### FILED 6/24/2020 DOCUMENT NO. 03283-2020 FPSC - COMMISSION CLERK



# **Public Service Commission**

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD TALLAHASSEE, FLORIDA 32399-0850

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

- **DATE:** June 24, 2020
- **TO:** Office of Commission Clerk (Teitzman)
- **FROM:** Division of Economics (Forrest, Coston) *JGH* Office of the General Counsel (Trierweiler) *JC*
- **RE:** Docket No. 20200110-EI Petition for approval of revised underground residential distribution tariffs, by Duke Energy Florida, Inc.

**AGENDA:** 07/07/20 – Regular Agenda – Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Administrative

**CRITICAL DATES:** 12/01/20 (8-Month Effective Date)

SPECIAL INSTRUCTIONS: None

## **Case Background**

On April 1, 2020, Duke Energy Florida, LLC (Duke or utility) filed a petition for approval of revisions to its underground residential distribution (URD) tariffs. The URD tariffs apply to new residential subdivisions and represent the additional costs, if any, Duke incurs to provide underground distribution service in place of overhead service. The proposed (legislative version) URD tariffs are contained in Attachment A to the recommendation.

Duke's current URD charges were approved by Order No. PSC-2019-0443-TRF-EI.<sup>1</sup> Duke waived the 60-day file and suspend provision pursuant to Section 366.06(3), Florida Statutes (F.S.), in an email dated April 8, 2020.<sup>2</sup> On May 22, 2020, Duke responded to staff's first data

<sup>&</sup>lt;sup>1</sup>Order No. PSC-2019-0443-TRF-EI, issued November 19, 2019, in Docket 20190076-EI, *In re: Petition for approval of revised underground residential distribution tariffs, by Duke Energy Florida, LLC.* <sup>2</sup> Document No. 01824, 2020

<sup>&</sup>lt;sup>2</sup> Document No. 01824-2020.

Docket No. 20200110-EI Date: June 24, 2020

request. The Commission has jurisdiction over this matter pursuant to Sections 366.03, 366.04, 366.05, and 366.06, F.S.

# Discussion of Issues

*Issue 1:* Should the Commission approve Duke's proposed URD tariffs and associated charges?

**Recommendation:** Yes, the Commission should approve Duke's proposed URD tariffs and associated charges as shown in Attachment A, effective July 7, 2020. (Forrest)

**Staff Analysis:** Rule 25-6.078, Florida Administrative Code (F.A.C.), defines investor-owned utilities' (IOU) responsibilities for filing updated URD tariffs. Duke has filed the instant petition pursuant to subsection (3) of the rule, which requires IOUs to file supporting data and analyses for updated URD tariffs if the cost differential, using current labor and material costs, varies from the Commission-approved differential by more than ten percent. On October 15, 2019, pursuant to Rule 25-6.078, F.A.C., Duke informed the Commission that its differential for the low density subdivision would change by more than 10 percent from the differential approved in the 2019 order, requiring Duke to file the instant petition.

The URD tariffs provide charges for underground service in new residential subdivisions and represent the additional costs, if any, the utility incurs to provide underground service in place of overhead service. The cost of standard overhead construction is recovered through base rates from all ratepayers. In lieu of overhead construction, customers have the option of requesting underground facilities. Any additional cost is paid by the customer as a contribution-in-aid-of-construction (CIAC). Typically, the URD customer is the developer of a subdivision.

Traditionally, three standard model subdivision designs have been the basis upon which each IOU submits URD tariff changes for Commission approval: low density, high density, and a high density subdivision where dwelling units take service at ganged meter pedestals (groups of meters at the same physical location). While actual construction may differ from the model subdivisions, the model subdivisions are designed to reflect average overhead and underground subdivisions.

Costs for underground construction have historically been higher than costs for standard overhead construction and the additional cost is paid by the customer as a CIAC. However, as shown on Table 1-1, Duke's proposed URD differential charges remain \$0 per lot for the low density and ganged meter subdivisions. For the high density subdivision, the proposed differential decreased from the current \$34 to \$0 per lot. The decrease in the differentials is primarily attributable to changes in Duke's labor, material, and operational costs.

Table 1-1 shows the current and proposed URD differentials for the low density, high density, and ganged meter subdivisions. The charges shown are per-lot charges.

Comparison of URD Differential per Lot					
Types of Subdivision	Current URD	Proposed URD			
	Differential				
Low Density	\$0	\$0			
High Density	\$34	\$0			
Ganged Meter	\$0	\$0			

Table 1-1	
<b>Comparison of URD Differential</b>	per Lot

Source: Order PSC-2019-0443-TRF-EI and Duke's 2020 Petition

The calculations of the proposed URD charges include (1) updated labor and material costs along with the associated loading factors and (2) operational costs. The costs are discussed below.

### Labor and Material Costs

The installation costs of both overhead and underground facilities include the labor and material costs to provide primary, secondary, and service distribution lines, as well as transformers. The costs of poles are specific to overhead service while the costs of trenching and backfilling are specific to underground service. The utilities are required by Rule 25-6.078 (5), F.A.C., to use current labor and material costs.

Duke's labor costs for overhead and underground construction are comprised of costs associated with work performed by both in-house employees and outside contractors. Duke's in-house labor rates are based upon actual labor costs negotiated in bargaining unit contracts and labor rates with contractors are negotiated. Table 1-2 compares total 2019 and 2020 labor and material costs for the three subdivision models.

Labor and Material Costs per Lot								
	2019 Costs	2020 Costs	Difference					
Low Density	Low Density							
Underground Labor/Material costs	\$1,620	\$2,263	\$643					
Overhead Labor/Material costs	\$1,323	\$2,343	\$1,020					
Per lot Differential	\$297	\$(80)	\$(377)					
High Density								
Underground Labor/Material Costs	\$1,484	\$1,978	\$494					
Overhead Labor/Material Costs	\$1,009	\$1,642	\$633					
Per Lot Differential	\$475	\$336	\$(139)					
Ganged Meter								
Underground Labor/Material Costs	\$581	\$774	\$193					
Overhead Labor/Material Costs	\$750	\$1,295	\$545					
Per lot Differential	\$(169)	\$(521)	\$(352)					

# Table 1-2 **Duke Trench and Install Conduit**

Source: 2019 Order and Duke's 2020 filing.

