Matthew R. Bernier
ASSOCIATE GENERAL COUNSEL
Duke Energy Florida, LLC

May 31, 2019

VIA ELECTRONIC MAIL

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

Re: *Request for Approval of Revised Underground Residential Distribution Tariff Sheets by Duke Energy Florida, LLC;* Docket No. 20190076-EI

Dear Mr. Teitzman:

Please find attached for filing Duke Energy Florida, LLC's Response to Staff's First Data Request in the above-referenced Docket.

Thank you for your assistance in this matter. Please feel free to call me at (850) 521-1428 should you have any questions concerning this matter.

Respectfully,

/s/ Matthew R. Bernier

Matthew R. Bernier

MRB/cmk
Attachment

cc: W. Trierweiler

106 East College Avenue, Suite 800 ▪ Tallahassee, Florida 32301
Phone: 850.521.1428 ▪ Fax: 727.820.5041 ▪ Email: matthew.bernier@duke-energy.com

Duke Energy Florida, LLC's Response to Staff's First Data Request re. Request for Approval of Revised Underground Residential Distribution Tariff Sheets by Duke Energy Florida, LLC

Docket No. 20190076-EI

1. Please refer to the last URD filing, Docket No. 20170069-EI, that shows the spreadsheet for Overhead and Underground Distribution Including Storm Costs and Pole Attachment Revenues for the Summary of NPV Life Cycle Costs per mile for the Actual 5-year Period. See Attachment A for reference.

   a. Please provide the same information for the 2019 filing.
   b. Please provide an excel spreadsheet, with formulas intact, of the NPV Life Cycle calculations.

   RESPONSE:
   a. Please see attachment at end of this file.
   b. Electronic version attached.

2. Please confirm whether Duke used the same methodology for calculating the NPV of operational costs as the methodology approved in Order No. PSC-12-0348-TRF-EI, issued July 5, 2012, in Docket No. 110293-EI. If not, please provide a detailed description of any changes in the methodology and the impact on the differential calculations.

   RESPONSE:
   The methodology has not changed.

3. The following questions refer to the loading factors (reference Duke's response to staff's first data request in Docket No. 170069-EI, No. 2).

   a. Does the Management & Supervision loading factor still include additional non- direct field personnel? If not, please explain.
   b. Please explain the reason that the Management and Supervision loading factor increased from 28.86 % in 2017 to 36.87 % in 2019.
   c. Please explain if the items included in footnote 3 have changed from the 2017 filing.
   d. Please explain the reasons that caused the Fleet loading factor to decrease from 21.41 % in 2017, to 16.40 % in 2019.
   e. Please explain the reasons that caused the Design and Project Management loading factor to increase from 13.90 % in 2017, to 21.08 % in 2019.
   f. Both footnote 1 & 3 include a state sales tax. Please explain if the sales tax is added twice.

   RESPONSE:

a. Yes, Management & Supervision (referred to as "Indirects" in current work management system) still includes additional nondirect field personnel.
b. The rate is calculated comparing the previous year amount of management and supervision costs divided by the amount of costs (CWIP, RWIP and O&M) overseen for that same year. The proportion of investment in the distribution system has decreased relative to the management and supervision costs, causing the loader rate to increase.
c. Stores rate no longer includes a specific working stock rate. The stores rate includes sales tax and a fixed percentage on the following cost types: Direct Materials, Material Returns, and Working Stock Allocations. Items previously included as working stock (shown previously as benchstock) are now included as direct charge items in work requests. This would include non-unit of property items such as but not limited to insulators, connectors, ground rods and conduit bends.
d. The fleet factor is now calculated using a crew-specific vehicle rate identified to the type of work performed.
e. Similar to DEF's response to part b, the Design and Project management costs have not increased in the same proportion as the investment in the distribution system. This has resulted in an increase in the Design and Project management loader rate.
f. Sales taxes is only included once. Footnote 3 was only to provide clarification that 7% of the total 17% is the sales tax.

4. Please refer to section 11.03 of the Company's filing. Summary of cost changes for residential subdivision designs (last page of the filing) for the following questions.

a. The first paragraph states that there were minor modifications to overhead design please provide and explanation of those modifications.
b. Please provide the reasons for the redesign of the three underground designs and the impact to the "per lot" differentials caused by the design changes.
c. Please provide a detailed discussion on the impact of recent storms in the modeling. Also, please list the storms.
d. What factors contributed to the increase for labor costs in both overhead and underground subdivisions?
e. Does Duke use employees or contractors for overhead and underground labor in the residential subdivision cost analysis? Is this a change from 2017?
f. What costs decreased or remained flat with the new per unit contract with your contractors that became effective in 2018?
g. The Company states that "there were considerable increases in costs associated with trenching and new underground service laterals" (third paragraph). Please explain.

