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September 30, 2019

Ms. Brinda Westbrook-Sedgwick  
Commission Secretary  
Public Service Commission of the District of Columbia  
1325 G Street, N.W.  
Suite 800  
Washington, D.C. 20005

**Re: Formal Case No.1145**

Dear Ms. Westbrook-Sedgwick:

Pursuant to Sections 34-1313.02 and 34-1313.07(a) of the District of Columbia Official Code, and the applicable rules of the Public Service Commission of the District of Columbia ("Commission"), enclosed please find an application for approval of the second biennial Underground Infrastructure Improvement Projects Plan ("Second Biennial Plan") and the application for a financing order (collectively, the "Applications") of the District Department of Transportation ("DDOT") and Potomac Electric Power Company ("Pepco"). Attached to this transmittal letter is a proposed form of the public notice of the Applications suitable for publication by the Commission.

Pursuant to 15 D.C.M.R. §150, *et seq.*, Pepco and DDOT are filing Appendix H to the Second Biennial Plan under confidential seal due to the sensitive nature of the information. In addition, Pepco is providing to the parties supporting work papers on a computer disk (Confidential and Public versions).

Please contact me if you have any further questions.

Sincerely,

A handwritten signature in blue ink that reads "Andrea H. Harper". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Andrea H. Harper

Enclosures – CD

cc: All Parties of Record

**PUBLIC SERVICE COMMISSION OF THE DISTRICT OF COLUMBIA**

**PUBLIC NOTICE**

**FORMAL CASE NO. 1145, IN THE MATTER OF THE APPLICATIONS FOR APPROVAL OF BIENNIAL UNDERGROUND INFRASTRUCTURE IMPROVEMENT PROJECTS PLANS AND FINANCING ORDERS**

The Public Service Commission of the District of Columbia (“Commission”) hereby gives notice that, on September 30, 2019, the District Department of Transportation (“DDOT”) and Potomac Electric Power Company (“Pepco”) filed a Joint Application for Approval of the Second Biennial Underground Infrastructure Improvement Projects Plan (“Joint Application”) and Financing Order Application (collectively, “Applications”) in compliance with the Electric Company Infrastructure Improvement Financing Act of 2014, as amended (the “Undergrounding Act”).

Second Biennial Underground Infrastructure Improvement Projects Plan

Pursuant to Section 34-1313.07(a) of the District of Columbia Official Code (“D.C. Code”), DDOT and Pepco filed the Joint Application seeking approval of the second biennial Underground Infrastructure Improvement Projects Plan (“Second Biennial Plan”). The Second Biennial Plan identifies ten (10) electric distribution feeders, that are currently overhead, all or parts of which DDOT and Pepco propose to place underground. As part of the feeder-selection process, Pepco ranked every overhead and combined overhead/underground feeder in the District of Columbia on a number of criteria, including the number and duration of outages and customer minutes of interruption on each feeder for the years 2010-2018 (including storm outage data). Based on this historical feeder performance data, as well as other secondary criteria, DDOT and Pepco selected the feeders that will be placed underground as part of the Second Biennial Plan.

The Second Biennial Plan also requests approval of a charge called the “Underground Project Charge” to recover costs incurred by Pepco to place underground the selected feeders and other authorized costs and charges. Pursuant to the Undergrounding Act, the Underground Project Charge is applicable to Pepco’s District of Columbia customers who take electric distribution service, except for customers served under Pepco’s Residential Aid Discount Rider. Pepco may annually file to adjust the Underground Project Charge no later than April 1 of each year to update forecasted expenditures for the calendar year in which the update is filed.

The proposed Underground Project Charge for 2020 represents a total increase of approximately two (2) cents per month for a residential customer Standard Offer Service (“SOS”) who uses 648 kWh per month. Over the two-year period in which these charges will be in effect, the Underground Project Charges are designed to collect \$3,167,258 in total revenues. In 2020 and 2021, Pepco expects to add approximately \$6.9 million in electric plant in service.

The initial Underground Project Charge for the first year, for each Rate Schedule, is as follows:

<u>Rate Schedule</u>	<u>Underground Project Charge (per kilowatt-hour)</u>
R	\$0.00005
MMA	\$0.00004
GS ND	\$0.00013
T	\$0.00013
GS LV	\$0.00022
GS 3A	\$0.00019
MGT LV	\$0.00014
GT LV	\$0.00014
GT 3A	\$0.00009
GT 3B	\$0.00001
RT	\$0.00008
SL/TS/OL LED	\$0.00006
TN	\$0.00003

If granted in full, the average monthly effects of the proposed rates in the first year will be:

**Underground Project Charge**

<u>Rate Schedule**</u>	<u>Average Monthly Usage</u>	<u>Monthly Bill Change (Distribution Only)*</u>		<u>Monthly Increase for Standard Offer Service Customers (Total Bill)*</u>	
		<u>Percent Change</u>	<u>Dollar Amount</u>	<u>Percent Change</u>	<u>Dollar Amount</u>
Residential Service	648	0.06%	\$ 0.02	0.03%	\$ 0.02
Master Metered Apartment Service	460	0.06%	\$ 0.01	0.02%	\$ 0.01
General Service – Non-Demand	1,145	0.08%	\$ 0.07	0.04%	\$ 0.07
Temporary Service	6,744	0.08%	\$ 0.40	0.04%	\$ 0.40
General Service – Low Voltage	10,427	0.24%	\$ 1.67	0.11%	\$ 1.67
General Service - Primary Service	19,803	0.18%	\$ 2.18	0.07%	\$ 2.18
Time Metered Medium General Service – Low Voltage / Time					
Metered General Service – Low Voltage	111,526	0.14%	\$ 8.92	0.06%	\$ 8.92
Time Metered General Service – Primary Service	1,283,856	0.17%	\$ 77.03	0.06%	\$ 77.03
Time Metered General Service – High Voltage	14,891,308	0.07%	\$ 148.91	0.01%	\$ 148.91
Rapid Transit Service	286,356	0.14%	\$ 14.32	0.04%	\$ 14.32
Street Lighting Service	237,477	0.15%	\$ 7.12	0.04%	\$ 7.12
Traffic Signal Service	291,526	0.09%	\$ 8.75	0.03%	\$ 8.75
Telecommunications Network Service	421	0.07%	\$ 0.01	0.03%	\$ 0.01

\* The effect of the proposed rates on any particular customer is dependent upon the actual usage of the customer.

Changes shown are for customers with average monthly usage per Formal Case 1150.

\*\* OL LED is not modeled separately as average usage per Formal Case 1150 is not available. Further, GT-LV and MGT-LV are modeled together as separate data per Formal Case 1150 is not available.

### Second Financing Order Application

Pursuant to D.C. Code § 34-1313.02(a), Pepco included an application requesting that the Commission issue a financing order authorizing Pepco to assess a charge called the “Underground Rider” to recover charges imposed on Pepco by the District of Columbia. The charge imposed on Pepco by the District of Columbia is called the DDOT Underground Electric Company Infrastructure Improvement Charge or “DDOT Charge.”

Pursuant to the Undergrounding Act, DDOT will use amount paid by Pepco for the DDOT Charge to fund costs associated with work performed by DDOT to place underground the distribution feeders included in the Second Biennial Plan and to be used by Pepco to provide electric distribution service in the District of Columbia. The work to be performed by DDOT includes civil engineering for and the construction and installation of certain underground conduits, duct banks, electric vaults, manholes and similar facilities, and repaving and other road work.

The Underground Rider is applicable to all customers who take electric distribution service, except customers served under Pepco’s Residential Aid Discount Rider. The proposed Underground Rider for 2020 represents a total decrease of approximately six (6) cents per month for a typical residential SOS customer who uses 648 kWh per month. Over the two-year period in which these charges will be in effect, the Underground Rider is designed to collect \$60 million, or \$30 million per year. Pepco may file to adjust the Underground Rider not more frequently than twice per year to true up the difference between the DDOT Charge imposed on Pepco for the period for which the adjustment is filed and actual amounts collected by Pepco through the Underground Rider for the corresponding period. The recovery for under-collection or over-collection shall be allocated to each customer class in the proportion to the customer class contributed to the under-collection or over-collection.

The charges for the Underground Rider for the first year, for each Rate Schedule, are as follows:

<u>Rate Schedule</u>	<u>Underground Rider (per kilowatt-hour)</u>
R	\$0.00129
MMA	\$0.00100
GS ND	\$0.00340
T	\$0.00340
GS LV	\$0.00567
GS 3A	\$0.00498
MGT LV	\$0.00368
GT LV	\$0.00368
GT 3A	\$0.00221
GT 3B	\$0.00020
RT	\$0.00196
SL/TS/OL LED	\$0.00155
TN	\$0.00066

If granted in full, the average monthly effects of the proposed Underground Rider, in the first year, will be:

# **Underground Rider**

<u>Rate Schedule**</u>	<u>Average Monthly Usage</u>	<u>Monthly Bill Change (Distribution Only)*</u>		<u>Monthly Increase for Standard Offer Service Customers (Total Bill)*</u>	
		<u>Percent</u>	<u>Dollar</u>	<u>Percent</u>	<u>Dollar</u>
		<u>Change</u>	<u>Amount</u>	<u>Change</u>	<u>Amount</u>
Residential Service	648	-0.19%	\$ (0.06)	-0.08%	\$ (0.06)
Master Metered Apartment Service	460	-0.32%	\$ (0.07)	-0.12%	\$ (0.07)
General Service – Non-Demand	1,145	-1.51%	\$ (1.27)	-0.78%	\$ (1.27)
Temporary Service	6,744	-1.55%	\$ (7.49)	-0.80%	\$ (7.49)
General Service – Low Voltage***	10,427	1.18%	\$ 8.24	0.56%	\$ 8.24
General Service - Primary Service	19,803	-1.69%	\$ (20.60)	-0.68%	\$ (20.60)
Time Metered Medium General Service – Low Voltage / Time					
Metered General Service – Low Voltage	111,526	-0.39%	\$ (24.54)	-0.17%	\$ (24.54)
Time Metered General Service – Primary Service	1,283,856	-0.22%	\$ (102.71)	-0.07%	\$ (102.71)
Time Metered General Service – High Voltage	14,891,308	-0.79%	\$ (1,786.96)	-0.11%	\$ (1,786.96)
Rapid Transit Service	286,356	-0.60%	\$ (60.13)	-0.17%	\$ (60.13)
Street Lighting Service	237,477	-1.04%	\$ (49.87)	-0.25%	\$ (49.87)
Traffic Signal Service	291,526	-0.63%	\$ (61.22)	-0.21%	\$ (61.22)
Telecommunications Network Service	421	-0.32%	\$ (0.05)	-0.12%	\$ (0.05)

\* The effect of the proposed rates on any particular customer is dependent upon the actual usage of the customer.

Changes shown are for customers with average monthly usage per Formal Case 1150.

\*\* OL LED is not modeled separately as average usage per Formal Case 1150 is not available. Further, GT-LV and MGT-LV are modeled together as separate data per Formal Case 1150 is not available.

\*\*\*Rate reflects a class revenue requirement decrease offset by relatively lower forecasted billing determinants for the applicable rate period.

The Underground Project Charge and the Underground Rider become effective upon the Commission's issuance of an order in Formal Case No. 1145 approving these charges.

The Commission will hold a series of community hearings on the Applications to receive comments from residents and businesses in the affected communities. The dates, times, and locations of the community hearings will be published on the Commission's website.

Any person desiring to intervene in this proceeding may file a petition to intervene with the Commission no later than [14 days after Notice]. All petitions to intervene shall conform to the requirements of the Commission's Rules of Practice and Procedure as set forth in Section 106 of Title 15 of the District of Columbia Municipal Regulations (15 DCMR Section 106).

Any person desiring to comment on the Applications may file comments with the Commission no later than [60 days after notice], 2019.

All written comments and petitions for intervention should be sent to Ms. Brinda Westbrook-Sedgwick, Commission Secretary, Public Service Commission of the District of Columbia, 1325 G Street, NW, Suite 800, Washington, DC 20005.

Pursuant to Sections 34-1313.03(d) and 34-1313.16 of the District of Columbia Official Code, the Commission's review of the Joint Application is required to be expediated. The issues to be considered by the Commission in reviewing the Joint Application are identified in Sections 302, 308 and 310 of the Undergrounding Act.

The Applications are available for viewing on the Commission's website ([www.dcpssc.org](http://www.dcpssc.org)) and inspection at the Public Service Commission's Office of the Commission's Secretary, 1325 G Street,

Suite 800, between the hours of 9:00 am and 5:30 pm, Monday through Friday. Copies of the Applications can be purchased at the Commission at a cost of \$0.10 per page, actual reproduction cost. The Applications may also be inspected at the following public libraries:

**District of Columbia Public Ward Libraries**

Mount Pleasant Library  
3160 16th St. NW  
Washington, D.C. 20010  
mtpleasantlibrary@dc.gov  
202-671-3121

Southeast Library  
900 Wesley Place SW  
Washington, D.C. 20024  
southwestlibrary@dc.gov  
202-724-4752

Southwest Library  
900 Wesley Place SW  
Washington, D.C. 20024  
southwestlibrary@dc.gov  
202-724-4752

Petworth Library  
4200 Kansas Ave. NW  
Washington, D.C. 20011  
petworthlibrary@dc.gov  
202-243-1188

Cleveland Park Library  
4340 Connecticut Ave NW  
Washington, D.C. 20008  
clevelandparklibrary@dc.gov  
202-282-3080

Woodridge Library  
1801 Hamlin Street NE  
Washington, D.C. 20018  
woodridgelibrary@dc.gov  
202-541-6226

Bellevue Library. William O. Lockridge  
115 Atlantic St. SW  
Washington, D.C. 20032  
bellevuelibrary@dc.gov  
202-243-1185

Capitol View Library  
5001 Central Ave. SE  
Washington, D.C. 20019  
capitolviewlibrary@dc.gov  
202-645-0755

BEFORE THE  
PUBLIC SERVICE COMMISSION  
OF THE DISTRICT OF COLUMBIA

IN THE MATTER OF	)	
APPLICATIONS FOR APPROVAL OF	)	
BIENNIAL UNDERGROUND INFRASTRUCTURE	)	Formal Case No. 1145
IMPROVEMENT PROJECTS PLANS AND	)	
FINANCING ORDERS	)	

**JOINT APPLICATION OF POTOMAC ELECTRIC POWER COMPANY  
AND THE DISTRICT DEPARTMENT OF TRANSPORTATION  
FOR APPROVAL OF THE SECOND BIENNIAL UNDERGROUND  
INFRASTRUCTURE IMPROVEMENT PROJECTS PLAN  
AND FINANCING ORDER APPLICATION**

Pursuant to D.C. Code §34-1313.07(a),<sup>1</sup> the District Department of Transportation (“DDOT”) and Potomac Electric Power Company (“Pepco” or the “Company”) (collectively, “Joint Applicants”) hereby jointly file this application (“Joint Application”) for approval by the Public Service Commission of the District of Columbia (“Commission”) of the second biennial Underground Infrastructure Improvement Projects Plan (“Second Biennial Plan”) for placing certain electric power lines and ancillary facilities underground. Pursuant to D.C. Code §34-1313.01 and §34-1313.02, Pepco also is filing herein an application for a financing order (“Financing Order Application”).<sup>2</sup> The initiative to place certain power lines underground described in the Applications is referred to herein as the District of Columbia Power Line Undergrounding, or DC PLUG, initiative.

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<sup>1</sup> The Electric Company Infrastructure Improvement Financing Act of 2014 (“Original Act”) has been subsequently amended, including by the Electric Company Infrastructure Improvement Financing Amendment Act of 2017 (“Amendment Act”). Together the Original Act and all subsequent amendments comprise the Undergrounding Act. The Undergrounding Act has been codified in Chapter 13A of Title 34 of the District of Columbia Official Code (“D.C. Code”).

<sup>2</sup> The Joint Application and the Financing Order Application are collectively referred to as the “Applications.”

In support of the Joint Application, the Second Biennial Plan, and the Financing Order Application, DDOT and Pepco state as follows:

**I.**  
**The Applicants**

**A. Pepco**

Pepco is a District of Columbia and Virginia corporation having its principal place of business at 701 Ninth Street, N.W., Washington, D.C. 20068. Pepco is a wholly-owned subsidiary of Pepco Holdings LLC (“Pepco Holdings”) and, since March 23, 2016, a subsidiary of Exelon Corporation. Pepco is engaged principally in the purchase and regulated retail sale of electricity and the provision of electricity distribution and transmission services in the District of Columbia and major portions of Prince George’s County and Montgomery County in Maryland.

Pepco is subject to regulation by the Commission with respect to its public utility operations within the District of Columbia pursuant to the District of Columbia Public Utilities Act, as amended, D.C. Code §§ 34-101 *et seq.*

**B. DDOT**

DDOT was established by the Council of the District of Columbia (“D.C. Council”) as an agency within the executive branch of the government of the District of Columbia (“District”) to improve the District of Columbia’s economic competitiveness and quality of life by planning, coordinating, and operating the transportation system, and managing and maintaining the transportation infrastructure, to ensure the safe, efficient movement of people, goods and information along public rights-of-way pursuant to D.C. Code §50-921.01 *et seq.*

**II.**  
**Identification and Contact Information**

All correspondence and communications concerning the Applications should be sent to the following persons at the addresses specified below. In addition, as required by D.C. Code §34-1313.08(c)(8), below is the contact information of the individuals who may be contacted by the Commission with formal or informal requests for clarification of any material in the Joint Application or requests for additional information.

<b><u>DDOT</u></b> Brian R. Caldwell Assistant Attorney General Public Advocacy Division Public Integrity Section Office of the Attorney General for the District of Columbia 441 Fourth Street, N.W., Suite 600-S Washington, D.C. 20010 <a href="mailto:brian.caldwell@dc.gov">brian.caldwell@dc.gov</a>  and,  Cheri H. Staples Assistant General Counsel Office of the General Counsel District Department of Transportation 55 M Street, S.E., Suite 700 Washington, D.C. 20003 <a href="mailto:cheri.staples@dc.gov">cheri.staples@dc.gov</a>	<b><u>Pepco</u></b> Wendy E. Stark Senior Vice President, Legal and Regulatory Strategy & General Counsel  Andrea H. Harper Assistant General Counsel Potomac Electric Power Company 701 Ninth Street, N.W., 9 <sup>th</sup> Floor Washington, D.C. 20068 <a href="mailto:westark@pepcoholdings.com">westark@pepcoholdings.com</a> <a href="mailto:ahharper@pepcoholdings.com">ahharper@pepcoholdings.com</a>  Brian Doherty Manager, Regulatory Affairs Potomac Electric Power Company 701 Ninth Street, N.W., 9 <sup>th</sup> Floor Washington, D.C. 20068 <a href="mailto:bdoherty@pepcoholdings.com">bdoherty@pepcoholdings.com</a>
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**III.**  
**Background**

In August 2012, former Mayor Vincent Gray convened a task force (“Task Force”), giving specific directives for analyzing “the technical feasibility, infrastructure options and reliability implications of undergrounding new or existing overhead electrical distribution facilities in the

District of Columbia.”<sup>3</sup> In October 2013, the Task Force issued its Final Report.<sup>4</sup> On March 3, 2014, Mayor Gray signed the Original Act into law,<sup>5</sup> directing DDOT and Pepco to bury certain overhead power lines in order to improve electric service resiliency and reliability in the District of Columbia. On June 17, 2014, DDOT and Pepco filed the first triennial Underground Infrastructure Improvement Projects Plan (“First Triennial Plan”), which was approved on November 12, 2014,<sup>6</sup> as clarified on January 22, 2015.<sup>7</sup> On August 1, 2014, Pepco filed the Application of Potomac Electric Power Company for Issuance of a Financing Order, which was approved on November 24, 2014.<sup>8</sup>

On September 15, 2014, OPC, DDOT and Pepco entered into the 2014 Stipulation<sup>9</sup> that resolved in their entirety the protests that the Office of People’s Counsel for the District of Columbia (“OPC”) made regarding certain technical and other aspects of system design, construction and operation as well as certain aspects of the proposed communications plan. DDOT and Pepco committed to incorporating the stipulations into the implementation of the First

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<sup>3</sup> *Mayor’s Power Line Undergrounding Task Force, Findings & Recommendations* (“Final Report”) at 8 (Oct. 2013).

<sup>4</sup> Final Report at 9.

<sup>5</sup> The law became effective on May 3, 2014.

<sup>6</sup> *In the Matter of the Application for Approval of Triennial Underground Infrastructure Improvement Projects Plan*, Formal Case No. 1116, Order No. 17697 (Nov. 12, 2014) (“Order No. 17697”), *reh’g denied In the Matter of the Application for Approval of Triennial Underground Infrastructure Improvement Projects Plan*, Formal Case No. 1116, Order No. 17769 (Jan. 22, 2015).

<sup>7</sup> *In the Matter of the Application for Approval of Triennial Underground Infrastructure Improvement Projects Plan*, Formal Case No. 1116, Order No. 17770 (Jan. 22, 2015) (“Order No. 17770”).

<sup>8</sup> *In the Matter of the Application of the Potomac Electric Power Company for a Financing Order*, Formal Case No. 1121, Order No. 17714 (Nov. 24, 2014) (“Order No. 17714”), *reh’g denied In the Matter of the Application of the Potomac Electric Power Company for a Financing Order*, Formal Case No. 1121, Order No. 17797 (Feb. 2, 2015).

<sup>9</sup> *Joint Stipulation of the Office of the People’s Counsel, Potomac Electric Power Company, and the District Department of Transportation Resolving Recommendations 1-13 and 16-25 of the Protest of the Office of People’s Counsel in Formal Case No. 1116*, Formal Case No. 1116 (Sept. 15, 2014) (“2014 Stipulation”). The 2014 Stipulation is available on the Commission’s website at [http://edocket.D.C.psc.org/edocket/docketsheets\\_pdf\\_FS.asp?caseno=FC1116&docketno=110&flag=D&show\\_result=Y](http://edocket.D.C.psc.org/edocket/docketsheets_pdf_FS.asp?caseno=FC1116&docketno=110&flag=D&show_result=Y).

Triennial Plan. The Commission accepted the 2014 Stipulation in Order No. 17697.<sup>10</sup> In March 2016, DDOT, Pepco and OPC entered into another stipulation (“the 2016 Stipulation”) regarding padmounted transformers.<sup>11</sup> DDOT and Pepco have incorporated the agreements set forth in the 2014 Stipulation and the 2016 Stipulation by reference, or explicitly, into the Second Biennial Plan and continue to be committed to fulfilling the applicable obligations.