As Table 1-2 shows, the majority of overhead and underground total labor and material costs increased since the 2019 petition. The utility stated that it identified an error in its cost estimating tool which did not allow the system to sufficiently account for the actual costs paid for overhead contract labor, specifically in the area of setting poles and overhead transformers. As such, after adjusting for these changes, the cost of pole setting increased from \$164 to \$644 and single-phase transformers increased from \$90 to \$643. The correction of these costs contribute to the majority of increased labor costs in this petition. Duke explained in response to staff's data request that the utility will continue to monitor the labor cost data to ensure their accuracy. Duke stated that material costs have fluctuated minimally since 2019.

### **Operational Costs**

Rule 25-6.078(4), F.A.C., requires that the differences in net present value (NPV) of operational costs between overhead and underground systems, including average historical storm restoration costs over the life of the facilities, be included in the URD charge. The inclusion of the operational cost is intended to capture longer term costs and benefits of undergrounding.

Operational costs include operations and maintenance costs along with capital costs<sup>3</sup> and represent the cost differential between maintaining and operating an underground versus an overhead system over the life of the facilities. The inclusion of the storm restoration cost in the URD calculations lowers the differential, since an underground distribution system generally incurs less damage than an overhead system as a result of a storm, and therefore, less restoration costs when compared to an overhead system.

The utility used a 5-year average of historical operational costs (2015-2019) for its calculations in this docket. The methodology used by Duke in this filing for calculating the NPV of operational costs was approved in Order No. PSC-12-0348-TRF-EI.<sup>4</sup> Staff notes that operational costs may vary among IOUs due to multiple factors, including differences in size of service territory, miles of coastline, regions subject to extreme winds, age of the distribution system, or construction standards.

	NPV of Operational Costs Differential per Lot					
Type of Subdivision	Pre-Operational Costs (A)	Non-Storm Operational Costs (B)	Avoided Storm Costs (C)	Proposed URD Differentials (A)+(B)+(C)		
Low Density	\$(80)	\$60	\$(960)	\$0		
High Density	\$336	\$64	(\$547)	\$0		
Ganged Meter	(\$521)	(\$69)	(\$418)	\$0		

Table 1-3

Source: 2020 Filing.

<sup>&</sup>lt;sup>3</sup> Operational capital costs are the costs associated with replacement equipment needed during the lifespan of the facilities.

<sup>&</sup>lt;sup>4</sup> Order No. PSC-12-0348-TRF-EI, issued July 5, 2012, in Docket No. 110293-EI, *In re: Petition for approval of revised underground residential distribution tariffs, by Progress Energy Florida, Inc.* 

Table 1-3 presents the pre-operational, non-storm operational, and the avoided storm restoration cost differentials between overhead and underground systems. The proposed differential is \$0 when the calculation results in a negative number.

Duke stated in its response to staff's data request that the average non-storm operational costs did not change significantly from 2019 to 2020. However, the data show that avoided storm restoration costs increased when compared to the 2019 petition. Duke's 2019 petition included the 5-year average of historical operational costs for 2014 to 2018, while this petition includes operational costs for 2015 to 2019.

## **Additional Customer Options**

In October 2019, the utility adopted a "cable in conduit" approach, similar to other utilities in Florida. This change required that all cable be included in conduit at installation, rather than cable being pulled through separately installed conduit. The utility believed this approach would reduce outages, as well as reduce repair and replacement times when failures occur. Under the "cable in conduit" approach, the utility removed certain costs associated with cable installation, splicing and pulling boxes. However, as a result of this change, the utility is proposing additional undergrounding construction options to developers in this petition, which could impact the overall cost of installing underground facilities. The two additional options are discussed below:

- Customer Mainline-Duke Services: Customer supply and install conduit for primary, secondary and street lights. This option allows the developer to purchase and install primary and secondary conduit in the subdivision; therefore, the material and labor costs associated with the installation of primary and secondary conduit, including trenching, have been excluded from the differential calculation. Duke continues to install services and transformers. The developer-purchased conduit will have to be installed meeting Duke guidelines.
- Customer Trench, Provide and Install Conduit: Customer supply and install conduit for primary, secondary and street lights. This option allows the developer to purchase and install services, primary, and secondary conduit. Therefore, the associated costs have been excluded from the differential calculation. Duke continues to install the transformers.

The utility notes that while the current NPV operational costs, including avoided storm restoration, result in a \$0 URD differential for these new options, Duke recognizes that a shift in the operational costs could allow the differential costs for these two new line costs to differ from the traditional *Duke Trench and Install Conduit* tariff, under which Duke performs the full installation.

## Conclusion

Staff has reviewed Duke's proposed URD tariffs and associated charges, its accompanying work papers, and its responses to staff's data request. Staff believes the proposed URD tariffs and associated charges are reasonable. Staff recommends the Commission approve Duke's proposed URD tariffs and associated charges as shown in Attachment A, effective July 7, 2020.

#### *Issue 2:* Should this docket be closed?

**Recommendation:** If Issue 1 is approved and a protest is filed within 21 days of the issuance of the order, the tariffs should remain in effect, with any revenues held subject to refund, pending resolution of the protest. If no timely protest is filed, this docket should be closed upon the issuance of a consummating order. (Trierweiler)

**Staff Analysis:** If Issue 1 is approved and a protest is filed within 21 days of the issuance of the order, the tariffs should remain in effect, with any revenues held subject to refund, pending resolution of the protest. If no timely protest is filed, this docket should be closed upon the issuance of a consummating order.

