

**Attachment 1**  
**Puerto Rico Electric Power Authority**  
**Fuel Cost Adjustment Factor**  
**For the Month of September 2018**

Line No.	Item	Amount	Reference
1	<b>Calculation of Fuel Cost Adjustment Factor for September 2018</b>		
2			
3	Projected Cost per Barrel (\$/BBL)	\$ 70.025170	Attachment 3, L76
4	Cost per Barrel - Two Months Previous (\$/BBL)	\$ 78.540702	Attachment 5
5	Applicable Fuel Cost (\$/BBL)	\$ 74.282936	(L3+L4)/2
6	Estimated Fuel Consumption - Equiv. Barrels	1,509,480.39	Attachment 3, L74
7	AdjustmentC for actual use vs billing for 2 previous months (\$) - July 2018	\$ 13,939,751.66	Attachment 6, L14
8	Adjustment for the effect of Contribution in Lieu of Taxes to the Central Government	0.89	
9	Net Generation (MWh)	1,471,602.662	Attachment 3, L104
10	Estimated Barrels of Oil for Fuel Subsidy factor	896,107.31	Attachment 3, L74-L11
11			
12			
13	<b>Efficiency Factors</b>		
14	Secondary (%)	88.10%	Attachment 4, Net Efficiency Factors
15	Primary (%)	90.50%	Attachment 4, Net Efficiency Factors
16	Transmission (%)	96.60%	Attachment 4, Net Efficiency Factors
17	Bus Bar (%)	100.00%	Attachment 4, Net Efficiency Factors
18			
19			
20	<b>September 2018 FCC Factor per kWh per Voltage Levels</b>		
21	Secondary (\$/kWh)	\$ 0.109257	(L5*L6+L7)/(L8*L9*L14)
22	Primary (\$/kWh)	\$ 0.106360	(L5*L6+L7)/(L8*L9*L15)
23	Transmission (\$/kWh)	\$ 0.099643	(L5*L6+L7)/(L8*L9*L16)
24	Bus Bar (\$/kWh)	\$ 0.096256	(L5*L6+L7)/(L8*L9*L17)
25			
26	Oil Factor Subsidy up to \$30/BBL Oil (\$/kWh)	\$ 0.035379	(30*L10+L7)/(L8*L9*L14)
27	Oil Factor Subsidy up to \$18/BBL Oil (\$/kWh)	\$ 0.026060	(18*L10+L7)/(L8*L9*L14)

**Attachment 2**  
**Puerto Rico Electric Power Authority**  
**Purchased Power Cost Adjustment Factor**  
**For The Month of September 2018**

Line No.	Item	Amount	Reference
1	<b>Calculation of Purchased Power Adjustment Factor for September 2018</b>		
2			
3	Estimated Cost of Purchased Power (\$)	\$ 56,209,862.98	Attachment 3, L87+L99
4	Adjustment CE for actual use vs billing for 2 previous months (\$) - July 2018	\$ 5,581,224.85	Attachment 6, L29
5	Adjustment for the effect of Contribution in Lieu of Taxes to the Central Government	0.89	
6	Net Generation (MWh)	1,471,602.66	Attachment 3, L104
7			
8			
9	<b>Efficiency Factors</b>		
10	Secondary (%)	88.10%	Attachment 4, Net Efficiency Factors
11	Primary (%)	90.50%	Attachment 4, Net Efficiency Factors
12	Transmission (%)	96.60%	Attachment 4, Net Efficiency Factors
13	Bus Bar (%)	100.00%	Attachment 4, Net Efficiency Factors
14			
15			
16	<b>September 2018 FCE Factor per kWh per Voltage Levels</b>		
17	Secondary (\$/kWh)	\$ 0.053551	(L3+L4)/(L5*L6*L10)
18	Primary (\$/kWh)	\$ 0.052131	(L3+L4)/(L5*L6*L11)
19	Transmission (\$/kWh)	\$ 0.048839	(L3+L4)/(L5*L6*L12)
20	Bus Bar (\$/kWh)	\$ 0.047179	(L3+L4)/(L5*L6*L13)

**Attachment 3**  
**Puerto Rico Electric Power Authority**  
**Projected Fuel and Purchased Power Expenses for the Month**  
**For the Month of September 2018**

Line No.

