

State of Florida



Public Service Commission

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TALLAHASSEE, FLORIDA 32399-0850

-M-E-M-O-R-A-N-D-U-M-

DATE: April 23, 2020

TO: Office of Commission Clerk (Teitzman)

FROM: Division of Engineering (Phillips, Ellis) *TB*
Office of the General Counsel (Passidomo, Murphy) *TLT*

RE: Docket No. 20200058-EG – Petition for approval of 2020 demand-side management plan, by Orlando Utilities Commission.

AGENDA: 05/05/20 – Regular Agenda – Proposed Agency Action - Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Brown

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

Case Background

Enacted in 1980, Sections 366.80 through 366.83, and 403.519, Florida Statutes (F.S.), known collectively as the Florida Energy Efficiency and Conservation Act (FEECA), requires the Florida Public Service Commission (Commission or PSC) to adopt conservation goals to increase the efficiency of energy consumption. Additionally, FEECA emphasizes reducing the growth rates of weather-sensitive peak demand, reducing and controlling the growth rates of electricity consumption, reducing the consumption of expensive resources such as petroleum fuels, and encouraging demand-side renewable energy resources. The Commission most recently

established conservation goals by Order No. PSC-2019-0509-FOF-EG, issued November 26, 2019 (2019 Goalsetting Order).¹ The Commission found that it was in the public interest to continue with the goals established in the prior FEECA goalsetting proceeding for the period 2015 through 2024, which were established by Order No. PSC-14-0696-FOF-EU (2014 Goalsetting Order).²

Pursuant to Section 366.82(7), F.S., after goals are established, the Commission must require each utility to develop Demand-Side Management (DSM) Plans to meet the conservation goals. Rule 25-17.0021(4), Florida Administrative Code (F.A.C.), requires that DSM Plans be filed within 90 days of the order establishing goals. Therefore, new DSM Plans were required to be filed by February 24, 2020.

On February 24, 2020, Orlando Utilities Commission (OUC) filed a petition requesting approval of its DSM Plan. As part of this filing, OUC provided a cost-effectiveness analysis of the proposed programs pursuant to Rule 25-17.008, F.A.C. These include the Rate Impact Measure (RIM) Test, the Total Resource Cost (TRC) Test, and the Participants Test.

The Commission has jurisdiction over this matter pursuant to Sections 366.80 through 366.83 and 403.519, F.S.

¹ Order No. PSC-2019-0509-FOF-EG, issued November 26, 2019, Docket No. 20190015-EG, *In re: Commission review of numeric conservation goals (Florida Power & Light Company)*, Docket No. 20190016-EG, *In re: Commission review of numeric conservation goals (Gulf Power Company)*, Docket No. 20190017-EG, *In re: Commission review of numeric conservation goals (Florida Public Utilities Company)*, Docket No. 20190018-EG, *In re: Commission review of numeric conservation goals (Duke Energy Florida, LLC)*, Docket No. 20190019-EG, *In re: Commission review of numeric conservation goals (Orlando Utilities Commission)*, Docket No. 20190020-EG, *In re: Commission review of numeric conservation goals (JEA)*, and Docket No. 20190021-EG, *In re: Commission review of numeric conservation goals (Tampa Electric Company)*.

² Order No. PSC-14-0696-FOF-EU, issued December 16, 2014, Docket No. 20130199-EI, *In re: Commission review of numeric conservation goals (Florida Power & Light Company)*, Docket No. 20130200-EI, *In re: Commission review of numeric conservation goals (Duke Energy Florida, Inc.)*, Docket No. 20130201-EI, *In re: Commission review of numeric conservation goals (Tampa Electric Company)*, Docket No. 20130202-EI, *In re: Commission review of numeric conservation goals (Gulf Power Company)*, Docket No. 20130203-EM, *In re: Commission review of numeric conservation goals (JEA)*, Docket No. 20130204-EM, *In re: Commission review of numeric conservation goals (Orlando Utilities Commission)*, and Docket No. 20130205-EI, *In re: Commission review of numeric conservation goals (Florida Public Utilities Company)*.

Discussion of Issues

Issue 1: Is OUC's DSM Plan projected to meet the annual numeric conservation goals established by the Commission in the 2019 Goalsetting Order?

