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VIA ELECTRONIC FILING

Adam J. Teitzman, Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: *Petition for Approval of Smart Outdoor Lighting Services Pilot Program by Duke Energy Florida, LLC; Docket No. 20230068-EI*

Dear Mr. Teitzman:

On behalf of Duke Energy Florida, LLC ("DEF"), please find enclosed for electronic filing DEF's Response to Staff's Second Data Request regarding the above-referenced docket.

Thank you for your assistance in this matter. Should have any questions, please feel free to contact me at (727) 820-4692.

Sincerely,

/s/ Dianne M. Triplett

Dianne M. Triplett

DMT/vr
Enclosures

cc: Suzanne Brownless, FPSC, sbrownle@psc.state.fl.us
Oakley Ward, FPSC, oward@psc.state.fl.us

**Duke Energy Florida, LLC's ("DEF") Response to
Florida Public Service Commission's ("Staff") Second Data Request
re. Petition for Approval of Smart Outdoor Lighting Services Pilot Program**

Docket No. 20230068-EI

1. Please refer to Duke's response to Question No. 1 of Staff's First Data Request for the following question: How will Duke measure the impact of the program on unmetered customers?

Response:

DEF will be utilizing vendor provided software that tracks street light usage based on being on/off or dimmed. The data will be compared to a normal streetlight with a photocell that turns the light on from dusk to dawn. The company will measure the impact by comparing 100% power and 350-hours per month to the percent reduction in wattage used in the pilot.

2. Please refer to Duke's responses to Question Nos. 6, 7, and 8 of Staff's First Data Request for the following questions:
 - a. Please provide a detailed breakdown of the \$12,500 in marketing costs
 - b. If Duke petitions for this program to become permanent will these costs be on an annual basis? Additionally, would there be any other costs?

Response:

- a. DEF now forecasts a lower marketing cost as shown below:
 - i. Customer Website (One Time Cost) \$3,000 to \$5,000
 - ii. Pilot Factsheet (One Time Cost) \$320 color printing costs (500)
 - b. These costs are associated with the initial marketing for the program. The marketing costs will vary from year to year and will be part of the rates for a permanent program. If DEF decides to implement a permanent program, Duke Energy will provide updated cost estimates at that time.
3. Please refer to Duke's response to Question No. 7 of Staff's First Data Request for the following questions. The utility stated that the marketing costs, "will be recovered through base rates."
 - a. Please clarify if these costs are already included in base rates or if they will be included in the next rate case.
 - b. Does this mean the general body of ratepayers will pay these costs? Please explain.

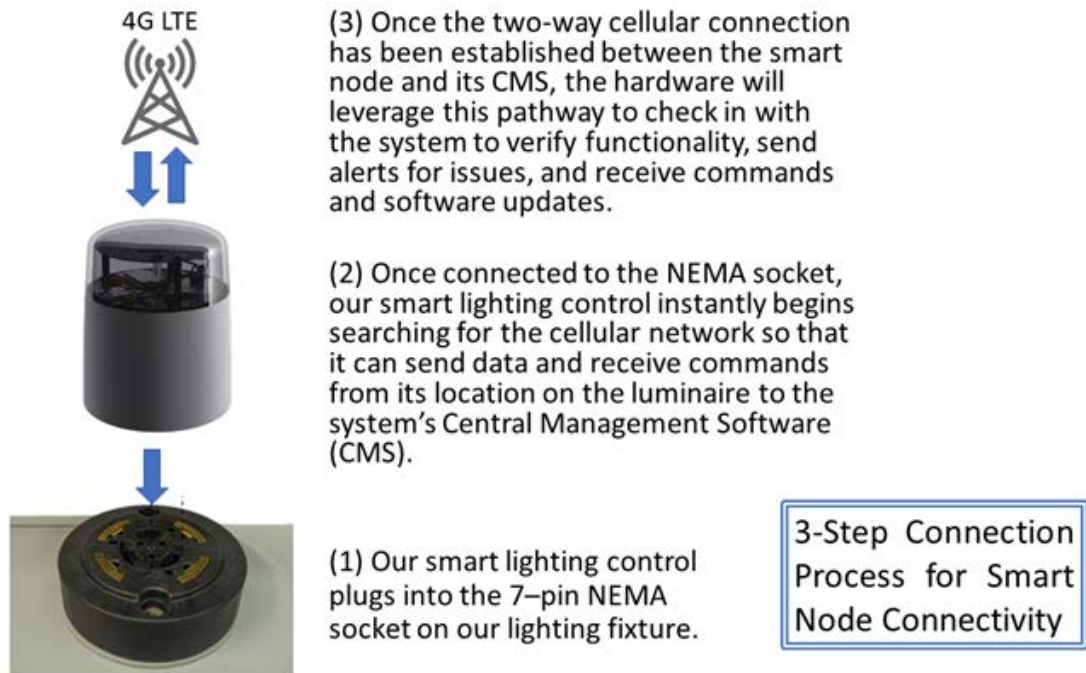
Response:

- a. These costs are not included in base rates but will be included in future rate cases if applicable.

b. Please see response to 3a.

4. Please refer to Duke’s response to Question No. 9a of Staff’s First Data Request for the following question: Please provide a diagram demonstrating how the NEMA socket, LED luminaire, and LTE-cellular network work together.

Response:



5. Please refer to Duke’s responses to Question No. 16 of Staff’s First Data Request for the following questions:
- Please explain in detail how the system records the schedule change on the node.
 - Please explain in detail how duke and the smart nodes communicate with each other.
 - What happens during the up to 48 hours it takes to record the schedule change on the node?
Please explain in detail.
 - Please explain in detail how lighting schedule changes will be implemented.

Response:

- DEF personnel inputs the lighting schedule change requested by the customer into the lighting Central Management System (CMS) by way of the LTE network. The node receives the change and updates the operation of the light based on the new schedule. Once a schedule change is received by the node, the system overwrites and keeps a record of the previous lighting schedule. In the event a node is disconnected from its cellular connection, experiences power

loss, or unable to receive the schedule change, it will continue to operate on its existing schedule until it can reconnect and receive the updated schedule from the CMS. This could take up to 48 hours per guidance from the manufacturer.

- b. The LTE network is used to communicate between the CMS and the smart node plugged into the 7-pin NEMA socket on lighting fixture. Once plugged in and able to receive power, the node searches the cellular network to establish a connection and begins to send and receive data from its location on the network. DEF uses an online Web interface to monitor, maintain and communicate with the smart node. This interface also allows Duke Energy to receive status alerts and notifications from the node to ensure it is working properly to resolve issues with the fixture or smart node hardware.
 - c. Please see the response to 5a.
 - d. Customers that want to participate in the pilot program must respond to a solicited email communication from Duke Energy. The company has created an email address that only those customers requesting smart lighting customizations will be given access to. Customers will receive a spreadsheet to fill out and request schedule changes. Once the schedule changes are received, Duke Energy will review the request to ensure it complies with the terms and conditions of the pilot. If approved, the changes will be implemented, and the customer will be notified via email when they can expect the changes to occur.
6. In response to Question No. 18 of Staff’s First Data Request Duke states that, “smart node deployment is still underway.”
- a. Were the costs associated with the installation of smart nodes specifically approved by the Commission? Please explain.
 - b. Are these costs in base rates for lighting customers or for all customers? Please explain.

Response:

- a. There are no incremental costs associated with the installation of smart nodes. Duke Energy has subscribed to a strategy that minimizes impact to lighting work and maintenance that is already being performed today and is deploying smart nodes in place of standard photocells on most repairs and maintenance calls, and newly constructed poles and lights.
- b. Please see response to 6.a.