

Dianne M. Triplett

July 5, 2022

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 Modifications to rate schedule tariff sheet no. 4.122 and determination under Rule 25-6.115(12) F.A.C. by Duke Energy Florida, LLC; Docket 20220089

Dear Mr. Teitzman:

On behalf of Duke Energy Florida, LLC ("DEF"), please find enclosed for electronic filing DEF's Response to Staff's First 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/mw Enclosures

cc: Suzanne Brownless, Office of General Counsel, FPSC



Duke Energy Florida, LLC's ("DEF") Response to Florida Public Service Commission's First Data Request (Nos. 1-13) re. Petition for approval of modifications to rate schedule tariff sheet No. 4.122 and determination under Rule 25-6.115(12), F.A.C,

Docket No. 20220089-EI

Please confirm that the distribution lines eligible for conversion pursuant to tariff sheet No.
4.122 all qualify for hardening under Duke's Storm Protection Plan (SPP). If not, please explain.

Response:

DEF will review each request for undergrounding to determine if the lines were previously hardened under the Storm Protection Plan (SPP). The distribution lines that were not previously hardened would qualify for hardening under the SPP and therefore be eligible for the proposed changes in tariff sheet 4.122.

2. In general, what is the average cost for one mile of overhead to be hardened under Duke's SPP?

Response:

In general, the average cost to harden one mile of overhead feeder is approximately \$988,000 per mile and the cost to harden one mile of overhead lateral is approximately \$495,000 per mile. The actual costs to harden an existing feeder or lateral line can vary significantly and is dependent on the details of the specific line segment.

3. Please explain what percentage of eligible overhead lines are left to underground. What year does Duke estimate completion of undergrounding the remaining eligible overhead lines?

Response:

Feeder lines are generally not eligible for undergrounding under the SPP. Lateral lines are eligible, however, DEF has just begun the Lateral Hardening Underground program under the SPP in 2022. Some lateral lines were undergrounded under DEF's Targeted Undergrounding (TUG) Program. DEF estimates approximately 96% of eligible lines are still left to underground. The expected time frame to complete undergrounding is approximately 40 years.

4. In paragraph 7 of the petition, Duke highlights that Rule 25-6.115(12), F.A.C., states that where:

the utility waives any charge, the utility shall reduce net plant in service as though those charges had been collected unless the Commission determines that there is quantifiable benefits to the general body of ratepayers commensurate with the waived charge."

Please provide the analysis quantifying the benefit to the general body of ratepayers for waiving the charges mentioned in the petition.

Response:

Please see the attached document titled, "DEF Summary of Est Benefits (NPV)-CIAC Change."

5. Paragraph 7 of the petition states that excluding the Existing Facilities Cost from the facilities charge for the conversion of existing non-hardened overhead facilities to underground will reduce the cost of conversion thereby incentivizing more conversions. Please provide a discussion and any available documentation that supports this statement.

Response:

The statement was based upon DEF's experience that cost is often a significant obstacle to customers that are interested in underground conversions. Therefore, it is reasonable to expect that reducing a customer's overhead to underground conversion costs by excluding the Existing Facilities Cost would provide an additional incentive for customers to pursue such conversions.

6. When a customer contacts Duke for converting distribution lines from overheard to underground, does the utility notify the customer if and when that particular distribution line is scheduled to be hardened under the SPP?

Response:

If contacted by a customer, DEF will advise the customer if lines they are requesting to be undergrounded are in the approved 3-year Storm Protection Plan. DEF is working to proactively notify customers when lines in their community are planned to be hardened.

7. Assuming the proposed tariff change is approved by the Commission, will customers who have already contacted Duke and received an estimate for the conversion cost (facilities charge), but the conversion has not been completed yet, receive a reduction in the facilities charge pursuant to the new approved tariff? Please explain.

Response:

Yes. Assuming the proposed tariff change is approved by the Commission, customers with active projects will receive a reduction in the estimate already received. Active projects include those projects in some stage of work such as engineering design, estimating, easement acquisition or construction on or after Commission approval. Conversion projects that are complete with construction prior to approval by the Commission would not see a reduction. Reductions can be provided by a partial refund of previous payment(s) or by adjustments to an outstanding invoice(s).

8. Please clarify if Rule 25-6.08(4), F.A.C. is the correct rule referencing the quote in paragraph 8 of the petition.

Response:

The rule reference is incorrect. After further review, the rule quoted was repealed in 2020, so DEF inadvertently cited to it. Notwithstanding the error, DEF still believes that there are benefits to the general body of customers for DEF's requested tariff change, as set forth in the Petition and the other responses to these data requests.

- 9. Please discuss how the exclusion of the Existing Facilities Cost from the calculation affects Duke's earnings and the general body of ratepayers.
 - a. During the term of the current rate case settlement and base rate freeze
 - b. In the MFRs for Duke's next rate case.