Recommendation: Yes. The DSM Plan proposed by OUC is projected to meet or exceed the annual numeric conservation goals approved by the Commission in the 2019 Goalsetting Order. OUC's 2020 DSM Plan is a continuation, with some modifications and additions, of its DSM plan approved by the Commission in 2015. OUC's DSM Plan is not projected to be cost-effective based upon the RIM Test. However, the Commission should allow OUC to continue programs considering OUC's status as a municipal utility, where the local governing body is given the latitude to make decisions regarding local community investment in energy efficiency. OUC's local governing body will make its own determination as to whether expenditures are reasonable and prudent and will decide if it is necessary to modify and or remove programs.

Staff also recommends that OUC file its administrative program standards for all programs within 30 days of the Consummating Order being issued in this docket. Staff further recommends that the Commission grant staff administrative authority to review and approve these standards. (Phillips)

Staff Analysis: The criteria used to review the appropriateness of the conservation programs were as follows: (1) whether the program advances the policy objectives of FEECA and its implementing rules; (2) whether the program is directly monitorable and yields measurable results; and (3) whether the program is cost-effective.³ Staff has reviewed OUC's DSM Plan, including its demand and energy savings, cost-effectiveness, and rate impact. OUC's DSM Plan meets or exceeds the goals set in the 2019 Goalsetting Order.

Description of DSM Plan

OUC's DSM Plan consists of 16 programs in total, eight residential and eight commercial. OUC has proposed to cancel two existing programs, continue two existing programs as is, continue ten existing programs with modifications to reflect current market conditions, and add four new programs. As required by Rule 25-17.003, F.A.C., OUC's DSM Plan continues to offer energy audits to residential customers, and OUC also continues to voluntarily offer audits to commercial/industrial customers. Table 1-1 provides a complete list of the programs and a brief description of each can be found in Attachment A.

OUC proposes to end the residential and commercial Window Film/Solar Screen Rebate Program. In this program, OUC provided rebates for the installation of solar window films in pre-existing homes and businesses. The solar window film reduces solar heating resulting in less energy needed to cool the home or business.

The primary change made to the modified programs was alterations to the rebate levels available within the program. For example, OUC reduced the residential and commercial duct repair program rebate from a maximum of \$160 to a maximum of \$100. While the residential and

³ PSC Order No. 22176, issued November 14, 1989, Docket No. 19890737-PU, In re: *Implementation of Section 366.80-.85, F.S., Conservation Activities of Electric and Natural Gas Utilities.*

commercial ceiling insulation program increased the available rebate from \$0.05 per square foot of attic insulation, to \$0.10 per square foot of attic insulation.

**Table 1-1
 OUC DSM Plan Program Listing**

Program Name	Program Status		
	Existing	Modified	New
Residential Programs			
Home Energy Survey	X		
Duct Repair/Replacement	X	X	
Ceiling Insulation Upgrade	X	X	
High Performance Windows	X	X	
Efficient Electric Heat Pump	X	X	
New Home Rebate	X	X	
Water Heater Heat Pump			X
Efficiency Delivered	X	X	
Commercial/Industrial Programs			
Energy Audits	X		
Efficient Electric Heat Pump	X	X	
Duct Repair Rebate	X	X	
Ceiling Insulation Rebates	X	X	
Cool/Reflective Roof	X	X	
Indoor Lighting Billed Solution			X
Indoor lighting Rebate			X
Custom Incentive			X

Source: Document No. 01070-2020

Program Savings

Seasonal peak demand and annual energy savings for the programs were reviewed. OUC estimates and measures savings by a program using a combination of methodologies, including site-specific engineering estimates as the most cost-effective method of evaluating program impacts. As required by Rule 25-17.003(10), F.A.C., OUC will conduct inspections of at least 10 percent of program installations to verify that installations were performed and meet quality standards.

Comparison of DSM Plan to Goals

Based on staff's review, OUC's DSM Plan will meet or exceed the Commission's established annual goals. The seasonal demand and energy savings associated with OUC's DSM Plan and the Commission's established goals are summarized in Table 1-2 and Table 1-3 for residential and commercial/industrial sectors, respectively.