1	AGUIRRE	Residual	BBL (000s)	441
2			MBTU (000s)	2,776
3			\$ (000s)	30,548
4			HANDLING	176
5			TOTAL \$ (000s)	30,724
6			\$/BBL	69.74
7			\$/MBTU	11.07
8			GWh	273.84
9	COSTA SUR	Gas Natural	MCF	3,680,239
10			MBTU (000s)	3,864
11			Equivalent BBL (000s)	613
12			TOTAL \$ (000s)	34,864
13			\$/BBL	56.84
14			\$/MBTU	9.02
15			GWh	387.08
16	PALO SECO	Residual	BBL (000s)	65
17			MBTU (000s)	412
18			\$ (000s)	4,395
19			HANDLING	26
20			TOTAL \$ (000s)	4,421
21			\$/BBL	67.67
22			\$/MBTU	10.74
23	GWh	40.66		
24	SAN JUAN	Residual	BBL (000s)	63
25			MBTU (000s)	397
26			\$ (000s)	4,238
27			HANDLING	25
28			TOTAL \$ (000s)	4,263
29			\$/BBL	67.67
30			\$/MBTU	10.74
31	GWh	37.80		
32	CICLO COMBINADO AGUIRRE	Destilado	BBL (000s)	5
33			MBTU (000s)	26
34			\$ (000s)	443
35			HANDLING	2
36			TOTAL \$ (000s)	445
37			\$/BBL	96.05
38			\$/MBTU	17.33
39	GWh	1.88		
40	TURBINAS DE COMBUSTION	Destilado	BBL (000s)	0
41			MBTU (000s)	0
42			\$ (000s)	0
43			HANDLING	0
44			TOTAL \$ (000s)	0
45			\$/BBL	0.00
46			\$/MBTU	0.00
47	GWh	0.00		
48	CAMBALACHE	Destilado	BBL (000s)	0
49			MBTU (000s)	0
50			\$ (000s)	0
51			HANDLING	0
52			TOTAL \$ (000s)	0
53			\$/BBL	0.00
54			\$/MBTU	0.00
55	GWh	0.00		
56	REPOWERING SJ5&6	Destilado	BBL (000s)	307
57			MBTU (000s)	1,701
58			\$ (000s)	29,346
59			HANDLING	123
60			TOTAL \$ (000s)	29,469

**Attachment 3**  
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**Projected Fuel and Purchased Power Expenses for the Month**  
**For the Month of September 2018**

Line No.					
61		\$/BBL	96.05		
62		\$/MBTU	17.33		
63		GWh	215.68		
64	TURBINAS DE MAYAGÜEZ	Destilado	BBL (000s)	16	
65			MBTU (000s)	87	
66			\$ (000s)	1,509	
67			HANDLING	6	
68			TOTAL \$ (000s)	1,516	
69			\$/BBL	96.05	
70			\$/MBTU	17.33	
71				GWh	8.16
72	SISTEMA TOTAL		SUB-TOTAL \$ (000s)	105,702	
73			TOTAL \$ (000s)	105,702	
74			Equivalent BBL (000s)	1,509	
75			MBTU (000s)	9,262	
76			\$/BBLEquivalente	70.03	
77			\$/MBTU	11.41	
78		GWh	965.11		
79	HIDRO (MWHR)		GWh	7.13	
80	TOTAL (MWHR)		GWh	972.23	
81	COMPRA ENERGIA	EcoEléctrica	\$	26,937	
82				\$/MWH	96.86
83				GWHR	278.10
84		AES		\$	23,988
85				\$/MWH	95.61
86				GWHR	250.89
87		Total Cogeneradores		\$	50,926
88				\$/MWH	96.27
89				GWHR	528.99
90	COMPRA ENERGIA RENOVABLE	Solar	\$	2,404	
91				\$/MWH	190.53
92				GWHR	12.62
93		Wind		\$	2,535
94				\$/MWH	161.59
95				GWHR	15.69
96		LFG		\$	346
97				\$/MWH	100.00
98				GWHR	3.46
99		Total Renovables		\$	5,284
100				\$/MWH	166.39
101				GWHR	31.76
102		Total Sistema	GWHR	1,533	
103		Auxiliares	GWHR	61	
104		Total Sistema Neto	GWHR	1,472	

\* En el caso de gas natural el costo por acarreo de combustible está incluido en el precio del combustible.  
\* La generación de las cogeneradoras y de los proyectos de energía renovable se presenta en valores netos.  
\*No se considera la generación de las unidades de USACE.