Response:

- a. In isolation, exclusion of the Existing Facilities Cost for overhead facilities that have not yet been hardened from the calculation of the Facility Charge would result in slightly higher rate base, accumulated depreciation, and depreciation expense to be recovered in base rates beginning with Duke's next rate case, with no impact on base rates during the term of the settlement. However, as explained in DEF's petition and in response to Question 4, the general body of ratepayers would not be impacted because they would otherwise pay for hardening the existing facilities through the SPP. Therefore, while the revenue requirement would be slightly higher in DEF's next rate case, SPP costs would be lower, resulting in no impact to the general body of ratepayers over time.
- b. Please see DEF's response to subpart (a).
- 10. For the most recent 12 months, please state the following:
 - a. How many customers paid CIAC to convert pursuant to this tariff?
 - b. Describe the type of customers.
 - c. What's the average CIAC of those customers for converting under this tariff?
 - d. What's the total CIAC paid by these customers in the most recent 12 months?

Response:

- a. 3 customers.
- b. 3 Municipalities
- c. \$1.53 million
- d. \$4.58 million
- 11. Please provide a hypothetical example of a typical facility charge formula calculation pursuant to the current and the proposed tariff sheet 4.122. Please show each component of the calculation separately.

ARGE:			Current	Ρ	oposed *	
Remaining net book value of existing overhead						
a)	facilities to be removed*;	\$	21,000	\$	-	
b)	removal cost of existing overhead facilities*;	\$	90,000	\$	-	
c)	salvage value of existing overhead facilities*;	\$	24,000	\$	-	
	estimated construction cost of underground					
	facilities including underground service laterals to					
	residential customers meters or point of delivery					
d)	for general service customers;	\$	1,600,000	\$	1,600,000	
	estimated construction cost of overhead facilities					
	including overhead service drops to customers'					
e)	meters;	\$	680,000	\$	680,000	
f)	qualifying binding cost estimate fee.	\$	4,000	\$	4,000	
	the net present value of the lifecycle operational					
g)	costs differential including storm restoration.	\$	68,000	\$	68,000	
		\$	935,000	\$	848,000	
	ARGE: a) b) c) d) e) f) g)	ARGE: Remaining net book value of existing overhead a) facilities to be removed*; b) removal cost of existing overhead facilities*; c) salvage value of existing overhead facilities*; estimated construction cost of underground facilities including underground service laterals to residential customers meters or point of delivery d) for general service customers; estimated construction cost of overhead facilities including overhead service drops to customers' e) meters; f) qualifying binding cost estimate fee. the net present value of the lifecycle operational costs differential including storm restoration.	ARGE: Remaining net book value of existing overhead a) facilities to be removed*; \$ b) removal cost of existing overhead facilities*; \$ c) salvage value of existing overhead facilities*; \$ c) salvage value of existing overhead facilities*; \$ estimated construction cost of underground facilities including underground service laterals to residential customers meters or point of delivery \$ d) for general service customers; \$ estimated construction cost of overhead facilities including overhead service drops to customers' \$ e) meters; \$ f) qualifying binding cost estimate fee. \$ g) costs differential including storm restoration. \$	ARGE: Current Remaining net book value of existing overhead facilities to be removed*; \$ 21,000 b) removal cost of existing overhead facilities*; \$ 90,000 c) salvage value of existing overhead facilities*; \$ 90,000 c) salvage value of existing overhead facilities*; \$ 24,000 estimated construction cost of underground facilities including underground service laterals to residential customers meters or point of delivery \$ 1,600,000 d) for general service customers; \$ 1,600,000 estimated construction cost of overhead facilities including overhead service drops to customers' \$ 680,000 e) meters; \$ 680,000 f) qualifying binding cost estimate fee. \$ 4,000 g) costs differential including storm restoration. \$ 68,000	ARGE: Current Present the present value of existing overhead a) facilities to be removed*; \$ 21,000 \$ b) removal cost of existing overhead facilities*; \$ 90,000 \$ c) salvage value of existing overhead facilities*; \$ 24,000 \$ c) salvage value of existing overhead facilities*; \$ 24,000 \$ estimated construction cost of underground facilities including underground service laterals to residential customers meters or point of delivery \$ 1,600,000 \$ d) for general service customers; \$ 1,600,000 \$ estimated construction cost of overhead facilities including overhead service drops to customers' \$ 680,000 \$ e) meters; \$ 680,000 \$ f) qualifying binding cost estimate fee. \$ 4,000 \$ g) costs differential including storm restoration. \$ 68,000 \$	

* In calculating the Applicant's Facility Charge, elements a, b, and c of the Facility Charge formula above are to be excluded from Facility Charge due from an Applicant who submits an application providing a binding notification that the Applicant intends to convert existing non-hardened overhead facilities to underground facilities.

12. Please discuss, explain, and quantify the potential savings to the SPP that are referenced in paragraph 6 of the petition.