L		DUKE ENERGY.		SECTION NO. IV THIRD FOURTH REVISED SHEET NO. 4.110 CANCELS SECOND THIRD REVISED SHEET NO. 4.110
		1.000-0-0		Page 1 of 7
				PART XI
			UND	ERGROUND RESIDENTIAL DISTRIBUTION POLICY
	11.01	Defi	nitions:	
		The	following words and ter	ms used under this policy shall have the meaning indicated:
		(1)	Applicant:	Any person, partnership, association, corporation, or governmental agency controlling or responsible for the development of a new subdivision or dwelling unit and applying for the construction of underground electric facilities.
		(2)	Building:	Any structure, within subdivision, designed for residential occupancy and containing less than five (5) individual dwelling units.
		(3)	Commission:	Florida Public Service Commission.
1		(4)	Company:	Duke Energy Florida, LLC
		<u>(5)</u>	Customer Provided an	ad Installed Conduit: Schedule 40 PVC grey electrical grade conduit, purchased by the customer on the open market and installed meeting Duke Energy guidelines. Diameter is to be specified by Duke Energy based upon the type of conductor
I	6	(56)	Direct Burial:	A type of construction involving the placing of conductors in the ground without the benefit of conduit or ducts. Other facilities, such as transformers, may be above ground.
I		(67)	Distribution System:	Electric service facilities consisting of primary and secondary conductors, service laterals, transformers, and necessary accessories and appurtenances for the furnishing of electric power at utilization voltage.
Ĩ		(78)	Feeder Main:	A three-phase primary installation which serves as a source for primary laterals and loops through suitable overcurrent devices.
		(9)	Mainline:	Portions of the subdivision including primary and secondary voltage conductors
		(8 <u>10</u>	))Mobile Home (Trailer)	A non-self propelled vehicle or conveyance, permanently equipped to travel upon the public highways, that is used either temporarily or permanently as a residence or living quarters.
I		( <u>911</u>	)Multiple-Occupancy B	uilding: A structure erected and framed of component structural parts and designed to contain five (5) or more individual dwelling units.
1		( <del>10</del> 1	2)	Point of Delivery: The point where the Company's wires or apparatus are connected to those of the Customer.
1		( <del>11</del> 1	3)	Primary Lateral: That part of the electric distribution system whose function is to conduct electricity at the primary level from the feeder main to the transformers serving the secondary street mains. It usually consists of a single-phase conductor or insulated cable, together with necessary accessory equipment for supporting, terminating and disconnecting from the primary mains by a fusible element.
l		( <del>12</del> 1	<u>4</u> )	Service Lateral: The underground service conductors between the street or rear property main, including any risers at a pole or other structure or from transformers, and the first point of connection to the service entrance conductors in a terminal or meter box on the exterior building wall.
1	i.	( <del>13</del> 1	<u>5</u> )	Subdivision: The tract of land which is divided into five (5) or more building lots or upon which five (5) or more separate dwelling units are to be located, or the land on which is to be constructed new multiple-occupancy buildings.
1		( <del>14</del> 1	<u>6)</u>	Townhouse: A one(1)-family dwelling unit of a group of three (3) or more such units separated only by firewalls. Each townhouse unit shall be constructed upon a separate lot and serviced with separate utilities and shall otherwise be independent of one another.

ISSUED BY: Javier J. Portuondo, <u>Managing DirectorVice President</u>, Rates & Regulatory Strategy – FL EFFECTIVE: <u>October 3, 2019</u>

l		KE R	GY.	SECTION NO. IV SECOND_THIRD_REVISED SHEET NO. 4.112 CANCELS FIRST_SECOND_REVISED SHEET NO. 4.112
	(7	7)	Rights	of Way and Easements (Continued): Page 3 of 7
			(c)	Public Rights of Way: Where underground distribution facilities are located in dedicated road or street right-of-way, no easement is required.
			(d)	Recorded Public Easements: Where underground distribution facilities are located on private property, wholly within an area covered by a recorded subdivision utility easement, namely a reservation, and recorded plat of an easement for public utility purposes, no other easement is required.
			(e)	Service Laterals: Where underground service conductors are located on private property and portions not covered by recorded subdivision utility easement are wholly within the private property they service no easement is required.
			(f)	Other Locations: Where underground distribution facilities are located on private property other than as described in Part 11.02(7)(a) or 11.02(7)(e), easements are required and shall be prepared as outlined in instructions prepared by the Real Estate Department.
			(g)	Blanket Easements: Where underground primary and secondary distribution facilities for service to a mobile home park or a multiple occupancy project are located on a tract of land having one ownership and the easement area cannot be described without a detailed survey, a blanket easement covering the entire premises may be utilized at the discretion of the Division Engineer.
	(1	8)	Damag	e to Company's Equipment:
	6		The Ap damage extend cost of	plicant shall be responsible to ensure that the Company's distribution system, once installed, is not ed, destroyed, or otherwise disturbed during the construction of the project. This responsibility shall not only to those in his employ, but also to his subcontractors, and he shall be responsible for the full repairing such damage.
	(	9)	Charge	25:
			The Co for the	mpany shall not be obligated to install any facilities within a subdivision until satisfactory arrangements payment of applicable charges, if any, have been completed.
	11.03 U	ND	ERGRO	DUND DISTRIBUTION FACILITIES FOR RESIDENTIAL SUBDIVISIONS AND DEVELOPMENTS.
	(1	1)	Availab	ility:
I			When accord	requested by the Applicant, the Company will provide underground electric distribution facilities in ance with t <u>its</u> standard practices in:
			(a) re	acognized residential subdivisions of five or more building lots;
			(b) tr	acts of land upon which five or more separate dwelling units are to be located;
			(c) tr	acts of land upon which new multiple-occupancy buildings are to be constructed.
			For bui	lding containing five or more dwelling units, see Part 11.06 of these Rules.
				(Continued on Next Page)

ISSUED BY: Javier J. Portuondo, <u>DirectorVice President</u>, Rates & Regulatory Strategy – FL EFFECTIVE: <u>April 29, 2013</u>