**Table 1-2
 Commission’s Residential Goals vs. OUC’s DSM Plan**

Year	Summer (MW)		Winter (MW)		Annual Energy (GWh)	
	Goal	DSM Plan	Goal	DSM Plan	Goal	DSM Plan
2020	0.21	0.61	0.21	0.68	0.77	1.20
2021	0.21	0.61	0.22	0.69	0.80	1.20
2022	0.19	0.61	0.20	0.69	0.72	1.20
2023	0.19	0.61	0.18	0.69	0.66	1.20
2024	0.16	0.61	0.16	0.70	0.57	1.21
Total⁴	0.96	3.04	0.97	3.45	3.52	6.01

Source: Document No. 01070-2020

**Table 1-3
 Commission’s Commercial/Industrial Goals vs. OUC’s DSM Plan**

Year	Summer (MW)		Winter (MW)		Annual Energy (GWh)	
	Goal	DSM Plan	Goal	DSM Plan	Goal	DSM Plan
2020	0.39	1.50	0.70	1.40	0.85	7.68
2021	0.40	1.50	0.78	1.40	0.86	7.68
2022	0.37	1.47	0.78	1.37	0.85	7.50
2023	0.39	1.44	0.74	1.34	0.82	7.40
2024	0.36	1.31	0.70	1.20	0.80	6.62
Total⁵	1.91	7.24	3.70	6.72	4.18	63.88

Source: Document No. 01070-2020

The values presented above are projections based upon participation rates which may or may not occur. OUC will be responsible for monitoring actual participation rates. OUC is a municipal utility and its local governing body will decide if it is necessary to modify, add, or remove programs.

Section 366.82(10), F.S., requires the Commission to provide an annual report to the Governor and Legislature on the progress of each utility toward meeting the established goals. Rule 25-17.0021(5), F.A.C., requires OUC to submit an annual report no later than March 1 of each year summarizing the achieved results of its DSM Plan. Staff will continue to monitor and report the actual amount of DSM savings each year, on an annual and cumulative basis, as part of the FECCA Report.

⁴ Totals may not equal due to rounding.

⁵ Totals may not equal due to rounding.

Based on Table 1-2 and Table 1-3, OUC's 2020 DSM plan is projected to exceed the established FEECA policy goals set by the Commission. The programs are all monitorable and the results are measurable.

Cost-Effectiveness Review

As required by Rule 25-17.008, F.A.C., OUC provided a cost-effectiveness analysis of the proposed programs using the RIM Test, the TRC Test and the Participants Test. The Commission's last established goals were not based upon any particular cost-effectiveness test. Rather, the Commission found that it was in the public interest to continue with the goals established in the prior FEECA goalsetting proceeding for the period 2015 through 2024, which were based on an economic analysis conducted in 2015. Below, staff addresses the assumptions associated with OUC's avoided costs and the results of the cost-effectiveness analysis.

Avoided Costs

OUC does not plan any additions to its generation fleet within the study period for its DSM Plan. In addition, its avoided costs do not include capacity benefits associated with deferring or delaying its next generating unit. OUC's avoided costs are therefore based on avoided energy only.

Cost-Effectiveness Test Results

The cost-effectiveness analysis of OUC's demand-side programs shows that none are cost-effective under the RIM and Participants Tests, and only one, the custom incentive program, is cost effective under both the TRC and Participants Tests. For municipal utilities such as OUC, local decisions fall within the jurisdiction of OUC's governing body regarding the investment in energy efficiency that best suits local needs and values. Accordingly, as the Commission has recognized in prior proceedings, it is appropriate to defer to municipal utilities' governing bodies to determine the level of investment if measures are not cost-effective.⁶

⁶ Order No. PSC-15-0325-PAA-EG, issued, August 11, 2015, Docket No. 20150088-EG, *In re: Petition for approval of modifications to demand-side management plan by Orlando Utilities Commission.*

