

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for approval of revised lighting
tariff by Tampa Electric Company.

DOCKET NO. 140232-EI
ORDER NO. PSC-15-0094-TRF-EI
ISSUED: February 5, 2015

The following Commissioners participated in the disposition of this matter:

ART GRAHAM, Chairman
LISA POLAK EDGAR
RONALD A. BRISÉ
JULIE I. BROWN
JIMMY PATRONIS

ORDER APPROVING REVISIONS TO TAMPA ELECTRIC
COMPANY'S LIGHTING TARIFF

BY THE COMMISSION:

On December 3, 2014, Tampa Electric Company (TECO or company) filed a petition requesting our approval to close to new customers all of the existing High Pressure Sodium (HPS) and Metal Halide (MH) outdoor lighting offerings. The proposed closing would result in TECO offering only light emitting diode (LED) technology to new outdoor lighting customers. In addition, TECO proposed adding nine new LED fixtures to the current LED tariff. The proposed tariff revisions are included as Attachment 1. We first approved TECO's LED lighting tariff in Order No. PSC-13-0138-FOF-EI.¹ We have jurisdiction over this matter pursuant to Section 366.06(1), Florida Statutes (F.S.).

In its petition, TECO has requested approval to close the existing HPS and MH fixtures tariff to new customers and to add nine new LED fixtures to its current tariff. TECO explained in its petition that in the few short years since the company began studying LED outdoor lighting, the technology and its pricing have evolved to the point that LED lighting is now the preferred solution for roadway and outdoor area applications. The company also stated that LED technology is superior to the HPS and MH technologies in several ways. LED lighting is significantly more energy-efficient and more reliable than HPS and MH technology and provides for more uniform illumination. In addition, unlike the bulbs used for HPS and MH lighting, LED fixtures and components are environmentally friendly involving no special disposal practices or costs.

TECO reported that market demand for LED outdoor lighting has seen a rapid rise in recent years, even with the higher cost of the early generation products. Several municipal customers within TECO's service area are currently subscribing to the company's LED tariff for

¹ Order No. PSC-13-0138-FOF-EI, issued March 25, 2013, in Docket No. 130019-EI, In re: Petition for approval of revised lighting tariffs by Tampa Electric Company.

street lighting. Those customers are also demanding additional LED street lighting options and are beginning to request conversion to LED fixtures of some of their existing HPS fixtures that are in service but have reached the end of their contract commitment.

In addition to the efficiency benefits, TECO listed four additional reasons customers are requesting to change to LED lighting:

- Obtaining certifications relating to security, environment, or energy efficiency;
- Better reliability resulting in fewer business disruptions for lighting repairs or replacements;
- Favorable color rendition and aiming characteristics; and
- LED lighting is viewed as a "green" choice.

TECO also reported that lighting manufacturing industry representatives have informed the company that over the next few years, many plants currently manufacturing HPS and MH lighting fixtures for utility use will close or be retooled to produce comparable LED products. As the HPS and MH products are phased out, the costs of such fixtures and components are expected to increase substantially and future availability is uncertain due to this reduction in production capacity. The proposed closure of the HPS and MH fixtures is shown on tariff sheets 6.805 and 6.806 (Attachment 1, pages 1 and 2).

While proposing to close the HPS and MH tariffs to new customers, TECO also proposed to add nine new LED fixtures: two floodlight, two decorative post-top, one area-lighter, two mungoose, and two roadway fixtures. The charges for the new LED lighting fixtures are comprised of three components: a fixture charge, a maintenance charge, and a non-fuel energy charge, consistent with TECO's current other lighting options. The new LED fixtures and associated charges are shown on tariff Sheet 6.808 (Attachment 1, page 3). In conjunction with its petition, TECO submitted supporting cost information that included a presentation of the following: individual tariff calculations; installation, maintenance, labor and vehicle costs; overhead cost factors; and monthly energy consumption charges. We have reviewed the cost information submitted with TECO's petition and find that the charges are reasonable and appropriate.

