

AUSLEY McMULLEN

ATTORNEYS AND COUNSELORS AT LAW

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September 20, 2017

VIA: ELECTRONIC FILING

Ms. Carlotta S. Stauffer
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Petition of Tampa Electric Company for Approval of Conservation Street and Outdoor Lighting Conversion Program; Docket No. 20170199-EI

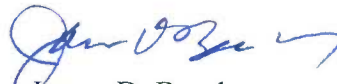
Dear Ms. Stauffer:

Attached for filing in the above docket are the following supplemental items submitted to provide background information on an earlier Tampa Electric Company proceeding in Docket No. 800701-EG:

1. Petition of Tampa Electric Company for Approval of Conservation Street and Outdoor Lighting Conversion Program
2. Staff Recommendation dated May 6, 1982
3. Order Approving Conservation Plan and Disapproving Proposed Rates

Thank you for your assistance in connection with this matter.

Sincerely,


James D. Beasley

JDB/pp
Attachments

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Conservation Plan of)
Tampa Electric Company.) DOCKET NO. 800701-EG
_____)

PETITION OF TAMPA ELECTRIC COMPANY
FOR APPROVAL OF CONSERVATION STREET AND
OUTDOOR LIGHTING CONVERSION PROGRAM

Tampa Electric Company ("Tampa Electric" or "the Company"),
by and through its undersigned attorneys and in accordance with
§366.82(5), Fla. Stat., and Commission rules implementing such
section hereby petitions the Commission for approval of the
Company's proposed Conservation Street and Outdoor Lighting
Conversion Program as a part of the Company's Conservation Plan
approved in this docket, and in support thereof, says:

1. The objective of the proposed program is to convert
standard street and outdoor lighting mercury vapor luminaires to
high pressure sodium luminaires in order to significantly reduce
the quantity of electricity consumed within the Company's service
area for street and outdoor lighting. All new installations
under the program will be high pressure sodium luminaires and
existing installations will be converted to high pressure sodium
on a planned time schedule.

2. Tampa Electric has studied the economics of the proposed
program and has determined that it will be cost effective. The
cost/benefit analysis for this program indicates that the
economic benefits to be derived will exceed net costs of the
program by more than \$10 million over the planned life of the
program. Utilizing guidelines previously approved by the Commis-
sion, Tampa Electric has calculated that the Benefit/Cost ratio
of this program will be 2.2, without taking demand savings into
account.

3. Tampa Electric has approximately 85,000 street and area
lighting fixtures in operation at this time. Under the proposed

program, conversion of these fixtures will begin during the first quarter of 1982. The program should produce energy savings of approximately 213 GWH by its completion at the end of 1989.

4. In evaluating the program Tampa Electric has used certain assumptions. First, high pressure sodium lighting systems will offer significant energy savings. In addition, the successful implementation of this conversion program will be dependent, to a large degree, upon the acceptance by Tampa Electric's customers of the quality of light rendered by high pressure sodium lighting systems. Customers must be sufficiently motivated to accept the program in adequate numbers in order to accomplish the Company's targeted levels of conversion.

5. Attached hereto as Appendix "A" is a one page document entitled "Street and Outdoor Lighting Conversion Program - Eight Year Changeout Schedule".

6. Attached hereto as Appendix "B" is a one page document entitled, "Street and Outdoor Lighting Program Conversion Costs and Savings Timetable".

7. Attached hereto as Appendix "C" is a one page schedule reflecting the estimated costs to be incurred and benefits to be derived under the proposed program.

8. Attached hereto as Appendix "D" are the following revised tariff sheets the Company proposed for approval to implement the conversion program:

- * (a) First Rev'd Sheet Nos. 6.260, 6.261 and 6.262, which govern Rate Schedule SL-2 (High Pressure Sodium Street Lighting Service)
- * (b) First Rev'd Sheet Nos. 6.270, 6.271 and 6.272, which govern Rate Schedule OL-1 (High Pressure Sodium General Outdoor Lighting Service).