		Page 4 of
(2) Contri	bution by Applicant	
(=)	Schedule of Charges:	
(a)	Schedule of Charges.	
	also Part 11.03(7)):	120/240 voit single-phase service (se
	To subdivisions with a density of 1.0 or more	0.00
	dwelling unit	
	Duke Provided and Installed Conduit	\$0.00 per dwelling un
	Customer Provided and Installed Conduit for Mainline	\$0.00 per dwelling un
	Customer Provided and Installed Trench and Conduit	\$0.00 per dwelling un
	To subdivisions with a density of six (6) or more	
	dwelling units per acre	\$34.00 per dwellii
	Unit Duke Provided and Installed Conduit	\$0.00 per dwalling un
	Customer Provided and Installed Conduit for Mainline	\$0.00 per dweiling un
	Customer Provided and Installed Trench and Conduit	\$0.00 per dwelling un
	To subdivisions with a density of	
	six (6) or more dwelling units per acre taking service	
	at ganged meter pedestals:	\$0.00 per dwelling un
	Duke Provided and Installed Conduit	\$0.00 per dwelling un
	Customer Provided and Installed Conduit for Mainline	\$0.00 per dwelling un
	Customer Provided and Installed Trench and Conduit	\$0.00 per dwelling un
(b)	To multi-occupancy buildings. The above costs are based upon arrangements that will permit se system within the subdivision from overhead feeder mains. If f deemed necessary by the Company to provide and/or maintai the Applicant or a governmental agency to be installed um Company the average differential cost between such undergrap	See Part 11.06(2) erving the local underground distributio feeder mains within the subdivision a in adequate service and are required 1 derground, the Applicant shall pay the und feeder mains within the subdivision
(b)	To multi-occupancy buildings The above costs are based upon arrangements that will permit se system within the subdivision from overhead feeder mains. If deemed necessary by the Company to provide and/or maintai the Applicant or a governmental agency to be installed un Company the average differential cost between such undergrou and equivalent overhead feeder mains as follows:	See Part 11.06(2) erving the local underground distribution feeder mains within the subdivision a in adequate service and are required I derground, the Applicant shall pay to und feeder mains within the subdivision
(b)	To multi-occupancy buildings The above costs are based upon arrangements that will permit se system within the subdivision from overhead feeder mains. If f deemed necessary by the Company to provide and/or maintai the Applicant or a governmental agency to be installed un Company the average differential cost between such undergrou and equivalent overhead feeder mains as follows: Three-phase primary main or feeder charge per trench-foot within	See Part 11.06(2) erving the local underground distributio feeder mains within the subdivision a in adequate service and are required I derground, the Applicant shall pay the und feeder mains within the subdivision
(b)	To multi-occupancy buildings The above costs are based upon arrangements that will permit se system within the subdivision from overhead feeder mains. If f deemed necessary by the Company to provide and/or maintai the Applicant or a governmental agency to be installed un Company the average differential cost between such undergrou and equivalent overhead feeder mains as follows: Three-phase primary main or feeder charge per trench-foot within (U.G Underground, O.H Overhead)	See Part 11.06(2) erving the local underground distributio feeder mains within the subdivision a in adequate service and are required I derground, the Applicant shall pay th und feeder mains within the subdivision in subdivision:
(b)	To multi-occupancy buildings The above costs are based upon arrangements that will permit se system within the subdivision from overhead feeder mains. If f deemed necessary by the Company to provide and/or maintai the Applicant or a governmental agency to be installed un Company the average differential cost between such undergrou and equivalent overhead feeder mains as follows: Three-phase primary main or feeder charge per trench-foot within (U.G Underground, O.H Overhead) #1/0 AWG U.G. vs. #1/0 AWG O.H.	See Part 11.06(2) erving the local underground distributio feeder mains within the subdivision a in adequate service and are required I derground, the Applicant shall pay th und feeder mains within the subdivision in subdivision:
(b)	To multi-occupancy buildings The above costs are based upon arrangements that will permit se system within the subdivision from overhead feeder mains. If f deemed necessary by the Company to provide and/or maintai the Applicant or a governmental agency to be installed un Company the average differential cost between such undergrou and equivalent overhead feeder mains as follows: Three-phase primary main or feeder charge per trench-foot within (U.G Underground, O.H Overhead) #1/0 AWG U.G. vs. #1/0 AWG O.H Duke Provided and Installed Conduit	See Part 11.06(2) erving the local underground distribution feeder mains within the subdivision a in adequate service and are required I derground, the Applicant shall pay the und feeder mains within the subdivision in subdivision: \$0.00 per foot
(b)	To multi-occupancy buildings The above costs are based upon arrangements that will permit se system within the subdivision from overhead feeder mains. If f deemed necessary by the Company to provide and/or maintai the Applicant or a governmental agency to be installed um Company the average differential cost between such undergrou and equivalent overhead feeder mains as follows: Three-phase primary main or feeder charge per trench-foot within (U.G Underground, O.H Overhead) #1/0 AWG U.G. vs. #1/0 AWG O.H.:	See Part 11.06(2) erving the local underground distribution feeder mains within the subdivision a in adequate service and are required I derground, the Applicant shall pay the und feeder mains within the subdivision in subdivision: \$0.00 per foot \$0.00 per foot \$0.00 per foot
(b)	To multi-occupancy buildings The above costs are based upon arrangements that will permit se system within the subdivision from overhead feeder mains. If f deemed necessary by the Company to provide and/or maintai the Applicant or a governmental agency to be installed um Company the average differential cost between such undergrou and equivalent overhead feeder mains as follows: Three-phase primary main or feeder charge per trench-foot within (U.G Underground, O.H Overhead) #1/0 AWG U.G. vs. #1/0 AWG O.H.: Duke Provided and Installed Conduit Customer Provided and Installed Trench and Conduit 500 MCM U.G. vs. 336 MCM O.H.:	See Part 11.06(2) erving the local underground distribution feeder mains within the subdivision a in adequate service and are required I derground, the Applicant shall pay th und feeder mains within the subdivision in subdivision: <u>\$0.00 per foot</u> <u>\$0.00 per foot</u> <u>\$0.00 per foot</u>
(b)	To multi-occupancy buildings The above costs are based upon arrangements that will permit se system within the subdivision from overhead feeder mains. If fi- deemed necessary by the Company to provide and/or maintai the Applicant or a governmental agency to be installed uni- Company the average differential cost between such undergrou and equivalent overhead feeder mains as follows: Three-phase primary main or feeder charge per trench-foot within (U.G Underground, O.H Overhead) #1/0 AWG U.G. vs. #1/0 AWG O.H.: <u>Duke Provided and Installed Conduit</u> 500 MCM U.G. vs. 336 MCM O.H.: <u>Duke Provided and Installed Conduit</u>	See Part 11.06(2) erving the local underground distribution feeder mains within the subdivision a in adequate service and are required I derground, the Applicant shall pay th und feeder mains within the subdivision in subdivision: <u>\$0.00 per foot</u> <u>\$0.00 per foot</u> <u>\$0.00 per foot</u> <u>\$0.00 per foot</u>
(b)	To multi-occupancy buildings The above costs are based upon arrangements that will permit se system within the subdivision from overhead feeder mains. If fi- deemed necessary by the Company to provide and/or maintai the Applicant or a governmental agency to be installed um Company the average differential cost between such undergrou and equivalent overhead feeder mains as follows: Three-phase primary main or feeder charge per trench-foot within (U.G Underground, O.H Overhead) #1/0 AWG U.G. vs. #1/0 AWG O.H.:	See Part 11.06(2) erving the local underground distribution feeder mains within the subdivision a in adequate service and are required I derground, the Applicant shall pay the und feeder mains within the subdivision in subdivision: <u>\$0.00 per foot</u> <u>\$0.00 per foot</u> <u>\$0.00 per foot</u> <u>\$0.00 per foot</u> <u>\$0.00 per foot</u> <u>\$0.00 per foot</u> <u>\$0.00 per foot</u>