**Attachment 4**  
**Puerto Rico Electric Power Authority**  
**Efficiency Factors**  
**For the Month of September 2018**

**DISTRIBUCIÓN DE LAS PÉRDIDAS**  
**DETERMINACIÓN DE LAS EFICIENCIAS DEL SISTEMA**  
**ACUMULACIÓN A 12 MESES A: JULIO 18**

	TOTAL	BARRA	TRANSMISIÓN	PRIMARIA	SECUNDARIA	USO AUTORIDAD
VENTAS VOLT. SECUNDARIO	6,223,824,971	0	0	0	6,223,824,971	
USO AEE EN SECUNDARIA	7,424,849	0	0	0	0	7,424,849
SUB-TOTAL	6,231,249,820	0	0	0	6,223,824,971	7,424,849
<i>PÉRDIDAS EN SECUNDARIA</i>	169,808,106	0	0	0	169,605,771	202,335
VENTAS VOLT. PRIMARIO	3,250,452,795	0	0	3,250,452,795	0	0
USO AEE EN PRIMARIA	18,967,088	0	0	0	0	18,967,088
SUB-TOTAL	9,670,477,809	0	0	3,250,452,795	6,393,430,742	26,594,272
<i>PÉRDIDAS EN PRIMARIA</i>	651,977,431	0	0	219,143,449	431,041,013	1,792,969
VENTAS VOLT. TRANSMISIÓN	3,093,970,867	0	3,093,970,867	0	0	0
USO AEE EN TRANSMISIÓN	0	0	0	0	0	0
SUB-TOTAL	13,416,426,107	0	3,093,970,867	3,469,596,244	6,824,471,755	28,387,241
<i>PÉRDIDAS EN TRANSMISIÓN</i>	472,543,404	0	108,973,546	122,203,544	240,366,480	999,834
VENTAS EN LA BARRA	7,136,324	7,136,324	0	0	0	0
<i>GENERACIÓN NETA</i>	13,896,105,835	7,136,324	3,202,944,413	3,591,799,788	7,064,838,235	29,387,075
<b>EFICIENCIA NETA</b>		<b>100.00%</b>	<b>96.60%</b>	<b>90.50%</b>	<b>88.10%</b>	<b>89.81%</b>
<i>AUXILIARES</i>	614,289,611	315,467	141,588,982	158,778,677	312,307,403	1,299,082
GENERACION TOTAL	14,510,395,446	7,451,791	3,344,533,395	3,750,578,465	7,377,145,638	30,686,157
<b>EFICIENCIA TOTAL</b>		<b>95.77%</b>	<b>92.51%</b>	<b>86.67%</b>	<b>84.37%</b>	<b>86.01%</b>

**Attachment 5**  
**Puerto Rico Electric Power Authority**  
**Actual Cost of Fuel for the two months previous**  
**For the Month of September 2018**

PUERTO RICO ELECTRIC POWER AUTHORITY  
 FUEL OIL CONSUMPTION REPORT  
 FOR THE MONTH  
 JULY 31, 2018

	BARRELS	COST PER BARREL	AMOUNT
BEGINNING BALANCE	2,073,412.26		\$ 173,146,110.77
ADJUSTMENTS	(53,178.00) *		(\$ 7,509,557.38) *
INTEREST			
FUEL HEDGE			
MISC. SERVICES & INSPECTION FEES			\$ 1,238,135.07
EXCISE TAXES			\$ 1,223,675.54
RECEIPTS			
STEAM & GAS	1,019,449.25	\$ 89.88	\$ 91,627,120.76
NATURAL GAS	479,124.44	\$ 56.80	\$ 27,215,557.29
TOTAL RECEIPTS	1,498,573.69	\$ 79.30	\$ 118,842,678.05
SUBTOTAL	3,518,807.95	\$ 81.54	\$ 286,941,042.05
CONSUMPTION			
STEAM & GAS	1,174,115.54		\$ 101,906,033.92
NATURAL GAS	479,124.44		\$ 27,215,557.29
ADJ. TO CONSUMPTION	-		\$ 725,038.00
TOTAL RECEIPTS	1,653,239.98	\$ 78.54	\$ 129,846,629.21
ENDING BALANCE	1,865,567.97	\$ 84.21	\$ 157,094,412.84