***Note:**

The Company specifically requests approval for the 50 watt and 150 watt high pressure sodium lighting luminaires in each of the attached tariffs. The remaining sizes and rates have been previously approved by the Commission.

9. Tampa Electric is simultaneously filing herewith a Petition in Docket No. 810050-PU (Conservation Cost Recovery) asking that, upon approval of the proposed Conservation Street Light Conversion Program, the Commission will likewise enter its Order in the Conservation Cost Recovery Docket asserting jurisdiction over the amounts to be expended by the Company during the remainder of the present cost recovery period (October 1, 1981 - March 31, 1982), for recovery during the next projection period (April - September, 1982) through the conservation cost recovery true-up mechanism.

WHEREFORE, Tampa Electric Company requests approval of its proposed Conservation Street and Outdoor Lighting Conversion Program for implementation during the first quarter of 1982.

DATED this _____ day of November, 1981.

Respectfully submitted,

LEE L. WILLIS and
JAMES D. BEASLEY of
Ausley, McMullen, McGehee,
Carothers and Proctor
Post Office Box 391
Tallahassee, Florida 32302
904/224-9115

ATTORNEYS FOR TAMPA ELECTRIC
COMPANY

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing Petition of Tampa Electric Company has been furnished by U. S. Mail or hand-delivery on this, the ____ day of November, 1981, to the following individuals:

Mr. Patrick K. Wiggins
Legal Department
Florida Public Service Commission
101 East Gaines Street
Tallahassee, FL 32301

Mr. Lex A. Hester
State Energy Director
Governor's Energy Office
301 Bryant Building
Tallahassee, FL 32301

Mr. J. Nixon Daniel, III
Post Office Box 12950
Pensacola, FL 32576

Mr. William H. Chandler
Post Office Drawer 0
Gainesville, FL 32601

Mr. Roy C. Young
Post Office Box 1833
Tallahassee, FL 32302

Mr. Jack Shreve
Office of the Public Counsel
Room 4. Holland Building
Tallahassee, FL 32301

Mr. James F. Stanfield
Post Office Box 14042
St. Petersburg, FL 33733

Mr. Matthew M. Childs
1400 Southeast First
National Bank Building
Miami, FL 33131

Mr. John W. McWhirter, Jr.
Post Office Box 1364
Tampa, FL 33601

ATTORNEY

STREET AND OUTDOOR LIGHTING CONVERSION PROGRAM
EIGHT YEAR CHANGEOUT SCHEDULE

YEAR	*NO. OF UNITS CONVERTED	COST RECOVERY REQUIREMENTS (\$000)		
		ESTIMATED REMOVAL COSTS	UNAMORTIZED PLANT	TOTAL
82	10,600	\$180.6	\$606.1	\$786.7
83	10,600	193.2	568.3	761.5
84	10,600	206.7	530.6	737.3
85	10,600	221.2	492.9	714.1
86	10,600	236.7	455.1	691.8
87	10,600	253.3	417.4	670.7
88	10,600	271.0	379.6	650.6
89	10,600	289.9	341.9	631.8
TOTAL	84,800	\$1,852.6	\$3,791.9	\$5,644.5

*Approximate Makeup of Annual Conversion Program:

NO.	WATTAGE	LUMENS	TYPE	REMOVAL COST/UNIT ('81)
4970	100W	3600L	MV	\$15.92
2408	175W	7000L	MV	\$15.92
174	250W	11000L	MV	\$15.92
2642	400W	20000L	MV	\$15.92
176	1000W	55000L	MV	\$15.92
230	1000W	100000L	MH	\$15.92

STREET AND OUTDOOR LIGHTING PROGRAM
 CONVERSION COSTS AND SAVINGS TIMETABLE

EXISTING INSTALLATIONS ONLY

<u>YEAR</u>	<u>QUANTITY</u>	<u>MATERIAL COST (000)</u>	<u>LABOR COST (000)</u>	<u>GWH SAVINGS</u>
82	10,600	\$ 1,214.5	\$ 1,042.8	5.9
83	10,600	1,299.4	1,116.1	11.8
84	10,600	1,390.3	1,194.0	17.7
85	10,600	1,488.0	1,277.7	23.6
86	10,600	1,592.3	1,367.5	29.5
87	10,600	1,704.3	1,462.2	35.3
88	10,600	1,816.8	1,560.7	41.2
89	10,600	<u>1,949.6</u>	<u>1,674.7</u>	47.1
		\$12,455.2	\$10,695.7	