RESPONSE:

a. Some changes in our standards related to insulators and pole framing were incorporated. In addition, some storm hardening was included by using sturdier (lower pole class number) poles to reflect our coastal exposure.

b. DEF adopted new underground design software in the fall of 2017. The new software had the latest parameters for cable and transformers from our vendors. DEF completed redesigns to ensure the latest design and equipment criteria was included in our differentials. The impact on the low-density design was negligible. The high-density single service had a higher impact because the previous design allowed the primary to come from back-lot and alongside-lots to the roadway. This was changed to be all front lot construction only in keeping with Florida Administrative Code R. 25-6.0341(1). The result was an increase in the underground design cost. The high-density gang service design was adjusted to reflect townhome construction taking service at a gang base. This is to reflect current construction and demand in DEF territory. DEF has had no new underground mobile home parks taking gang services but has had more than 20 townhome projects taking gang services. The net result of more units at a gang base was a reduced per lot cost.

c. The only consideration incorporated in to the designs as a result of the storms is using a lower-class number pole (Pole is bigger in diameter) to reflect storm hardening in the design. The net result increased overhead costs slightly which resulted in a lower per lot differential. The storms DEF considered on the current filing include Hurricanes Irma, Nate, Michael, Matthew, Hermine and Tropical Storm Colin.

d. For internal labor, the fringe benefit rate charged increased between the periods from 14.86% to 27.73%. The base crew rate used in the calculation offset the increase based on transition to using a crew-specific rate in the calculations.

e. Yes, the OH and UG subdivisions design analysis include both DEF employees and contractors. DEF continues to use the same labor crews for the same labor functions in the 2019 filing as was used in the 2017 filing for both estimation and actual construction purposes.

f. Labor for meter base riser installation decreased 25%, labor for primary elbows increased by 3%

g. Trenching costs increased 31% and costs for installing underground service laterals (includes trenching) increased 73%.

5. Please provide a discussion on any changes in the non-storm operational cost changes.

RESPONSE:

Duke Energy Florida's non-storm operational costs reduced from 2016 to 2018 as part of DEF's continued focus on managing costs through work methods, staffing, standards, inventory controls, technology and contracts management. Examples of these improvements include creation of the Night Time Line Crew, increasing the Basic Insulation Level on new construction to reduce outage opportunities, reducing standing inventories at local Ops Centers and further saturation of the Self-Healing technology.

ATTACHMENT

Duke Energy Florida
Actuals for 5 Year Period of 2014-2018
Summary of NPV Life Cycle Costs per mile for Overhead and Underground Distribution
Including Storm Costs and Pole Attachment Revenues

	Including Storm	Excluding Storm	Storm
5 year average OH Unit Costs in 2018 Dollars - Annual	$ 11,606	$ 6,269	$ 5,337
5 year average UG Unit Costs in 2018 Dollars - Annual	$ 5,312	$ 4,942	$ 370
Differential in 2018 Dollars - OH more (less) than UG	$ 6,294	$ 1,327	$ 4,967

NPV of 34 Year Life Cycle	Including Storm	Excluding Storm	Storm
Overhead - Per Mile	$ 201,199	$108,678	$92,521
Underground - Per Mile	$ 92,088	$85,673	$6,414
Differential - OH more (less) than UG	**$ 109,111**	**$ 23,005**	**$ 86,107**

NPV Life Cycle Costs - Per Lot Differentials

	OHD	UG			
Low Density					
Feet of Line	9,625	13,250			
Miles of Line	1.82	2.51			
Number of Lots	210	210			
Per Lot - OHD			$ 1,747	$ 943	$ 803
Per Lot - UG			$ 1,100	$ 1,024	$ 77
Per Lot - Differential			$ (646)	$ 80	$ (726)
High Density-IND					
Feet of Line	4,621	5,645			
Miles of Line	0.88	1.07			
Number of Lots	176	176			
Per Lot - OHD			$ 1,000	$ 540	$ 460
Per Lot - UG			$ 559	$ 520	$ 39
Per Lot - Differential			$ (441)	$ (20)	$ (421)
High Density-GNG					
Feet of Line	3,435	4,347			
Miles of Line	0.65	0.82			
Number of Lots	176	176			
Per Lot - OHD			$ 744	$ 402	$ 342
Per Lot - UG			$ 431	$ 401	$ 30
Per Lot - Differential			$ (313)	$ (1)	$ (312)