



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

May 22, 2020

**VIA ELECTRONIC MAIL**

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

Re: *Duke Energy Florida, LLC's Petition for Approval of Underground Residential  
Distribution Tariff Sheets*; Docket No. 20200110-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/cm  
Attachment

cc: W. Trierweiler

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

**Docket No. 20200110-EI**

1. Referring to 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. Please provide the same excel spreadsheet, with the formulas intact, of the NPV Life Cycle calculations.

**RESPONSE:**

Please see attachment Data Request #1 – Summary excel spreadsheet.xlsx.

2. Please provide a discussion on any cost changes in the non-storm operational cost and in the storm operational costs (when compared to the NPV Life Cycle Cost provided in 2019 filing).

**RESPONSE:**

The operational costs are based on the average of the most recent 5-year time period. Average non-storm operational costs did not significantly change from 2019 to 2020. The increase in overall costs is driven by higher operational storm costs in 2019 than in 2014. Both underground and overhead costs saw a 30% increase in the average unit costs from the averages calculated in 2019. The methodology for calculating DEF's non-storm and storm cost averages, NPV's, storm allocation, etc. is consistent with the 2019 filing.

Please refer to Exhibit D, 11.03-Summary of cost changes for Residential Subdivision Designs, to answer the following questions.

3. In the first paragraph, the utility says that it will allow customers to install conduit per Duke's specifications.
  - a) What are the specification and guidelines for Duke's customers who want to install a conduit?
  - b) Where can Duke's customers find these specifications? Please provide a link, if applicable.

**RESPONSE:**

a) The specification for our customers is the same as Duke Energy installations. Conduit must be electrical grade grey PVC schedule 40 buried at 36" with 36" radius sweeps.

b) Duke Energy customers can find a link to detailed installation specifications on page 14 of the Duke Energy Requirements for Electric Service and Meter Installation currently on file with the Florida Public Service Commission. It is also available on the Duke Energy web site <https://www.duke-energy.com/home/billing/rates#tab-d589a156-227c-46b6-8a5b-21aa87e19ff0>. Direct link to the specification pages:

<https://www.duke-energy.com/ /media/PDFs/External/Section-22-08.pdf>

4. In paragraph 3, the utility states “Duke Energy has recognized our current overhead cost estimating tool did not sufficiently account for the costs we were paying our overhead contract labor, specifically for setting poles and overhead transformers.”
  - a) Please explain how long Duke believes that it has been underestimating its overhead contract labor cost.
  - b) How did Duke identify this calculation error and what steps were taken to ensure the correct cost estimates are represented in this petition?

**RESPONSE:**

- a) DEF had previously not been incorporating the overhead contract labor costs in our hourly overhead rates used for estimating. Estimates previously were based upon hourly Duke labor rates with burdens and the average expected time for each task. When DEF moved to the new Maximo software in late 2007, changes to the time associated with compatible units was not increased to account for the elimination of set up time for work locations. Hourly rates now reflect the per unit pricing of our overhead contractors blended with costs of Duke crews including set up time.
  - b) DEF noted that cost actuals were coming in higher than cost estimates and initiated a project team in 2019 to study the issue. This team evaluated labor estimating practices (both the labor hours for task duration and the labor rates used in the estimation process) and made updates in 3Q2019 to make corrections to this core data in order to more accurately reflect current work practices and labor resources/contracts. DEF will continue to monitor estimates versus actuals and update on an annual basis as needed.
5. In paragraph 3, Duke states that “the labor rates for pole setting changed from \$164 to \$644.” Please explain how this amount is embedded in Schedule Nos. 2, 6, and 9.

**RESPONSE:**

This change will be captured under Item – Poles – Labor in each of the respective schedules mentioned above.

The following questions refer to the Schedules in Exhibit C, Duke trench and installed conduit.

6. In Schedule No. 1, Overhead vs. Underground summary sheet Low Density 21 Lot Subdivision cost per service laterals, please explain the \$254 increase from (646) in 2019 to (900) in 2020 for the NPV of Life Cycle Operational Cost including storm restoration and pole attachment revenue.

**RESPONSE:**

The increase in the differential is primarily due to the increase in low density overhead storm costs used to derive the 5-year average unit costs in the 2020 filing compared to the 2019 filing. Overhead storm costs were higher in 2019 than in 2014, which is the only difference in the calculations from year to year. From a comparison perspective, low

density underground storm costs did not see as significant of an increase as overhead, thus decreasing the differential.

7. In Schedule No. 2- Cost per service lateral overhead material and labor low density 210 lot subdivision, please explain the reasons for the labor increase of \$1,033.61 from \$788 in 2019 to \$1,821 in 2020.

**RESPONSE:**

The hourly rate changed from \$69.02 (fleet included) in 2019 to \$91.12 in 2020 and the hours associated with the design changed from 1536 hours to 2659 hours. These two combined resulted in an increase in labor costs associated with the overhead design to increase 132%. The overhead design or CUs have not changed between 2019 and 2020.

8. In Schedule No. 3- Cost per service lateral underground material and labor low density 210 lot subdivision,
- a) Please explain the reason for the labor increase of \$426.78 from \$1,021 in 2019 to \$1,448 in 2020.
- b) Please explain the reason for the increase in the line item “primary” from \$67.78 in 2019 to \$149.25 in 2020.