TAMPA ELECTRIC COMPANY

FIRST REVISED SHEET NO. 6.260
CANCELS ORIGINAL SHEET NO. 6.260

**HIGH PRESSURE SODIUM
STREET LIGHTING SERVICE**

SCHEDULE: SL-2

RATE CODE: 660-699, 760-799.

AVAILABLE: Entire service area.

APPLICABLE: For public street and highway lighting for incorporated cities and other governmental authorities. Also for subdivision developers and responsible civic groups who (1) install a minimum of six lights, (2) make a deposit equivalent to a six months' bill and (3) agree to a five-year contract.

CHARACTER OF SERVICE: Service provided during the hours of darkness.

RATE PER MONTH:

	<u>Facilities' Charge</u>	<u>Demand Charge</u>	<u>Energy Charge</u>	<u>Facilities' Maintenance Charge</u>
Existing Pole-Overhead Wire				
50 Watt - 4000 Lumen	\$ 3.15	\$.34	\$.96	\$.65
70 Watt - 5800 Lumen	3.21	.46	1.27	.68
100 Watt - 9500 Lumen	3.23	.79	2.19	.75
150 Watt - 16000 Lumen	3.27	1.18	3.28	.78
250 Watt - 27500 Lumen	3.65	1.72	4.78	.80
400 Watt - 50000 Lumen	4.44	2.65	7.38	.89
Set Wood Pole-Overhead Wire				
50 Watt - 4000 Lumen	\$ 4.60	\$.34	\$.96	\$.65
70 Watt - 5800 Lumen	4.66	.46	1.27	.68
100 Watt - 9500 Lumen	4.68	.79	2.19	.75
150 Watt - 16000 Lumen	5.00	1.18	3.28	.78
250 Watt - 27500 Lumen	5.39	1.72	4.78	.80
400 Watt - 50000 Lumen	6.17	2.65	7.38	.89
Set Concrete Pole-Overhead Wire				
50 Watt - 4000 Lumen	\$ 6.17	\$.34	\$.96	\$.65
70 Watt - 5800 Lumen	6.23	.46	1.27	.68
100 Watt - 9500 Lumen	6.25	.79	2.19	.75
150 Watt - 16000 Lumen	7.05	1.18	3.28	.78
250 Watt - 27500 Lumen	7.43	1.72	4.78	.80
400 Watt - 50000 Lumen	8.21	2.65	7.38	.89

