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COMMISSION
CLERK

February 7, 2011

VIA HAND DELIVERY

Ms. Ann Cole, Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: *Petition for approval of revisions to Tariff Sheet Nos. 6.280 through 6.284 and approve original Tariff Sheet No. 6.2811 in Rate Schedule LS-1, Lighting Service by Progress Energy Florida, Inc.; Docket No. 110030-EI*

Dear Ms. Cole:

Please find attached for filing on behalf of Progress Energy Florida, Inc. ("PEF") the original and five (5) copies of its responses to Staff's First Data Request in the above referenced docket.

Thank you for your assistance. Please feel free to call me at (727) 820-5184 should you have any questions.

Sincerely,

John T. Burnett
John T. Burnett

COM _____ JTB/lms
APA _____
ECR 4 Attachments
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FPSC-COMMISSION CLERK

**PROGRESS ENERGY FLORIDA, INC.'S RESPONSES TO STAFF'S FIRST DATA REQUEST
DOCKET No. 110030-EI**

- Q1. In its petition, PEF is seeking to add a new lighting fixture category (LED lighting) to its LS-1 Lighting Schedule, please provide a detailed narrative and all cost support used to derive the proposed new lighting fixture category.**

Answer:

Light Emitting Diode (LED) lighting is being added as a standard tariff offering to provide Progress Energy Florida's customers a selection of lower energy use lighting products. This new technology provides energy reductions of approximately 22% -34% depending on the fixture style. The costs for these new lighting types was derived consistent with currently approved methods. The fixtures charges were developed as the average installed costs times the currently approved 1.59% fixture rental rate per Lighting Tariff Sheet No. 6.283. The maintenance charges were developed based on the Company's estimated maintenance cost by fixture type as per approved Lighting Tariff Sheet No. 6.283. See attached excel file for detailed calculations (Attachment A). The non-fuel energy unit charge is provided as information only and represents the currently approved non-fuel energy rate of 1.707 cents per kWh per Lighting Tariff Sheet No. 6.280 times the kWh presented in the proposed tariff by fixture type.

- Q2. Please provide a detailed narrative, and all cost support used to derive the proposed two new Sodium Vapor lighting billing types 300 and 302.**

Answer:

The 400 Watt High Pressure Sodium (HPS) Sandpiper (billing type 300) and the 100 Watt Bronze Champion (Billing type 302) are being added due to customer requests. The Sandpiper was already available in a lower wattage, but the 400 Watt was required to light multi-lane highways. The Bronze Champion was added due to specific customer requests because the Company does not currently offer lights that meet the specific aesthetic need. The costs for these new lighting types was derived consistent with currently approved methods. The fixtures charges were developed as the average installed costs times the currently approved 1.59% fixture rental rate per Lighting Tariff Sheet No. 6.283. The maintenance charges were developed based on the Company's estimated maintenance cost by fixture type as per approved Lighting Tariff Sheet No. 6.283. See attached excel file for detailed calculations (Attachment A). The non-fuel energy unit charge is provided as information only and represents the currently approved non-fuel energy rate of 1.707 cents per kWh per Lighting Tariff Sheet No. 6.280 times the kWh presented in the proposed tariff by fixture type.

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Q3. Please provide a detailed narrative, and all cost support used to derive the proposed six new Metal Halide lighting billing types 307, 308, 309, 311, 312, and 319.

Answer:

The U.S. Department of Energy recently passed new rules that require certain wattages of metal halide fixtures be manufactured with a “pulse start” technology. This technology results in lower energy use with this lamp source. These six new fixtures are replacing existing types in our tariff that we can no longer offer due to the new federal requirements. The new billing types are required as they have different cost components than those that are being discontinued. The costs for these new lighting types were derived consistent with currently approved methods. The fixtures charges were developed as the average installed costs times the currently approved 1.59% fixture rental rate per Lighting Tariff Sheet No. 6.283. The maintenance charges were developed based on the Company’s estimated maintenance cost by fixture type as per approved Lighting Tariff Sheet No. 6.283. See attached excel file for detailed calculations (Attachment A). The non-fuel energy unit charge is provided as information only and represents the currently approved non-fuel energy rate of 1.707 cents per kWh per Lighting Tariff Sheet No. 6.280 times the kWh presented in the proposed tariff by fixture type.

Q4. In Item 4 of the petition, PEF provides that it proposes to restrict the following lighting billing types: Sodium Vapor types 370, 375 and Metal Halide types 327, 349, 371, 372, and 390, to existing installations. Please provide a detailed narrative for the above-referenced restrictions including a description setting forth the origin and purpose of these proposed restrictions.

Answer:

The U.S. Department of Energy recently passed new rules that require certain wattages of Metal Halide fixtures be manufactured with a “pulse start” technology. This technology results in lower energy use with this lamp source and is considered a nation-wide conservation initiative. The five Metal Halide lighting types are being restricted because they will no longer be manufactured without pulse start technology. In addition, these fixtures are being restricted to existing installations and future installations or replacements will be with the six proposed new types referenced in Question 3 above. The two Sodium Vapor types are being restricted due to manufacturer’s availability and/or lack of customer interest.

