Yes	Diesel Fuel Oil	15	138

<sup>\*</sup> Efficiency Rating = Amount of kilowatt hours generated per barrel consumed



### **Generators Out of Service**

### February, 2015

Unit	Category	Туре	Forced Outage Details		Return Date
D14	Electrical System	FO (Postpone)	Negative Sequence Current alarm activated.	02/02/15	02/05/15
E2	Instrumentation & Control System	MO	Thermocouple on cylinder #5 and isolation valve to piston cooling transmitter to	02/02/15	02/02/15
E4	Main Engine	MO	Unit out to change fuel pipes and fuel rail seals	02/04/15	02/05/15
E4	Auxilary Systems	FO (Immediate)	Cylinder 8RHS fuel leak bottom high pressure pipe.	02/05/15	02/05/15
GT5	Auxilary Systems	MO	Unit out to change 13.8Kv breaker and various other jobs.	02/05/15	02/08/15
E3	Main Engine	MO	Unit out to address several fuel oil leaks.	02/05/15	02/06/15
E6	Main Engine	MO	Unit out to address broken drain pipe on LHS charge air cooler.	02/05/15	02/06/15
E7	Auxilary Systems	FO (Immediate)	E7 L.O. suction strainer clogged.	02/06/15	02/07/15
E5	Main Engine	MO	replace fuel rail brackets	02/08/15	02/08/15
D8	Electrical System	MO	Unit out to effect repairs on Auxiliary Unit Transformer, change head on #5 RH.	02/09/15	02/12/15
E4	Auxilary Systems	FO (Immediate)	Tripped	02/20/15	02/20/15
E7	Electrical System	MO	Unit out to replace Lube oil auto filter control panel.	02/11/15	02/12/15
E7	Main Engine	FO (Immediate)	Auto lube oil filter controller required changes to its parameters to operate profic	02/12/15	02/12/15
E7	Auxilary Systems	MO	Unit out to replace cylinder #4B injector	02/12/15	02/12/15
D10	Electrical System	FO (Immediate)	Stator phase B high temperature	02/13/15	02/14/15
E3	Main Engine	MO	Unit out for crankcase deflections.	02/14/15	02/14/15
E4	Main Engine	MO	Unit out for crankcase deflections.	02/14/15	02/14/15
D8	Auxilary Systems	FO (Immediate)	D8 SCW pump motor emitting burning electric smell and heat	02/16/15	02/16/15
E2	Main Engine	FO (Immediate)	Cyl injector No 1 north side leaking badly	02/16/15	02/17/15
E2	Main Engine	MO	Cyl 7 FO pp 7 HP pipe connection has sheared a bolt injectors 6 and 8 are leaking	02/17/15	02/18/15
E8	Auxilary Systems	MO	Unit out to repair cracked JCW vent on cylinder 7A	02/18/15	02/19/15
D8	Auxilary Systems	FO (Immediate)	SCW pump motor terminal heating up.	02/19/15	02/19/15
D3	Main Engine	MO	Big End Bearing Inspection	02/20/15	02/21/15
E4	Main Engine	FO (Immediate)	Cyl 13 SA V/V not closing causing SA delivery pipe to glow red	02/20/15	02/21/15
D3	Instrumentation & Control System	FO (Immediate)	Governor control, surging and loss of load. EMD	02/21/15	02/24/15
E4	Auxilary Systems	FO (Immediate)		02/22/15	NULL
E5	Instrumentation & Control System	FO (Start-Up Failure)	Governor system start block activated.	02/26/15	02/26/15



# **Scheduled Generator Maintenance**

# April 2015

Generator	Maintenance Type	Outage Date	Return Date
E6(6K)	6000hr	04/01/15	04/07/15
E8(9K)	9000hr	04/07/15	04/16/15
E7(6K)	6000hr	04/17/15	04/28/15
D8(9k)	9000hr	04/29/15	05/05/15



### 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 incured 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.
  No major events have occurred during the filing period having an impact on the Fuel Adjustment Rate.
- 3. Changes in Debt Facilities Affecting the Fuel Adjustment Rate.
  The existing \$55 million overdraft facility with a local bank expired on February 28, 2015, and was renewed for a stub period ending June 30, 2015 and decreased to \$41 million.