**Table 1-4
 OUC Cost-Effectiveness Test Results by Program**

Program Name	RIM Test	TRC Test	Participants Test
Residential Programs			
Duct Repair/Replacement	0.20	2.14	0.32
Ceiling Insulation Upgrade	0.18	0.46	0.10
High Performance Windows	0.13	0.62	0.09
Efficient Electric Heat Pump Seer	0.15 - 0.18	0.28 - 0.47	0.05 - 0.10
New Home Rebates	0.19	0.33	0.08
Heat Pump Water Heater Rebates	0.20	0.62	0.14
Residential Efficiency Delivered	0.14	1.29	0.17
Commercial Programs			
Efficient Electric Heat Pump Seer 15	0.23 - 0.26	0.29 - 0.48	0.07 - 0.12
Duct Repair rebates	0.29	1.10	0.32
Ceiling Insulation Upgrade rebates	0.25	0.48	0.12
Cool/Reflective Roof Rebates	0.52	0.69	0.37
Indoor Lighting Billed Solution	0.43	1.86	0.77
Indoor Lighting Rebates	0.51	1.55	0.76
Custom Incentive	0.39	3.67	1.28

Source: Document No. 01070-2020

Rate Impact

The costs to implement the programs within OUC’s DSM Plan would be established by the municipal utility’s governing body. Overall, the DSM programs are a small amount of the customer’s bill. Table 1-5 below is an estimate of the monthly bill impact on the typical residential and commercial customer over a five-year period. The estimated costs are based upon participation rates and administrative costs used in the cost-effectiveness analysis. Much like investments in generation, transmission, and distribution, investments in energy efficiency have an immediate rate impact, but may produce savings over time.

**Table 1-5
 OUC Estimated Monthly Bill Impact of Proposed DSM Plan**

Year	Residential Customer 1,200 kWh/mo
	Monthly Bill Impact (\$)
2020	0.43
2021	0.44
2022	0.44
2023	0.44
2024	0.44

Source: Document No. 01936-2020

Conclusion

The DSM Plan proposed by OUC is projected to meet or exceed the annual numeric conservation goals approved by the Commission in the 2019 Goalsetting Order. OUC's 2020 DSM Plan is a continuation, with some modifications and additions, of its DSM plan approved by the Commission in 2015. OUC's DSM Plan is not projected to be cost-effective based upon the RIM Test. However, the Commission should allow OUC to continue programs considering OUC's status as a municipal utility, where the local governing body is given the latitude to make decisions regarding local community investment in energy efficiency. OUC's local governing body will make its own determination as to whether expenditures are reasonable and prudent and will decide if it is necessary to modify and or remove programs.

Staff also recommends that OUC file its administrative program standards for all programs within 30 days of the Consummating Order being issued in this docket. Staff further recommends that the Commission grant staff administrative authority to review and approve these standards.

Issue 2: Should this docket be closed?

Recommendation: No. If no person whose substantial interests are affected by the proposed agency action files a protest within 21 days of the issuance of the PAA Order, a Consummating Order should be issued. If the Commission approves any programs, the programs should become effective on the date of the Consummating Order. However, if a protest is filed within 21 days of the issuance of the PAA Order, the programs should not be implemented until after the resolution of the protest. In either event, the docket should remain open for staff's verification that the program standards have been filed by the utility and approved by staff. When the PAA issues become final and the program standards have been approved, this docket should be closed administratively. (Passidomo, Murphy)

Staff Analysis: If no person whose substantial interests are affected by the proposed agency action files a protest within 21 days of the issuance of the PAA Order, a Consummating Order should be issued. If the Commission approves any programs, the programs should become effective on the date of the Consummating Order. However, if a protest is filed within 21 days of the issuance of the PAA Order, the programs should not be implemented until after the resolution of the protest. In either event, the docket should remain open for staff's verification that the program standards have been filed by the utility and approved by staff. When the PAA issues become final and the program standards have been approved, this docket should be closed administratively.

OUC 2020 DSM Plan

Residential Programs

Home Energy Survey Program

The home energy walk-through surveys were designed to provide residential customers with recommended energy efficiency measures and practices customers can implement, and to encourage participation in various OUC rebate programs. OUC provides participating customers specific tips on conserving electricity and water as well as details on customer rebate programs.

Duct Repair Rebates Program

The program is designed to encourage residential customers to repair leaking ducts on existing systems. Qualifying customers must have an existing central air conditioning system, within certain limits and ducts must be sealed with mastic and fabric tape or any other Underwriters Laboratory (UL) approved duct tape.

Maximum Incentive: Up to \$100

Ceiling Insulation Rebates Program

The program is designed to encourage customers to upgrade their attic insulation. The program applies to conditioned areas only.

Maximum Incentive: Up to \$0.10/sq.-ft.