**Progress Energy Florida
 Cost Support for New Lighting Types
 Development of Fixtures Rental Charges - LED, HPS & MH
 Proposed in Docket No. 110030-EI**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)		
Billing Type	Description	Lumens	Luminaire	Bracket	Photo Control	Lamp	Service Wire	Subtotal (1) thru (5)	Travel & Loading (6) * 3%	Eng & Superv [(6)+(7)] * 15%	Total (6)+(7)+(8)	Fixture Rental Rate (9) * 1.59%
300	HPS Deco Roadway White	50,000	\$447.22	\$42.00	\$4.87	\$8.03	\$280.00	\$782.12	\$23.46	\$120.84	\$926.42	\$14.73
302	Sandpiper HPS Deco Rdwy Blk	9,500	\$448.54	\$42.00	\$4.87	\$6.85	\$280.00	\$782.26	\$23.47	\$120.86	\$926.59	\$14.73
307	MH Deco Post Top-Sanibel Pulse Start	11,600	\$546.41	\$165.81	\$4.87	\$11.53	\$166.25	\$894.87	\$26.85	\$138.26	\$1,059.97	\$16.85
308	MH Clermont Tear Drop Pulse Start	11,600	\$708.49	\$165.81	\$4.87	\$11.53	\$166.25	\$1,056.95	\$31.71	\$163.30	\$1,251.96	\$19.91
309	MH Deco Rectangular Pulse Start	36,000	\$357.23	\$32.00	\$4.87	\$19.87	\$280.00	\$693.97	\$20.82	\$107.22	\$822.01	\$13.07
311	MH Deco Cube Pulse Start	36,000	\$511.57	\$32.00	\$4.87	\$19.87	\$280.00	\$848.31	\$25.45	\$131.06	\$1,004.82	\$15.98
312	MH Flood Pulse Start	36,000	\$255.48		\$4.87	\$19.87	\$280.00	\$560.22	\$16.81	\$86.55	\$663.58	\$10.55
319	MH Post Top- Biscayne Pulse Start	11,600	\$626.76		\$4.87	\$11.53	\$166.25	\$809.41	\$24.28	\$125.05	\$958.75	\$15.24
361	LED Roadway	6,000	\$687.11	\$40.50	\$4.87		\$166.25	\$898.73	\$26.96	\$138.85	\$1,064.55	\$16.93
362	LED Roadway	9,600	\$854.24	\$40.50	\$4.87		\$166.25	\$1,065.86	\$31.98	\$164.68	\$1,262.51	\$20.07
363	LED Shoebox Type 3	20,664	\$1,864.22	\$32.00	\$4.87		\$280.00	\$2,181.09	\$65.43	\$336.98	\$2,583.50	\$41.08
364	LED Shoebox Type 4	14,421	\$1,413.79	\$32.00	\$4.87		\$280.00	\$1,730.66	\$51.92	\$267.39	\$2,049.97	\$32.59
367	LED Shoebox Type 5	14,421	\$1,363.45	\$32.00	\$4.87		\$280.00	\$1,680.32	\$50.41	\$259.61	\$1,990.34	\$31.65

Notes:

- Column (1) - (5) PEF average installed cost of equipment including install labor
- Column (7) 3% - Loading rate for travel to from site and loading of materials into vehicles
- Column (8) 15% - PEF standard engineering and supervision loading rate for field work
- Column (10) 1.59% - PEF current approved fixture rate per Lighting Tariff Sheet No. 6.283

Progress Energy Florida
 Cost Support for New Lighting Types
 Development of Monthly Maintenance Rates - LED
 Proposed in Docket No. 110030-EI

2010 Union Contract rate plus Benefits
 Loading for Troublemans/Servicemen

\$50.22

Shoebox LED 14,421 - 30,664 Lumen			Stores			Travel		Industry	
Maintenance Charge Calculation		Time (Min.)	Loading	Labor	Total	(3%)	Total	Failure	Monthly
			11%					Rate	Cost
Spot PE Cell Replacement	60	20.00	2.20	50.22	72.42	2.17	74.59	10.0%	0.62
Surge Protector	60	74.50	8.20	50.22	132.92	3.99	136.90	17.51%	2.00
Connector Replacement	60	1.31	0.14	50.22	51.67	1.55	53.22	5.00%	0.22
Total Maintenance Rate									2.84
Notes									
1. Labor is per 2007-2010 contract rates									
2. Failure rate for surge protector is 24,000 hrs									
3. Failure rate for PE cells is 10%									
4. Stores Loading includes P.O. and payment processing									
5. Travel 3% is travel to/from site and loading vehicles									