In March 2015, the Apartment and Office Building Association of Metropolitan Washington D.C. (“AOBA”) appealed the final orders in Formal Case Nos. 1116 and 1121 to the District of Columbia Court of Appeals (“D.C. Court of Appeals”), challenging the Commission’s interpretation of certain provisions of the Original Act. Effective October 22, 2015, the D.C. Council amended the Original Act to include a specific definition of “distribution service customer class cost allocations,”<sup>12</sup> which amendment was included in the appeal heard by the D.C. Court of Appeals. The D.C. Court of Appeals affirmed the Commission orders on January 14, 2016<sup>13</sup> and denied AOBA’s request for rehearing *en banc* on March 17, 2016.

Also in 2014, in Formal Case No. 1121, the U.S. General Services Administration (“GSA”) challenged the surcharge recouping the cost of DDOT’s activity under the Original Act. Pepco, the District and DDOT sought to address the GSA challenge in a manner that would allow the DC PLUG initiative to proceed under the Original Act but ultimately decided to amend the Original

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<sup>10</sup> Order No. 17697 at P 149.

<sup>11</sup> *Motion to Approve Joint Stipulation and Joint Stipulation of the Office of the People’s Counsel, Potomac Electric Power Company, and the District Department of Transportation regarding Consideration of Pad-Mounted Transformers for DC PLUG Initiative Feeders in Formal Case No. 1116*, Formal Case No. 1116 (Mar. 8, 2016) (“2016 Stipulation”). The 2016 Stipulation is available on the Commission’s website at [http://edocket.D.C.psc.org/edocket/docketsheets\\_pdf\\_FS.asp?caseno=FC1116&docketno=239&flag=D&show\\_result=Y](http://edocket.D.C.psc.org/edocket/docketsheets_pdf_FS.asp?caseno=FC1116&docketno=239&flag=D&show_result=Y).

<sup>12</sup> D.C. Code § 34–1311.01(8A).

<sup>13</sup> *Apt. and Office Bldg. Ass’n of Metro Wash. v. PSC of the Dist. of Columbia*, 129 A.3d 925 (D.C. 2016).

Act and, to that end, developed an alternative structure. On May 19, 2017, Mayor Muriel Bowser signed the Amendment Act into law.

On July 3, 2017, pursuant to D.C. Code §§34-1313.02 and 34-1313.07(a), the Joint Applicants filed applications for the approval of the First Biennial Plan and Financing Order. The Commission granted the Joint Application for Approval of the First Biennial Plan and Financing Order in Order No. 19167 on November 9, 2017. On December 11, 2017, AOBA filed an Application for Reconsideration of Order No. 19167, and the Joint Applicants filed an Application for Clarification or, in the alternative, Reconsideration of Order No. 19167. The Commission denied AOBA's Application for Reconsideration and granted Joint Applicants' Application for Clarification or, in the alternative, Reconsideration of Order No. 19167 on January 18, 2018, in Order No. 19237. The D.C. Court of Appeals affirmed the orders of the Commission on March 7, 2019.<sup>14</sup>

Pursuant to D.C. Code §34-1313.08, §34-1313.01 and §34-1313.02, DDOT and Pepco are submitting the Joint Application and the Financing Order Application, both of which comply in all respects with the Undergrounding Act and provide extensive data and other information that support the undergrounding activities proposed and funded in the Joint Application and the Financing Order Application.

#### **IV. SUMMARY OF REQUEST**

In the Joint Application, DDOT and Pepco seek approval of the Second Biennial Plan to place underground specified electric power lines and ancillary facilities and permission to impose

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<sup>14</sup> *Apartment & Office Bldg. Ass'n of Metro. Washington v. Pub. Serv. Comm'n of D.C.*, 203 A.3d 772, 775 (D.C. 2019).

the Underground Project Charge. In the Financing Order Application, Pepco seeks approval to implement the Underground Rider to recover the funds Pepco is required to remit to the District for the DDOT Underground Electric Company Infrastructure Improvement Charge (“DDOT Charge”), approval of the DDOT Underground Electric Company Infrastructure Improvement Costs, and approval of the DDOT Charge. The Applications are supported by the Second Biennial Plan, which includes all required appendices, and the supporting direct testimonies and exhibits.

The following testimonies and exhibits support the Applications and the Second Biennial Plan. Company Witness McGowan, Vice President, Regulatory Policy & Strategy of Pepco Holdings, *inter alia*, will describe the funding structure under the Undergrounding Act and the recovery mechanisms and will demonstrate that the Financing Order Application is in compliance with the requirements of D.C. Code §34-1313.02. Company Witness Lipari, Manager, Reliability for Pepco will discuss the selection process for the feeders recommended for placement underground in the Second Biennial Plan, and Company Witness Smith, Manager, Manager of Project Management for Pepco, will discuss certain aspects of the Second Biennial Plan that relate to the construction efforts under the Second Biennial Plan as well as procurement from certified business enterprises (“CBEs”) and the hiring of District of Columbia residents. Company Witness Peter Blazunas, Manager of Rate Administration, will discuss the rate impacts and revenue requirement associated with the DC PLUG initiative and will provide support for the Financing Order Application. Company Witness Matt Kozey, Communications Manager, will discuss customer and community education and outreach activities associated with the DC PLUG initiative. DDOT Witness Ronald Williams, Program Manager, will discuss, *inter alia*, the DDOT Underground Electric Company Infrastructure Improvement Costs, the DDOT Charges, and efforts to procure associated services from CBEs.

The Applications and the Second Biennial Plan are also supported by the following appendices:

Appendix A	Feeder Ranking (SAIFI, SAIDI, CMI/\$)
Appendix B	Feeder Prioritization
Appendix C	Feeder Description Summary Sheets
Appendix D	Feeder Locations and One-Line Drawings
Appendix E	Existing Overhead Electrical Schematics
Appendix F	Preliminary Electrical Schematics
Appendix G	Preliminary Civil Schematics
Appendix H	Itemized Feeder Cost Estimates (Confidential)
Appendix I	Underground Project Charge Revenue Requirement and Rate Design
Appendix J	Underground Rider Revenue Requirement and Rate Design
Appendix K	Underground Project Charge Bill Impacts
Appendix L	Underground Rider Bill Impacts
Appendix M	Underground Project Charge and Underground Rider Tariff Sheets
Appendix N	DC PLUG Education Plan and Budget
Appendix O	Utility Coordination Protocol
Appendix P	First Biennial Plan Status Report

## **V.**

### **Joint Application and Second Biennial Plan Compliance with the Undergrounding Act**

D.C. Code §34-1313.08 specifies the contents of the Joint Application and the Second Biennial Plan and the requirements that Pepco and DDOT must meet in the Joint Application and

Second Biennial Plan. The Joint Application and Second Biennial Plan provide the information necessary for Commission approval, which will allow Pepco and DDOT to begin construction activities and will allow Pepco to begin collecting the Underground Project Charge.

**A. D.C. Code §34-1313.08(a)(1)(A)**

D.C. Code §34-1313.08(a)(1)(A) requires that the Second Biennial Plan include a measurement and ranking of each overhead and combined overhead-underground mainline primary and lateral feeder in the District of Columbia.<sup>15</sup> The section of the Second Biennial Plan entitled “Feeder Selection” discusses the measurement and ranking of the required mainline primary and lateral feeders based on data from 2010-2018, using the primary selection criteria (D.C. Code §34-1313.08(a)(2)) discussed below, as supported by Appendix A. The testimony of Company Witness Smith and his accompanying exhibits discuss the ranking and prioritization processes in detail, including the ranking process used to select the feeders for the Second Biennial Plan shown in Appendix B. The Joint Application, Second Biennial Plan, and the accompanying testimony and exhibits provide the information necessary to satisfy the requirements of D.C. Code §34-1313.08(a)(1)(A).

**B. D.C. Code §34-1313.08(a)(1)(B)**

D.C. Code §34-1313.08(a)(1)(B) requires that the Second Biennial Plan use the aforementioned rankings to identify which of Pepco’s mainline and lateral feeders will utilize the DDOT Underground Electric Company Infrastructure Improvements. Appendices B and C identify the selected mainline primary and lateral feeders and the section of the Second Biennial Plan entitled “Feeder Selection” discusses the process used to select the feeders for the first two years of the DC PLUG initiative. The testimony of Company Witness Lipari and accompanying

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<sup>15</sup> D.C. Code §34-1313.08(a)(1)(A) directs that the measurement and ranking be based on feeder data from January 1, 2010 through the most recently completed calendar year and use the primary selection criteria in D.C. Code §34-1313.08(a)(2).

exhibits also address the feeder selection process. The Joint Application, Second Biennial Plan, and the accompanying testimony and exhibits provide the information necessary to satisfy the requirements of D.C. Code §34-1313.08(a)(1)(B).

**C. D.C. Code §34-1313.08(a)(2)**

D.C. Code §34-1313.08(a)(2) requires a showing of certain enumerated metrics based on all sustained interruptions that affect the public welfare (inclusive of major service outages) on each overhead and combined overhead-underground mainline primary and lateral feeder circuit in the District of Columbia from January 1, 2010, through the most recently completed calendar year. In compliance with D.C. Code §34-1313.08(a)(2), Appendix A includes a weighted average, for 2010-2018, of the (1) number of outages per feeder, (2) duration of the outages per feeder, and (3) cost per customer minutes of interruption per feeder. The section of the Second Biennial Plan entitled “Feeder Selection” discusses this analysis. The testimony of Company Witness Lipari and his accompanying exhibits address the weighting based on the criteria required in D.C. Code §34-1313.08(a)(2). The Joint Application, Second Biennial Plan, and the accompanying testimony and exhibits provide the information necessary to satisfy the requirements of D.C. Code §34-1313.08(a)(2).

**D. D.C. Code §34-1313.08(a)(3)(A)**

D.C. Code §34-1313.08(a)(3)(A) requires that the Second Biennial Plan describe each mainline primary and lateral feeder that the Joint Applicants selected to be placed underground, and identify and describe the feeder number and feeder location, including street address, neighborhood and Ward. The section of the Second Biennial Plan entitled “Feeder Descriptions” and Appendices C, D, E, F, and G identify and describe the feeder number and feeder location, including street address, neighborhood and Ward for the selected mainline primary and lateral feeders, as supported by the testimony of Company Witness Smith. The Joint Application, Second

Biennial Plan, and the accompanying testimony provide the information necessary to satisfy the requirements of D.C. Code §34-1313.08(a)(3)(A).

**E. D.C. Code §34-1313.08(a)(3)(B)**

D.C. Code §34-1313.08(a)(3)(B) requires that the Second Biennial Plan include overhead electrical cables, fuses, switches, transformers, and ancillary equipment, including poles, that will either be placed underground or removed. Appendices E and F of the Second Biennial Plan identify overhead electrical cables, fuses, switches, transformers, and ancillary equipment that will either be placed underground or removed, as discussed in the “Feeder Descriptions” section of the Second Biennial Plan and supported by the testimony of Company Witness Smith. The Joint Application, Second Biennial Plan, and the accompanying testimony provide the information necessary to satisfy the requirements of D.C. Code §34-1313.08(a)(3)(B).

**F. D.C. Code §34-1313.08(a)(3)(C)**

D.C. Code §34-1313.08(a)(3)(C) requires that the Second Biennial Plan include overhead primary and lateral feeders that are currently located parallel to the primary and lateral feeders selected to be placed underground. Appendices B and F to the Second Biennial Plan identify overhead primary and lateral feeders that are currently located parallel to the primary and lateral feeders selected to be placed underground, as discussed in the section of the Second Biennial Plan entitled “Feeder Descriptions” and supported by the testimony of Company Witness Smith. The Joint Application, Second Biennial Plan, and the accompanying testimony provide the information necessary to satisfy the requirements of D.C. Code §34-1313.08(a)(3)(C).

**G. D.C. Code §34-1313.08(a)(3)(D)**

D.C. Code §34-1313.08(a)(3)(D) requires that the Second Biennial Plan identify the overhead secondary feeder circuits and ancillary facilities, and telecommunications and cable television cables and ancillary above-ground equipment that will not be placed underground. The

section of the Second Biennial Plan entitled “Remaining Overhead Power Lines and Associated Equipment” discusses the fact that all overhead secondary feeder circuits and ancillary facilities, and telecommunications and cable television cables and ancillary above-ground equipment will remain above ground, as supported by the testimony of Company Witness Smith. Moreover, from the time that the Joint Applicants file the Second Biennial Plan to the time that civil and electrical engineering designs are finalized, DDOT and Pepco will look for opportunities to allow certain limited portions of DC PLUG initiative feeders to remain overhead, potentially reducing costs for the selected feeder, without impacting the anticipated reliability and resilience gains associated with placing the feeder underground. This will allow DDOT and Pepco to apply the cost of placing that section of the feeder underground to a future DC PLUG feeder. The Joint Application, Second Biennial Plan, and the accompanying testimony provide the information necessary to satisfy the requirements of D.C. Code §34-1313.08(a)(3)(D).

**H. D.C. Code §34-1313.08(a)(3)(E)**

D.C. Code §34-1313.08(a)(3)(E) requires that the Second Biennial Plan identify the proposed Electric Company Infrastructure Improvements funded by the Underground Project Charge and the DDOT Underground Electric Company Infrastructure Improvements funded by DDOT Charges. Appendices C, F, and G to the Second Biennial Plan identify the proposed Electric Company Infrastructure Improvements funded by the Underground Project Charge and DDOT Underground Electric Company Infrastructure Improvements to be funded by DDOT Charges, as discussed in the sections of the Second Biennial Plan entitled “Feeder Descriptions” and “Interties, Future Load, and Feeder Conversions” and supported by the testimonies of Company Witness Smith and DDOT Witness Williams. The Joint Application, Second Biennial Plan, and the accompanying testimonies provide the information necessary to satisfy the requirements of D.C. Code §34-1313.08(a)(3)(E).

**I. D.C. Code §34-1313.08(a)(3)(F)**

D.C. Code §34-1313.08(a)(3)(F) requires that the Second Biennial Plan identify new distribution automation devices and segmentation capability to be obtained through the DC PLUG initiative. The section of the Second Biennial Plan entitled “Incorporation of Innovative Methods and Advanced Technology,” as supported by the testimony of Company Witness Smith, discusses new distribution automation devices and segmentation capability that may be obtained through the DC PLUG initiative. The Joint Application, Second Biennial Plan, and the accompanying testimony provide the information necessary to satisfy the requirements of D.C. Code §34-1313.08(a)(3)(F).

**J. D.C. Code §34-1313.08(a)(3)(G)**

D.C. Code §34-1313.08(a)(3)(G) requires that the Second Biennial Plan identify interties that will enable the feeder to receive power from multiple directions or sources. The section of the Second Biennial Plan entitled “Interties, Future Load and Feeder Conversions” and Appendices B, E and F identify interties that will enable the feeder to receive power from multiple directions or sources, as supported by the testimony of Company Witness Smith. The Joint Application, Second Biennial Plan, and the accompanying testimony provide the information necessary to satisfy the requirements of D.C. Code §34-1313.08(a)(3)(G).

**K. D.C. Code §34-1313.08(a)(3)(H)**

D.C. Code §34-1313.08(a)(3)(H) requires that the Second Biennial Plan identify the capability to meet current load and future load projections. The section of the Second Biennial Plan entitled “Interties, Future Load and Feeder Conversions” and Appendix C discuss the capability to meet current load and future load projections, as supported by the testimony of Company Witness Smith. The Joint Application, Second Biennial Plan, and the accompanying

testimony provide the information necessary to satisfy the requirements of D.C. Code §34-1313.08(a)(3)(H).

**L. D.C. Code §34-1313.08(a)(3)(I)**

D.C. Code §34-1313.08(a)(3)(I) requires that the Second Biennial Plan include a status report and an explanation of the reasons why DDOT Underground Electric Company Infrastructure Improvement Activity or Electric Company Infrastructure Improvement Activity associated with projects contained in the First Biennial Plan approved by the Commission in Order No. 19167 have not been completed and the dates upon which the projects are expected to be completed. A status report regarding the feeders included in the First Biennial Plan is provided at Appendix O, fulfilling the requirement of D.C. Code §34-1313.08(a)(3)(I).

**M. D.C. Code §34-1313.08(b)**

D.C. Code §34-1313.08(b) requires that DDOT and Pepco identify estimated start and end dates for each approved project not more than 90 days after approval of the Joint Application and Second Biennial Plan. As Company Witness Smith testifies, DDOT and Pepco will identify estimated start and end dates within 90 days of approval of the Joint Application and Second Biennial Plan, in compliance with D.C. Code §34-1313.08(b).

**N. D.C. Code §34-1313.08(c)(1)**

D.C. Code §34-1313.08(c)(1) requires that the Second Biennial Plan include an itemized estimate of the Electric Company Infrastructure Improvement Costs and the proposed Underground Project Charges. The section of the Second Biennial Plan entitled “Project Cost” and Appendix H provide the itemized estimates of the Electric Company Infrastructure Improvement Costs,<sup>16</sup> as supported by the testimony of Company Witness Smith. The section of

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<sup>16</sup> Due to the sensitivity of providing bidders with cost estimates and based on DDOT and Pepco’s experience with the First Triennial Plan, DDOT and Pepco are providing the itemized Electric Company Infrastructure Improvement Costs and DDOT Underground Electric Company Infrastructure Improvement Costs under confidential

the Second Biennial Plan entitled “Cost Recovery” and Appendices I, K, and M discuss the proposed Underground Project Charge, as supported by the testimony and exhibits of Company Witness Blazunas. The Joint Application, Second Biennial Plan, and the accompanying testimonies and exhibits provide the information necessary to satisfy the requirements of D.C. Code §34-1313.08(c)(1).

**O. D.C. Code §34-1313.08(c)(2)**

D.C. Code §34-1313.08(c)(2) requires that the Second Biennial Plan include an itemized estimate of the DDOT Underground Electric Company Infrastructure Improvement Costs. The section of the Second Biennial Plan entitled “Project Cost” and Appendix H provide the itemized estimate of the DDOT Underground Electric Company Infrastructure Improvement Costs, as supported by the testimony of Company Witness Smith and DDOT Witness Williams. The Joint Application, Second Biennial Plan, and the accompanying testimony provide the information necessary to satisfy the requirements of D.C. Code §34-1313.08(c)(2).

**P. D.C. Code §34-1313.08(c)(3)**

D.C. Code §34-1313.08(c)(3) requires that the Second Biennial Plan include an assessment of potential obstacles to timely completion of a project. The section of the Second Biennial Plan entitled “Obstacles to Timely Completion” provides an assessment of potential obstacles to timely completion for any of the projects in the DC PLUG initiative, as supported by the testimony of Company Witness Smith. The Joint Application, Second Biennial Plan, and the accompanying testimony provide the information necessary to satisfy the requirements of D.C. Code §34-1313.08(c)(3).

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cover pursuant to 15 D.C.M.R. § 150. Aggregate amounts for DDOT, Pepco and Total Costs appear in the public version of Appendices B and C.

**Q. D.C. Code §34-1313.08(c)(4)**

D.C. Code §34-1313.08(c)(4) requires that the Second Biennial Plan include a description of the efforts taken to identify District of Columbia residents to be employed by DDOT and Pepco contractors during the planned construction of the DDOT Underground Electric Company Infrastructure Improvements and the Electric Company Infrastructure Improvements in the Second Biennial Plan. The section of the Second Biennial Plan entitled “Focus on District of Columbia Businesses and Residents” provides a description of the efforts taken to identify District of Columbia residents to be employed by DDOT and Pepco and their contractors during the planned construction of the DDOT Underground Electric Company Infrastructure Improvements and the Electric Company Infrastructure Improvements, as supported by the testimonies of Company Witness Smith and DDOT Witness Williams. The Joint Application, Second Biennial Plan, and the accompanying testimony provide the information necessary to satisfy the requirements of D.C. Code §34-1313.08(c)(4).

**R. D.C. Code §34-1313.08(c)(5)**

D.C. Code §34-1313.308(c)(5) requires that the Second Biennial Plan include an explanation of the availability of alternate funding sources, if any, for relocation of the overhead equipment and ancillary facilities. The section of the Second Biennial Plan entitled “Alternate Funding Sources” and the testimonies of Company Witness Smith and DDOT Witness Williams explain that neither the Company nor DDOT is aware of any alternate sources of funds, satisfying the requirements of D.C. Code §34-1313.08(c)(5).

**S. D.C. Code §34-1313.08(c)(6)(A)**

D.C. Code §34-1313.08(c)(6)(A) requires that the Second Biennial Plan include an exhibit setting forth the proposed Underground Project Charges, workpapers calculating the derivation of these charges, the proposed allocation of billing responsibility among Pepco’s distribution service

customer classes for the Underground Project Charges. The section also requires a worksheet showing the (1) projected total expenses, (2) capital costs, (3) depreciation expenses, (4) annual revenue requirement and rate of return on equity, as set by the Commission in Formal Case No. 1150, and (5) allocation of billing responsibility utilized in these calculations. The exhibits providing this information can be found in Appendices I, K, and M of the Second Biennial Plan and further discussion of the contents can be found in the section of the Second Biennial Plan entitled “Cost Recovery.” In addition, the testimony and exhibits of Company Witness Blazunas support the Second Biennial Plan. The Joint Application, Second Biennial Plan, and the accompanying testimony and exhibits provide the information necessary to satisfy the requirements of D.C. Code §34-1313.08(c)(6)(A).

**T. D.C. Code §34-1313.08(c)(6)(B)**

D.C. Code §34-1313.08(c)(6)(B) requires that the aforementioned exhibit in D.C. Code §34-1313.08(c)(6)(A) include the proposed accounting treatment for the costs to be recovered through these charges. It also requires that no costs recovered through the Underground Project Charge be included in rate base or otherwise be incorporated in base tariff rates unless or until Pepco requests that these costs be transferred into rate base and discontinues recovery through the Underground Project Charge. The section of the Second Biennial Plan entitled “Cost Recovery” provides this information, as supported by the testimony and exhibits of Company Witness Blazunas. The Joint Application, Second Biennial Plan, and the accompanying testimony and exhibits provide the information necessary to satisfy the requirements of D.C. Code §34-1313.08(c)(6)(B).