TECO's observations about the desirability of LED lighting is confirmed by the U.S. Energy Information Agency (EIA) in its November 4, 2014 report, in which EIA stated:

Improvements in lighting technology for light-emitting diode (LED) bulbs have increased lighting efficiency, or efficacy, as well as color quality. In September of this year, several manufacturers released ENERGY STAR®-qualified bulbs surpassing 100 lumens per watt. For comparison, traditional incandescent bulbs, which do not meet current light bulb efficiency standards and are no longer sold, provide 13 to 18 lumens per watt.

When first introduced, LED bulbs were far more expensive than other bulbs, but their costs have since come down dramatically. Even now, however, they are

often the most expensive bulbs on the shelf, but their much longer lifetimes and lower power draw can economically justify the higher initial cost.²

Given the information discussed above, we find that the proposed changes to TECO's lighting tariff are reasonable and are hereby approved.

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that Tampa Electric Company's proposed changes to its lighting tariff as discussed in the body of this Order are hereby approved. It is further

ORDERED that the effective date of Tampa Electric Company's revised lighting tariff shall be February 3, 2015. It is further

ORDERED that if a protest is filed within 21 days of the issuance of this order, the tariff shall remain in effect with any revenues held subject to refund pending resolution of the protest. It is further

ORDERED that if no timely protest is filed, this docket shall be closed upon the issuance of a Consummating Order.

By ORDER of the Florida Public Service Commission this 5th day of February, 2015.



CARLOTTA S. STAUFFER
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399
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Copies furnished: A copy of this document is provided to the parties of record at the time of issuance and, if applicable, interested persons.

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² U.S. Energy Information Administration website report, "LED light bulbs keep improving in efficiency and quality", November 4, 2014, <http://www.eia.gov/todayinenergy/detail.cfm?id=18671&src=email>.

NOTICE OF FURTHER PROCEEDINGS

The Florida Public Service Commission is required by Section 120.569(1), Florida Statutes, to notify parties of any administrative hearing or judicial review of Commission orders that is available under Sections 120.57 or 120.68, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing or judicial review will be granted or result in the relief sought.

Mediation may be available on a case-by-case basis. If mediation is conducted, it does not affect a substantially interested person's right to a hearing.

The Commission's decision on this tariff is interim in nature and will become final, unless a person whose substantial interests are affected by the proposed action files a petition for a formal proceeding, in the form provided by Rule 28-106.201, Florida Administrative Code. This petition must be received by the Office of Commission Clerk, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, by the close of business on February 26, 2015.

In the absence of such a petition, this Order shall become final and effective upon the issuance of a Consummating Order.

Any objection or protest filed in this docket before the issuance date of this order is considered abandoned unless it satisfies the foregoing conditions and is renewed within the specified protest period.



~~THIRD-FOURTH~~ REVISED SHEET NO. 6.805
 CANCELS ~~SECOND-THIRD~~ REVISED SHEET NO. 6.805

Continued from Sheet No. 6.800

MONTHLY RATE:

High Pressure Sodium Fixture, Maintenance, and Base Energy Charges:

Rate Code		Description	Lamp Size				Charges per Unit (\$)			
Dusk to Dawn	Timed Svc.		Initial Lumens ⁽⁴²⁾	Lamp Wattage ⁽⁴³⁾	kWh		Fixture	Maint.	Non-Fuel Base Energy	
					Dusk to Dawn	Timed Svc.			Dusk to Dawn	Timed Svc.
800	860	Cobra ⁽¹⁾	4,000	50	20	10	2.85	2.24	0.49	0.25
802	862	Cobra/Nema ⁽¹⁾	6,300	70	29	14	2.89	1.90	0.71	0.34
803	863	Cobra/Nema ⁽⁴²⁾	9,500	100	44	22	3.28	2.10	1.08	0.54
804	864	Cobra ⁽⁴²⁾	16,000	150	66	33	3.77	1.82	1.62	0.81
805	865	Cobra ⁽⁴²⁾	28,500	250	105	52	4.40	2.35	2.59	1.28
806	866	Cobra ⁽⁴²⁾	50,000	400	163	81	4.59	2.70	4.01	1.99
468	454	Flood ⁽¹⁾	28,500	250	105	52	4.85	2.35	2.59	1.28
478	484	Flood ⁽⁴²⁾	50,000	400	163	81	5.15	2.71	4.01	1.99
809	869	Mongoose ⁽⁴²⁾	50,000	400	163	81	5.87	2.73	4.01	1.99
509	508	Post Top (PT) ⁽¹⁾	4,000	50	20	10	3.59	2.24	0.49	0.25
570	530	Classic PT ⁽⁴²⁾	9,500	100	44	22	10.70	1.71	1.08	0.54
810	870	Coach PT ⁽¹⁾	6,300	70	29	14	4.25	1.90	0.71	0.34
572	532	Colonial PT ⁽⁴²⁾	9,500	100	44	22	10.61	1.71	1.08	0.54
571	531	Contemporary PT ⁽¹⁾	9,500	100	44	22	7.48	1.93	1.08	0.54
573	533	Salem PT ⁽⁴²⁾	9,500	100	44	22	8.15	1.71	1.08	0.54
550	534	Shoebox ⁽⁴²⁾	9,500	100	44	22	7.23	1.71	1.08	0.54
566	536	Shoebox ⁽⁴²⁾	28,500	250	105	52	7.84	2.87	2.59	1.28
552	538	Shoebox ⁽⁴²⁾	50,000	400	163	81	8.59	2.20	4.01	1.99

⁽¹⁾ Closed to new business
~~⁽⁴²⁾ Nema fixture is closed to new business. 100 Watt Cobra fixture is still available.~~
⁽⁴²⁾ Lumen output may vary by lamp configuration and age.
⁽⁴³⁾ Wattage ratings do not include ballast losses.

Continued to Sheet No. 6.806

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE: ~~May 18, 2010~~



~~FIRST~~ ~~SECOND~~ REVISED SHEET NO. 6.806
 CANCELS ~~ORIGINAL~~ ~~FIRST~~ REVISED SHEET NO. 6.806

Continued from Sheet No. 6.805

MONTHLY RATE:

Metal Halide Fixture, Maintenance, and Base Energy Charges:

Rate Code		Description	Lamp Size				Charges per Unit (\$)			
Dusk to Dawn	Timed Svc.		Initial Lumens ⁽²⁾	Lamp Wattage ⁽³⁾	kWh		Fixture	Maint.	Non-Fuel-Base Energy	
					Dusk to Dawn	Timed Svc.			Dusk to Dawn	Timed Svc.
704	724	Cobra ⁽¹⁾	29,700	350	138	69	6.80	4.50	3.40	1.70
520	522	Cobra ⁽¹⁾	32,000	400	159	79	5.44	3.62	3.91	1.94
705	725	Flood ⁽¹⁾	29,700	350	138	69	7.72	4.55	3.40	1.70
556	541	Flood ⁽¹⁾	32,000	400	159	79	7.55	3.63	3.91	1.94
558	578	Flood ⁽¹⁾	107,800	1,000	383	191	9.48	7.37	9.43	4.70
701	721	General PT ⁽¹⁾	12,000	150	67	34	9.57	3.54	1.65	0.84
574	548	General PT ⁽¹⁾	14,400	175	74	37	9.83	3.37	1.82	0.91
700	720	Salem PT ⁽¹⁾	12,000	150	67	34	8.42	3.54	1.65	0.84
575	568	Salem PT ⁽¹⁾	14,400	175	74	37	8.47	3.38	1.82	0.91
702	722	Shoebox ⁽¹⁾	12,000	150	67	34	6.52	3.54	1.65	0.84
564	549	Shoebox ⁽¹⁾	12,800	175	74	37	7.18	3.34	1.82	0.91
703	723	Shoebox ⁽¹⁾	29,700	350	138	69	8.62	4.45	3.40	1.70
554	540	Shoebox ⁽¹⁾	32,000	400	159	79	9.04	3.58	3.91	1.94
576	577	Shoebox ⁽¹⁾	107,800	1,000	383	191	14.89	7.37	9.43	4.70

⁽¹⁾ Closed to new business
⁽²⁾ Lumen output may vary by lamp configuration and age.
⁽³⁾ Wattage ratings do not include ballast losses.