Continued to Sheet No. 6.261

TAMPA ELECTRIC COMPANY

FIRST REVISED SHEET NO. 6.261
CANCELS ORIGINAL SHEET NO. 6.261

Continued from Sheet No. 6.260

	<u>Facilities' Charge</u>	<u>Demand Charge</u>	<u>Energy Charge</u>	<u>Facilities' Maintenance Charge</u>
Existing Pole-Underground Wire				
50 Watt - 4000 Lumen	\$ 4.90	\$.34	\$.96	\$.67
70 Watt - 5800 Lumen	4.96	.46	1.27	.69
100 Watt - 9500 Lumen	4.98	.79	2.19	.77
150 Watt - 16000 Lumen	13.29	1.18	3.28	.79
250 Watt - 27500 Lumen	13.68	1.72	4.78	.81
400 Watt - 50000 Lumen	14.64	2.65	7.38	.90
Set Concrete Pole-Underground Wire				
50 Watt - 4000 Lumen	\$ 9.04	\$.34	\$.96	\$.67
70 Watt - 5800 Lumen	9.10	.46	1.27	.69
100 Watt - 9500 Lumen	9.12	.79	2.19	.77
150 Watt - 16000 Lumen	17.06	1.18	3.28	.79
250 Watt - 27500 Lumen	17.44	1.72	4.78	.81
400 Watt - 50000 Lumen	18.41	2.65	7.38	.90
Set Aluminum Pole-Underground Wire				
50 Watt - 4000 Lumen	\$10.92	\$.34	\$.96	\$.67
70 Watt - 5800 Lumen	10.98	.46	1.27	.69
100 Watt - 9500 Lumen	11.00	.79	2.19	.77
150 Watt - 16000 Lumen	24.08	1.18	3.28	.79
250 Watt - 27500 Lumen	24.46	1.72	4.78	.81
400 Watt - 50000 Lumen	33.82	2.65	7.38	.90
Each Additional Light on a Wood or Concrete Pole				
50 Watt - 4000 Lumen	\$ 2.33	\$.34	\$.96	\$.62
70 Watt - 5800 Lumen	2.40	.46	1.27	.64
100 Watt - 9500 Lumen	2.41	.79	2.19	.72
150 Watt - 16000 Lumen	2.72	1.18	3.28	.74
250 Watt - 27500 Lumen	3.10	1.72	4.78	.76
400 Watt - 50000 Lumen	4.08	2.65	7.38	.85
Each Additional Light on an Aluminum Pole				
50 Watt - 4000 Lumen	\$ 2.54	\$.34	\$.96	\$.62
70 Watt - 5800 Lumen	2.60	.46	1.27	.64
100 Watt - 9500 Lumen	2.62	.79	2.19	.72
150 Watt - 16000 Lumen	3.64	1.18	3.28	.74
250 Watt - 27500 Lumen	4.02	1.72	4.78	.76
400 Watt - 50000 Lumen	5.36	2.65	7.38	.85

Continued on Sheet No. 6.262

TAMPA ELECTRIC COMPANY
DOCKET NO. 800701-EG
APPENDIX D(a)
PAGE 3 of 3

TAMPA ELECTRIC COMPANY

FIRST REVISED SHEET NO. 6.262
CANCELS ORIGINAL SHEET NO. 6.262

Continued from Sheet No. 6.261

	<u>Facilities' Charge</u>	<u>Demand Charge</u>	<u>Energy Charge</u>	<u>Facilities' Maintenance Charge</u>
Decorative Post Top-Ornamental Pole and Underground Wire				
70 Watt - 5800 Lumen	\$8.98	\$.46	\$1.27	\$.73

MINIMUM CHARGE: The monthly charge.

FUEL ADJUSTMENT: See "Billing Adjustments" beginning on Sheet No. 6.020.
Kilowatt-hours for the Fuel Adjustment shall be determined by the following table.

<u>Lumens</u>	<u>Lamp Size</u>	<u>Kwh Per Month</u>
4,000	50 Watts	21
5,800	70 Watts	28
9,500	100 Watts	48
16,000	150 Watts	72
27,500	250 Watts	105
50,000	400 Watts	162

CONSERVATION ADJUSTMENT: See "Billing Adjustments" beginning on Sheet No. 6.020. Kilowatt-hours for the Conservation Adjustment shall be determined by the above table.

FRANCHISE FEE ADJUSTMENT: See "Billing Adjustments" beginning on Sheet No. 6.020.

PAYMENT OF BILLS: See Sheet No. 6.021.

TAMPA ELECTRIC COMPANY
DOCKET NO. 800701-EG
APPENDIX D(b)
PAGE 1 of 3

TAMPA ELECTRIC COMPANY

FIRST REVISED SHEET NO. 6.270
CANCELS ORIGINAL SHEET NO. 6.270

**HIGH PRESSURE SODIUM
GENERAL OUTDOOR LIGHTING SERVICE**

SCHEDULE: OL-1

RATE CODE: 430-449, 460-479, 530-549, 560-579.

AVAILABLE: Entire service area.

APPLICABLE: For outdoor area lighting.

CHARACTER OF SERVICE: Service provided during the hours of darkness.