**U. D.C. Code §34-1313.08(c)(7)**

D.C. Code §34-1313.08(c)(7) requires that the Second Biennial Plan include any other information that DDOT or Pepco considers material to the Commission’s consideration of the Joint

Application. The DC PLUG Education Plan (“Education Plan”) and accompanying budget in Appendix N are material parts of the Second Biennial Plan. The Education Plan and accompanying budget are discussed in the “DC PLUG Education Plan” section of the Second Biennial Plan. Company Witness Kozey testifies about the importance of the Education Plan to the DC PLUG initiative, including the origin of the Education Plan, the Commission’s approval of the Education Plan in the First Triennial Plan as well as the First Biennial Plan, the general strategy underlying the Education Plan, the Education Plan budget, and the reasonableness of the Education Plan. The Joint Application, Second Biennial Plan, and the accompanying testimony and exhibit provide the information necessary to satisfy the requirements of D.C. Code §34-1313.08(c)(7).

**V. D.C. Code §34-1313.08(c)(8)**

D.C. Code §34-1313.08(c)(8) requires that the Second Biennial Plan include identification and contact information of one or more individuals who may be contacted by the Commission with formal or informal requests for clarification of any material set forth in the Joint Application and Second Biennial Plan or requests for additional information. Part II (Identification and Contact Information) of the Applications provides the required identification and contact information to satisfy the requirements of D.C. Code §34-1313.08(c)(8).

**W. D.C. Code §34-1313.08(c)(9)**

D.C. Code §34-1313.08(c)(9) requires that the Joint Application and Second Biennial Plan include a proposed form of notice of the application for Commission publication. The required form of notice is attached to Pepco’s transmittal letter, satisfying the requirements of D.C. Code §34-1313.08(c)(9).

**X. D.C. Code §34-1313.08(c)(10)**

D.C. Code §34-1313.08(c)(10) requires that the Second Biennial Plan include

[a] protocol to be followed by the electric company and DDOT to provide notice and to coordinate engineering, design, and construction work performed pursuant

to this act with the gas company, water utility, and other utilities that own or plan to construct, as approved by the Commission where applicable, facilities that may be affected by DDOT Underground Electric Company Infrastructure Improvement Activity or Electric Company Infrastructure Improvement Activity.

The “Utility Coordination” section of the Second Biennial Plan describes the coordination measures to be pursued and Appendix O presents the utility coordination protocol, as supported by the testimony of DDOT Witness Williams. The Joint Application, Second Biennial Plan, and the accompanying testimony provide the information necessary to satisfy the requirements of D.C. Code §34-1313.08(c)(10).

## **VI.**

### **Requested Commission Findings Regarding the Joint Application**

Based on the data and information provided in this Joint Application (including the Second Biennial Plan and the accompanying testimony and exhibits) and the Financing Order Application, DDOT and Pepco respectfully request that the Commission make the following findings, as contemplated by D.C. Code §34-1313.10(b).

#### **A. D.C. Code §34-1313.10(b)(1)**

The Joint Application satisfies the applicable requirements of D.C. Code §34-1313.08, as detailed above.

#### **B. D.C. Code §34-1313.10(b)(2)**

The proposed Electric Company Underground Infrastructure Improvements are appropriately designed and located, based on the Commission’s review of this Joint Application (including the Second Biennial Plan and the accompanying testimony and exhibits).

#### **C. D.C. Code §34-1313.10(b)(3)**

The intended reliability improvements will accrue to the benefit of Pepco’s customers. That is so because, among other reasons, Pepco’s customers are currently impacted by severe

weather events, and because undergrounding the feeders selected in the Second Biennial Plan is expected to reduce the duration and frequencies of outages from severe weather events.

**D. D.C. Code §34-1313.10(b)(4)**

The projected costs associated with the proposed Electric Company Underground Infrastructure Improvement Activity are prudent, based on the Commission's review of the cost and other information provided in the Joint Application (including the Second Biennial Plan and the accompanying testimony and exhibits). Moreover, in selecting the feeders to be placed underground, the Second Biennial Plan used criteria that result in the greatest reduction in duration and frequency of outages once the feeders are placed underground as well as the greatest reduction in the minutes of interruption for every dollar spent to place those feeders underground (taking into account other relevant considerations).

**E. D.C. Code §34-1313.10(b)(5)**

The projected DDOT Underground Electric Company Infrastructure Improvement Costs to be funded by DDOT Charges are prudent, based on the Commission's review of the cost and other information provided in the Joint Application (including the Second Biennial Plan and the accompanying testimony and exhibits). As noted above, in selecting the feeders to be placed underground, the Second Biennial Plan used criteria that result in the greatest reduction in duration and frequency of outages once the feeders are placed underground as well as the greatest reduction in the minutes of interruption for every dollar spent to place those feeders underground (taking into account other relevant considerations).

**F. D.C. Code §34-1313.10(b)(6)**

Pepco's proposed Underground Project Charges are just and reasonable, based on the Commission's review of the customer charge and other information provided in the Joint Application (including the Second Biennial Plan and the accompanying testimony and exhibits).

The Underground Project Charges appropriately allow Pepco to recoup its prudently incurred costs, and their amount is reasonable and consistent with the Undergrounding Act.

**G. D.C. Code §34-1313.10(b)(7)**

The grant of the authorizations and approvals sought by DDOT and Pepco in the Joint Application are otherwise in the public interest. The District of Columbia is expected to experience increasing effects from severe weather events, including those due to climate change—as was found in the Task Force’s Final Report,<sup>17</sup> by the D.C. Council in enacting the Undergrounding Act,<sup>18</sup> and by the Commission in Order No. 19167.<sup>19</sup> Severe weather events that heavily impacted the District of Columbia between 2010 and 2018 include the February 2010 winter storm, the June 2012 Derecho, the January 2016 blizzard, and the March 2018 Winter Storm Riley. Meanwhile, Pepco customers, D.C. residents, and the D.C. Council have for years expressed concerns regarding system reliability and resilience.<sup>20</sup> The electric system modernization required to address these concerns will demand an unprecedented investment in the electric distribution infrastructure in the District of Columbia.<sup>21</sup>

The Joint Application represents a reasonable, cost-effective, and prudent next step in addressing those challenges, and one that is consistent with the Undergrounding Act. In particular, the Joint Application ensures that the investment in the District of Columbia’s electric distribution infrastructure will be reasonable, cost-effective, and prudent—by using selection criteria that result in the greatest reduction in duration and frequency of outages once the feeders are placed underground as well as the greatest reduction in the minutes of interruption for every dollar spent to place those feeders underground, taking into account other relevant considerations (such as

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<sup>17</sup> Final Report at 53.

<sup>18</sup> D.C. Code § 34-1311.02(1)-(2).

<sup>19</sup> Order No. 19167 ¶¶ 241-42..

<sup>20</sup> Order No. 19167 ¶ 241.

<sup>21</sup> D.C. Code § 34-1311.02(5); Order No. 19167 ¶ 241.

limiting the number of concurrent projects in a Ward at any one time, and maximizing the number of customers in each Ward who will realize the benefits associated with the Second Biennial Plan). The improvements contemplated by the Joint Application, when completed, will substantially benefit Pepco's customers and the District of Columbia as a whole. The Commission should therefore find that the grant of the authorizations and approvals sought by DDOT and Pepco in the Joint Application are in the public interest.

## **VII.**

### **Requested Commission Authorizations and Approvals in Accordance with the Undergrounding Act**

Based on the data and information provided in this Joint Application (including the Second Biennial Plan and the accompanying testimony and exhibits), DDOT and Pepco respectfully request that the Commission grant the following authorizations and approvals, as contemplated by D.C. Code §34-1313.10(c).

#### **A. D.C. Code §34-1313.10(c)(1)**

Authorization for Pepco to impose on and collect from its distribution service customers in the District of Columbia the Underground Project Charges in accordance with the distribution service customer class cost allocations approved in Formal Case No. 1150, provided that no such charge shall be assessed against customers served under Pepco's Residential Aid Discount ("RAD") program.

#### **B. D.C. Code §34-1313.10(c)(2)**

Authorization for Pepco to bill the Underground Project Charges to customers as a volumetric surcharge, provided that no such surcharge shall be assessed against customers served under Pepco's RAD program.

**C. D.C. Code §34-1313.10(c)(3)**

Approval of the annual revenue requirement, which shall include the rate of return on equity approved by the Commission in Formal Case No. 1150.

**D. D.C. Code §34-1313.10(c)(4)**

D.C. Code §34-1313.10(c)(4) requires that the Commission provide a description of the frequency of project construction update reports for the DDOT Underground Electric Company Infrastructure Improvements funded by DDOT Charges and the Electric Company Infrastructure Improvements in the Second Biennial Plan and approved by the Commission. The Joint Applicants propose that the Commission continue the requirement to file annual update reports no later than September 30 of each year in the years in which a biennial plan is not filed. The update report should be made concurrently with the status report required pursuant to D.C. Code §34-1313.07(b). In addition, pursuant to the 2014 Stipulation, DDOT and Pepco will continue to hold the semi-annual meetings and will continue to file the thirty-day reports on those meetings.

**VIII.**

**Financing Order Application Compliance with the Undergrounding Act**

D.C. Code §34-1313.02 specifies the contents to be included in the Financing Order Application and the requirements that Pepco must meet in that application. The Financing Order Application, the Second Biennial Plan, and the accompanying testimony and exhibits provide the information necessary for the Commission to approve the Financing Order Application, thereby allowing the District to impose the DDOT Charge on Pepco and Pepco to begin collecting based on the Underground Rider. The Commission should find that the Financing Order Application satisfies the applicable requirements of D.C. Code §34-1313.02.

**A. D.C. Code §34-1313.02(b)(1)**

D.C. Code §34-1313.02(b)(1) requires that Pepco file a Financing Order Application concurrently with each joint application and biennial plan. Pursuant to D.C. Code §34-1313.02(a), Pepco has filed the Financing Order Application as part of the Joint Application and Second Biennial Plan. The Financing Order Application is supported in the “Cost Recovery” section of the Second Biennial Plan and by the testimonies and exhibits of Company Witnesses McGowan and Blazunas and DDOT Witness Williams.

**B. D.C. Code §34-1313.02(b)(2)(A)**

D.C. Code §34-1313.02(b)(2)(A) requires that Pepco include in the Financing Order Application the DDOT Charges for the next two-year period. The DDOT Charges for the next two-year period are found in the testimonies and exhibits of Company Witnesses Blazunas and McGowan and DDOT Witness Williams. Appendices J, L, and M and the “Cost Recovery” section of the Second Biennial Plan provide additional support. The Financing Order Application, the Second Biennial Plan, and the accompanying testimonies and exhibits provide the information necessary to satisfy the requirements of D.C. Code §34-1313.02(b)(2)(A).

**C. D.C. Code §34-1313.02(b)(2)(B)**

D.C. Code §34-1313.02(b)(2)(B) requires that Pepco include in the Financing Order Application a calculation of the Underground Rider by distribution service customer class estimated to be sufficient to generate an amount equal to the DDOT Charges for the next two-year period. Appendix J to the Second Biennial Plan contains the revenue requirement and the rate design of the Underground Rider, as further discussed in the “Cost Recovery” section of the Second Biennial Plan and the testimony and exhibits of Company Witness Blazunas. Appendix M to the Second Biennial Plan contains the Underground Rider, as further discussed in the “Cost Recovery” section of the Second Biennial Plan and the testimony and exhibits of Company

Witness Blazunas. Appendix L to the Second Biennial Plan contains the customer bill impact of the Underground Rider. The Financing Order Application, the Second Biennial Plan, and the accompanying testimony and exhibits provide the information necessary to satisfy the requirements of D.C. Code §34-1313.02(b)(2)(B).

**D. D.C. Code §34-1313.02(b)(2)(C)**

D.C. Code §34-1313.02(b)(2)(C) requires that Pepco include in the Financing Order Application a proposed form of notice of the application suitable for publication by the Commission, which may be combined with the notice of the Joint Application and Second Biennial Plan. The required form of notice is attached to the transmittal letter, satisfying the requirements of D.C. Code §34-1313.02(b)(2)(c).

**IX.**

**Required Provisions for the Issuance of a Financing Order**

The Undergrounding Act requires that the Commission must include certain provisions in any financing order. D.C. Code §34-1313.01 states that all financing orders, among other provisions, shall:

1. “Describe the DDOT Underground Electric Infrastructure Improvement Activities to be paid through the DDOT Charge for the next 2-year period.” (D.C. Code §34-1313.01(a)(1)). Information addressing this can be found in the testimonies of Company Witness Smith and DDOT Witness Williams, the Second Biennial Plan and Appendices B, C, G, and H.
2. “Assess the DDOT Charge on Pepco for the next 2-year period sufficient to fully satisfy the DDOT Underground Electric Company Infrastructure Annual Revenue Requirement to enable the DDOT Underground Electric Company Infrastructure Improvement Activity to be undertaken in the next 2-year period plus an amount necessary to recover any DDOT Underground Electric Company Infrastructure Improvement Costs incurred by DDOT but not reimbursed through prior collections of the DDOT Charge; provided, that the DDOT Charges approved by the Commission under the Undergrounding Act cannot exceed \$187.5 million in the aggregate; provided further, that any amounts collected with respect to the DDOT Charge and not expended for DDOT Underground Electric Company Infrastructure Improvement Costs as contemplated by the Undergrounding Act will

be refunded to Pepco and thereafter credited to customers as the Commission may direct.” (D.C. Code §34-1313.01(a)(2)(A)). Information regarding this can be found in the testimonies and exhibits of Company Witnesses Blazunas and Smith and DDOT Witness Williams, the Second Biennial Plan and Appendices C and H.

3. Direct Pepco to remit by the 10<sup>th</sup> day of each month during the applicable two-year period a payment equal to 1/24 of the DDOT Charges approved for the applicable two-year period pursuant to the financing order to the DDOT Underground Electric Company Infrastructure Improvement Fund established pursuant to D.C. Code §34-1313.03a. (D.C. Code §34-1313.01(a)(2)(B)). Information regarding this can be found in the testimonies and exhibits of Company Witnesses Blazunas and McGowan and DDOT Witness Williams, and the Second Biennial Plan.
4. “Assess the Underground Rider for the next 2-year period among [Pepco’s] distribution service customer classes in accordance with the distribution service customer class cost allocations approved by the Commission for [Pepco] and in effect pursuant to [Pepco’s] most recently decided base rate case [(i.e., Formal Case No. 1150)] in an amount sufficient for [Pepco] to recover the DDOT [Charge]; provided, that no such charges shall be assessed against [Pepco’s RAD] customer class or any succeeding customer class approved by the Commission for the purpose of providing economic relief to a specified low-income customer class; provided further, that the Underground Rider shall be billed to customers by [Pepco] on a volumetric basis.” (D.C. Code §34-1313.01(a)(3)). Information concerning this can be found in the testimonies and exhibits of Company Witnesses Blazunas and McGowan, the Second Biennial Plan and Appendices J, L, and M.
5. “Describe the true-up mechanism as provided in § 34-1313.14 to reconcile actual collections of the Underground Rider with the forecasted collection on at least an annual basis to ensure that the collections of the Underground Rider are adequate for [Pepco] to recover an amount equal to the aggregate amount of the DDOT Electric Company Infrastructure Improvement Charges.” (D.C. Code §34-1313.01(a)(4)). Information regarding the true-up mechanism can be found in the testimonies and exhibits of Company Witnesses Blazunas and McGowan and the Second Biennial Plan.
6. “Prescribe the filing of billing and collection reports relating to the DDOT Underground Electric Company Infrastructure Charges and the Underground Rider.” (D.C. Code §34-1313.01(a)(5)).

## **X.**

### **Requested Findings for the Issuance of a Financing Order**

The Commission should find that the Financing Order Application satisfies the applicable requirements of D.C. Code §34-1313.02. In addition, the Commission should find the following, in accordance with D.C. Code §34-1313.03(c).

1. The projected DDOT Underground Electric Company Infrastructure Improvement Costs to be funded by the DDOT Charges are prudent; and
2. The \$60 million DDOT Charge for the Second Biennial Plan is reasonable, and the Underground Rider reasonably can be expected to generate sufficient revenues to permit Pepco to recover the DDOT Charges.

The information required for finding (1) above can be found in the testimonies of Company Witness Smith and DDOT Witness Williams, the Second Biennial Plan and Appendix H. The information required for finding (2) above can be found in the testimonies of Company Witness Blazunas and DDOT Witness Williams, the Second Biennial Plan and Appendices J, L, and M. Together this information satisfies the requirements of D.C. Code §34-1313.03(c).

## **XI.**

### **Conclusion**

WHEREFORE, DDOT and Pepco respectfully request that the Commission: 1) approve the Joint Application and Second Biennial Plan; 2) issue the Financing Order; 3) permit Pepco and DDOT to commence the Electric Company Infrastructure Improvements and DDOT Underground Electric Company Infrastructure Improvements necessary to complete the underground placement of the feeders identified in the Second Biennial Plan; 4) authorize the Underground Project Charge, the DDOT Charge, and Underground Rider; 5) make the findings and grant the authorizations and approvals requested in the Joint Application and the Financing Order Application; and 6) make such other findings as the Commission may determine to be necessary to approve the Joint Application and the Financing Order Application.

Respectfully submitted,

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# **Second Biennial Underground Infrastructure Improvement Projects Plan**

Pursuant to the Undergrounding Act

District of Columbia Department of Transportation

And

Potomac Electric Power Company

September 30, 2019

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# INTRODUCTION

## Background

On August 16, 2012, Mayor Vincent Gray established the Mayor’s Power Line Undergrounding Task Force (“Task Force”).<sup>1</sup> The purpose of the Task Force was to pool the collective resources available in the District of Columbia to analyze the technical feasibility, infrastructure options and reliability implications of placing new or existing overhead electric distribution facilities underground in the District of Columbia.<sup>2</sup> These resources included a legislative body, regulators, utility personnel, community representatives, experts and other parties who could contribute in a meaningful way to the Task Force.<sup>3</sup> The Task Force also analyzed the financing, legislative and regulatory actions associated with placing power lines underground.<sup>4</sup> The Task Force published its Findings and Recommendations Final Report in October 2013.<sup>5</sup> The Final Report found that significant improvements to the District of Columbia’s aging electric n system to reduce extended power outages caused primarily by storms would require significant new investment.<sup>6</sup>

On March 7, 2014, the Council of the District of Columbia (“DC Council”) passed the Electric Company Infrastructure Improvement Financing Act of 2014 (the “Original

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<sup>1</sup> Mayor’s Order No. 2012-130, 59 D.C. Register 10544 (Aug. 27, 2012).

<sup>2</sup> Government of the District of Columbia, Executive Office of the Mayor. Mayor’s Power Line Undergrounding Task Force Findings and Recommendations: Final Report, at 6 (Oct. 2013) (“Final Report”).

<sup>3</sup> Final Report at 8.

<sup>4</sup> Final Report at 8.

<sup>5</sup> Final Report at 1.

<sup>6</sup> Final Report at 73.

Act”),<sup>7</sup> which became effective on May 3, 2014. The Original Act required the District Department of Transportation (“DDOT”) and the Potomac Electric Power Company (“Pepco”) to jointly file with the Public Service Commission of the District of Columbia (“Commission”) and concurrently serve upon the Office of the People’s Council for the District of Columbia (“OPC”) an application for approval of their First Triennial Underground Infrastructure Improvement Projects Plan (“First Triennial Plan”).<sup>8</sup>

Through a collaborative effort and in response to the requirements established in the Original Act, DDOT and Pepco jointly submitted the First Triennial Plan to the Commission on June 17, 2014. On November 12, 2014, the Commission, pursuant to the Original Act, approved the First Triennial Plan in Order No. 17697, as clarified in Order No. 17770. Pepco also filed with the Commission, pursuant to the Original Act, an application for issuance of a financing order on August 1, 2014, which the Commission approved on November 24, 2014 (“Financing Order”). As a result of several legal challenges to the First Triennial Plan as well as the structure of the Original Act, the DC PLUG initiative was delayed.

On May 19, 2017, Mayor Muriel Bowser signed (and thereby made effective) the Electric Company Infrastructure Improvement Financing Amendment Act, which amended the Original Act (as amended, the “Undergrounding Act”).<sup>9</sup> The Undergrounding Act directs DDOT and Pepco to bury certain overhead power lines in order to improve the resilience of the electric distribution system in the District of Columbia. D.C. Code §34-

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<sup>7</sup> D.C. Law 20-102.

<sup>8</sup> Original Act, § 308(a).

<sup>9</sup> The Original Act and all subsequent amendments, including the Amended Act, constitute the “Undergrounding Act.” The Undergrounding Act has been codified as Chapter 13A of Title 34 of the D.C. Code.

1313.07(a) required DDOT and Pepco to file a joint application for approval by the Commission of the first biennial Underground Infrastructure Improvements Projects Plan (“First Biennial Plan”) within 45 days of the effective date of the Undergrounding Act. D.C. Code §34-1313.02(b)(1) required Pepco to file an application for a financing order (“First Financing Order Application”) concurrently with the First Biennial Plan. D.C. Code §34-1313.02(a) provided that the First Biennial Plan and the First Financing Order Application could be filed in a single application.

On June 15, 2017, in Order No. 18801, the Commission opened a proceeding ("Formal Case No. 1145"), among other things, to consider approval of the First Biennial Plan and the First Financing Order Application. The Joint Applicants filed an application for the approvals of the First Biennial Plan and the First Financing Order Application (“the Joint Application”) on July 3, 2017, which was approved by the Commission on November 9, 2017.

Pursuant to D.C. Code §34-34-1313.07(a), the Joint Applicants file the Second Biennial Plan for Commission review and approval.

## **Purpose**

The Second Biennial Plan identifies the DDOT Underground Electric Company Infrastructure Improvement Activity<sup>10</sup> and the Electric Company Infrastructure Improvement Activity<sup>11</sup> to be undertaken in the years following its approval and to describe

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<sup>10</sup> D.C. Code §34-1311.01(11).