(b)	To multi-occupancy buildings The above costs are based upon arrangements that will permit se system within the subdivision from overhead feeder mains. If f deemed necessary by the Company to provide and/or maintai the Applicant or a governmental agency to be installed un Company the average differential cost between such undergrou and equivalent overhead feeder mains as follows: Three-phase primary main or feeder charge per trench-foot withi (U.G Underground, O.H Overhead) #1/0 AWG U.G. vs. #1/0 AWG O.H.: Duke Provided and Installed Conduit. 500 MCM U.G. vs. 336 MCM O.H.: Duke Provided and Installed Trench and Conduit. 2000 MCM U.G. vs. 795 MCM O.H.:	See Part 11.06(2) erving the local underground distribution feeder mains within the subdivision a in adequate service and are required I derground, the Applicant shall pay the und feeder mains within the subdivision in subdivision: <u>\$0.00 per foot</u> <u>\$0.00 per foot</u> <u>\$0.00 per foot</u> <u>\$0.00 per foot</u> <u>\$0.00 per foot</u> <u>\$0.00 per foot</u> <u>\$0.00 per foot</u>
(b)	To multi-occupancy buildings The above costs are based upon arrangements that will permit se system within the subdivision from overhead feeder mains. If f deemed necessary by the Company to provide and/or maintai the Applicant or a governmental agency to be installed un Company the average differential cost between such undergrou and equivalent overhead feeder mains as follows: Three-phase primary main or feeder charge per trench-foot withi (U.G Underground, O.H Overhead) #1/0 AWG U.G. vs. #1/0 AWG O.H.: Duke Provided and Installed Conduit Customer Provided and Installed Trench and Conduit. 1000 MCM U.G. vs. 795 MCM O.H.: Duke Provided and Installed Conduit.	See Part 11.06(2) erving the local underground distribution feeder mains within the subdivision at in adequate service and are required I derground, the Applicant shall pay the und feeder mains within the subdivision in subdivision: <u>\$0.00 per foot</u> <u>\$0.00 per foot</u>
(b)	To multi-occupancy buildings The above costs are based upon arrangements that will permit se system within the subdivision from overhead feeder mains. If f deemed necessary by the Company to provide and/or maintai the Applicant or a governmental agency to be installed un Company the average differential cost between such undergrou and equivalent overhead feeder mains as follows: Three-phase primary main or feeder charge per trench-foot withi (U.G Underground, O.H Overhead) #1/0 AWG U.G. vs. #1/0 AWG O.H.: Duke Provided and Installed Conduit. 500 MCM U.G. vs. 336 MCM O.H.: Duke Provided and Installed Trench and Conduit. 1000 MCM U.G. vs. 795 MCM O.H.: Duke Provided and Installed Conduit. Customer Provided and Installed Conduit. Customer Provided and Installed Conduit.	See Part 11.06(2) erving the local underground distribution feeder mains within the subdivision at in adequate service and are required I derground, the Applicant shall pay the und feeder mains within the subdivision in subdivision: <u>\$0.00 per foot</u> <u>\$0.00 per foot</u>
(b)	To multi-occupancy buildings	See Part 11.06(2) erving the local underground distribution feeder mains within the subdivision and in adequate service and are required I derground, the Applicant shall pay the und feeder mains within the subdivision in subdivision: <u>\$0.00 per foot</u> <u>\$0.00 per foot</u>
(b)	To multi-occupancy buildings	See Part 11.06(2) erving the local underground distribution feeder mains within the subdivision and in adequate service and are required I derground, the Applicant shall pay the und feeder mains within the subdivision in subdivision: <u>\$0.00 per foot</u> <u>\$0.00 per foot</u>
(b)	To multi-occupancy buildings The above costs are based upon arrangements that will permit se system within the subdivision from overhead feeder mains. If f deemed necessary by the Company to provide and/or maintai the Applicant or a governmental agency to be installed un Company the average differential cost between such undergrou and equivalent overhead feeder mains as follows: Three-phase primary main or feeder charge per trench-foot within (U.G Underground, O.H Overhead) #1/0 AWG U.G. vs. #1/0 AWG O.H Duke Provided and Installed Conduit. 500 MCM U.G. vs. 336 MCM O.H Duke Provided and Installed Trench and Conduit. 500 MCM U.G. vs. 795 MCM O.H Duke Provided and Installed Trench and Conduit. 1000 MCM U.G. vs. 795 MCM O.H The above costs are based on underground feeder construction us is required, the following additional charge(e) will apply: 2 inch conduit.	See Part 11.06(2) erving the local underground distribution feeder mains within the subdivision and in adequate service and are required I derground, the Applicant shall pay the und feeder mains within the subdivision in subdivision: <u>\$0.00 per foot</u> <u>\$0.00 per foot</u>
(b)	To multi-occupancy buildings The above costs are based upon arrangements that will permit se system within the subdivision from overhead feeder mains. If f deemed necessary by the Company to provide and/or maintai the Applicant or a governmental agency to be installed un Company the average differential cost between such undergrou and equivalent overhead feeder mains as follows: Three-phase primary main or feeder charge per trench-foot within (U.G Underground, O.H Overhead) #1/0 AWG U.G. vs. #1/0 AWG O.H.:	See Part 11.06(2) erving the local underground distribution feeder mains within the subdivision a in adequate service and are required I derground, the Applicant shall pay the und feeder mains within the subdivision in subdivision: <u>\$0.00 per foot</u> <u>\$0.00 </u>
(b)	To multi-occupancy buildings The above costs are based upon arrangements that will permit se system within the subdivision from overhead feeder mains. If fi- deemed necessary by the Company to provide and/or maintai the Applicant or a governmental agency to be installed und Company the average differential cost between such undergrou and equivalent overhead feeder mains as follows: Three-phase primary main or feeder charge per trench-foot within (U.G Underground, O.H Overhead) #1/0 AWG U.G. vs. #1/0 AWG O.H.: Duke Provided and Installed Conduit Customer Provided and Installed Trench and Conduit. 500 MCM U.G. vs. 336 MCM O.H.: Duke Provided and Installed Trench and Conduit. 1000 MCM U.G. vs. 795 MCM O.H.: Duke Provided and Installed Trench and Conduit. The above costs are based on underground feeder construction using the required, the following additional charge(c) will apply: 2 inch conduit. Customer Conduit. Customer Provided and Installed Trench and Conduit. Customer Provided and Installed Trench and Conduit. The above costs are based on underground feeder construction using required, the following additional charge(c) will apply: 2 inch conduit. Customer Conduit. Customer Conduit. Customer Conduit. Customer Provided and Installed Trench and Conduit. Customer Provided and Installed Trench and Conduit. Customer Provided and Installed Trench and Conduit. The above costs are based on underground feeder construction using required, the following additional charge(c) will apply: 2 inch conduit. Customer Conduit. Customer Conduit. Customer Conduit. Customer Conduit. Customer Conduit. Customer Conduit. Customer Conduit. Customer Conduit. Customer Customer	See Part 11.06(2) erving the local underground distribution feeder mains within the subdivision in adequate service and are required I derground, the Applicant shall pay the und feeder mains within the subdivision in subdivision: <u>\$0.00 per foot</u> <u>\$0.00 pe</u>
(b)	To multi-occupancy buildings	See Part 11.06(2) erving the local underground distribution feeder mains within the subdivision and in adequate service and are required I derground, the Applicant shall pay the und feeder mains within the subdivision in subdivision: <u>\$0.00 per foot</u> <u>\$0.00 per foot</u> <u>\$3.55 per foot</u> <u>\$2.34 per foot</u> <u>\$3.87 per foot</u>
(b)	To multi-occupancy buildings	See Part 11.06(2) erving the local underground distribution feeder mains within the subdivision and in adequate service and are required I derground, the Applicant shall pay the und feeder mains within the subdivision in subdivision: <u>\$0.00 per foot</u> <u>\$0.00 per foot</u> <u>\$0.0</u>