LIMITATION: Installations shall be made only when, in the judgment of the Company, location of the proposed light is, and will continue to be, easily and economically accessible to Company equipment and personnel for both construction and maintenance.

RATE PER MONTH:

	<u>Facilities' Charge</u>	<u>Demand Charge</u>	<u>Energy Charge</u>	<u>Facilities' Maintenance Charge</u>
Existing Pole-Overhead Wire				
50 Watt - 4000 Lumen	\$ 3.64	\$.34	\$.96	\$.65
70 Watt - 5800 Lumen	3.71	.46	1.27	.68
100 Watt - 9500 Lumen	3.73	.79	2.19	.75
150 Watt - 16000 Lumen	3.78	1.18	3.28	.78
250 Watt - 27500 Lumen	4.22	1.72	4.78	.80
400 Watt - 50000 Lumen	5.12	2.65	7.38	.89
Set Wood Pole-Overhead Wire				
50 Watt - 4000 Lumen	\$ 5.32	\$.34	\$.96	\$.65
70 Watt - 5800 Lumen	5.39	.46	1.27	.68
100 Watt - 9500 Lumen	5.41	.79	2.19	.75
150 Watt - 16000 Lumen	5.78	1.18	3.28	.78
250 Watt - 27500 Lumen	6.22	1.72	4.78	.80
400 Watt - 50000 Lumen	7.13	2.65	7.38	.89
Set Concrete Pole-Overhead Wire				
50 Watt - 4000 Lumen	\$ 7.13	\$.34	\$.96	\$.65
70 Watt - 5800 Lumen	7.20	.46	1.27	.68
100 Watt - 9500 Lumen	7.22	.79	2.19	.75
150 Watt - 16000 Lumen	8.14	1.18	3.28	.78
250 Watt - 27500 Lumen	8.58	1.72	4.78	.80
400 Watt - 50000 Lumen	9.49	2.65	7.38	.89

Continued to Sheet No. 6.271

TAMPA ELECTRIC COMPANY

FIRST REVISED SHEET NO. 6.271
CANCELS ORIGINAL SHEET NO. 6.271

Continued from Sheet No. 6.270

	<u>Facilities' Charge</u>	<u>Demand Charge</u>	<u>Energy Charge</u>	<u>Facilities' Maintenance Charge</u>
Existing Pole-Underground Wire				
50 Watt - 4000 Lumen	\$ 5.66	\$.34	\$.96	\$.67
70 Watt - 5800 Lumen	5.74	.46	1.27	.69
100 Watt - 9500 Lumen	5.75	.79	2.19	.77
150 Watt - 16000 Lumen	15.36	1.18	3.28	.79
250 Watt - 27500 Lumen	15.80	1.72	4.78	.81
400 Watt - 50000 Lumen	16.92	2.65	7.38	.90
Set Concrete Pole-Underground Wire				
50 Watt - 4000 Lumen	\$10.45	\$.34	\$.96	\$.67
70 Watt - 5800 Lumen	10.52	.46	1.27	.69
100 Watt - 9500 Lumen	10.54	.79	2.19	.77
150 Watt - 16000 Lumen	19.72	1.18	3.28	.79
250 Watt - 27500 Lumen	20.16	1.72	4.78	.81
400 Watt - 50000 Lumen	21.28	2.65	7.38	.90
Each Additional Light on a Wood or Concrete Pole				
50 Watt - 4000 Lumen	\$ 2.70	\$.34	\$.96	\$.62
70 Watt - 5800 Lumen	2.77	.46	1.27	.64
100 Watt - 9500 Lumen	2.79	.79	2.19	.72
150 Watt - 16000 Lumen	3.15	1.18	3.28	.74
250 Watt - 27500 Lumen	3.59	1.72	4.78	.76
400 Watt - 50000 Lumen	4.71	2.65	7.38	.85
Decorative Post Top-Ornamental Pole and Underground Wire				
70 Watt - 5800 Lumen	\$10.37	\$.46	\$1.27	\$.73

ADDITIONAL CHARGE: Where pavement must be removed and replaced in order to install the underground cable, the customer will bear the cost of this additional work.