<sup>11</sup> D.C. Code §34-1311.01(20).

the collection and rate impacts of the Underground Project Charge.<sup>12</sup> The elements of the Second Financing Order Application describe the structure of the DDOT Underground Electric Company Infrastructure Improvement Charge (“DDOT Charge”)<sup>13</sup> and the recovery under and rate impacts of the Underground Rider.<sup>14</sup>

## **FEEDER SELECTION**

The method by which DDOT and Pepco selected feeders to be placed underground in this Second Biennial Plan generally reflects the same methodology the was used to select feeders in the First Biennial Plan, which the Commission found complied with the Undergrounding Act in Order No. 19167 in Formal Case No. 1145. The criteria to select feeders include, but are not limited to, reliability performance indices such as the System Average Interruption Frequency Index (“SAIFI”), System Average Interruption Duration Index (“SAIDI”), and Customer Minutes of Interruption per dollar cost to place feeders underground (“CMI/\$”).<sup>15</sup> The difference between the feeder selection methodology described in the Second Biennial Plan and the one used to select the First Biennial Plan feeders is that, pursuant to D.C. Code §34-1313.08(a)(2), the selection in the Second Biennial Plan relied on nine years of data (2010-2018) rather than seven years of data (2010-2016).

In selecting the feeders, DDOT and Pepco followed a five-step process:

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<sup>12</sup> D.C. Code §34-1311.01(42).

<sup>13</sup> D.C. Code §34-1311.01(13).

<sup>14</sup> D.C. Code §34-1311.01(42A).

<sup>15</sup> D.C. Code §1313.08(a)(2).

1. Rank power lines (feeders) by historical reliability and customer minutes of interruptions reduced per dollar spent (SAIFI, SAIDI, CMI/\$);
2. Identify the highest-ranked feeders in each of the five Wards (Wards 3, 4, 5, 7 and 8) of the District of Columbia characterized by a large concentration of overhead power lines and susceptibility to overhead outages;
3. Analyze ongoing reliability work as well as current and planned system work;
4. Identify opportunities to take advantage of existing or planned DDOT roadway reconstruction projects; and
5. Finalize the feeder selection for inclusion in the Second Biennial Plan.

## **Feeder Ranking**

The Primary Selection Criteria for selecting the feeders in the Second Biennial Plan include three metrics for each feeder—SAIDI, SAIFI and CMI/\$. These Primary Selection Criteria facilitate the selection of feeders that result in the greatest reduction in duration and frequency of outages once the feeders are placed underground as well as the greatest reduction in the minutes of interruption for every dollar spent to place those feeders underground.<sup>16</sup>

DDOT and Pepco began the feeder selection process by ranking each of Pepco's overhead (and combined overhead/underground) feeders according to SAIFI, SAIDI and CMI/\$. The feeder ranking presented in Appendix A is based on reliability performance

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<sup>16</sup> Final Report at 61.

data from January 1, 2010 through December 31, 2018, as required by D.C. Code §34-1313.08(a)(2) and includes Major Service Outages (“MSOs”).<sup>17</sup> The inclusion of MSOs in the outage data upon which the feeder ranking model is based ensures that the resulting feeder ranking accurately reflects the impact of severe weather on the electric distribution system in the District of Columbia and allows DDOT and Pepco to identify the most appropriate feeders to place underground to fulfill the purpose of the DC PLUG initiative—to make the electric distribution system more resilient during severe weather events. Severe weather events that heavily impacted the District of Columbia between 2010 and 2018 include the February 2010 winter storm, the June 2012 Derecho, the January 2016 blizzard, and the March 2018 Winter Storm Riley.

## **Feeder Prioritization**

DDOT and Pepco also used Secondary Evaluation Criteria to further optimize the selection, prioritization and sequence of feeders to be placed underground. The Secondary Evaluation Criteria include value of service, coordination with other District projects, community impact and customer impact. Each of the Secondary Evaluation Criterion allows the most reliability benefits to be gained from placing the selected feeders underground. First, value of service represents the economic benefits of reduced outages to customers. DDOT and Pepco will consider value of service as they sequence the feeders for construction and will be reflected in the 90-day supplemental filing, as directed by D.C. Code §34-1313.08(b). Second, coordination with other District projects (*e.g.*, major road

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<sup>17</sup> 15 D.C.M.R. § 3699.1.

reconstruction work) allows Pepco to reduce paving costs and achieve efficiencies of scale. Third, the community impact of this magnitude of construction work can be significant. By limiting the number of concurrent projects in a Ward at any one time, DDOT and Pepco can minimize that impact. Finally, the evaluation of customers supplied by each feeder allows DDOT and Pepco to consider special needs of customers as they schedule feeders to be placed underground.

In addition to the Primary Selection Criteria and Secondary Evaluation Criteria described above, DDOT and Pepco included other considerations in the selection process. As with the First Biennial Plan approved in Formal Case No. 1145, these additional considerations include the consideration of reliability enhancement programs already being performed,<sup>18</sup> coordination with future economic and infrastructure developments in the feeder area, coordination with other utilities' and local governments' infrastructure projects, the number of customers served by each feeder, and the overall schedule.

The following steps describe the process by which DDOT and Pepco selected the feeders to be placed underground in this Second Biennial Plan.

**Step 1:** To begin the feeder selection process, DDOT and Pepco ranked each overhead and combined overhead/underground feeder in the District of Columbia using its Feeder Ranking Model. The reliability performance data used in the Feeder Ranking Model covered the nine-year period from January 1, 2010 through December 31, 2018, in accordance with the D.C. Code §34-1313.08(a)(2). No outage data were

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<sup>18</sup> For an example of Pepco's consideration of reliability projects already in-progress, see the "Interties, Future Load and Feeder Conversions" section of the Second Biennial Plan.

excluded from the data set. The result of the Feeder Ranking Model run is a ranking of feeders where the least resilient or least reliable feeder (according to the criteria) is ranked first. That ranking is included as Appendix A.

**Step 2:** DDOT and Pepco then identified the most equitable distribution of DC PLUG initiative improvements across the District of Columbia by selecting the two highest-ranked (*i.e.*, least resilient) feeders in each Ward to be placed underground. Wards 3, 4, 5, 7 and 8 represent the Wards where the impact of severe weather on the overhead portion of the electric distribution system is felt most commonly. By dispersing construction work over five Wards, DDOT and Pepco will minimize disruptions to communities around the work sites. Additionally, by spreading out work among five Wards, DDOT and Pepco maximize the number of customers in each Ward who will realize the benefits associated with the Second Biennial Plan of the DC PLUG initiative.

**Step 3:** DDOT and Pepco analyzed ongoing reliability work as well as current and planned system work on the most highly-ranked feeders in each Ward. As a result, in some Wards, the feeders selected to be placed underground may not have ranked as the two highest-ranked feeders in that Ward. Below, for each Ward, is a description of the process by which DDOT and Pepco identified the two feeders in each Ward that were selected for placement underground in the Second Biennial Plan.

**Ward 3 – Feeder 14767 & Feeder 467**

Rank	Ward	Feeder	VoS	Customers	CMI/\$
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4	3	308	\$117,845	595	0.045
6	3	14767	\$368,021	1,044	0.020
15	3	15801	\$230,810	2,688	0.024
16	3	144	\$21,304	276	0.019
17	3	467	\$50,897	431	0.047

Feeders selected:

- Feeder 14767 was selected because it is ranked the second least resilient feeder in Ward 3 after Feeder 308, which was previously selected in the First Biennial Plan.
- Feeder 467 was selected because it has a higher customer count than Feeder 144 which is rank one placed higher. Feeder 467 is also located in area that is not near Feeder 308 or Feeder 14767.

Feeders not selected:

- Feeder 308 was not selected because it was previously selected in the First Biennial Plan.
- Feeder 15801 was not selected due to its proximity to Feeder 14767. It is also part of an ASR scheme and most of the outages experienced were before the scheme was implemented.
- Feeder 144 was not selected due to the feeder's customer count being smaller than that of Feeder 467. In addition, the majority of the Feeder 144's primary mainline is underground.

#### **Ward 4 – Feeder 15021 and Feeder 15001**

Ranking	Ward	Feeder	VOS	Customers	CMI/\$
2	4	14890	\$145,124	1755	.237
9	4	14900	\$139,534	1371	.019
10	4	15009	\$387,555	1406	.023
11	4	15021	\$121,574	2212	0.03
26	4	15001	\$543,362	1341	0.02

Feeders selected:

- 15021 and 15001 are the next least resilient feeders in Ward 4 after Feeder 14890, for which the majority of the customers normally served are currently being served by Feeder 15944 due to the ongoing work at the Harrison Substation.

Feeders not selected:

- Feeder 14890 ranks as the least resilient feeder in Ward 4. However, the majority of the customers normally served by Feeder 14890 are currently being served by Feeder 15944 due to the ongoing work at the Harrison Substation. Customers normally served by Feeder 14890 (but currently served by 15944) are planned to be moved back to Feeder 14890 in the fourth quarter of 2019. For these reasons, Pepco intends to reexamine Feeder 14890 as it considers candidate feeders for the Third Biennial Plan. At that time, Pepco expects Feeder 14890 will be returned to its normal configuration allowing for a more accurate assessment of the ranking of the feeder. Should Feeder 14890 be recommended for placement underground as part of the Third Biennial Plan, DDOT and Pepco would recommend that it be placed underground in its normal configuration, rather than its current temporary configuration.
- 14900 was already selected as part of the First Biennial Plan.
- 15009 was already selected as part of the First Biennial Plan .

#### **Ward 5 – Feeder 14008 and 14093**

<b>Ranking</b>	<b>Ward</b>	<b>Feeder</b>	<b>VOS</b>	<b>Customers</b>	<b>CMI/\$</b>
3	5	14008	\$738,703	1055	0.039
12	5	14014	\$286,630	1872	.022
14	5	14007	\$290,305	1624	.027
20	5	14093	\$368,013	1346	0.021

Feeders selected:

- 14008 is the least resilient feeder in Ward 5 and has been selected for the Second Biennial Plan.
- 14093 is the next least resilient feeder in Ward 5 and has been selected for the Second Biennial Plan

Feeders not selected:

- 14014 is currently part of the Irving Area Reliability Plan Pepco will reevaluate these Feeders reliability improvements resulting from the Irving Area Reliability Plan before considering it for placement underground as part of the DC PLUG initiative.
- 14007 was previously selected under the First Biennial Plan.

**Ward 7 – Feeder 118 and 14702**

Ranking	Ward	Feeder	VOS	Customers	CMI/\$
1	7	15707	\$2,088,159	3,101	.095
5	7	15705	\$1,542,614	2151	.037
7	7	118	\$276,788	528	0.022
19	7	14702	\$494,294	1096	0.017

Feeders selected:

- Feeder 118 and 14702 are the next least resilient feeders in Ward 7 after Feeders 15705 and 15707, which are currently part of the Benning Area Reliability Plan.

Feeders not selected:

- Feeders 15707 and 15705 are part of Benning Area Reliability Plan and were not selected because the Benning Area Reliability Plan improvement construction was recently completed on them. Pepco will re-evaluate these feeders' reliability improvements resulting from the Benning Area Reliability Plan before considering, them for placement underground as part of the DC PLUG initiative.

### **Ward 8 – Feeder 15166 & Feeder 15171**

<b>Rank</b>	<b>Ward</b>	<b>Feeder</b>	<b>VoS</b>	<b>Customers</b>	<b>CMI/\$</b>
8	8	14758	\$238,663	2,165	0.033
13	8	15166	\$736,573	2,277	0.031
40	8	165	\$99,762	418	0.023
43	8	15172	\$96,580	1,529	0.016
46	8	15171	\$145,703	1,711	0.028

Feeders selected:

- Feeder 15166 was selected because it is ranked the second least resilient feeder in Ward 8 after Feeder 14758, which was previously selected in the First Biennial Plan.
- Feeder 15171 was selected because it is the fifth least resilient feeder and the fourth ranked least resilient feeder (15172) offers few opportunities for placing sections of the feeder underground.

Feeders not selected:

- Feeder 14758 was previously selected in the First Biennial Plan.
- Feeder 165 was not selected based on the feeder's customer count.
- Feeder 15172 was not selected because there were few opportunities for placing sections of the feeder underground available as compared to the next ranked feeder (15171).

**Step 4:** Identify “opportunity project” feeders. To comply with the Undergrounding Act’s directive to minimize total costs and maximize the opportunity for collaboration, DDOT and Pepco analyzed but were unable to identify any opportunities for the Second Biennial Plan.

**Step 5:** Finalize feeder selection for the Second Biennial Plan. The above methodology yields the following list of 10 feeders selected for placement underground as part of the Second Biennial Plan.

<b>Second Biennial Plan Feeders</b>					
<b>Ranking</b>	<b>Ward</b>	<b>Feeder</b>	<b>VOS</b>	<b>Customers</b>	<b>CMI/\$</b>
3	<b>5</b>	14008	\$738,703	1055	0.039
6	<b>3</b>	14767	\$368,021	1044	0.02
7	<b>7</b>	118	\$276,788	528	0.022
11	<b>4</b>	15021	\$121,574	2212	0.03
13	<b>8</b>	15166	\$736,573	2277	0.031
17	<b>3</b>	467	\$50,897	431	0.047
19	<b>7</b>	14702	\$494,294	1096	0.017
20	<b>5</b>	14093	\$368,013	1346	0.021
26	<b>4</b>	15001	\$543,362	1341	0.02
46	<b>8</b>	15171	\$145,703	1711	0.028

The Feeder Prioritization for the Second Biennial Plan is presented in Appendix B (Feeder Prioritization).

### **Feeder Descriptions**

D.C. Code §34-1313.08(a)(3) requires DDOT and Pepco to present, among other things, a description of each feeder recommended to be placed underground. Appendix C provides two-page summary sheets for each feeder selected to be placed underground during the Second Biennial Plan of the DC PLUG initiative. The summary sheets in Appendix C provide a description of the feeder, including feeder number, location (Ward and neighborhood), the proposed scope of work for that feeder that will be funded by the DDOT Charges and the Underground Project Charge (“UPC”) as well as other pertinent information. The Undergrounding Act also requires DDOT and Pepco to present:

1. A description of the feeder, including feeder number and location (street address, Ward and neighborhood).<sup>19</sup>

Please see Appendices C (Feeder Description Summary Sheets) and D (Feeder Locations and One-Line Drawings).

2. The overhead electrical cables, fuses, switches, transformers and ancillary equipment, including poles, to be relocated underground or removed.<sup>20</sup>

Please see Appendices E (Existing Overhead Electrical Schematics) and F (Preliminary Electrical Schematics).

3. The overhead primary and lateral feeders that are currently located parallel to the selected primary and lateral feeders that Pepco recommends to be placed underground.<sup>21</sup>

Please see Appendices D (Feeder Locations and One-Line Drawings) and F (Preliminary Electrical Schematics).

4. The above ground equipment that will not be relocated underground or removed.<sup>22</sup>

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<sup>19</sup> D.C. Code §34-1313.08(a)(3)(A).

<sup>20</sup> D.C. Code §34-1313.08(a)(3)(B).

<sup>21</sup> D.C. Code §34-1313.08(a)(3)(C).

<sup>22</sup> D.C. Code §34-1313.08(a)(3)(D).

Please see the section below entitled “Remaining Overhead Power Lines and Associated Equipment”.

5. The proposed Pepco and DDOT infrastructure improvements funded by DDOT Charges and the UPC.<sup>23</sup>

Please see Appendices C (Feeder Description Summary Sheets), F (Preliminary Electrical Schematics) and G (Preliminary Civil Schematics).

6. Distribution automation (DA) devices and segmentation capability.<sup>24</sup>

Please see the section below captioned “Incorporation of innovative Methods and Advanced Technology”.

7. The interties that will enable the feeder to receive power from multiple directions or sources.<sup>25</sup>

Please see Appendices B (Feeder Prioritization) and F (Preliminary Electrical Schematics). Please also see the “Interties, Future Load and Feeder Conversions” section below.

8. A description of the 10-year load projections.<sup>26</sup>

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<sup>23</sup> D.C. Code §34-1313.08(a)(3)(E).

<sup>24</sup> D.C. Code §34-1313.08(a)(3)(F).

<sup>25</sup> D.C. Code §34-1313.08(a)(3)(G).

<sup>26</sup> D.C. Code §34-1313.08(a)(3)(H).

Please see Appendix C (Feeder Description Summary Sheets). Please also see the “Interties, Future Load and Feeder Conversions” section below.

### **Remaining Overhead Power Lines and Associated Equipment**

After DDOT and Pepco place a selected feeder underground, the overhead secondary lines and associated ancillary equipment and poles will remain overhead. Generally, all overhead equipment associated with the primary lines, such as overhead fuses, switches, transformers and other ancillary equipment associated with the primary lines, will be removed and placed underground.

From the time that DDOT and Pepco file the Second Biennial Plan to the time that civil and electrical engineering designs are finalized, DDOT and Pepco will continue to look for opportunities to allow certain limited portions of DC PLUG initiative feeders to remain overhead without impacting the anticipated reliability and resilience gains associated with placing the feeder underground. For instance, if DDOT and Pepco identify a section of a selected feeder’s primary lateral line that has neither experienced nor is susceptible to overhead outages, the final engineering designs may call for that section of the feeder to remain overhead. This will allow DDOT and Pepco to apply the cost associated with placing that section of the feeder underground to a future DC PLUG initiative feeder.

In most cases, the poles will remain in place. DDOT and Pepco will remove poles if those poles have only primary feeder cable on them. If poles support other lines, such

as telecommunications lines or existing overhead secondary cables, DDOT and Pepco will leave them in place.

### **Interties, Future Load and Feeder Conversions**

Pepco prepared the Preliminary Electrical Schematics in Appendix F according to its standard methodology for designing the 4kV and 13kV electric distribution system. This methodology provides capacity for future load increases as well as limited additional conduit space for replacement of failed cables and additional feeder expansion. Pepco also has created its feeder designs to ensure that loops within the feeder are established and ties to other feeders are maintained so customer disruptions are minimized during planned and unplanned outages. These loops on the laterals of the feeders represent a significant improvement in resiliency compared to existing overhead laterals, where very limited looped or transfer capability exists.

As part of its commitment to enhance reliability, Pepco continues to convert its 4kV primary feeders to 13kV primary feeders. Pepco's 4kV to 13kV conversion program is intended to address increasing load demands, maintain reliability, replace aging equipment and infrastructure and provide for future demands so that they can be met even under adverse conditions.<sup>27</sup> As Pepco prioritized the feeders to be placed underground as part of the DC PLUG initiative, it considered other reliability enhancement programs already being performed in the District of Columbia. As a result, 4kV to 13kV conversion projects

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<sup>27</sup> For additional information on Pepco's conversion projects, please see the 2019 Consolidated Report, page 95.

and projects that involve placing those same (or associated) feeders underground may impact the selection of feeders to be placed underground as part of the DC PLUG initiative.

Feeders 118 and 467 are the only 4kV networked feeders selected for placement underground in the Second Biennial Plan. When these feeders are placed underground, DDOT and Pepco intend to use cable and associated equipment that is rated for 13kV, but the feeders will continue to operate at 4kV to allow them to remain part of their associated 4kV network once placed underground. By constructing these feeders to 13kV standards, Pepco will be able to convert them to 13kV in the future. The remainder of the feeders selected for placement underground as part of the Second Biennial Plan are existing 13kV feeders.

As part of future biennial plans, DDOT and Pepco may select 4kV radial feeders for placement underground that will be converted to 13kV as part of the DC PLUG initiative. As part of the conversion process, Pepco will transfer some or all of the load on those 4kV feeders to the 13kV feeder that will be placed underground. DDOT and Pepco will further describe the process in future biennial plans, in which such conversion will occur.

### **Incorporation of Innovative Methods and Advanced Technology**

The Undergrounding Act requires Pepco to report on new DA devices and segmentation capability to be obtained by placing the selected feeders and advanced technology underground to minimize cost.<sup>28</sup>

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<sup>28</sup> D.C. Code §34-1313.08(a)(3)(F).

In September 2014, Pepco initiated its Underground Technology Enhancement Program (“UTEP”) by releasing a request for proposals (“RFP”) for DA devices as well as configurations that comply with Pepco’s standards to be deployed on its 13kV underground distribution system. Pepco considered four responses to its RFP, which included proposals for DA equipment, including switches and interrupters at various stages of development and recommendations for communications protocols. Pepco then met with vendors to discuss their proposed devices and strategies for deploying DA on the underground distribution system and, in some cases, observed the operation of those devices in a test environment. After studying vendors’ RFP responses, meeting with vendors, observing tests and researching other companies’ practices, Pepco identified a configuration of DA devices for use on its underground system (including future DC PLUG initiative feeders) and moved forward with the installation of DA devices on existing underground feeders.

Pepco’s underground DA design includes installing one mid-line interrupter and one automated feeder tie switch to adjacent feeders on the main trunk of each feeder chosen for DA installation. The mid-line interrupter allows for automatic isolation of customers in the event of a fault past the location of the interrupter so that customers located between the substation and the interrupter will not experience an outage. In the event a fault occurs between the substation circuit breaker and the mid-line interrupter, the automated tie switch allows restoration of service to customers between the interrupter and the end of the circuit. In this case, the customers between the interrupter and the end of the circuit will only experience a momentary interruption while the switching operation is performed remotely.

Many of Pepco’s distribution substations have available fault currents that require devices rated for 40kA. The widely-used interrupting devices are typically rated at 25kA.

As a result, many of the responses to Pepco's UTEP RFP included devices that were either not rated for a 40kA fault current or were still under development. To address this issue, Pepco has used fault current analysis to identify the existing underground feeders (and locations thereon) on which it is safe to install interrupting devices that are rated at 25kA. In addition, Pepco continues to work with vendors to develop acceptable non-oil 40kA automated switches for tie points. Thus, under Pepco's underground DA design, switches will be installed in locations on existing underground feeders that are sufficiently far away from the substation to allow Pepco to use a 25kA-rated device. This serves to further control cost and allow Pepco to use products that are more readily available in the marketplace.

Pepco received two interrupters in November 2015 and two additional interrupters in January 2016. Pepco has installed devices on three existing 13kV underground feeders—Feeders 14722, 14786 and 15703. Installation of these devices required modifications to the manholes that will house them, including enlarging the size of the manholes. As of this Second Biennial Plan, Pepco Control Center Emergency Management System control on Feeder 14722 was completed in October 2018, and communications work, including relay and radio configuration on Feeders 14786 and 15703, is in progress.

Pepco plans to complete the required relay programming and coordination with its control center in preparation for the devices to be deployed. Once complete, Pepco will monitor and evaluate the performance of those devices on its system and further refine its procedures for the safe operation of underground DA devices.