**RESPONSE:**

- a) The increase is due to the labor associated with conduit installation and cable pulling rather than direct bury cable in an open trench.
- b) This line item in 2020 includes the conduit for the primary and the cost to pull the cable in the conduit which was not in the 2019 filing.

9. In Schedule 9- cost per service overhead material and labor high density 176 lot subdivision ganged meters.
- a) Please explain the calculation of the “32.81% of labor” in footnote 5.
- b) Please explain if the calculation of the 32.81% of labor applies to all schedules.

**RESPONSE:**

- a) This is calculated based on actual spend over the previous 12 months as compared to the estimated amount over the same time period. This is revised on an annual basis to ensure actual spend reflects estimated spend.
- b) This same rate is used across all schedules.

10. For Schedule Nos. 2, 3, 6, and 7, please explain the Fleet percentage change from 16.5% percent of labor in 2019 to “25.09% UG and 11.27% OH” in 2020.

**RESPONSE:**

Fleet costs are imbedded in the underground and overhead labor rate. Fleet costs decreased slightly for both underground and overhead. The underground fleet rate increased because the underground hourly labor rate decreased by approximately \$4 per hour. The result is fleet makes up a larger portion of the hourly rate for underground. The hourly rate for overhead increased approximately \$22 per hour with fleet now making up a smaller portion of the labor rate resulting in a decrease in fleet as a percentage of overhead.

11. In Exhibit C, Duke provided cost support for the three options: Duke Trench and Install Conduit, Customer Mainline - Duke Services, and Customer Trench, Provide and Install Conduit. Please discuss the different options in more detail, and specify which costs are not included in the second and third option that allows for customers to do part of the work.

**RESPONSE:**

**Duke Trench and Install Conduit:** Duke Energy does full installation with standard expectation of a clear trench path within 6” of final grade.

**Customer Mainline - Duke Services:** **The customer will supply and install conduit for primary, secondary and street light (if applicable)** as per a Duke provided plan. Duke will install the conduit for the service runs from the transformer or pedestal to the home. This selection is best for developers that purchase and develop the land and sell the lots or final property to a homebuilder rather than build homes themselves. Duke will not require a clear trench path and will not require proper depths until the customer is ready for cable and transformer installation. Duke remains responsible for all other infrastructure.

**Customer Trench, Provide and Install Conduit:** **The customer will supply and install conduit for primary, secondary services and street light (if applicable)** as per a Duke provided plan. This selection is best for developers that purchase and develop raw land including the home building. Duke will not require a clear trench path and will not require proper depths until the customer is ready for cable and transformer installation. Duke remains responsible for all other infrastructure.

**Duke Energy Florida**  
**Actuals for 5 Year Period of 2015-2019**  
**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 2019 Dollars - Annual	\$ 13,299	\$ 6,280	\$ 7,019
5 year average UG Unit Costs in 2019 Dollars - Annual	\$ 5,342	\$ 4,851	\$ 491
Differential in 2019 Dollars - OH more (less) than UG	\$ 7,957	\$ 1,429	\$ 6,528

<b>NPV of 34 Year Life Cycle</b>	Including Storm	Excluding Storm	Storm
Overhead - Per Mile	\$ 231,941	\$109,526	\$122,415
Underground - Per Mile	\$ 93,167	\$84,604	\$8,563
<b>Differential - OH more (less) than UG</b>	<b>\$ 138,774</b>	<b>\$ 24,922</b>	<b>\$ 113,851</b>

**NPV Life Cycle Costs - Per Lot Differentials**

	OHD	UG			
<b>Low Density</b>					
Feet of Line	9,625	13,250			
Miles of Line	1.82	2.51			
Number of Lots	210	210			
Per Lot - OHD			\$ 2,013	\$ 951	\$ 1,063
Per Lot - UG			\$ 1,113	\$ 1,011	\$ 102
Per Lot - Differential			\$ (900)	\$ 60	\$ (960)
<b>High Density-IND</b>					
Feet of Line	4,621	6,684			
Miles of Line	0.88	1.27			
Number of Lots	176	176			
Per Lot - OHD			\$ 1,153	\$ 545	\$ 609
Per Lot - UG			\$ 670	\$ 609	\$ 62
Per Lot - Differential			\$ (483)	\$ 64	\$ (547)
<b>High Density-GNG</b>					
Feet of Line	3,435	3,693			
Miles of Line	0.65	0.70			
Number of Lots	176	176			
Per Lot - OHD			\$ 857	\$ 405	\$ 452
Per Lot - UG			\$ 370	\$ 336	\$ 34
Per Lot - Differential			\$ (487)	\$ (69)	\$ (418)

**Duke Energy Florida**

**Actuals for 5 Year Period of 2015-2019**

**Summary of NPV Life Cycle Costs per mile for Overhead and Underground Distribution - Customer Mainline Duke Service Including Storm Costs and Pole Attachment Revenues**

	Including Storm	Excluding Storm	Storm
5 year average OH Unit Costs in 2019 Dollars - Annual	\$ 13,299	\$ 6,280	\$ 7,019
5 year average UG Unit Costs in 2019 Dollars - Annual	\$ 5,342	\$ 4,851	\$ 491
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**Duke Energy Florida**

**Actuals for 5 Year Period of 2015-2019**

**Summary of NPV Life Cycle Costs per mile for Overhead and Underground Distribution - Customer Conduit AI Including Storm Costs and Pole Attachment Revenues**

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5 year average OH Unit Costs in 2019 Dollars - Annual	\$ 13,299	\$ 6,280	\$ 7,019
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