MINIMUM CHARGE: The monthly charge.

Continued on Sheet No. 6.272

TAMPA ELECTRIC COMPANY
DOCKET NO. 800701-EG
APPENDIX D(b)
PAGE 3 of 3

TAMPA ELECTRIC COMPANY

FIRST REVISED SHEET NO. 6.272
CANCELS ORIGINAL SHEET NO. 6.272

Continued from Sheet No. 6.271

FUEL ADJUSTMENT: See "Billing Adjustments" beginning on Sheet No. 6.020. Kilowatt-hours for the Fuel Adjustment shall be determined by the following table:

<u>Lumens</u>	<u>Lamp Size</u>	<u>Kwh Per Month</u>
4,000	50 Watts	21
5,800	70 Watts	28
9,500	100 Watts	48
16,000	150 Watts	72
27,500	250 Watts	105
50,000	400 Watts	162

CONSERVATION ADJUSTMENT: See "Billing Adjustments" beginning on Sheet No. 6.020. Kilowatt-hours for the Conservation Adjustment shall be determined by the above table.

FRANCHISE FEE ADJUSTMENT: See "Billing Adjustments" beginning on Sheet No. 6.020.

TERMS OF SERVICE: Overhead installations under this schedule are available only to customers who sign a contract for a minimum period of 1 year. Underground installations are available only to customers who sign a contract for a minimum period of 5 years. Decorative post top units available in groups of six or more lights only.

PAYMENT OF BILLS: See Sheet No. 6.021

AGENDA 5/18/82
ITEM NO. 31

MEMORANDUM

May 6, 1982

M. W. Campbell XC: GPW ✓
WJC
GJK
DMM
Please see
me

TO : COMMISSION CLERK
FROM: ELECTRIC AND GAS DEPARTMENT (BROCKMAN, MEETER, WOERNER) *MM* *WJC* *AB*
RE : DOCKET NUMBER 800701-EG - PETITION OF TAMPA ELECTRIC COMPANY
(TECO) FOR APPROVAL OF CONSERVATION STREET AND OUTDOOR LIGHTING
CONVERSION PROGRAM

~~PROPOSED AGENCY ACTION~~ - AGENDA, MAY 18, 1982

ISSUE 1

Should conservation programs be evaluated as a single entity in determining cost effectiveness, or should each logically separable subcomponent be evaluated separately?

RECOMMENDATION

Where subcomponents can stand along, each subcomponent should be evaluated separately for cost-effectiveness.

DISCUSSION

In this docket, Tampa Electric Company has submitted a conservation program for converting existing mercury vapor street lights to high pressure sodium. However, a conservation program must be shown to be cost-effective before otherwise unrecovered program costs can be recovered through the mechanism of the Conservation Cost Recovery Clause.

In evaluating the cost-effectiveness of converting mercury vapor lights, TECO performed only one cost-effectiveness calculation, although there are four differently sized lights involved in their program. TECO showed, and staff agreed, that taken as a group, it is cost-effective to change out all existing mercury vapor lights to high pressure sodium.

However, in reviewing TECO's proposed program, staff argued that it was not cost-effective to convert the 100 watt (3,600 lumen) light, if it were evaluated separately.

TECO, joined by FP&L in the person of Mr. Petillo, and by the City of Tampa in the person of Renee Faas, argued in favor of treating conservation programs as single entities. Staff's Dr. Stanley argued that subcomponents should be evaluated separately where subcomponents are not integral to other subcomponents.

Staff is unable to find in any of the testimony a coherent reason for not considering cost-effectiveness of street light conversions on a component-by-component basis. While Mr. Kordecki alluded to possible problems in marketing a program where components are evaluated separately, he never addressed the specific issue of street light conversions. Mr. Petillo argued similarly. On the other hand, Dr. Stanley argued that failure to evaluate each subcomponent separately, where subcomponents are logically separable, would result in wasted resources. Staff, therefore recommends that conservation programs be evaluated on a component-by-component basis where it is meaningful to do so.