DDOT and Pepco plan to include accommodations for DA in the final civil and electrical engineering designs for six of the feeders selected for placement underground in the Second Biennial Plan of the DC PLUG initiative: Feeders 15001, 15021, 14008, 14093, 14702 and 15166. Feeder 14767 has DA devices installed and is part an activated Automatic Sectionalizing and Reclosing (“ASR”) scheme. Feeders 15001, 15021, 14008, 14093, 14702 and 15166 each have DA devices installed on them and are each planned to be part of an ASR scheme. This configuration will enhance resiliency and reliability as well as improve Pepco’s ability to restore power during outages.

DDOT continues to examine the feasibility of using mobile lidar to create the required Computer-Automated Design (“CAD”) drawings of the streets and areas around the feeders that will be placed underground. Mobile lidar uses laser scanning equipment mounted on vehicles in combination with GPS and inertial measurement units to rapidly and safely capture large datasets necessary to create accurate digital representations of roadways and their surroundings. These virtual survey datasets can then be used in the planning, design, construction and maintenance of highways and other structures.<sup>29</sup> DDOT is also looking into using Building Information Modeling, which is an intelligent 3-D model-based process for planning, design, construction and management of inventory. These new technologies and processes may potentially expedite and enhance accuracy and reduce costs associated with the field survey activities that are a fundamental part of each project in the DC PLUG initiative.

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<sup>29</sup> “Guidelines for the Use of Mobile LIDAR in Transportation Applications,” Foreward, Transportation Research Board of the National Academies (2013).

## **Project Cost**

The Undergrounding Act outlines the general cost-sharing arrangement between DDOT and Pepco. DDOT/District and Pepco will each cover approximately 50% of the cost to place the overhead feeders underground as set forth in the Second Biennial Plan. DDOT primarily will perform the required civil engineering design and construction work, while Pepco primarily will perform the electrical engineering design and construction work. However, because of the nature of the work involved, the cost associated with the civil portion of the Second Biennial Plan will outweigh the cost associated with the electrical portion of the Second Biennial Plan. To achieve the 50/50 cost-sharing arrangement between DDOT and Pepco, Pepco will reimburse DDOT for the Civil Engineering/Program Management Services and other fees DDOT pays to their contractors. Additionally, Pepco will furnish the manhole and conduit material for each DC PLUG initiative project. DDOT and Pepco expect, based on their analysis of the estimated costs of the Second Biennial Plan, that when these civil costs are allocated to Pepco, the cost sharing becomes more balanced. The confidential version of Appendix H provides itemized feeder cost estimates in the Second Biennial Plan that reflect this re-allocation of costs between DDOT and Pepco. Upon agreement between DDOT and Pepco, Pepco may perform some civil engineering design or construction to ensure Pepco pays its share of the cost of placing the feeders underground.

The Undergrounding Act describes the Commission's ability to authorize Pepco to recover underground project costs up to \$250 million, which will be recovered from customers under the UPC through a surcharge on their bills. Additionally, the Undergrounding Act provides for DDOT Charges in the amount of \$187.5 million to

finance construction of underground facilities by DDOT. The \$187.5 million will also be recovered from customers through the Underground Rider. To supplement the \$187.5 million DDOT, as part of DDOT Capital Improvement funding, can provide up to \$62.5 million.<sup>30</sup> The up to \$62.5 million will not be recovered on Pepco customer bills.

DDOT is currently analyzing its planned resurfacing and reconstruction projects in the District of Columbia in an effort to identify opportunities for coordination with the DC PLUG initiative and potential cost savings. DDOT reconstruction work includes projects that are in DDOT's current Six Year Transportation Improvement Program. The scope of work on these projects typically includes full reconstruction of the road including, but not limited to, new sidewalks, curbs, gutters, full-depth roadway, inlets, landscape, utilities, street lights and traffic signals. DDOT resurfacing work includes projects that are in DDOT's Annual Paving Plans. The scope of this work typically includes milling and paving of the roadway surface only, with some minor roadway repair work. Any opportunity projects DDOT identifies will contribute to the \$62.5 million from the DDOT Capital Improvement funding.

DDOT is looking closely at the areas of the District of Columbia that are served by one or more of the top-ranked 20-30 feeders (according to Appendix A) to identify planned resurfacing or reconstruction projects that may coincide with projects to place those feeders underground. Appendix B describes the ten feeders selected to be placed underground in the Second Biennial Plan. In addition to these selected feeders, Pepco and DDOT may prioritize entire feeders or portions of other feeders to take advantage of these opportunities, where it is appropriate and cost-effective to do so. If so, DDOT and Pepco

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<sup>30</sup> Final Report at 10.

will include that information in future biennial plans as they are filed with the Commission as well as at the established semi-annual meetings and in annual reports on the Second Biennial Plan.

### **Obstacles to Timely Completion**

DDOT and Pepco have not identified any specific obstacles to the design and construction of the feeders selected for placement underground in the Second Biennial Plan. Throughout the DC PLUG initiative, DDOT and Pepco will continue to identify potential risk factors and mitigation techniques. At this stage, DDOT and Pepco recognize that risks commonly associated with this program are the same as the obstacles and risks associated with any large capital project DDOT and/or Pepco may undertake. Common sources of risk include adverse weather, availability of qualified contractor resources,<sup>31</sup> and the availability of materials. DDOT and Pepco intend to take all proper precautions to minimize risk and maintain safety. To the greatest extent possible, DDOT and Pepco will also address the concern of traffic disruptions by prioritizing and scheduling feeders to be placed underground in such a way that the work is spread out among the five Wards.

### **Alternate Funding Sources**

DDOT and Pepco are not aware of available alternate funding sources for the relocation of the overhead equipment and ancillary facilities at this time. Thus, there are no alternate funding sources described in the Second Biennial Plan.

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<sup>31</sup> For further information on the Joint Applicants efforts to engage District of Columbia businesses and residents, see the Workforce Engagement Report for 2018 filed in Formal Case No. 1145.

## **Project Cost Estimates Calculation**

Cost estimates to place each feeder underground use the following subcategories:

1. Cost Estimate for the proposed underground civil infrastructure (Estimated by DDOT)
2. Cost Estimate for the proposed underground electrical infrastructure (Estimated by PEPCO)
3. Cost Estimate for the removal of existing overhead infrastructure (Estimated by PEPCO)

DDOT developed the civil cost estimates included in the Second Biennial Plan in a manner consistent with standard DDOT practices for estimating the civil cost of a DDOT project in the development phase. Accordingly, DDOT used historical bid-based and cost-based methodologies as well as its engineering judgment and experience to develop the cost estimates. DDOT's cost estimates assume that the stage of design is at approximately 10-25%.

DDOT employed the historical bid-based methodology because it allowed DDOT to leverage its experience bidding the types of pay items and quantities that will be included in the DC PLUG initiative projects to calculate an accurate estimated cost. DDOT maintains a database of contractor's bid prices in its project cost estimating database called AASHTOWare. DDOT analyzed historical bid prices from previous years to calculate its cost estimates.

DDOT used the cost-based estimating methodology for specific items that can be calculated using RS Means Heavy Construction Cost Data ("RS Means"), which is also

used by DDOT contractors. RS Means uses the cost of materials and the cost of labor to determine total cost. RS Means also calculates how many crews will be required to perform the work, based on their estimated daily output. DDOT also used the cost-based estimating methodology to verify the accuracy of the civil cost estimates calculated using historical bid-based cost estimating.

Finally, DDOT employed its engineering judgment and experience in conjunction with the methods described above. This includes using sound judgment as well as guidelines, such as DDOT's Standards and Specifications for Highways and Structures.

Pepco's cost estimates are calculated using Pepco's Asset Suite 8 ("AS8") This is consistent with Pepco's standard method for estimating its cost for constructing new distribution facilities. The price of each unit consists of the following categories:

1. Labor – The labor cost is the activity-type pricing cost incurred by the craft, management and inspector assigned to oversee the work. This pricing method includes the actual labor cost as well as corporate overheads, vehicle and facility costs for each classification of employee that is assigned to the project.
2. Material – Material costs are based on the moving average price of the material. The material price depends on the monthly increase and/or decrease in the commodities market price. The purchase price includes the manufacturer's average base cost, inventory services, warehousing (if needed), and inbound freight costs.
3. Administrative and General ("A&G") – A&G Costs are the cost of management employees who support the construction activities indirectly and are limited to those employees who are involved in the capital process. A&G percentages are based on the planned activity of the cost center compared to the distribution capital

projects planned for the year. This is consistent with Pepco's standard capitalization policy and procedures.

4. Miscellaneous Costs (Stores) – Stores overhead rates are based on the cost required to operate the stores.

## **UTILITY COORDINATION**

DDOT and Pepco recognize the importance of coordinating work with other utilities. Additionally, D.C. Code §34-1313.08(c)(10) requires DDOT and Pepco to present the protocol for such coordination as part of this Second Biennial Plan. Appendix O contains that protocol and is consistent with the protocol the Commission approved as part of the First Biennial Plan.

DDOT and Pepco have jointly hosted, and will continue hosting, utility coordination meetings with the gas company, water utility and other utilities. The purpose of those meetings is to discuss the planned work associated with the DC PLUG initiative and, together with the attending utilities, to identify conflicts and workarounds as well as opportunities for collaboration or other involvement.

## **COST RECOVERY**

### **Underground Project Charge**

The Underground Project Charge is a volumetric surcharge that will be collected from all distribution customers, excluding RAD customers, to recover Pepco's portion of the DC PLUG initiative investments. D.C. Code §34-1311.01(42) defines the Underground Project Charge as an annually adjusted surcharge paid by all distribution service customers

of the electric company (except for customers served under the electric company's residential aid discount or a succeeding discount program) for its recovery of the Electric Company Infrastructure Improvement Costs, together with the electric company's rate of return as approved by the Commission. The Underground Project Charge will recover Pepco's \$250 million investment in the DC PLUG initiative in the same manner as approved in Order No. 17697, and as clarified by Order No. 17770, in Formal Case No. 1116, and Order No. 19167 in Formal Case No. 1145 and affirmed by the D.C. Court of Appeals.<sup>32</sup>

### **Accounting Treatment**

D.C. Code §34-1313.08(c)(6)(B) requires Pepco to present the proposed accounting treatment for the costs to be recovered through the Underground Project Charges. The accounting treatment for the DC PLUG initiative will follow traditional regulatory accounting for capital projects and development of revenue requirements.

### **O&M expenses included in the Underground Project Charge**

The Underground Project Charge includes recovery of the following O&M expenses:

- Costs associated with the Company's portion of the Customer Education Plan;
- Costs associated with the community outreach stations;

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<sup>32</sup> *Apt. and Office Bldg. Ass'n of Metro Washington v. Pub. Serv. Comm'n of D.C.*, 129 A.3d 925 (D.C. 2016); *Apartment & Office Bldg. Ass'n of Metro. Washington v. Pub. Serv. Comm'n of D.C.*, 203 A.3d 772 (D.C. 2019).

- Commission costs associated with the Commission's evaluation of DC PLUG initiative filings;
- OPC costs associated with OPC's review of DC PLUG initiative filings.

All of these cost categories were previously approved in Order No. 17697, as clarified by Order No. 17770, and again in Order No. 19167 to be included in the Underground Project Charge. In addition, the Underground Project Charge includes recovery of the following additional O&M expenses:

- The refund of Commission and OPC deposits related to previous DC Plug filings;
- Costs associated with work on an Opportunity Project from the First Triennial Plan.

As discussed by Company Witness Smith, the costs associated with the approximately \$216,000 of conduit placed underground as part of an Opportunity Project approved in the First Triennial Plan would have been capital costs in the Underground Project Charge had the First Triennial Plan been able to move forward. However, due to the delay in implementation of the First Triennial Plan, the feeder associated with the Opportunity Project was not placed underground. Over time that feeder was reconfigured and, if placed underground in any subsequent biennial plan, will no longer include the conduit placed underground as part of the Opportunity Project. Because the conduit was placed underground as part of the DC PLUG initiative and is recoverable under D.C. Code §34-1311.01(21), the appropriate accounting treatment is to recover them through the UPC as O&M costs.

## **Methodology for the development of the Underground Project Charge**

The revenue requirement and resulting rates included in the Underground Project Charge are calculated using Pepco's portion of the projected capital cost data including, but not limited to, the actual costs of engineering; design and construction; and actual labor, materials, and Allowance for Funds Used During Construction. Additionally, the revenue requirement includes the O&M expenses described above. The revenue requirement includes a return of investment through depreciation based on the plant investment that is placed in service and that is associated with Electric Company Infrastructure Improvement Activity. Pursuant to D.C. Code §34-1313.10(c)(3), the revenue requirement also includes a return on investment based on a rate of return of 7.45%, as authorized in Pepco's last base rate case (Formal Case No. 1150). The O&M expenses do not earn a return on investment.

Pursuant to D.C. Code §34-1313.10(c)(1), the total revenue requirement is allocated among the customer classes in proportion to non-customer charge related distribution revenue, as approved in Formal Case No. 1150, which is the Company's most recently decided base rate case. This aligns the share of revenues collected from each class via the Underground Project Charge with the share of non-customer charge related base distribution revenue assigned to that class in Formal Case No. 1150. As also required by D.C. Code §34-1313.10(c)(1), customers served under the RAD program are not subject to the Underground Project Charge and excluded from the allocation of the revenue requirement. Consistent with D.C. Code §34-1311.01(8A) and as approved in Order No. 17697 and again in Order No. 19167 and affirmed by the D.C. Court of Appeals, customer charge revenues were excluded from the allocation on the basis that the DC PLUG

initiative does not include infrastructure, such as meters and services, that would normally be recovered through a customer charge.

For each customer class, an Underground Project Charge rate is developed on a per-kilowatt-hour basis by dividing the class revenue requirement by the forecasted billing determinants for that class for the applicable 12-month period.

Pepco currently has a base rate application pending before the Commission in Formal Case No. 1156. The Underground Project Charges presented in this Second Biennial Plan reflect the most recent Commission-approved base rates,<sup>33</sup> which are those approved in Order No. 19433 in Formal Case No. 1150.

### **Specific development of the Underground Project Charge**

The Company proposes to make the updated Underground Project Charge effective upon the issuance of the Commission's order approving the Underground Project Charge. The charge will be based on forecasted project costs of approximately \$264 million that are associated with feeders placed into service through calendar year 2021 under the Second Biennial Plan. These costs are detailed in the appendices to this Second Biennial Plan. Appendix I provides the development of the annual Underground Project Charge revenue requirement and the allocation of the revenue requirement among the Company's distribution service customer classes (excluding customers served under the RAD Rider) based on the non-customer charge related base distribution revenues authorized in Order No. 19433 in Formal Case No. 1150. Appendix I also provides the final Underground

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<sup>33</sup> See, e.g., D.C. Code §34-1313.08(c)(6)(A)(iv); D.C. Code §34-1313.10(c).

Project Charge rates, on a per kWh basis, for each distribution service customer class based on calendar years 2020-2021 forecasted sales.

### **Annual update of the Underground Project Charge**

Pursuant to D.C. Code §34-1313.15, the Company will file an adjustment to the Underground Project Charge on or before April 1 of each year following issuance of an order authorizing the imposition and collection of Underground Project Charges and for as long as the order remains in effect. The next adjustment is expected to be made on or before April 1, 2020.

The adjustment will include all of the requirements in D.C. Code §34-1313.15. In addition to the forecasted expenditures that are placed into service for the two calendar years for which the update is filed, the annual adjustment will include a true-up of Underground Project Charges for the prior calendar year. For each class, an over- or under-recovery amount will be calculated as the difference between actual Electric Company Infrastructure Improvement Costs incurred during the prior calendar year (based on actual capital expenditures, plant closings, depreciation expense and O&M expenses) and actual booked Underground Project Charge revenues during the same time period. For the purpose of calculating each class's true-up amount, actual Electric Company Infrastructure Improvement Costs will be allocated among the classes in proportion to the Underground Project Charge revenue requirement that was in effect during the period being reconciled. Underground Project Charge collections are tracked by distribution service customer class and will be directly assigned. For each class, the under-recovery amount will be added to,

or the over-recovery amount credited to, that class's revenue requirement for the next rate period.

The Electric Company Infrastructure Improvement Costs will be incorporated into distribution rate base as part of the distribution rate case filing following completion of all Electric Company Infrastructure Improvement Activity and closing of all associated investment to electric plant. At that point, the Company would file a final adjustment to the Underground Project Charge to true-up actual costs and collections for each class as of the effective date of the Company's updated base rates, with refunds or surcharges to occur during the following rate period. At the end of that rate period, the Underground Project Charge will be terminated.

### **Updated Tariff sheets to reflect the Underground Project Charge**

An updated Underground Project Charge Rider – Rider 'UPC' reflecting this Second Biennial Plan is provided in Appendix M. Rider UPC is applicable to all rate schedules with the exception of customers served under the RAD Rider. The Underground Project Charge will continue to be shown on customer bills as "Underground Charge, Pepco."

### **DDOT Charge and Underground Rider**

The Undergrounding Act defines the financing structure for the District-funded portion of the DC PLUG initiative (*i.e.*, \$187.5 million). Pursuant to D.C. Code §34-1313.01(a)(2)(A), the District will assess Pepco the DDOT Charge in an amount equal to the cost of the work to be performed by DDOT in the next two-year period. Pursuant to

D.C. Code §34-1313.01(a)(2)(B), Pepco will remit funds to DDOT equal to 1/24 of the DDOT Charge, within the first 10 days of each month during the applicable billing period. Consistent with D.C. Code §34-1313.03a, the District has established the DDOT Underground Electric Company Infrastructure Improvement Fund (“DDOT Improvement Fund”). The Pepco funds remitted to DDOT to pay the DDOT Charge will be placed in the DDOT Improvement Fund and will be exclusively used to pay the DDOT Underground Electric Company Infrastructure Improvement Costs.

To recover the DDOT Charges, the Company will allocate the Underground Rider revenue requirement to its distribution service customer classes, with the exception of RAD customers (D.C. Code §34-1313.01(a)(3)) in proportion to non-customer charge related base distribution revenue authorized in Formal Case No. 1150, which is the Company’s most recently decided distribution base rate case, and in an amount sufficient to ensure that the Underground Rider can reasonably be expected to generate sufficient revenues to permit Pepco to recover the DDOT Charges. To ensure that the Company recovers aggregate costs equal to the annual DDOT Charges (approximately \$30 million per year), pursuant to D.C. Code §34-1313.14, the Underground Rider will be subject to a true-up on, at most, a semi-annual basis to account for any over- or under-collection.

### **DDOT Charge**

Pursuant to D.C. Code §34-1311.01(13), the DDOT Charge is imposed by the District on Pepco pursuant to a financing order issued by the Commission and is used by the District to pay the DDOT Underground Electric Company Infrastructure Improvement Costs.

Pursuant to D.C. Code §34-1313.01(a)(2)(B), in each month of the applicable two-year period, Pepco will remit to DDOT 1/24th of the DDOT Charges approved for that period.

### **Underground Rider**

The Underground Rider is an annually adjusted rider to Pepco's volumetric distribution service rates paid by all of Pepco's distribution service customers (except for customers served through the RAD program) that reasonably can be expected to generate sufficient revenues to permit Pepco to recover the DDOT Charges.

The annual revenue requirement to be collected under the Underground Rider is one-half (or 12/24ths) of the DDOT Charges approved in the financing order. Pursuant to D.C. Code §34-1313.01(a)(3), the Underground Rider will allocate costs to Pepco's distribution service customer classes, excluding customers served through the RAD program, in accordance with the distribution service customer class cost allocations in effect pursuant to Pepco's most recently decided base rate case. The distribution service customer class cost allocation methodology for the Underground Rider's revenue requirement is the same as the allocation methodology approved by the Commission in Formal Case Nos. 1116 and 1145 and affirmed by the Court of Appeals and is based on the non-customer charge related base distribution revenue approved in Order No. 19433 in Formal Case No. 1150. This methodology aligns each class's revenue responsibility under the Underground Rider with that class's non-customer charge related base distribution revenue responsibility, as determined by the Commission in Formal Case No. 1150.

Consistent with D.C. Code §34-1313.01(a)(3), the Underground Rider rates are developed for each applicable distribution service customer class as a volumetric rate (*i.e.*, on a per kilowatt-hour basis). The billing determinants used to set the rates are forecasted kWh sales for the applicable 12-month period, which ensures that the Underground Rider can reasonably be expected to generate sufficient revenues to permit Pepco to recover the DDOT Charges.

Under D.C. Code §34-1313.14(a), rates under the Underground Rider will be subject to true-up on, at most, a semi-annual basis. For each distribution service customer class subject to the Underground Rider, an over- or under-collection amount will be calculated as that class's Underground Rider collections less actual DDOT Charges imposed on Pepco attributable to that class during the true-up period. For the purpose of calculating each class's over- or under-collection amount, DDOT Charges imposed on Pepco will be imputed to distribution service customer classes consistent with the distribution service customer class cost allocation of the revenue requirement that was used to develop the Underground Rider rates that were in effect during the period being reconciled. Collections from each class under the Underground Rider will be tracked separately and will be directly assigned to the applicable class. The amount of the true-up of the Underground Rider will be allocated to each distribution service customer class in proportion to its contribution to the under-collection or over-collection. This methodology will ensure that the true-up is performed consistent with D.C. Code §34-1313.14(f)(1). The Underground Rider can be found in Appendix M.

## **Bill comparisons showing the impact of the UPC and the Underground Rider**

Bill comparisons for the UPC and the Underground Rider for the major distribution service customer classes are provided in Appendices K and L. Based on current base rates, the typical residential customer using an average of 648 kWhs per month would see an estimated monthly bill impact in 2020 of \$0.02 or 0.03% due to the Underground Project Charge and (\$0.06) or -0.08% due to the Underground Rider.

## **DC PLUG EDUCATION PLAN**

Education and communication will be critical to the success of the DC PLUG initiative. The DC PLUG initiative is committed to transparency in project planning and implementation. DC PLUG initiative communications will help residents, businesses, and other stakeholders understand the initiative's scope and expected impact, planned activities for the target areas, the infrastructure improvement process and the multi-year implementation schedule. As with all infrastructure improvements, the impact of construction work on daily activity will be a particularly important communication message for residents, businesses, and other stakeholders. Pursuant to D.C. Code §34-1313.08(c)(7), DDOT and Pepco have included in Appendix N the DC PLUG Education Plan (Education Plan), which is substantially the same as the Education Plan approved in Order No. 19167.