ISSUED BY: Javier J. Portuondo, Managing DirectorVice President, Rates & Regulatory Strategy – FL EFFECTIVE: October 3, 2019

4	DUKE ENERGY.	SECTION NO. IV NINETEENTH TWENTIET CANCELS EIGHTEENTH	TH REVISED SHEET NO. 4.114 HINETEENTH REVISED SHEET NO. 4.114
	Second Second Second Second		Page 5 of 7
	(2) Contribution by A	pplicant (continued):	
	(c) Credits (n agreemen of a portio drawings,	ot to exceed the "average differential costs" s t, the Applicant provides trenching and backfill on of the cash payment described above. T are:	stated above) will be allowed where, by mutual ling for the use of the Company's facilities in lieu 'hese credits, based on the Company's design
	Primary ar for each F	ıd/or Secondary Systems, oot of Trench	\$ <del>3.54<u>3.35</u></del>
	Service La for each F	terals, oot of Trench	\$ <u>3.543.35</u>
	(3) Point of Delivery:		
	The point of deli building that is r property. The Co secondary electr of the building by required in exce service.	very shall be determined by the Company an earest the point at which the underground s impany will not install a service on the opposite c supply is available to the property. The poin special exception. The Applicant shall pay th ss of that which would have been needed to	In will be on the front half of the side of the secondary electric supply is available to the e side of the building where the underground at of delivery will only be allowed on the rear se estimated full cost of service lateral length or reach the Company's designated point of
	(4) Location of Meter	and Socket:	
1	The Applicant sh Company's spec order that the me	all install a meter socket at the point designat ifications. Every effort shall be made to locat ter can be read without going through fences,	ted by the Company in accordance with the te the meter socket in unobstructed areas in etc.
	(5) Development of	Subdivisions:	
	The above charg required to cons development who from the Applica based on the es deposit, without i on a prorata basi deposit remaining from the extensio	es are based on reasonably full use of the lan truct underground electric facilities through a are service will not be required for at least two (/ nt before construction is commenced. This timated total cost of such facilities rather tha nterest, in excess of any charges for undergro s at quarterly intervals on the basis of installat g unrefunded, after five (5) years from the date on, will be retained by the company.	Ind being developed. Where the Company is a section or sections of the subdivision or 2) years, the Company may require a deposit deposit, to guarantee performance, will be an the differential cost. The amount of the pund service will be returned to the Applicant tions to new customers. Any portion of such the Company is first ready to render service
	(6) Relocation or Re	noval of Existing Facilities:	
	If the Company is in the implement costs shall inclu removed, and an	required to relocate or remove existing overhu ation of these Rules, all costs thereof shall be de costs of relocation or removal, the in-pla y additional costs due to existing landscaping,	ead and/or underground distribution facilities e borne exclusively by the Applicant. These ace value (less salvage) of the facilities so , pavement or unusual conditions.
	(7) Other Provisions:		
	If soil compactior charge may be a Applicant's comp	i is required by the Applicant at locations when added to the charges set forth in this tariff. action specifications.	re Company trenching is done, an additional The charge will be estimated based on the
			(Continued on Next Page)

ISSUED BY: Javier J. Portuondo, Managing DirectorVice President, Rates & Regulatory Strategy – FL EFFECTIVE: October 3, 2019