ISSUE 2

Should TECO be allowed conservation cost recovery on the 100 watt mercury vapor light conversion?

RECOMMENDATION

TECO should be allowed recovery under the Conservation Cost Recovery Clause for costs incurred in converting 100 watt mercury vapor lights to high pressure sodium. TECO should also adjust their street light tariffs to reflect their revised conversion cost estimates.

DISCUSSION

In prefiled testimony, both Mr. Mestas of TECO and Dr. Stanley of staff agreed that it would not be cost-effective to convert the 100 watt mercury vapor light. In response to cross examination, TECO agreed to late file an exhibit showing the cost-effectiveness of converting 100 watt mercury vapor lights under the alternative assumption that conservation in TECO's service area frees up capacity to be sold on the broker. Assuming the energy broker operates correctly, as planned, this makes sense. TECO, however, recognized that for purposes of reimbursement under the Conservation Cost Recovery Clause, it is the savings to the TECO service area, not the State as a whole, which is most relevant. Therefore, TECO used the broker KWH rate for sales by TECO.

Their use of forecasted energy broker KWH rates and the fact that TECO discovered they could do the 100 watt conversions for approximately \$100 versus the over \$200 cost originally submitted, reversed TECO's conclusion regarding the cost-effectiveness of converting the 100 watt (3,600 lumen) mercury vapor light. Under the assumption of broker sales, TECO concluded it is cost-effective to convert the 100 watt (3,600 lumen) light.

TECO has thus substantially changed their analysis. They have now shown that under reasonable assumptions it can be cost-effective to convert the 100 watt light. Dr. Stanley has shown that under slightly different, but also reasonable assumptions, one can make a strong argument for delaying conversion of the 100 watt light. The decision is a close one, then, on whether to allow conservation cost recovery

for the 100 watt light. Staff, therefore recommends that cost recovery be allowed if TECO adjusts their street light tariff to reflect the revised lower estimates of converting street lights to high pressure sodium.

ISSUE 3

Should the rates for the 50 and 150 watt high pressure sodium vapor lamps proposed by TECO be approved?

RECOMMENDATION

The rates proposed by the Company for the 50 and 150 watt fixtures should not be approved because they are based on the cost of new installations and only 20% of the luminaires will be new installations. The rates should be recalculated by the company and should reflect the percentages of fixtures which are new and converted and their respective costs.

DISCUSSION

Now that TECO has estimated that the cost of converting a mercury vapor fixture to a high pressure sodium vapor is as much as 54% less than the cost of installing a new high pressure sodium vapor fixture, the staff contends that the high pressure sodium vapor rates should be weighted by the percentages of high pressure sodium lights that the company expects to be new and converted. Otherwise the company will over recover on the converted lights. Since the company expects 80% of the lights on the sodium vapor rates will be conversions and 20% will be new installations, the staff proposes that the company should calculate high pressure sodium vapor rates based on 80% of the cost of a converted lamp plus 20% of the cost of a new installation. The company is only

Memorandum
May 6, 1982
Page-5-

adding the 50 and 150 watt fixtures in this filing so only these two rates would reflect this weighting.

The staff intends to review thoroughly the cost of conversions as well as new installations in the current TECO rate case because of the dramatic change in the estimated cost of conversions filed by the company. It should also be pointed out that the sodium vapor rates for the other luminaires are based on the cost of new installations which may not be appropriate.

LBB/MM/GWW/pa

cc: David Swafford, Executive Director
William D. Talbott, Deputy Executive Director/Technical
General Counsel
Legal Department

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Conservation Plan of) DOCKET NO. 800701-EG (AP)
Tampa Electric Company.) ORDER NO. 11002
) ISSUED: 7-19-82
)

The following Commissioners participated in the disposition of this matter:

JOSEPH P. CRESSE, Chairman
GERALD L. GUNTER
SUSAN W. LEISNER

Pursuant to notice, the Florida Public Service Commission held a public hearing in the above docket on March 8, 1982.