D.C. Code §34-1311.01(21) includes customer communications among the Electric Company Infrastructure Improvement Costs recoverable through the Underground Project Charge associated with the DC PLUG initiative. As such, the Education Plan includes an estimated annual budget of approximately \$934,500 for Pepco community outreach and

education and associated materials, attached to the Second Biennial Plan in Appendix N. This budget is higher than the budget approved in the First Biennial Plan because it includes an amount for continued communications regarding the First Biennial Plan feeders as well as communications regarding the Second Biennial Plan feeders. The budget can be updated as business and community needs change.

## **FOCUS ON DISTRICT OF COLUMBIA BUSINESSES AND RESIDENTS**

D.C. Code §34-1311.02(7) states that the Mayor (through DDOT) and Pepco should make every practical effort to ensure that District residents are hired for newly created jobs funded by any mechanism wherein the costs of such funding are paid by the District from the DDOT Charges or recovered by Pepco through the Underground Project Charge, with a goal being that at least 100% of all construction-related jobs are filled by District of Columbia residents and 100% of the construction contracts are awarded to certified business enterprises or certified joint ventures.<sup>34</sup> Pepco intends to comply with the Undergrounding Act through partnership with DDOT, the District Government and various contracting and workforce recruitment activities.

First, Pepco will determine its hiring and contracting needs. The direct hiring opportunities may include journey electrical workers, electrical apprentices, skilled laborers and engineers. Pepco will make every practical effort to identify and hire qualified local residents for all of these positions.

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<sup>34</sup> See “Power Line Undergrounding Program Certified Business Enterprise Utilization Act of 2019, D.C. Law 23-0026, effective September 11, 2019. The Original Act had established the goal as “100% of construction contracts are awarded to District businesses.”

Second, Pepco will identify employment and contracting opportunities. These opportunities may include the installation of cable and other electrical equipment and engineering design.

Third, Pepco will identify local qualified candidates for opportunities. To that end, DDOT and Pepco have jointly hosted forums for contractors, during which DDOT and Pepco familiarized contractors with the DC PLUG initiative, the work that would be required, the Pepco procurement process, and explained how to register as an approved Pepco supplier or Certified Business Enterprise in the District of Columbia. Pepco also used that opportunity to underscore the District of Columbia-focused goal prescribed by the Undergrounding Act.

Fourth, Pepco will provide training and internships to prepare additional local candidates to be qualified. To this end, Pepco will also work with local universities to recruit interns for engineering and other roles.

DDOT and Pepco will draw on a wide range of resources and initiatives to proactively support District resident hiring and CBE business contracting by DDOT and Pepco. Appropriate information and guidelines will be included in the bid process so that contractors understand the procurement standards for the DC PLUG initiative. DDOT and Pepco will reach out to CBEs and coordinate with key agencies, such as the Department of Small and Local Business Development (“DSLBD”) and the Department of Employment Services (“DOES”). Pre-procurement efforts with the District’s Office of Contracting and Procurement and DSLBD will promote participation by CBEs.

DDOT and Pepco, with assistance from the National Utility Contractors Association of Washington, the District of Columbia Building Industry Association, and

the Greater Washington Chamber of Commerce, convened a contractors forum in March 2018 to reach out to several hundred CBE firms to explain the DC PLUG initiative and the work that will be available as part of this project. Further, Pepco and DDOT reached out to District of Columbia construction community at the greater Hispanic Chamber of Commerce Business Expo in March of 2019 and the Second Annual Ward 4 Small Business Summit in May of 2019.

Where feasible, work scope may be unbundled or subdivided to expand participation opportunities for smaller District of Columbia CBEs, a strategy which also promotes networking and teaming among contractors, including smaller contractors who may not have the resources individually to undertake larger projects.

The parties also expect to employ construction apprenticeship programs administered by the DOES to enable city residents to learn high-demand skills that can increase employment opportunities in the DC PLUG initiative. DOES is also an important resource for identifying to contractors available District of Columbia workers who are able to perform construction, electrical and engineering jobs. Both DDOT and Pepco have engaged with the Laborer's International Union of North America regarding recruiting, training and placement of District of Columbia residents through its workforce development program. DDOT and Pepco will conduct and participate in job fairs and other community outreach activities directed towards District of Columbia residents and designed to provide notice of employment opportunities and to recruit candidates for employment.

The DC PLUG team has conducted over 70 one-on-one meetings with CBEs and non-CBE firms interested in receiving their CBE certification to understand their existing

capabilities and discuss their potential participation in the DC PLUG initiative. The firms typically perform professional services, construction management, project management, program management, communications and community outreach. The Joint Applicants have also participated in “match-making events” with District-based CBE firms and attended the District of Columbia’s 2018 Small Business Expo.

Finally, Pepco has hired a District of Columbia resident to to serve as the Community Relations Coordinator for the DC PLUG team. The Community Relations Coordinator acts as the DC PLUG initiative’s interface with customers and to execute the Education Plan.

### **Capability and Capacity Building Program**

Although not specified in the D.C. Code, Pepco has created a Capability & Capacity Building (“C&C”) Program to expand and develop the pool of qualified CBE construction contractors. Pepco’s C&C Program creates opportunities for CBE firms to become qualified by setting up and awarding discrete work packages for existing feeders that are similar to the type of work that contractors perform on DC PLUG initiative projects. Pepco provides CBE construction contractors the opportunity to demonstrate their capability and capacity to perform work in accordance with Pepco standards on existing Pepco projects and become qualified to bid on and perform DC PLUG initiative construction projects as well as normal Pepco projects. Pepco exclusively invites CBE firms to respond to its RFPs for C&C Program work. The work packages offered through the C&C Program are funded in the same manner as Pepco’s normal capital projects, are outside of the DC PLUG initiative, and are not funded through the DC PLUG initiative’s funding mechanism.

Therefore, the C&C Program represents additional contracting opportunities for CBE firms beyond those specifically related to the DC PLUG initiative. The type of work that characterizes the C&C Program includes civil and electrical construction work, the installation of conduit and manholes, installation of electrical cable, and civil construction quality assurance and quality control. DDOT and Pepco believe that the C&C Program will increase the number of CBE construction contractors qualified to bid on and perform DC PLUG initiative construction work as well as increase the number of qualified contractors for Pepco's existing feeder work.

Pepco is working with the DSLBD to identify local CBE construction and engineering firms as well as upcoming projects that will create future opportunities to further engage CBEs through the C&C Program.

**POTOMAC ELECTRIC POWER COMPANY**  
**BEFORE THE**  
**PUBLIC SERVICE COMMISSION OF THE DISTRICT OF COLUMBIA**  
**DIRECT TESTIMONY OF KEVIN M. MCGOWAN**  
**FORMAL CASE NO. 1145**

1   **Q1.   Please state your name and position.**

2   A1.           My name is Kevin M. McGowan, and I am Vice President, Regulatory  
3           Policy & Strategy of Pepco Holdings LLC (PHI). I am testifying on behalf of  
4           Potomac Electric Power Company (Pepco or the Company).

5   **Q2.   What are your responsibilities in your role as Vice President, Regulatory**  
6           **Policy & Strategy?**

7   A2.           I am responsible for regulatory, utility of the future and energy acquisition  
8           matters for PHI and its three regulated utility subsidiaries: Pepco, Atlantic City  
9           Electric Company, and Delmarva Power & Light Company. In this capacity, I am  
10          responsible for regulatory affairs related to PHI's utility business before the Public  
11          Service Commission of the District of Columbia (Commission), the Maryland  
12          Public Service Commission, the Delaware Public Service Commission, the New  
13          Jersey Board of Public Utilities, and the Federal Energy Regulatory Commission.  
14          I also participate in PHI's analysis of regulatory issues and the development of  
15          positions on those issues.

16   **Q3.   What is your educational and professional background and experience?**

17   A3.           I hold a Bachelor of Business Administration degree in both Accounting  
18           and Business Data Systems from the University of Texas at San Antonio and a  
19           Masters of Business Administration in Finance from the University of Chicago  
20           Booth School of Business. I am also a Certified Public Accountant.

1           In 1998, I joined Potomac Capital Investments, a subsidiary of Pepco, as  
2           the Vice President and Treasurer. In 2004, I transferred to PHI's Power Delivery  
3           group and eventually to PHI, where I have managed various financial functions  
4           including Strategic Planning, Financial Planning, Treasury and Corporate Risk. In  
5           March 2009, I was promoted to Vice President and Treasurer of PHI. In November  
6           2012, I became Vice President, Regulatory Affairs and, upon closing of the merger  
7           between Exelon Corporation (Exelon) and PHI, I was named Vice President,  
8           Regulatory Policy and Strategy. Prior to joining Pepco, I worked for Duty Free  
9           International, an international retail company, and prior to that I worked for Ernst  
10          & Young.

11   **Q4. Have you previously presented testimony with respect to the District of**  
12   **Columbia Power Line Undergrounding (DC PLUG) initiative before this**  
13   **Commission?**

14   A4.           Yes. I previously testified in the DC PLUG initiative proceedings (Formal  
15           Case Nos. 1116, 1121 and 1145). In addition, I have testified before this  
16           Commission and other commissions in the Company's previous distribution base  
17           rate case proceedings and other matters.

18   **Q5. What is the purpose of your testimony?**

19   A5.           The purpose of my testimony is to (i) introduce the Pepco and DDOT  
20           witnesses who are providing testimony in support of this application for approval  
21           of the Second Biennial Plan (Joint Application) and the Financing Order  
22           Application (collectively, Applications), (ii) provide a description of the funding  
23           structure under the Undergrounding Act, as defined below, (iii) explain the

1        surcharges that customers can expect to see on their electric bills, (iv) provide an  
2        overview of the operations and maintenance (O&M) costs included in the  
3        Underground Project Charge, (v) demonstrate that the application is in compliance  
4        with the requirements of the Financing Order request under D.C. Code §34-  
5        1313.02, and (vi) summarize the provisions mandated by the Undergrounding Act  
6        to be included in the Commission's Financing Order (D.C. Code §34-1313.01).

7                This testimony and accompanying exhibits were prepared by me or under  
8        my direct supervision and control. The source documents for my testimony are  
9        District and Pepco records, public documents, and my personal knowledge and  
10       experience.

11    **Q6.    What topics are discussed in other Company and DDOT witnesses' testimony?**

12    A6.    There are five other witnesses presenting testimony in support of the Joint  
13    Application. They are as follows:

- 14        •    Company Witness Lipari, Manager, Reliability for PHI, will discuss the feeder  
15        ranking model and the selection of feeders included in the Second Biennial  
16        Plan.
- 17        •    Company Witness Smith, Manager of Engineering and Project Management at  
18        Pepco, will discuss certain aspects of the Second Biennial Plan that relate to the  
19        construction effort.
- 20        •    Company Witness Kozey, Communications Manager for the Pepco region, will  
21        discuss customer and community education and outreach activities associated  
22        with the DC PLUG initiative and, in particular, the Second Biennial Plan.

- Company Witness Blazunas, Manager, Rate Administration for Pepco, will discuss the rate impacts and revenue requirement associated with the Second Biennial Plan of the DC PLUG initiative and provide support for the Financing Order Application. He will also discuss the refund of funds deposited by Pepco for Commission and OPC related to previous DC PLUG filings.
- DDOT Witness Williams, Professional Engineer and Program Manager, District Department of Transportation (DDOT), will discuss the DDOT Underground Electric Company Infrastructure Improvement Costs (DDOT Costs), the DDOT Underground Electric Company Infrastructure Improvement Charges (DDOT Charges), and other information, such as local business procurement.

**Q7. Please describe the Undergrounding Act.**

A7. On May 3, 2014, the Electric Company Infrastructure Improvement Financing Act of 2014 (the Original Act) became effective as D.C. Law 20-102. Effective May 17, 2017, the Original Act was amended by the Electric Company Infrastructure Improvement Financing Emergency Amendment Act of 2017 (Amendment Act). Among other material changes, the Amendment Act imposes a charge on Pepco the cost of which Pepco is entitled to recover from its distribution service customers, excluding the Residential Aid Discount (RAD) customers, through a surcharge on their bills. When I refer to the Undergrounding Act in my testimony, it is to the Original Act as amended, including by the Amendment Act. Consequently, any reference to a section of law or a defined term is to that section or defined term as contained in the Undergrounding Act.

**Q8. What is the funding structure under the Undergrounding Act?**

A8. Under the Undergrounding Act, the Pepco-funded portion of the initiative is recoverable through the Underground Project Charge, limited to \$250 million,<sup>1</sup> and the District-funded portion funded by the DDOT Charges may not exceed \$187.5 million.<sup>2</sup> DDOT will also fund up to \$62.5 million of the DC PLUG initiative from DDOT Capital Improvement funds.

Pursuant to the D.C. Code §34-1313.01(a)(2)(A), the District will assess on Pepco a fee equal to the cost of the work to be performed by DDOT for the next two-year period, in the form of the DDOT Charge. Pursuant to D.C. Code §34-1313.01(a)(2)(B), Pepco will remit a payment, equal to 1/24 of the DDOT Charge, within the first 10 days of each month during the applicable billing period. The Pepco funds remitted to DDOT to pay the DDOT Charge will be placed in the the Underground Electric Company Infrastructure Improvement Fund (DDOT Improvement Fund) established pursuant to D.C. Code §34-1313.03(a) for use exclusively in paying for the DDOT Costs.

To recover the DDOT Charge, the Company assesses an Underground Rider surcharge on its distribution service customer classes, with the exception of RAD customers (D.C. Code §34-1313.01(a)(3)) on a volumetric basis, and in, at most, an amount sufficient for Pepco to recover the DDOT Charges. To ensure that the Company recovers aggregate costs equal to the annual DDOT Charge (approximately \$30 million per year), pursuant to D.C. Code §34-1313.14, the

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<sup>1</sup> D.C. Code §34-1313.10(d).

<sup>2</sup> D.C. Code §34-1313.01(a)(2)(A).

1 Underground Rider will be subject to a true-up, at most, on a semi-annual basis to  
2 account for over- or under-collection.

3 **Q9. How will Pepco recover its \$250 million in costs associated with the DC PLUG**  
4 **initiative?**

5 A9. Pepco will recover its \$250 million investment through an Underground  
6 Project Charge surcharge, in the same manner as was approved in Order No.  
7 19167.<sup>3</sup> The surcharge will appear on electric distribution customers' bills in the  
8 same manner as proposed in the First Biennial Plan and approved by the  
9 Commission. Company Witness Blazunas discusses the Underground Project  
10 Charge and its development in more detail.

11 **Q10. What costs are included in the Underground Project Charge?**

12 A10. The Underground Project Charge consists of the revenue requirement for  
13 the Electric Company Infrastructure Improvements projected to be placed in service  
14 plus certain O&M costs. Company Witness Blazunas reviews each of these  
15 elements, but I will address, in particular, the recovery of costs incurred for  
16 opportunity projects that were selected as part of the First Triennial Plan filed  
17 pursuant to the Original Act that were not selected for inclusion in the Second  
18 Biennial Plan under the Undergrounding Act.

19 **Q11. Why are costs associated with feeders selected in the First Triennial Plan**  
20 **included in the revenue requirement for the Second Biennial Plan?**

21 A11. Pepco constructed conduit that was part of an Opportunity Project—Feeder  
22 15707—from the First Triennial Plan. Due to the legal challenges to the First

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<sup>3</sup> Order No. 19167 at ¶ 230

1 Triennial Plan, the wires were never pulled through the conduit and Feeder 15707  
2 was reconfigured as part of another program. Because the unused conduit was  
3 constructed in good faith under the approval the Commission granted of the First  
4 Triennial Plan and Pepco's subsequent decisions regarding Feeder 15707 were  
5 made in the interests of improving customer reliability, Pepco requests that the  
6 approximately \$216,000 of cost associated with the installation of this conduit be  
7 amortized as operating and maintenance expense over one-year. Company Witness  
8 Smith provides a detailed discussion of the Opportunity Project costs from the First  
9 Triennial Plan for which the Company is seeking recovery.

10 **Q12. Does the Application comply with the requirements of the Financing Order**  
11 **request in the Undergrounding Act?**

12 A12. Yes. The requirements for the application for financing orders under D.C.  
13 Code §34-1313.02 are summarized as follows:

- 14 • D.C. Code §34-1313.02(b)(2)(A) - the DDOT Charge for the next two-year  
15 period is set forth in Appendix I and further discussed in the testimony of  
16 Company Witness Blazunas.
- 17 • D.C. Code §34-1313.02(b)(2)(B) - the Direct Testimony of Company  
18 Witness Blazunas sets forth: the Underground Rider; the allocation of the  
19 Underground Rider among Pepco's distribution service customer classes,  
20 other than the RAD customer class, in accordance with the distribution  
21 service customer class cost allocations approved by the Commission in  
22 Formal Case No. 1150 (the Company's last base rate proceeding), sufficient  
23 to generate an amount at least equal to the annual DDOT Charge for the

1 next two-year period. The proposed tariff changes to implement the  
2 Underground Rider are described and supported in Company Witness  
3 Blazunas' testimony.

- 4 • D.C. Code §34-1313.02(b)(2)(C) - a proposed form of public notice of the  
5 application suitable for publication by the Commission

6 **Q13. Are there necessary provisions mandated by the Undergrounding Act that the**  
7 **Commission must include in any financing order?**

8 A13. Yes. D.C. Code §34-1313.01 and §34-1313.03 of the Undergrounding Act  
9 specify the provisions that are required to be included in any financing order and  
10 are included in the application, along with a reference to where each item is  
11 addressed in the Financing Order Application and Second Biennial Plan.

12 **Q14. What is the Company's recommendation with regard to the Second Financing**  
13 **Order Application?**

14 A14. The Company has complied with all requirements of the Undergrounding  
15 Act and recommends that the Commission issue the Financing Order, in accordance  
16 with D.C. Code §34-1313.03(c).

17 **Q15. Does this conclude your testimony?**

18 A15. Yes, it does.

**POTOMAC ELECTRIC POWER COMPANY**  
**BEFORE THE**  
**PUBLIC SERVICE COMMISSION OF THE DISTRICT OF COLUMBIA**  
**DIRECT TESTIMONY OF PAUL LIPARI**  
**FORMAL CASE NO. 1145**

1   **Q1.   Please state your name and position.**

2   A1.           My name is Paul Lipari. I am the Manager, Reliability at Pepco Holdings, LLC  
3           (Pepco Holdings). I am testifying on behalf of Potomac Electric Power Company  
4           (Pepco or the Company).

5   **Q2.   What are your responsibilities in your role as Manager Reliability?**

6   A2.           I am responsible for Pepco Holdings' management of a multifunctional  
7           reliability reporting and analysis team within the Technical Services division of Pepco  
8           Holdings, which includes the Delmarva Power & Light Company (Delmarva Power),  
9           Atlantic City Electric, and Pepco service territories. This department is responsible for  
10          reliability reporting and system performance analytics for the distribution system.

11   **Q3.   Could you please describe your educational and professional background and**  
12   **experience?**

13   A3.           I earned a Bachelor of Science Degree in Engineering from the New Jersey  
14           Institute of Technology, and a Master in Business Administration from Drexel  
15           University. I joined Atlantic City Electric in 1986 in the Distribution Standards  
16           department, progressing from the role of associate engineer to senior engineer in  
17           distribution engineering with time spent in both a central engineering support role as  
18           well as field and customer engineering. I have held several management positions,  
19           including Sr. Supervising Engineer, Manager of GIS and Drafting Services and

1 Manager Reliability Programs. In 2018, I transferred to my current position, Manager  
2 of Reliability.

3 **Q4. Have you ever testified before the Public Service Commission of the District of**  
4 **Columbia (Commission)?**

5 A4. No, this is my first time sponsoring testimony before this Commission.

6 **Q5. Was your testimony prepared by you or under your direct supervision and**  
7 **control?**

8 A5. Yes. This testimony and accompanying exhibit were prepared by me or under  
9 my direct supervision and control. The sources for my testimony are Company records,  
10 public documents, and my personal knowledge and experience.

11 **Q6. What is the purpose of your testimony?**

12 A6. The District Department of Transportation (DDOT) and Pepco are required to  
13 file a Biennial Underground Infrastructure Improvement Projects Plan (Second  
14 Biennial Plan) in compliance with the Undergrounding Act.<sup>1</sup> The purpose of my  
15 testimony is to support certain aspects of the DC PLUG initiative that relate broadly to  
16 the construction effort under the Second Biennial Plan. Specifically, I am testifying  
17 about such topics as the Feeder Ranking Model and feeder selection methodology.

18 **Q7. About which components of D.C. Code §34-1313.08 are you testifying?**

19 A7. I am a principle witness with respect to the certain requirements of D.C. Code  
20 §34-1313.08(a) which relate to the selection of feeders for the Second Biennial Plan.

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<sup>1</sup> The Electric Company Infrastructure Improvement Financing Act of 2014 was subsequently amended, including on May 17, 2017, by Mayor Muriel Bowser who signed (and thereby made effective) the Electric Company Infrastructure Improvement Financing Emergency Amendment Act of 2017 (as amended, Undergrounding Act).

1 **Q8. Have DDOT and Pepco provided a measurement and ranking of the reliability**  
2 **performance of each of Pepco's overhead and combined overhead-underground**  
3 **feeders in the District of Columbia over the preceding nine years, using the**  
4 **primary selection criteria specified by the Undergrounding Act?**

5 A8. Yes. Appendix A of the Second Biennial Plan presents the ranking of the  
6 reliability performance of Pepco's overhead and combined overhead/underground  
7 feeders based on nine-calendar-years' average of (a) the number of outages per feeder  
8 (SAIFI), (b) the duration of the outages occurring on the feeder (SAIDI), and  
9 (c) customer minutes of interruption on the feeder per dollar of estimated cost to place  
10 the feeder underground (CMI/\$), weighted equally, for all sustained interruptions  
11 occurring on each overhead and combined overhead-underground feeder in the District  
12 of Columbia.

13 In accordance with D.C. Code §34-1313.08(a)(1)(A) , DDOT and Pepco used  
14 nine full years of reliability data to rank its overhead feeders. DDOT and Pepco used  
15 reliability performance data from the years 2010 through 2018 to rank the feeders.