Roadway LED 6000 - 9600 Lumen			Stores			Travel		Industry	
Maintenance Charge Calculation		Time (Min.)	Loading	Labor	Total	(3%)	Total	Failure	Monthly
			11%					Rate	Cost
Spot PE Cell Replacement	60	20.00	2.20	50.22	72.42	2.17	74.59	10.0%	0.62
Starter Board Replacement	60	50.00	5.50	50.22	105.72	3.17	108.89	17.51%	1.59
Connector Replacement	60	1.31	0.14	50.22	51.67	1.55	53.22	5.00%	0.22
Total Maintenance Rate									2.43
Notes									
1. Labor is per 2007-2010 contract rates									
2. Failure rate for surge protector is 24,000 hrs									
3. Failure rate for PE cells is 10%									
4. Stores Loading includes P.O. and payment processing									
5. Travel 3% is travel to/from site and loading vehicles									

Progress Energy Florida
 Cost Support for New Lighting Types
 Development of Monthly Maintenance Rates - HPS
 Proposed in Docket No. 110030-EI

2010 Union Contract rate plus Benefits
 Loading for Troublemans/Servicemen

\$50.22

100W HPS Horizontal			Stores			Travel		Industry	
Maintenance Charge Calculation		Time (Min.)	Loading	Labor	Total	(3%)	Total	Failure	Monthly
			11%					Rate	Cost
Spot Lamp Replacement	45	6.75	0.74	37.67	45.16	1.35	46.51	16.66%	0.65
Spot PE Cell Replacement	45	4.65	0.51	37.67	42.83	1.28	44.11	10.0%	0.37
Starter Board Replacement	60	28.00	3.08	50.22	81.30	2.44	83.74	5.00%	0.35
Connector Replacement	60	1.31	0.14	50.22	51.67	1.55	53.22	5.00%	0.22
Total Maintenance Rate									1.58
Notes									
1. Labor is per 2007-2010 contract rates									
2. Failure rate for this lamp is 25,200 hrs									
3. Failure rate for PE cells is 10%									
4. Stores Loading includes P.O. and payment processing									
5. Travel 3% is travel to/from site and loading vehicles									

400W HPS Horizontal			Stores			Travel		Industry	
Maintenance Charge Calculation		Time (Min.)	Loading	Labor	Total	(3%)	Total	Failure	Monthly
			11%					Rate	Cost
Spot Lamp Replacement	45	8.65	0.95	37.67	47.27	1.42	48.68	16.66%	0.68
Spot PE Cell Replacement	45	4.65	0.51	37.67	42.83	1.28	44.11	10.0%	0.37
Starter Board Replacement	60	28.00	3.08	50.22	81.30	2.44	83.74	5.00%	0.35
Connector Replacement	60	1.31	0.14	50.22	51.67	1.55	53.22	5.00%	0.22
Total Maintenance Rate									1.61
Notes									
1. Labor is per 2007-2010 contract rates									
2. Failure rate for this lamp is 25,200 hrs.									
3. Failure rate for PE cells is 10%									
4. Stores Loading includes P.O. and payment processing									
5. Travel 3% is travel to/from site and loading vehicles									

Progress Energy Florida
 Cost Support for New Lighting Types
 Development of Monthly Maintenance Rates - MH
 Proposed in Docket No. 110030-EI

2010 Union Contract rate plus Benefits
 Loading for Troublemans/Service Men

\$50.22

150W Metal Halide			Stores			Travel		Industry	
Maintenance Charge Calculation		Time (Min.)	Loading	Labor	Total	(3%)	Total	Failure	Monthly
		Material	11%					Rate	Cost
Spot Lamp Replacement	45	18.37	2.02	37.67	58.06	1.74	59.80	42.02%	2.09
Spot PE Cell Replacement	45	4.65	0.51	37.67	42.83	1.28	44.11	10.00%	0.37
Connector Replacement	60	1.31	0.14	50.22	51.67	1.55	53.22	5.00%	0.22
Total Maintenance Rate									2.68

Notes

- Labor is per 2007-2010 contract rates
- Failure rate for MH lamps is 10,000 hrs
- Failure rate for PE cells is 10%
- Stores Loading includes P.O. and payment processing
- Travel 3% is travel to/from site and loading vehicles

320W Metal Halide			Stores			Travel		Industry	
Maintenance Charge Calculation		Time (Min.)	Loading	Labor	Total	(3%)	Total	Failure	Monthly
		Material	11%					Rate	Cost
Spot Lamp Replacement	45	17.90	1.97	37.67	57.53	1.73	59.26	42.02%	2.08
Spot PE Cell Replacement	45	4.65	0.51	37.67	42.83	1.28	44.11	10.00%	0.37
Connector Replacement	60	16.21	1.78	50.22	68.21	2.05	70.26	5.00%	0.29
Total Maintenance Rate									2.74

Notes

- Labor is per 2007-2010 contract rates
- Failure rate for MH lamps is 10,000 hrs
- Failure rate for PE cells is 10%
- Stores Loading includes P.O. and payment processing
- Travel 3% is travel to/from site and loading vehicles