High Performance Windows Rebates Program

The program is designed to encourage customers to install windows that improve energy efficiency in their homes by purchasing ENERGY STAR® rated energy efficient windows.

Maximum Incentive: \$1.50/sq.-ft.

Efficient Electric Heat Pump Rebates Program

The residential program provides rebates to qualifying customers in existing homes who install heat pumps having a seasonal energy efficiency ratio (SEER) of 15.0 or higher.

Maximum Incentive: Up to \$1,630

New Home Rebates Program

Previously known as the Residential Gold Ring Home Program, the program offers “a la carte” rebates for a variety of items the builder or home buyer may choose. The table below is an example of the incentives available.

Rebate	Rate of Rebate	Maximum Rebate
Ceiling Insulation Upgrade	\$0.03/sq.-ft.	\$60
Heat Pump	Up to \$1,630	\$500
Energy Star Heat Pump Water Heater	\$500	\$500
Solar Water Heater	\$900	\$900

Heat Pump Water Heater Rebates Program

The program provides rebates for the heat pumps commonly known as hybrid electric heat pump water heaters for qualifying installations.

Maximum Incentive: \$500

Residential Efficiency Delivered Program

Formerly known as the Home Energy Fix-Up, the program is available to residential customers (single family homes) and provides up rebates for energy and water efficiency upgrades based on the needs of the customer's home after a residential energy survey. The program is an income based program. The participant's income is also the basis for determining what maximum incentive and percentage of costs OUC will contribute toward the improvements. Specifically, OUC will contribute 85 percent, up to \$2,000 for households with incomes less than \$40,000, and 50 percent, up to \$1,000 for households with incomes up to \$60,000.

Maximum Incentive: Up to \$2,000

Commercial Programs

Energy Audits Program

The program is focused on increasing the energy efficiency of commercial buildings and includes a free survey comprised of a physical walk-through inspection of the commercial facility. Following the inspection the customer receives a written report detailing cost-effective recommendations to make the facility more energy and water efficient. Participating customers are encouraged to participate in other OUC commercial programs and directly benefit from energy conservation, which decreases their electric and water bills

Efficient Electric Heat Pump Rebates Program

The program provides rebates to qualifying customers in existing buildings who install heat pumps having a SEER of 15.0 or higher.

Maximum Incentive: Up to \$1,630

Duct Repair Rebates Program

The program is designed to encourage commercial customers to repair leaking ducts on existing systems. Qualifying customers must have an existing central air conditioning system of within certain limits and ducts must be sealed with mastic and fabric tape or any other UL approved duct tape.

Maximum Incentive: Up to \$100

Ceiling Insulation Rebates Program

The program is designed to increase a building's resistance to heat loss and gain. Participating customers receive a rebate for upgrading their attic insulation up to R-30 or greater.

Maximum Incentive: \$0.10/sq.-ft.

Cool/Reflective Roof Rebates Program

The program is designed to reflect the sun's rays and lower roof surface temperature while increasing the lifespan of the roof. OUC will rebate customers for ENERGY STAR® cool/reflective roofing that has an initial solar reflectance greater than or equal to 0.70.

Maximum Incentive: \$0.12/sq.-ft.

Indoor Lighting Billed Solution Program

The program assists commercial customers with investments in new lighting technologies. Through a competitive Request For Proposals process, OUC selects a qualified lighting contractor to work with customers to develop proposals. Customers enter into an Agreement with OUC to payback the cost of the project based on the expected savings through monthly charges applied to their bill. The program is a cash-flow neutral billed solution where the savings pay for the project's cost over the pay-back period or term. The term cannot exceed five years.

Indoor Lighting Rebates Program

The program offers commercial customers that upgrade the efficiency of their indoor lighting a rebate if they meet certain requirements. Participation is open to facilities located within OUC's service area that receive electric service under an OUC commercial rate.

Maximum Incentive; Up to \$250/kW

Custom Incentive Program

Through the program, commercial customers receive incentives based on the reduction in peak demand their projects achieve plus the first year energy savings. Incentives and other program must meet program requirements and caps; including incentives cannot exceed 50 percent of project costs and the project must have a greater than a two-year payback. Incentives are split between project completion and one year after project completion.

Maximum Incentive: Up to \$550/kW (\$250/kW for lighting) and \$0.032/kWh.