16 **Q9. Please describe generally the process for identifying and evaluating feeders to be**  
17 **placed underground.**

18 A9. DDOT and Pepco used the same process that they used to identify feeders for  
19 selection in the First Triennial Plan and the First Biennial Plan. The Commission found  
20 in Order No. 17697 (as clarified in Order No. 17770) that this process complied with  
21 the Original Act. First, DDOT and Pepco started the feeder selection process by  
22 ranking all of Pepco's overhead and combined overhead/underground feeders in the  
23 District of Columbia using a quantitative model. That quantitative model is included

1 as Exhibit PEPCO (B)-1 and is explained further in the Second Biennial Plan. Second,  
2 they identified the most equitable distribution of DC PLUG initiative improvements  
3 across the District of Columbia by selecting the highest-ranked (*i.e.*, least resilient)  
4 feeder in each ward to be placed underground. Third, they analyzed ongoing reliability  
5 work as well as current and planned system work on the most highly-ranked feeders in  
6 each Ward. Fourth, DDOT and Pepco identified opportunities to take advantage of  
7 existing or planned DDOT roadway work. Last, DDOT and Pepco finalized the feeder  
8 selection for the Second Biennial Plan.

9 Throughout the DC PLUG initiative, DDOT and Pepco will continue to search  
10 for new opportunities for coordination with utilities and government agencies that may  
11 align with or enhance the cost-effectiveness or benefits associated with the initiative.  
12 If such opportunities require re-prioritization of feeders or the selection of additional  
13 feeders to be placed underground, DDOT and Pepco will inform the Commission  
14 through an update to the Second Biennial Plan.

15 **Q10. How did DDOT and Pepco perform the feeder ranking analysis?**

16 A10. DDOT and Pepco used a quantitative model to rank Pepco's overhead and  
17 combined overhead/underground feeders in the District of Columbia, in accordance  
18 with the Undergrounding Act. The results of the model are attached to my testimony  
19 as PEPCO (B)-1. As required by the Undergrounding Act, the model incorporates the  
20 historical reliability performance data for each of Pepco's District of Columbia  
21 overhead and combined overhead/underground feeders from 2010 through 2018.  
22 Model inputs include (for each feeder):

- 1                   • Reliability performance data (*e.g.*, Number of customer interruptions (CI)
- 2                   and customer minutes of interruption (CMI)),
- 3                   • Estimated cost to place the primary mainline and lateral lines underground,
- 4                   • Number of customers served,
- 5                   • Value of service calculation, and
- 6                   • Physical characteristics of each feeder, such as geographical location and
- 7                   number of circuit miles.

8   **Q11. Does the model exclude major service outages (MSO)?**

9   A11.           No. In accordance with D.C. Code §34-1313.08(a)(2), the outage data used in  
10           the model includes all outage data during the nine-year period, including MSO data.  
11           This is consistent with the approach followed by DDOT and Pepco in the First Biennial  
12           Plan.

13   **Q12. Is it appropriate to include MSO data in the outage data?**

14   A12.           Yes. It is appropriate to include MSO data because the primary purpose of the  
15           DC PLUG initiative is to improve system reliability and resilience during severe  
16           weather events. In addition, these enhancements will also improve system reliability  
17           during blue sky conditions. Indeed, D.C. Code §34-1311.02(2) states that “Electric  
18           system modernization is necessary to establish 21st century electric distribution  
19           systems to promote the public interest through increased system reliability, resiliency,  
20           and flexibility during all types of weather events, including major storms.”

21

1

2 **Q13. How did Pepco use this feeder ranking to select feeders to be placed underground**  
3 **during the Second Biennial Plan of the DC PLUG initiative?**

4 A13. First, as discussed above, Pepco ranked its overhead District of Columbia  
5 feeders according to SAIFI, SAIDI and CMI per dollar. Second, DDOT and Pepco  
6 identified the highest-ranked feeders in each of the five wards of the District of  
7 Columbia characterized by a large concentration of overhead power lines and  
8 susceptibility to overhead outages (*i.e.*, Wards 3, 4, 5, 7 and 8). Third, DDOT and  
9 Pepco analyzed ongoing reliability work as well as current and planned system work  
10 on the most highly-ranked feeders in each Ward. As a result, in some Wards, the feeder  
11 selected to be placed underground may not have ranked as the worst-performing feeder  
12 in that Ward. For a detailed description of which feeders were selected from each  
13 Ward, please see the Feeder Selection section of the Second Biennial Plan. Fourth,  
14 DDOT and Pepco identified opportunities to take advantage of existing or planned  
15 DDOT roadway reconstruction projects to place an adjacent highly-ranked feeder  
16 underground. DDOT and Pepco call these projects “opportunity projects.” The fifth  
17 and final step in the feeder selection process is to finalize the feeder selection for  
18 inclusion in the Second Biennial Plan.

19 **Q14. Please provide an example of a feeder selected for placement underground that is**  
20 **not the highest-ranked feeder in its Ward.**

21 A14. An example of a feeder selected for placement underground that is not the  
22 highest-ranked (least-resilient) feeder in its Ward is Feeder 467. Feeder 467 ranks as  
23 the fifth least resilient feeder in Ward 3, with Feeders 308, 14767, 15801, and 114

1 ranked above it in the Feeder Ranking Model. Feeder 308, the least-resilient feeder in  
2 Ward 3, was selected as part of the First Biennial Plan. Similarly, Feeder 14767, the  
3 second least-resilient feeder in Ward 3, is being selected for this Second Biennial Plan.  
4 Feeder 15801, the third least-resilient feeder in Ward 3, was not selected in this plan to  
5 account for Ward equity as the feeder is in close proximity to adjacent Feeder 14767  
6 which is being selected as part of this Second Biennial Plan. Feeder 144, the fourth  
7 least-resilient feeder in Ward 3, was not selected in this plan due to the majority of the  
8 feeder's primary mainline already being underground and the feeder's low customer  
9 count in comparison to Feeder 467, which is ranked one place lower than Feeder 144.  
10 For these reasons, DDOT and Pepco selected the fifth highest-ranked feeder in Ward 3  
11 for placement underground - Feeder 467.

12 **Q15. Did DDOT and Pepco analyze planned DDOT capital projects in an effort to**  
13 **identify opportunities for the Second Biennial Plan?**

14 A15. Yes. However at this time Pepco and DDOT have not identified additional  
15 opportunities for for undergrounding that can take advantage of planned DDOT capital  
16 projects beyond Feeder 14900, which was identified as part of the First Biennial Plan.  
17 Pepco and DDOT will continue to explore new opportunities as they become available.

18 **Q16. Which feeders are DDOT and Pepco recommending for placement underground**  
19 **in the Second Biennial Plan?**

20 A16. DDOT and Pepco recommend the following ten feeders be selected for  
21 placement underground in the Second Biennial Plan. These feeders are described in  
22 greater detail throughout the Second Biennial Plan and its appendices.

- 23 • Feeder 467 (4kV) – Ward 3

- 1 • Feeder 14767 (13kV) – Ward 3
- 2 • Feeder 15001(13kV) – Ward 4
- 3 • Feeder 15021 (13kV) – Ward 4
- 4 • Feeder 14008 (13kV) – Ward 5
- 5 • Feeder 14093 (13kV) – Ward 5
- 6 • Feeder 118 (4kV) – Ward 7
- 7 • Feeder 14702 (13kV) – Ward 7
- 8 • Feeder 15171 (13kV) – Ward 8
- 9 • Feeder 15166 (13kV) – Ward 8

10 For Feeders 467, 14767, 15001, and 15021, DDOT and Pepco intend to place the  
11 primary mainline and primary lateral sections underground. For Feeders 118, 14008,  
12 14093, 14702, 15166, and 15171, DDOT and Pepco plan to place large sections of  
13 these feeders' primary mainline and primary lateral underground because these  
14 feeders have large sections that are not vulnerable to tree- or storm-related outages.

15 **Q17. Why did DDOT and Pepco select two feeders in each Ward as the feeders to be**  
16 **placed underground in the Second Biennial Plan?**

17 A17. DDOT and Pepco selected two feeders in each Ward (Wards 3, 4, 5, 6, 7 and 8)  
18 most heavily impacted by overhead outages in order to minimize customer impact in a  
19 given Ward and to equitably enhance resilience and reliability benefits among the  
20 Wards. Road or utility construction work can have a significant impact on a community  
21 and economic impact on businesses. DDOT and Pepco have attempted to spread the  
22 planned construction work across those five Wards of the District of Columbia in an

1 effort to minimize the impact on any one Ward by limiting the number of feeders being  
2 worked on within a Ward at the same time.

3 **Q18. Where in the Second Biennial Plan can the Commission find the feeders selected**  
4 **to be placed underground?**

5 A18. DDOT and Pepco present the feeders selected for the Second Biennial Plan of  
6 the DC PLUG initiative in Appendix B.

7 **Q19. Will Pepco's District of Columbia customers realize reliability and resilience**  
8 **improvements as a result of placing the feeders underground as specified in the**  
9 **Second Biennial Plan?**

10 A19. Yes. As described in my Direct Testimony, Pepco used a quantitative model to  
11 rank its overhead feeders. Based on the nine years of historical reliability data included  
12 in that model, customer interruptions that occurred on the overhead primary mainline  
13 and overhead lateral portions of the feeders scheduled to be placed underground in the  
14 Second Biennial Plan will be significantly reduced, and the total system reliability  
15 performance indices will be improved. The Feeder Ranking Model assumes that all of  
16 the outages associated with faults that occurred on the primary main lines and laterals  
17 will be avoided once those portions of the feeder are placed underground.

18 **Q20. How does Pepco measure the improvement in feeder performance as a result of**  
19 **placement underground?**

20 A20. Pepco measures feeder performance using industry-standard reliability  
21 performance indices. These indices include, but are not limited to, SAIFI, SAIDI, and  
22 CMI.

1   **Q21. Do the expected reliability improvements discussed above satisfy D.C. Code §34-**  
2       **1313.10(B)(3)?**

3   A21.           Yes. The expected reliability improvements associated with the DC PLUG  
4       initiative will benefit Pepco's District of Columbia customers, as required by the  
5       Undergrounding Act. These benefits will be realized both by customers on the specific  
6       feeder being placed underground as well as on feeders that are not part of the DC PLUG  
7       initiative because having fewer overhead lines will result in less storm damage and  
8       associated restoration cost, faster restoration when outages do occur, and lower  
9       economic impact to customers from loss of electric power during major storms.

10   **Q22. Should the Commission approve the Second Biennial Plan as jointly submitted by**  
11       **DDOT and Pepco?**

12   A22.           Yes.

13   **Q23. Does this complete your Direct Testimony?**

14   A23.           Yes, it does.

**Pepco (B)-1**

DC FEEDER UNDERGROUNDING RANKING MODEL for Undergrounding each feeder's main and laterals for outages 1/10 thru 12/18					VOS	Customers				System Reductions▶	CI	CMI	Avg	CMI/\$	
						Total		Resi- dential	Com- mercial		53.7%	56.3%	55.0%		
										Averaged Rankings (Sort Ascending)					
System Totals:▶		495	\$3,418,248,395		\$20,913,000	274,664		250,117	24,547	SAIDI, SAIFI, CMI/\$	CMI/\$	SAIDI	SAIFI	na	1.0
Selected Feeders	Impact▶	36%	100.0%		100.0%	73.3%		58.1%	46.4%					na	na
	Totals:▶	180	\$3,418,248,395		\$20,913,000	201,192		145,439	11,392					0.014	1.1
Rank	Ward	Feeder	\$	Cum	\$	n	Cum	n	n	n	n	n	n	n	n
1	7	15707	\$44,019,882	\$44,019,882	\$2,088,159	3,101	3,101	2,790	188	5.3	6.0	3.0	7.0	0.095	2.8
2	4	14890	\$11,059,242	\$55,079,124	\$145,124	1,755	4,856	824	18	7.0	2.0	1.0	18.0	0.237	1.5
3	5	14008	\$21,385,137	\$76,464,261	\$738,703	1,055	5,911	923	113	8.7	14.0	10.0	2.0	0.039	3.1
4	3	308	\$18,386,700	\$94,850,961	\$117,845	595	6,506	547	13	9.0	11.0	2.0	14.0	0.045	2.3
5	7	15705	\$39,433,468	\$134,284,430	\$1,542,614	2,151	8,657	1,945	190	9.3	15.0	12.0	1.0	0.037	4.0
6	3	14767	\$47,505,597	\$181,790,027	\$368,021	1,044	9,701	936	60	17.3	40.0	8.0	4.0	0.020	2.4
7	7	118	\$14,306,265	\$196,096,292	\$276,788	528	10,229	453	48	18.0	34.0	14.0	6.0	0.022	2.6
8	8	14758	\$27,345,876	\$223,442,168	\$238,663	2,165	12,394	2,003	162	18.3	16.0	34.0	5.0	0.033	2.5
9	4	14900	\$43,449,404	\$266,891,572	\$139,534	1,371	13,765	1,324	23	21.0	42.0	13.0	8.0	0.019	2.6
10	4	15009	\$30,737,828	\$297,629,400	\$387,555	1,406	15,171	1,324	82	21.0	29.0	22.0	12.0	0.023	1.9
11	4	15021	\$32,518,225	\$330,147,625	\$121,574	2,212	17,383	2,023	97	21.0	22.0	30.0	11.0	0.030	2.0
12	5	14014	\$43,158,871	\$373,306,496	\$286,630	2,212	19,595	1,872	181	23.3	35.0	32.0	3.0	0.022	2.7
13	8	15166	\$29,888,561	\$403,195,057	\$736,573	2,277	21,872	2,092	185	24.3	21.0	36.0	16.0	0.031	1.7
14	5	14007	\$30,375,499	\$433,570,556	\$290,305	1,624	23,496	1,177	45	25.0	25.0	21.0	29.0	0.027	1.5
15	3	15801	\$51,311,668	\$484,882,224	\$230,810	2,688	26,184	939	69	26.0	27.0	28.0	23.0	0.024	1.7
16	3	144	\$15,176,317	\$500,058,541	\$21,304	276	26,460	271	3	26.3	44.0	5.0	30.0	0.019	2.0
17	3	467	\$11,689,551	\$511,748,092	\$50,897	431	26,891	416	13	27.3	8.0	4.0	70.0	0.047	0.8
18	3	75	\$9,688,765	\$521,436,857	\$46,120	364	27,255	319	11	29.0	17.0	9.0	61.0	0.033	1.8
19	7	14702	\$31,701,640	\$553,138,497	\$494,294	1,096	28,351	929	96	29.3	53.0	25.0	10.0	0.017	2.3
20	5	14093	\$31,929,366	\$585,067,862	\$368,013	1,346	29,697	799	116	29.7	37.0	24.0	28.0	0.021	1.3
21	7	368	\$15,629,627	\$600,697,489	\$160,099	697	30,394	597	47	29.7	38.0	29.0	22.0	0.020	1.3
22	3	14766	\$19,422,578	\$620,120,067	\$321,588	731	31,125	661	61	32.3	36.0	18.0	43.0	0.021	1.3
23	3	394	\$13,855,177	\$633,975,244	\$25,771	297	31,422	289	4	32.7	54.0	11.0	33.0	0.016	1.6
24	7	14717	\$45,600,519	\$679,575,763	\$164,692	4,335	35,757	2,363	146	33.0	26.0	60.0	13.0	0.026	2.6
25	7	383	\$6,639,577	\$686,215,340	\$70,017	375	36,132	352	23	34.0	33.0	38.0	31.0	0.023	1.2
26	4	15001	\$35,192,800	\$721,408,140	\$543,362	1,341	37,473	1,216	106	35.0	41.0	20.0	44.0	0.020	1.4
27	7	15170	\$19,084,386	\$740,492,527	\$300,458	1,646	39,119	1,529	117	36.0	19.0	43.0	46.0	0.032	1.7
28	4	15944	\$54,577,991	\$795,070,517	\$117,945	714	39,833	641	20	36.3	67.0	7.0	35.0	0.013	1.4
29	4	482	\$4,475,874	\$799,546,392	\$16,691	526	40,359	156	7	36.3	13.0	44.0	52.0	0.042	1.5
30	5	14200	\$16,419,709	\$815,966,101	\$221,082	2,669	43,028	1,354	81	38.7	12.0	62.0	42.0	0.043	1.3
31	6	15701	\$14,685,327	\$830,651,428	\$711,402	3,215	46,243	2,870	345	39.7	7.0	52.0	60.0	0.068	1.4
32	4	14896	\$28,432,800	\$859,084,228	\$72,442	1,342	47,585	948	24	40.7	45.0	40.0	37.0	0.019	1.2
33	4	15199	\$35,432,126	\$894,516,354	\$832,045	1,991	49,576	1,726	216	40.7	51.0	54.0	17.0	0.017	1.8
34	4	490	\$6,445,294	\$900,961,648	\$194,404	632	50,208	528	60	41.0	32.0	65.0	26.0	0.023	1.7
35	4	15264	\$31,332,212	\$932,293,860	\$170,383	1,653	51,861	1,596	57	41.3	20.0	15.0	89.0	0.032	0.6
36	7	385	\$15,224,869	\$947,518,729	\$134,044	898	52,759	766	43	43.0	23.0	23.0	83.0	0.030	0.6
37	3	14136	\$6,813,407	\$954,332,136	\$156,494	3,226	55,985	914	78	43.3	4.0	61.0	65.0	0.129	1.5
38	3	65	\$18,985,630	\$973,317,766	\$120,016	526	56,511	484	28	43.3	57.0	16.0	57.0	0.016	1.2
39	4	14135	\$28,205,348	\$1,001,523,114	\$272,765	1,021	57,532	959	62	43.7	50.0	26.0	55.0	0.018	1.1
40	8	165	\$7,827,672	\$1,009,350,786	\$99,762	418	57,950	375	31	46.7	30.0	31.0	79.0	0.023	0.8
41	3	64	\$17,421,111	\$1,026,771,897	\$19,203	289	58,239	259	6	47.0	90.0	19.0	32.0	0.009	1.5

DC FEEDER UNDERGROUNDING RANKING MODEL for Undergrounding each feeder's main and laterals for outages 1/10 thru 12/18					Impacts by feeder (sort Desc)							
					SAIFI		SAIDI			CAIDI		
		UG Cost/Feeder			OH	New	System	OH	New	System	OH	New
System Totals:►		495	\$3,418,248,395		0.6	0.4	316	207	108	304	327	268
Selected Feeders	Impact►	36%	100.0%		na	na	na	na	na	na	na	na
	Totals:►	180	\$3,418,248,395		0.8	0.3	340	243	97	320	319	324
Rank	Ward	Feeder	\$	Cum	n	n	n	n	n	n	n	n
1	7	15707	\$44,019,882	\$44,019,882	2.1	0.7	1401	1352	49	497.2	651.3	66.4
2	4	14890	\$11,059,242	\$55,079,124	1.4	0.1	1508	1495	13	977.6	1,053.3	104.3
3	5	14008	\$21,385,137	\$76,464,261	2.4	0.7	994	781	213	319.3	320.6	314.8
4	3	308	\$18,386,700	\$94,850,961	1.6	0.7	1507	1393	114	657.6	867.1	165.8
5	7	15705	\$39,433,468	\$134,284,430	3.0	1.0	1012	675	338	255.4	224.2	353.3
6	3	14767	\$47,505,597	\$181,790,027	2.2	0.2	997	923	74	410.8	412.1	394.2
7	7	118	\$14,306,265	\$196,096,292	2.1	0.5	787	603	184	302.4	281.6	398.7
8	8	14758	\$27,345,876	\$223,442,168	2.2	0.3	444	419	24	175.7	187.8	83.3
9	4	14900	\$43,449,404	\$266,891,572	2.0	0.6	641	606	35	249.9	304.4	61.3
10	4	15009	\$30,737,828	\$297,629,400	1.7	0.2	540	512	28	284.7	297.3	159.0
11	4	15021	\$32,518,225	\$330,147,625	1.8	0.2	467	445	22	230.6	244.2	107.1
12	5	14014	\$43,158,871	\$373,306,496	2.4	0.3	450	434	16	165.3	178.9	53.7
13	8	15166	\$29,888,561	\$403,195,057	1.5	0.2	436	411	25	260.7	279.6	123.6
14	5	14007	\$30,375,499	\$433,570,556	1.2	0.4	881	513	368	569.5	435.5	997.9
15	3	15801	\$51,311,668	\$484,882,224	1.2	0.4	558	466	92	333.3	379.5	206.3
16	3	144	\$15,176,317	\$500,058,541	1.2	0.8	1477	1026	451	739.1	889.2	534.0
17	3	467	\$11,689,551	\$511,748,092	0.7	0.0	1297	1284	13	1,716.0	1,815.4	264.3
18	3	75	\$9,688,765	\$521,436,857	0.8	1.1	1058	883	174	574.4	1,159.5	161.4
19	7	14702	\$31,701,640	\$553,138,497	1.9	0.4	603	491	112	264.9	257.0	306.0
20	5	14093	\$31,929,366	\$585,067,862	1.2	0.1	514	493	20	398.3	415.7	197.4
21	7	368	\$15,629,627	\$600,697,489	1.3	0.1	464	459	5	347.6	366.3	56.8
22	3	14766	\$19,422,578	\$620,120,067	1.0	0.3	1084	559	524	826.5	563.3	1,647.7
23	3	394	\$13,855,177	\$633,975,244	1.1	0.5	863	766	97	544.6	709.0	192.0
24	7	14717	\$45,600,519	\$679,575,763	1.7	0.9	489	274	215	186.2	163.3	226.6
25	7	383	\$6,639,577	\$686,215,340	1.1	0.1	411	406	6	339.3	364.6	56.5
26	4	15001	\$35,192,800	\$721,408,140	1.0	0.5	712	522	191	496.2	541.2	404.0
27	7	15170	\$19,084,386	\$740,492,527	0.9	0.8	449	373	76	258.8	395.5	95.6
28	4	15944	\$54,577,991	\$795,070,517	1.1	0.4	1131	1003	128	786.6	941.4	344.0
29	4	482	\$4,475,874	\$799,546,392	0.9	0.7	686	361	324	446.0	422.5	475.6
30	5	14200	\$16,419,709	\$815,966,101	1.0	0.3	339	265	74	253.0	267.2	212.5
31	6	15701	\$14,685,327	\$830,651,428	0.8	0.6	364	309	55	269.0	402.2	94.0
32	4	14896	\$28,432,800	\$859,084,228	1.0	0.1	515	392	123	437.5	378.6	866.9
33	4	15199	\$35,432,126	\$894,516,354	1.4	0.4	683	306	378	380.6	212.7	1,052.1
34	4	490	\$6,445,294	\$900,961,648	1.2	0.5	700	235	465	420.3	195.0	1,011.5
35	4	15264	\$31,332,212	\$932,293,860	0.5	0.0	604	600	4	1,019.1	1,103.2	74.7
36	7	385	\$15,224,869	\$947,518,729	0.6	0.0	506	502	4	835.6	867.3	134.2
37	3	14136	\$6,813,407	\$954,332,136	0.7	0.7	368	273	96	250.5	368.4	130.9
38	3	65	\$18,985,630	\$973,317,766	0.8	0.4	627	567	61	544.0	711.1	170.4
39	4	14135	\$28,205,348	\$1,001,523,114	0.8	0.3	524	485	40	484.0	590.5	150.8
40	8	165	\$7,827,672	\$1,009,350,786	0.6	0.1	463	438	25	615.1	724.9	166.4
41	3	64	\$17,421,111	\$1,026,771,897	1.1	0.4	707	529	178	470.7	486.5	429.2