APPEARANCES: JAMES D. BEASLEY, Esquire
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Tallahassee, Florida 32302
For Tampa Electric Company.

JAMES STANFIELD, Esquire
Post Office Box 14042
St. Petersburg, Florida 33733
For Florida Power Corporation.

C. ROGER VINSON, Esquire
Post Office Box 12950
Pensacola, Florida 32576
For Gulf Power Company.

MATTHEW M. CHILDS, Esquire
1400 Southeast First National Bank Building
Miami, Florida 33131
For Florida Power and Light Company.

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Florida Public Service Commission
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ORDER APPROVING CONSERVATION
PLAN AND DISAPPROVING PROPOSED RATES

BY THE COMMISSION:

Pursuant to the provisions of Section 366.82(5), Florida Statutes, Tampa Electric Company (TECO) has requested approval of its proposed Outdoor Lighting Conversion Program as part of its conservation plan. Concurrent with its Petition, TECO has filed tariff provisions containing rates for 50 watt and 150 watt high pressure sodium luminaires.

Of particular importance in this proceeding is the question of whether, when reviewing a proposed conservation program, we

should consider the program in the aggregate or whether we should attempt to analyze individual components for cost effectiveness. This question impacts upon whether a program should be approved for inclusion in a conservation plan, as well as upon whether certain costs associated with an approved program should be allowed through conservation cost recovery.

Initially we determined that, for purposes of approval of a program for inclusion in a conservation plan, the program should be analyzed for cost effectiveness on an aggregate basis. TECO proposed that the same approach be used for conservation cost recovery. The staff proposed that a program should be disaggregated, when possible, for cost effectiveness. According to the staff, costs associated with separable components of a program which are not cost effective should not be recoverable through conservation cost recovery, even though the program as a whole is cost effective. Having considered the testimony, we find that conservation programs should, to the extent practicable, be disaggregated for cost effectiveness analysis. If an identifiable and separable component of a program is not cost effective, recovery of costs for that component through the conservation cost recovery clause should not be allowed.

At hearing, TECO presented testimony in favor of its approach, as did FP&L and the City of Tampa. The staff presented testimony in favor of its view, as well as testimony designed to show that TECO's plan to convert the 100 watt (3,600 lumen) light, was not cost effective. TECO filed a late-filed exhibit showing a cost effectiveness calculation for the 100 watt conversions assuming that conservation in TECO's service area frees up capacity on the energy broker. This late-filed exhibit shows that the 100 watt conversion is cost effective. The remaining portions of the program are all cost effective. The entire program should therefore be approved for conservation cost recovery.

TECO has estimated that the cost of converting a mercury vapor fixture to a high pressure sodium vapor fixture is as much as 54% less than the cost of installing a new high pressure sodium vapor fixture. TECO's high pressure sodium vapor rates should be weighted by the percentages of high pressure sodium lights that TECO expects to be new and converted. Since TECO expects 80% of the lights on the sodium vapor rates will be conversions and 20% will be new installations, the company should calculate high pressure sodium rates based upon 80% of the cost of a converted lamp plus 20% of the cost of a new installation. Since TECO's proposed 50 and 150 watt fixture rates are not calculated on this basis, they must be disapproved. The company should file revised tariff sheets to comply with the above. It is, therefore,

ORDERED by the Florida Public Service Commission that the Petition of Tampa Electric Company for approval of its Conservation Street and Outdoor Lighting Conversion Program be and the same is hereby approved. It is further

ORDERED that all reasonable and prudently incurred unreimbursed expenditures associated with the program qualify for conservation cost recovery. It is further

ORDERED that the proposed rates for 50 and 150 watt high pressure sodium vapor lamps filed by Tampa Electric Company are hereby disapproved. It is further

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ORDERED that Tampa Electric Company file revised rates for its 50 and 150 watt high pressure sodium vapor lamps to reflect the relative percentages of new versus converted fixtures, as well as their respective costs.

By ORDER of the Florida Public Service Commission, this 19th day of July 1982.


Steve Tribble
COMMISSION CLERK

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