Continued to Sheet No. 6.808

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE: **March 5, 2013**



~~FIRST-SECOND~~ REVISED SHEET NO. 6.808
 CANCELS ~~ORIGINAL-FIRST REVISED~~ SHEET NO. 6.808

Continued from Sheet No. 6.806

MONTHLY RATE:

LED Fixture, Maintenance, and Base Energy Charges:

Rate Code		Description	Lamp Size				Charges per Unit (\$)			
Dusk to Dawn	Timed Svc.		Initial Lumens ⁽¹⁾	Lamp Wattage ⁽²⁾	kWh ⁽¹⁾		Fixture	Maintenance	Non-Fuel-Base Energy	
					Dusk to Dawn	Timed Svc.			Dusk to Dawn	Timed Svc.
<u>828</u>	<u>848</u>	<u>Roadway</u>	<u>5,155</u>	<u>56</u>	<u>20</u>	<u>10</u>	<u>6.56</u>	<u>1.57</u>	<u>0.49</u>	<u>0.25</u>
820	840	Roadway	7,577	103	36	18	10.06	1.07	0.89	0.44
821	841	Roadway	8,300	108	37	19	10.06	1.08	0.91	0.47
<u>829</u>	<u>849</u>	<u>Roadway</u>	<u>15,285</u>	<u>157</u>	<u>55</u>	<u>27</u>	<u>10.02</u>	<u>2.04</u>	<u>1.35</u>	<u>0.66</u>
822	842	Roadway	15,300	196	69	34	13.16	1.14	1.70	0.84
823	843	Roadway	14,831	206	72	36	15.16	1.25	1.77	0.89
<u>835</u>	<u>855</u>	<u>Post Top</u>	<u>5,176</u>	<u>60</u>	<u>21</u>	<u>11</u>	<u>14.92</u>	<u>2.06</u>	<u>0.52</u>	<u>0.27</u>
824	844	Post Top	3,974	67	24	12	17.75	1.39	0.59	0.30
825	845	Post Top	6,030	99	35	17	18.51	1.41	0.86	0.42
<u>836</u>	<u>856</u>	<u>Post Top</u>	<u>7,360</u>	<u>100</u>	<u>35</u>	<u>18</u>	<u>15.07</u>	<u>2.06</u>	<u>0.86</u>	<u>0.44</u>
<u>830</u>	<u>850</u>	<u>Area-Lighter</u>	<u>14,100</u>	<u>152</u>	<u>53</u>	<u>27</u>	<u>13.40</u>	<u>2.27</u>	<u>1.30</u>	<u>0.66</u>
826	846	Area-Lighter	13,620	202	71	35	17.24	1.27	1.75	0.86
827	847	Area-Lighter	21,197	309	108	54	18.59	1.40	2.66	1.33
<u>831</u>	<u>851</u>	<u>Flood</u>	<u>22,122</u>	<u>238</u>	<u>83</u>	<u>42</u>	<u>14.35</u>	<u>3.11</u>	<u>2.04</u>	<u>1.03</u>
<u>832</u>	<u>852</u>	<u>Flood</u>	<u>32,087</u>	<u>359</u>	<u>126</u>	<u>63</u>	<u>17.29</u>	<u>3.70</u>	<u>3.10</u>	<u>1.55</u>
<u>833</u>	<u>853</u>	<u>Mongoose</u>	<u>24,140</u>	<u>245</u>	<u>86</u>	<u>43</u>	<u>13.28</u>	<u>2.74</u>	<u>2.12</u>	<u>1.06</u>
<u>834</u>	<u>854</u>	<u>Mongoose</u>	<u>32,093</u>	<u>328</u>	<u>115</u>	<u>57</u>	<u>14.72</u>	<u>3.25</u>	<u>2.83</u>	<u>1.40</u>

⁽¹⁾ Average

⁽²⁾ Average wattage. Actual wattage may vary by up to +/- 5 watts.

Continued to Sheet No. 6.810