11.04	UNDERG	ROUND	SERVICE	LATERAL	S FROM	EXISTING	SECONDARY	ELECTRIC	Page 6
SYSTE	MS.				-				
	(1) New l	Jndergrour	nd Service	Laterals:					
	Wher svste	requeste	d by the A	Applicant, th ted resident	e Compar ial building	ny will instal as containing	l underground less than five	service latera (5) separate d	ls from overhea welling units.
	(2) Contr	bution by	Applicant:					(•) •••••••••	inening enner
	(a)	The App seconda	licant shal	I pay the Co and an unde	ompany th rground s	e following ervice latera	average differe I:	ential cost bet	ween an existing
		For Servi	ce Lateral <u>ce Lateral</u>	up to 80 feet up to 80 feet	Duke Sur	pplied and Ins r Supplied ar	stalled Conduit. Id Installed Con	duit	.\$544.00 <u>641.00</u> .\$339.00
		For each For each	foot over 8 foot over 8	30 feet up to 30 feet up to	300 feet <u>C</u> 300 feet C	ouke Supplied	d and Installed ( oplied and Insta	Conduit lled Conduit	.\$-0.00 per foot .\$0.00 per foot
		Service la	aterals in e	xcess of 300	) feet shall	be based on	a specific cost	estimate.	
	(b)	Credits w in accord portion of drawings	vill be allow lance with of the cash , are as fo	ved where, b the Compar n payment o llows:	y mutual a y specific lescribed	agreement, t ations and fo above. The	he Applicant pro or the use of the ese credits, ba	ovides trenchi Company fac sed on the Co	ng and backfilling cilities, in lieu of a ompany's design
		For each	Foot of Tr	ench				\$-	3.543.35
		The prov	isions of P	aragraphs 1	1.03(3) ar	nd 11.03(4) a	are also applica	ble.	
11.05	UNDERG Applicabi	ROUND S lity:	ERVICE L	ATERALS F	REPLACIN	IG EXISTING	B RESIDENTIA	L OVERHEAD	) SERVICES:
11.05	UNDERG Applicabi Whe over than	ROUND S lity: in request head lines five (5) se	ERVICE L ed by the as replace parate dwe	ATERALS F Applicant, t ments for exi elling units.	REPLACIN he Compa isting over	IG EXISTING any will insta head service	B RESIDENTIA all underground s to existing res	L OVERHEAD	SERVICES: rals from existing gs containing less
11.05	UNDERG Applicabi Whe over than Rearrang	ROUND S lity: n requestr head lines five (5) se ement of S	ERVICE L ed by the as replace parate dwe Service Ent	ATERALS F Applicant, t ments for exi elling units. rance:	REPLACIN he Compa isting over	IG EXISTINC any will instr head service	RESIDENTIA	L OVERHEAD	SERVICES: als from existing gs containing les
11.05	UNDERG Applicabi Whe over than Rearrang The facili spec	ROUND S lity: n requesti- head lines five (5) se ement of S Applicant ties to acc ifications.	ERVICE L ed by the as replace parate dwe Service Ent shall be re commodate	ATERALS F Applicant, t ments for exi elling units. rance: sponsible fo a the propos	REPLACIN he Compa sting overl or any nec sed under	IG EXISTING any will instr head service essary rearra ground servi	B RESIDENTIA all underground s to existing res anging of his e: ce lateral in a	L OVERHEAD d service later idential building xisting electric ccordance with	SERVICES: als from existing gs containing less service entrance h the Company!
11.05	UNDERG Applicabi Whe over than Rearrang The facili spec	ROUND S lity: n request head lines five (5) se ement of S Applicant ties to acc ifications. g:	ERVICE L ed by the as replace parate dwe Service Ent shall be re commodate	ATERALS F Applicant, t ments for exi elling units. rance: sponsible fo e the propos	REPLACIN he Compa isting overl or any nec sed under	IG EXISTING any will instr head service essary rearra ground servi	B RESIDENTIA all underground s to existing res anging of his e ce lateral in a	L OVERHEAD d service later idential building xisting electric ccordance with	D SERVICES: als from existing gs containing les service entrance h the Company?
11.05	UNDERG Applicabi Whe over than Rearrang The facili spec Trenching The any trenc work	ROUND S lity: n requesti- head lines five (5) se ement of S Applicant ties to acc ifications. g: Applicant s landscapin h or remo- s shall be b	ERVICE L ad by the as replace parate dwe Service Ent shall be re commodate shall also p g, paveme re any add ased on a	ATERALS F Applicant, t ments for exit elling units. rance: sponsible for a the proposi- rovide, at no nt, or other s titional equip specific cost	REPLACIN he Compa- sting over r any nec sed under cost to the suitable re ment other estimate.	IG EXISTING any will insta head service essary rearra ground servi e Company, a pairs. If the than the Ser	A RESIDENTIA all underground s to existing res anging of his e: ce lateral in a a suitable trench Applicant requir vice Lateral, the	L OVERHEAD d service later idential building xisting electric ccordance with n and perform t ests the Comp e charge to the	SERVICES: als from existing gs containing less service entrance h the Company! the backfilling and any to supply the Applicant for this
11.05	UNDERG Applicabi Whe over than Rearrang The facili spec Trenching The any trenc work	ROUND S lity: n request head lines five (5) se ement of S Applicant ties to acc ifications. g: Applicant s landscapin ch or remov shall be b	ERVICE L ad by the as replace parate dwe Service Ent shall also p g, paveme re any add ased on a Applicant	ATERALS F Applicant, t ments for exi elling units. rance: sponsible fo e the propose rovide, at no int, or other specific cost	REPLACIN he Comprising overlisting overlis	IG EXISTING any will instr head service essary rearra ground servi e Company, a pairs. If the than the Ser	B RESIDENTIA all underground s to existing res anging of his e: ce lateral in a a suitable trench Applicant requivice Lateral, the	L OVERHEAD d service later idential building xisting electric coordance with n and perform t ests the Comp e charge to the	D SERVICES: als from existing gs containing less service entrance h the Company! the backfilling and any to supply the Applicant for this
11.05	UNDERG Applicabi Whe over than Rearrang The facili spec Trenching The any trenc work Com	ROUND S lity: n request head lines five (5) se ement of S Applicant ties to acc ifications. g: Applicant s landscapin ch or remo s shall be b tribution by charge exc	ERVICE L ed by the as replace parate dwe Service Ent shall be re- commodate shall also p g, paveme re any add ased on a Applicant: cluding trer	ATERALS F Applicant, t ments for exi elling units. rance: sponsible fo a the propos rovide, at no int, or other : itional equip specific cost	REPLACIN he Comprising overlising overlising overlised undersed undersed undersed undersed undersed underset of the suitable rement other estimate.	IG EXISTING any will instr head service essary rearra ground servi e Company, a pairs. If the than the Ser s follows:	B RESIDENTIA all underground s to existing res anging of his e ce lateral in a a suitable trench Applicant require vice Lateral, the	L OVERHEAD d service later idential building xisting electric ccordance with n and perform t ests the Comp e charge to the	D SERVICES: als from existing gs containing less service entrance h the Company! the backfilling and any to supply the Applicant for this
11.05	UNDERG Applicabi Whe over than Rearrang The facili spec Trenching The any trenc work Cont The For s	ROUND S lity: n request head lines five (5) se ement of S Applicant ties to acc ifications. g: Applicant s landscapin ch or remov s shall be b tribution by charge exc Service Lai service	ERVICE L ed by the as replace parate dwe Service Ent shall be re commodate shall also p g, paveme re any add ased on a Applicant cluding tren teral	ATERALS F Applicant, t ments for exi elling units. rance: sponsible fo a the propos rovide, at no int, or other r itional equip specific cost	REPLACIN he Comprising overlisting overlis	IG EXISTING any will instr head service essary rearra ground servi e Company, a pairs. If the than the Ser s follows:	B RESIDENTIA all underground s to existing res anging of his e ce lateral in a a suitable trench Applicant requ vice Lateral, th	L OVERHEAD d service later idential building xisting electric coordance with n and perform t ests the Comp e charge to the sector the S1,24	D SERVICES: als from existing gs containing less service entrance h the Company! the backfilling and any to supply the Applicant for this 37.00 <u>1.762.00</u>
11.05	UNDERG Applicabi Whe over than Rearrang The facili spec Trenching Trenching Trenching trenc Cont The any trenc Cont The For s	ROUND S lity: n request head lines five (5) se ement of S Applicant ties to acc ifications. g: Applicant s landscapin ch or remov s shall be b tribution by charge exc Service Lai service Applicant ifications a	ERVICE L ed by the as replace parate dwe Service Ent shall also p g, paveme re any add ased on a Applicant cluding trer teral may elect	ATERALS F Applicant, t ments for exi elling units. rance: sponsible fo a the proposi- rovide, at no int, or other r itional equip specific cost aching costs to provid b Duke Ener	REPLACIN he Comprising overlisting overlisting overlisting overlisting overlisted undersed undersed underset of the suitable rement other estimate. shall be at shall be at sh	IG EXISTING any will instr head service essary rearra ground servi e Company, a pairs. If the than the Ser s follows:	B RESIDENTIA all underground s to existing res anging of his ex ce lateral in an a suitable trench Applicant requivice Lateral, the vice Lateral, the meeting current	L OVERHEAD d service later idential building xisting electric coordance with n and perform t ests the Comp e charge to the scharge to the \$1,23 ent Duke Ene e shall be as f	D SERVICES: als from existing gs containing less service entrance h the Company? the backfilling and any to supply the Applicant for this 37.001.762.00 ergy construction ollows:

ISSUED BY: Javier J. Portuondo, <u>Managing DirectorVice President</u>, Rates & Regulatory Strategy – FL EFFECTIVE: October 3, 2019

11.06	UNE	DERGR	DUND DISTRIBUTION FACILITIES TO MULTIPLE-OCCUPANCY RESIDENTIAL BUILDINGS:
	(1)	Availab	ity:
		Underg occupa	ound electric distribution facilities may be installed within the tract of land upon which multiple- icy residential buildings containing five (5) or more separate dwelling units will be constructed.
	(2)	Contrib	ition by Applicant:
		There w the most occupa	ill be no contribution from the Applicant so long as the Company is free to construct the extension ir t economical manner, and reasonably full use is made of the tract of land upon which the multiple ncy buildings will be constructed. Other conditions will require a contribution from the Applicant.
	(3)	Respor	sibility of Applicant
		(a)   	urnish details and specifications of the proposed building or complex of buildings. The Company wil se these in the design of the electric distribution facilities required to render service.
		(b) )	vhere the Company determines that transformers are to be located inside the building, the Applican hall provide:
		i	The vault or vaults necessary for the transformers and the associated equipment, including the ventilation equipment.
		3	The necessary raceways or conduit for the Company's supply cables from the vault or vaults to a suitable point five (5) feet outside the building in accordance with the Company's plans and specifications.
		i	Conduits underneath all buildings when required for the Company's supply cables. Such conduits shall extend five (5) feet beyond the edge of the buildings for joining to the Company's facilities.
		j	The service entrance conductors and raceways from the Applicant's service equipment to the designated point of delivery within the vault.
	(3)	Respor	sibility of Applicant (Continued):
		(c)	Where the Company determines that transformers are to be located outside the building, the Applicant shall provide:
			i. The transformer enclosure or space for pad-mounted equipment, if required.
			<ol> <li>The service entrance conductors and raceway from the Applicant's service equipment to the point of delivery designated by the Company at or near the building.</li> </ol>
	(4)	Respor	sibility of the Company:
		(a)	The Company will:
			<ol> <li>Provide the Applicant with the Company's plans to supply the proposed building or complex o buildings, and specifications for the facilities to be provided by the Applicant.</li> </ol>
			<li>Furnish and install the primary or secondary conductors from existing or proposed facilities adjoining the property to the point of delivery.</li>
			iii. Furnish and install the necessary transformers and associated equipment located either outside the building or in the vault(s) within the building.
			iv. Be solely responsible for the installation, operation, and maintenance of all of its facilities.
	(5)	Service	Voltage:
	G	The Co	npany will supply service at one of the several secondary voltages available as mutually agreed upor the Applicant and the Company

EFFECTIVE: April 29, 2013