Response:

If a customer elects to underground a selected distribution line that has not yet been hardened, this distribution line will no longer appear on the list of overhead assets to be hardened under the SPP. The expected expense for that distribution line will be removed from the SPP and will become base rate customer reimbursable work. Quantifying the potential savings is difficult as it is dependent on the amount of customers requesting for undergrounding. 13. Please assume the following hypothetical example. A customer converts distribution lines in 2023 from overhead to underground. Pursuant to current tariff sheet No. 4.122 the facilities charge, or contribution in aid of construction (CIAC), is \$500. Under the proposed tariff, assuming it receives approval, the CIAC is \$300, and the waived \$200 is reflected as a reduction to net plant in service pursuant to Rule 25-6.115, Florida Administrative Code. Please show and explain the reduction to the SPP if the distribution line was scheduled to be hardened through the SPP in 2027. In which year will the reduction in the SPP be reflected (2023 or 2027) and by what amount?

Response:

In the example provided, DEF will assume the actual planned cost of the work is \$1200. DEF would remove the planned work from the 2027 schedule. In this case, the \$1200 would be a reduction in the future timeline of SPP work.

DUKE ENERGY FLORIDA Summary of Estimated Benefits/(Costs) for DEF Proposed CIAC Changes Savings for Hypothetical Underground, based on Average Estimates

Average CIAC Adjustments-based or	n DEF (per mile)
Average Book Value	5,304
Average OH Removal	108,394
Average Salvage Value	(13,366)
Average UG MED Savings	10,616
Average OH MED Savings	2,411
Average OH non-MED Savings	439
Average UG non-MED Savings	1,934

Net NPV Benefit/(Cost)	44,977	
NPV Savings	145,309	
NPV Cost	100,332	Equals sum of the three exclusions proposed in CIAC tariff change
Discount Factor	6.55%	
NPV Compare (40-year):		

	Avg Annual Savings					
	*	Cumulative Avg Savings				
Year	(Nominal)	(Nominal)				
2023	9,699	9,699				
2024	9,699	19,399				
2025	9,699	29,098				
2026	9,699	38,797				
2027	9,699	48,496				
2028	9,699	58,196				
2029	9,699	67,895				
2030	9,699	77,594				
2031	9,699	87,294				
2032	9,699	96,993				
2033	9,699	106,692				
2034	9,699	116,391				
2035	9,699	126,091				
2036	9,699	135,790				
2037	9,699	145,489				
2038	9,699	155,189				
2039	9,699	164,888				
2040	9,699	174,587				
2041	9,699	184,286				
2042	9,699	193,986				
2043	9,699	203,685				
2044	9,699	213,384				
2045	9,699	223,084				
2046	9,699	232,783				
2047	9,699	242,482				
2048	9,699	252,181				
2049	9,699	261,881				
2050	9,699	271,580				
2051	9,699	281,279				
2052	9,699	290,979				
2053	9,699	300,678				
2054	9,699	310,377				
2055	9,699	320,076				
2056	9,699	329,776				
2057	9,699	339,475				
2058	9,699	349,174				

2059	9,699	358,874
2060	9,699	368,573
2061	9,699	378,272
2062	9,699	387,971

* UG Savings, net of OH savings

Hypothetical Examples of future UG Projects:

								OH MED	UG MED	An	nual non MED		
								Savings	Savings		savings (OH	Anr	ual UG non
		Mileage	Вс	ok Value	0	H Removal	Salvage	(Annual)	(Annual)		hardening)	Μ	ED savings
Kenneth City	X50	1.86	\$	9,865	\$	201,613	\$ (24,861)	\$ 4,368	\$19,233	\$	1,190	\$	5,241
	X53	3.02	\$	16,017	\$	327,350	\$ (40,365)	\$13,646	\$60,086	\$	1,904	\$	8,385
Northeast	X284	3.93	\$	20,844	\$	425,988	\$ (52 <i>,</i> 529)	\$11,053	\$48,669	\$	2,856	\$	12,577
	X287	3.71	\$	19,677	\$	402,142	\$ (49 <i>,</i> 588)	\$ 8,211	\$36,155	\$	476	\$	2,096
	X289	2.25	\$	11,933	\$	243,886	\$ (30,074)	\$ 4,599	\$20,250	\$	476	\$	2,096
Disston	X64	4.81	\$	25,511	\$	521,375	\$ (64,291)	\$ 6,564	\$28,903	\$	1,904	\$	8,385
	X65	1.36	\$	7,213	\$	147,416	\$ (18,178)	\$ 1,816	\$ 7,996	\$	476	\$	2,096
	X67	3.45	\$	18,298	\$	373,959	\$ (46,113)	\$ 8,544	\$37,621	\$	1,428	\$	6,289
Totals				129,359		2,643,729	(325,998)	58,801	258,913		10,712		47,165
Average, per	mile			5,304		108,394	(13,366)	2,411	10,616		439		1,934