Attachment 6  
 Puerto Rico Electric Power Authority  
 Reconciliation of Two Months Previous, in (\$000)  
 For the Month of September 2018

Line No.	FUEL ADJUSTMENT CLAUSE	Jul-18
1	<u>COSTS TO RECOVER</u>	
2	Fuel Cost (per Fuel Report, data from Fuels Office)	\$ 129,847
3	Authority Use	(257)
4	Shipping Cost (40 cents per barrel)	660
5	Fuel Cost before Revenue Requirement of CILT	\$ 130,250
6	Fuel Cost after 11% Revenue Requirement	\$ 146,348
7	<u>FUEL ADJUSTMENT REVENUES</u>	
8	CC&B Billing Reports	130,685
9	<b>Calculated Fuel adjustment for month</b>	<b>\$ 15,663</b>
10	<b>Calculated Fuel Adjustment (*0.89)</b>	<b>\$ 13,940</b>
11		
12		
13		
14	<b>Final Calculated Fuel Adjustment</b>	<b>\$ 13,940</b>
15		
16	<b>PURCHASED POWER CLAUSE</b>	
17	<u>COSTS TO RECOVER</u>	
18	Invoices from Eco/AES/Renewables + Renewable Energy Credits + Invoice Adjustments from previous months	\$ 60,358
19	Authority Use	\$ (107)
20	Purchased Power Cost before CILT Revenue Requirement	\$ 60,251
21	Purchased Power Cost after 11% Revenue Requirement	\$ 67,698
22	<u>PURCHASED POWER REVENUES</u>	
23	CC&B Billing Reports	61,427
24	<b>Calculated Purchased Power Adjustment for month</b>	<b>\$ 6,271</b>
25	<b>Calculated Purchased Power Adjustment (*0.89)</b>	<b>\$ 5,581</b>
26		
27		
28		
29	<b>Final Calculated Purchased Power Adjustment</b>	<b>\$ 5,581</b>
30		
31		
32		
33	<b>Gross Production (MWh)</b>	<b>1,648</b>
34	<b>Total Consumption Billed (MWh)</b>	<b>1,331</b>

**Attachment 7**  
**Puerto Rico Electric Power Authority**  
**Bill Impacts**  
**For the Month of September 2018**

Voltage Level	August 2018			September 2018		
	Fuel Adjustment Factors	Purchased Power Adjustment Factors	Total	Fuel Adjustment Factors	Purchased Power Adjustment Factors	Total
	\$/kWh			\$/kWh		
Secondary Distribution	0.115810	0.049776	0.165586	0.109257	0.053551	0.162808
Primary Distribution	0.112766	0.048468	0.161234	0.106360	0.052131	0.158491
Transmission	0.105669	0.045417	0.151086	0.099643	0.048839	0.148482
Bus Bar	0.102087	0.043878	0.145965	0.096256	0.047179	0.143435

Rate and Voltage Level	Energy Consumption (kWh)	August 2018		September 2018		Difference	
		\$	\$/kWh	\$	\$/kWh	\$	%
GRS - Residential	800	\$ 182.99	\$ 0.2287	\$ 180.77	\$ 0.2260	\$ (2.22)	-1.2%
GSS - Secondary Small Commercial, Industrial	1,200	311.33	\$ 0.2594	\$ 308.00	\$ 0.2567	\$ (3.33)	-1.1%
GSP - Primary Medium Commercial, Industrial 250 kVA	91,800	\$ 21,299.16	\$ 0.2320	\$ 21,047.36	\$ 0.2293	\$ (251.80)	-1.2%
GST - Transmission Large Commercial, Industrial 1,500 kVA	550,800	\$ 117,122.26	\$ 0.2126	\$ 115,687.97	\$ 0.2100	\$ (1,434.29)	-1.2%