DC FEEDER UNDERGROUNDING RANKING MODEL											
for Undergrounding each feeder's main and laterals					Customer Interruptions (CI)						
for outages 1/10 thru 12/18			UG Cost/Feeder		System	OH		UG impacts on CI			
System Totals:►		495	\$3,418,248,395		285,259	174,193		Total System		OH only	
Selected Feeder	Impact►	36%	100.0%		74.8%	87.9%		53.7%		87.9%	
	Totals:►	180	\$3,418,248,395		213,481	153,103					
Rank	Ward	Feeder	\$	Cum	n	n	Cum	%	Cum	%	Cum
1	7	15707	\$44,019,882	\$44,019,882	8,737	6,435.3	6,435	2.26%	2.26%	3.69%	3.69%
2	4	14890	\$11,059,242	\$55,079,124	2,707	2,491.0	8,926	0.87%	3.13%	1.43%	5.12%
3	5	14008	\$21,385,137	\$76,464,261	3,285	2,570.1	11,496	0.90%	4.03%	1.48%	6.60%
4	3	308	\$18,386,700	\$94,850,961	1,364	956.2	12,453	0.34%	4.37%	0.55%	7.15%
5	7	15705	\$39,433,468	\$134,284,430	8,529	6,471.1	18,924	2.27%	6.63%	3.71%	10.86%
6	3	14767	\$47,505,597	\$181,790,027	2,534	2,338.4	21,262	0.82%	7.45%	1.34%	12.21%
7	7	118	\$14,306,265	\$196,096,292	1,375	1,130.7	22,393	0.40%	7.85%	0.65%	12.86%
8	8	14758	\$27,345,876	\$223,442,168	5,467	4,834.1	27,227	1.69%	9.54%	2.78%	15.63%
9	4	14900	\$43,449,404	\$266,891,572	3,515	2,727.9	29,955	0.96%	10.50%	1.57%	17.20%
10	4	15009	\$30,737,828	\$297,629,400	2,667	2,423.0	32,378	0.85%	11.35%	1.39%	18.59%
11	4	15021	\$32,518,225	\$330,147,625	4,475	4,030.7	36,408	1.41%	12.76%	2.31%	20.90%
12	5	14014	\$43,158,871	\$373,306,496	6,017	5,363.3	41,772	1.88%	14.64%	3.08%	23.98%
13	8	15166	\$29,888,561	\$403,195,057	3,810	3,349.4	45,121	1.17%	15.82%	1.92%	25.90%
14	5	14007	\$30,375,499	\$433,570,556	2,513	1,914.5	47,036	0.67%	16.49%	1.10%	27.00%
15	3	15801	\$51,311,668	\$484,882,224	4,502	3,301.2	50,337	1.16%	17.65%	1.90%	28.90%
16	3	144	\$15,176,317	\$500,058,541	552	318.6	50,655	0.11%	17.76%	0.18%	29.08%
17	3	467	\$11,689,551	\$511,748,092	326	304.9	50,960	0.11%	17.86%	0.18%	29.26%
18	3	75	\$9,688,765	\$521,436,857	670	277.4	51,238	0.10%	17.96%	0.16%	29.41%
19	7	14702	\$31,701,640	\$553,138,497	2,497	2,094.3	53,332	0.73%	18.70%	1.20%	30.62%
20	5	14093	\$31,929,366	\$585,067,862	1,736	1,597.0	54,929	0.56%	19.26%	0.92%	31.53%
21	7	368	\$15,629,627	\$600,697,489	930	873.8	55,803	0.31%	19.56%	0.50%	32.04%
22	3	14766	\$19,422,578	\$620,120,067	958	725.8	56,529	0.25%	19.82%	0.42%	32.45%
23	3	394	\$13,855,177	\$633,975,244	471	321.0	56,850	0.11%	19.93%	0.18%	32.64%
24	7	14717	\$45,600,519	\$679,575,763	11,391	7,272.3	64,122	2.55%	22.48%	4.17%	36.81%
25	7	383	\$6,639,577	\$686,215,340	455	417.2	64,539	0.15%	22.62%	0.24%	37.05%
26	4	15001	\$35,192,800	\$721,408,140	1,925	1,292.9	65,832	0.45%	23.08%	0.74%	37.79%
27	7	15170	\$19,084,386	\$740,492,527	2,857	1,554.2	67,386	0.54%	23.62%	0.89%	38.68%
28	4	15944	\$54,577,991	\$795,070,517	1,027	760.8	68,147	0.27%	23.89%	0.44%	39.12%
29	4	482	\$4,475,874	\$799,546,392	809	449.9	68,597	0.16%	24.05%	0.26%	39.38%
30	5	14200	\$16,419,709	\$815,966,101	3,576	2,652.2	71,249	0.93%	24.98%	1.52%	40.90%
31	6	15701	\$14,685,327	\$830,651,428	4,350	2,469.5	73,719	0.87%	25.84%	1.42%	42.32%
32	4	14896	\$28,432,800	\$859,084,228	1,580	1,389.5	75,108	0.49%	26.33%	0.80%	43.12%
33	4	15199	\$35,432,126	\$894,516,354	3,574	2,859.5	77,967	1.00%	27.33%	1.64%	44.76%
34	4	490	\$6,445,294	\$900,961,648	1,052	761.8	78,729	0.27%	27.60%	0.44%	45.20%
35	4	15264	\$31,332,212	\$932,293,860	980	899.7	79,629	0.32%	27.91%	0.52%	45.71%
36	7	385	\$15,224,869	\$947,518,729	543	520.0	80,149	0.18%	28.10%	0.30%	46.01%
37	3	14136	\$6,813,407	\$954,332,136	4,743	2,388.6	82,538	0.84%	28.93%	1.37%	47.38%
38	3	65	\$18,985,630	\$973,317,766	607	419.2	82,957	0.15%	29.08%	0.24%	47.62%
39	4	14135	\$28,205,348	\$1,001,523,114	1,106	838.2	83,795	0.29%	29.38%	0.48%	48.10%
40	8	165	\$7,827,672	\$1,009,350,786	315	252.7	84,048	0.09%	29.46%	0.15%	48.25%
41	3	64	\$17,421,111	\$1,026,771,897	434	314.3	84,362	0.11%	29.57%	0.18%	48.43%

DC FEEDER UNDERGROUNDING RANKING MODEL												
for Undergrounding each feeder's main and laterals					Customer Minutes/Interruption (CMI)							
for outages 1/10 thru 12/18		UG Cost/Feeder			System	OH		UG impacts on CMI				
System Totals:►		495	\$3,418,248,395		86,785,858	56,992,293		Total System		OH only		
Selected Feeder	Impact►	36%	100.0%		78.8%	85.7%		56.3%		85.7%		
	Totals:►	180	\$3,418,248,395		68,414,270	48,866,835						
Rank	Ward	Feeder	\$	Cum	n	n	Cum	%	Cum	%	Cum	
1	7	15707	\$44,019,882	\$44,019,882	4,344,144	4,191,299	4,191,299	4.83%	4.83%	7.35%	7.35%	
2	4	14890	\$11,059,242	\$55,079,124	2,646,206	2,623,686	6,814,984	3.02%	7.85%	4.60%	11.96%	
3	5	14008	\$21,385,137	\$76,464,261	1,049,107	824,006	7,638,990	0.95%	8.80%	1.45%	13.40%	
4	3	308	\$18,386,700	\$94,850,961	896,685	829,114	8,468,104	0.96%	9.76%	1.45%	14.86%	
5	7	15705	\$39,433,468	\$134,284,430	2,177,854	1,451,027	9,919,131	1.67%	11.43%	2.55%	17.40%	
6	3	14767	\$47,505,597	\$181,790,027	1,040,910	963,753	10,882,884	1.11%	12.54%	1.69%	19.10%	
7	7	118	\$14,306,265	\$196,096,292	415,677	318,423	11,201,307	0.37%	12.91%	0.56%	19.65%	
8	8	14758	\$27,345,876	\$223,442,168	960,836	908,071	12,109,378	1.05%	13.95%	1.59%	21.25%	
9	4	14900	\$43,449,404	\$266,891,572	878,553	830,256	12,939,634	0.96%	14.91%	1.46%	22.70%	
10	4	15009	\$30,737,828	\$297,629,400	759,275	720,487	13,660,121	0.83%	15.74%	1.26%	23.97%	
11	4	15021	\$32,518,225	\$330,147,625	1,031,985	984,368	14,644,489	1.13%	16.87%	1.73%	25.70%	
12	5	14014	\$43,158,871	\$373,306,496	994,477	959,408	15,603,897	1.11%	17.98%	1.68%	27.38%	
13	8	15166	\$29,888,561	\$403,195,057	993,405	936,469	16,540,366	1.08%	19.06%	1.64%	29.02%	
14	5	14007	\$30,375,499	\$433,570,556	1,431,231	833,804	17,374,170	0.96%	20.02%	1.46%	30.49%	
15	3	15801	\$51,311,668	\$484,882,224	1,500,513	1,252,904	18,627,074	1.44%	21.46%	2.20%	32.68%	
16	3	144	\$15,176,317	\$500,058,541	407,704	283,270	18,910,344	0.33%	21.79%	0.50%	33.18%	
17	3	467	\$11,689,551	\$511,748,092	559,047	553,528	19,463,872	0.64%	22.43%	0.97%	34.15%	
18	3	75	\$9,688,765	\$521,436,857	385,006	321,586	19,785,458	0.37%	22.80%	0.56%	34.72%	
19	7	14702	\$31,701,640	\$553,138,497	661,314	538,122	20,323,580	0.62%	23.42%	0.94%	35.66%	
20	5	14093	\$31,929,366	\$585,067,862	691,307	663,927	20,987,507	0.77%	24.18%	1.16%	36.83%	
21	7	368	\$15,629,627	\$600,697,489	323,287	320,100	21,307,608	0.37%	24.55%	0.56%	37.39%	
22	3	14766	\$19,422,578	\$620,120,067	792,098	408,849	21,716,457	0.47%	25.02%	0.72%	38.10%	
23	3	394	\$13,855,177	\$633,975,244	256,325	227,605	21,944,061	0.26%	25.29%	0.40%	38.50%	
24	7	14717	\$45,600,519	\$679,575,763	2,120,529	1,187,520	23,131,581	1.37%	26.65%	2.08%	40.59%	
25	7	383	\$6,639,577	\$686,215,340	154,237	152,129	23,283,711	0.18%	26.83%	0.27%	40.85%	
26	4	15001	\$35,192,800	\$721,408,140	955,334	699,786	23,983,497	0.81%	27.64%	1.23%	42.08%	
27	7	15170	\$19,084,386	\$740,492,527	739,284	614,713	24,598,210	0.71%	28.34%	1.08%	43.16%	
28	4	15944	\$54,577,991	\$795,070,517	807,772	716,220	25,314,429	0.83%	29.17%	1.26%	44.42%	
29	4	482	\$4,475,874	\$799,546,392	360,628	190,062	25,504,492	0.22%	29.39%	0.33%	44.75%	
30	5	14200	\$16,419,709	\$815,966,101	904,939	708,546	26,213,038	0.82%	30.20%	1.24%	45.99%	
31	6	15701	\$14,685,327	\$830,651,428	1,170,036	993,211	27,206,249	1.14%	31.35%	1.74%	47.74%	
32	4	14896	\$28,432,800	\$859,084,228	691,242	526,010	27,732,259	0.61%	31.95%	0.92%	48.66%	
33	4	15199	\$35,432,126	\$894,516,354	1,360,307	608,260	28,340,519	0.70%	32.66%	1.07%	49.73%	
34	4	490	\$6,445,294	\$900,961,648	442,131	148,555	28,489,074	0.17%	32.83%	0.26%	49.99%	
35	4	15264	\$31,332,212	\$932,293,860	998,544	992,562	29,481,636	1.14%	33.97%	1.74%	51.73%	
36	7	385	\$15,224,869	\$947,518,729	454,078	450,932	29,932,568	0.52%	34.49%	0.79%	52.52%	
37	3	14136	\$6,813,407	\$954,332,136	1,188,256	880,052	30,812,620	1.01%	35.50%	1.54%	54.06%	
38	3	65	\$18,985,630	\$973,317,766	330,054	298,101	31,110,721	0.34%	35.85%	0.52%	54.59%	
39	4	14135	\$28,205,348	\$1,001,523,114	535,385	494,975	31,605,696	0.57%	36.42%	0.87%	55.46%	
40	8	165	\$7,827,672	\$1,009,350,786	193,486	183,191	31,788,887	0.21%	36.63%	0.32%	55.78%	
41	3	64	\$17,421,111	\$1,026,771,897	204,260	152,920	31,941,806	0.18%	36.81%	0.27%	56.05%	

DC FEEDER UNDERGROUNDING RANKING MODEL for Undergrounding each feeder's main and laterals for outages 1/10 thru 12/18					Costs						
					Main line			Primary Lateral		OH Line Removal	Permitting
		UG Cost/Feeder		Main Line	Transformers	Risers	Cables	Transformers			
System Totals:▶		495	\$3,418,248,395		NA						
Selected	Impact▶	36%	100.0%								
Feeder	Totals:▶	180	\$3,418,248,395		\$1,687,140,895	\$315,819,727	N/A	#####	\$262,422,414	\$54,154,224	\$26,706,470
Rank	Ward	Feeder	\$	Cum	\$	\$	\$	\$	\$	\$	\$
1	7	15707	\$44,019,882	\$44,019,882	\$19,699,169	\$6,634,961	N/A	\$11,488,956	\$5,270,549	\$620,328	\$305,918
2	4	14890	\$11,059,242	\$55,079,124	\$4,994,823	\$306,404	N/A	\$5,192,523	\$386,505	\$119,872	\$59,116
3	5	14008	\$21,385,137	\$76,464,261	\$9,451,150	\$3,851,882	N/A	\$4,905,193	\$2,737,678	\$294,165	\$145,069
4	3	308	\$18,386,700	\$94,850,961	\$8,917,144	\$1,830,133	N/A	\$5,920,344	\$1,439,828	\$187,021	\$92,230
5	7	15705	\$39,433,468	\$134,284,430	\$13,913,926	\$3,773,276	N/A	\$15,107,354	\$5,728,517	\$609,712	\$300,683
6	3	14767	\$47,505,597	\$181,790,027	\$15,393,648	\$3,129,765	N/A	\$22,335,689	\$5,881,034	\$512,646	\$252,814
7	7	118	\$14,306,265	\$196,096,292	\$7,812,478	\$1,588,806	N/A	\$3,590,327	\$1,023,290	\$195,133	\$96,231
8	8	14758	\$27,345,876	\$223,442,168	\$19,280,947	\$3,239,237	N/A	\$3,264,948	\$677,490	\$591,535	\$291,719
9	4	14900	\$43,449,404	\$266,891,572	\$15,598,806	\$2,632,070	N/A	\$20,158,033	\$4,462,177	\$400,707	\$197,611
10	4	15009	\$30,737,828	\$297,629,400	\$9,830,180	\$2,690,233	N/A	\$12,742,539	\$4,904,665	\$381,883	\$188,328
11	4	15021	\$32,518,225	\$330,147,625	\$10,170,157	\$3,189,802	N/A	\$13,227,137	\$5,431,596	\$334,548	\$164,984
12	5	14014	\$43,158,871	\$373,306,496	\$17,209,730	\$5,067,224	N/A	\$14,427,316	\$5,560,948	\$598,500	\$295,154
13	8	15166	\$29,888,561	\$403,195,057	\$16,213,669	\$2,896,344	N/A	\$8,040,600	\$1,865,205	\$584,495	\$288,247
14	5	14007	\$30,375,499	\$433,570,556	\$12,602,962	\$3,263,553	N/A	\$10,292,644	\$3,647,952	\$380,663	\$187,726
15	3	15801	\$51,311,668	\$484,882,224	\$20,804,357	\$3,292,234	N/A	\$22,211,501	\$4,344,226	\$441,582	\$217,769
16	3	144	\$15,176,317	\$500,058,541	\$7,461,069	\$1,371,697	N/A	\$4,911,738	\$1,226,164	\$137,728	\$67,921
17	3	467	\$11,689,551	\$511,748,092	\$6,590,328	\$1,492,665	N/A	\$2,664,501	\$718,971	\$149,405	\$73,680
18	3	75	\$9,688,765	\$521,436,857	\$6,331,633	\$1,044,016	N/A	\$1,765,658	\$353,084	\$130,177	\$64,198
19	7	14702	\$31,701,640	\$553,138,497	\$19,854,907	\$3,389,801	N/A	\$6,208,804	\$1,364,563	\$591,743	\$291,821
20	5	14093	\$31,929,366	\$585,067,862	\$17,726,997	\$5,160,142	N/A	\$6,030,674	\$2,262,500	\$501,657	\$247,395
21	7	368	\$15,629,627	\$600,697,489	\$10,229,820	\$2,281,124	N/A	\$2,107,891	\$593,342	\$279,576	\$137,874
22	3	14766	\$19,422,578	\$620,120,067	\$5,494,565	\$1,269,240	N/A	\$9,550,654	\$2,865,318	\$162,610	\$80,192
23	3	394	\$13,855,177	\$633,975,244	\$9,647,748	\$1,800,420	N/A	\$1,728,007	\$387,660	\$195,118	\$96,224
24	7	14717	\$45,600,519	\$679,575,763	\$23,937,058	\$6,773,116	N/A	\$9,969,353	\$3,862,701	\$708,762	\$349,530
25	7	383	\$6,639,577	\$686,215,340	\$3,108,020	\$1,478,240	N/A	\$1,139,309	\$769,130	\$97,028	\$47,850
26	4	15001	\$35,192,800	\$721,408,140	\$10,565,398	\$2,988,986	N/A	\$15,353,905	\$5,756,014	\$353,947	\$174,551
27	7	15170	\$19,084,386	\$740,492,527	\$12,237,072	\$2,290,628	N/A	\$3,196,228	\$772,507	\$393,764	\$194,187
28	4	15944	\$54,577,991	\$795,070,517	\$26,905,068	\$5,448,004	N/A	\$17,137,001	\$4,235,822	\$570,668	\$281,428
29	4	482	\$4,475,874	\$799,546,392	\$3,890,285	\$263,343	N/A	\$154,296	\$13,477	\$103,454	\$51,019
30	5	14200	\$16,419,709	\$815,966,101	\$9,289,254	\$2,361,802	N/A	\$3,235,311	\$1,091,016	\$296,236	\$146,090
31	6	15701	\$14,685,327	\$830,651,428	\$4,816,661	\$1,507,491	N/A	\$5,423,963	\$2,536,095	\$268,637	\$132,480
32	4	14896	\$28,432,800	\$859,084,228	\$9,456,367	\$804,314	N/A	\$15,835,349	\$1,854,861	\$322,746	\$159,164
33	4	15199	\$35,432,126	\$894,516,354	\$6,233,963	\$1,133,489	N/A	\$21,531,993	\$5,879,965	\$437,139	\$215,578
34	4	490	\$6,445,294	\$900,961,648	\$3,595,647	\$1,160,898	N/A	\$1,039,075	\$502,088	\$98,841	\$48,744
35	4	15264	\$31,332,212	\$932,293,860	\$15,302,725	\$1,444,010	N/A	\$12,298,049	\$1,498,571	\$528,314	\$260,541
36	7	385	\$15,224,869	\$947,518,729	\$9,730,416	\$2,587,702	N/A	\$1,848,763	\$670,058	\$259,806	\$128,125
37	3	14136	\$6,813,407	\$954,332,136	\$3,489,745	\$1,317,906	N/A	\$1,273,668	\$632,975	\$66,379	\$32,735
38	3	65	\$18,985,630	\$973,317,766	\$11,631,780	\$1,864,629	N/A	\$4,271,807	\$871,682	\$231,545	\$114,188
39	4	14135	\$28,205,348	\$1,001,523,114	\$16,628,838	\$2,361,736	N/A	\$7,354,460	\$1,277,071	\$390,611	\$192,632
40	8	165	\$7,827,672	\$1,009,350,786	\$5,247,522	\$1,449,320	N/A	\$687,873	\$250,098	\$129,162	\$63,697
41	3	64	\$17,421,111	\$1,026,771,897	\$8,707,942	\$1,595,946	N/A	\$5,509,042	\$1,354,057	\$170,192	\$83,931

DC FEEDER UNDERGROUNDING RANKING MODEL for Undergrounding each feeder's main and laterals for outages 1/10 thru 12/18					VOS	Customers				System Reductions▶	CI	CMI	Avg	CMI/\$		
		UG Cost/Feeder		Total		Resi- dential	Com- mercial	53.7%	56.3%		55.0%					
System Totals:▶		495	\$3,418,248,395			\$20,913,000	274,664	250,117	24,547	SAIDI, SAIFI, CMI/\$					na	1.0
Selected Feeders	Impact▶ Totals:▶	36%	100.0%			100.0%	73.3%	58.1%	46.4%							na
		180	\$3,418,248,395		\$20,913,000	201,192	145,439	11,392			CMI/\$	SAIDI	SAIFI	0.014	1.1	
Rank	Ward	Feeder	\$	Cum	\$	n	Cum	n	n	n	n	n	n	n	n	
42	3	14894	\$800,882	\$1,027,572,779	\$40,414	718	58,957	691	27	49.7	1.0	17.0	131.0	0.502	0.3	
43	8	15172	\$21,366,843	\$1,048,939,622	\$96,580	1,529	60,486	1,408	121	49.7	55.0	69.0	25.0	0.016	1.3	
44	4	485	\$1,229,947	\$1,050,169,569	\$3,592	727	61,213	50	1	50.7	5.0	71.0	76.0	0.127	1.0	
45	2	15943	\$24,289,544	\$1,074,459,114	\$192,926	2,047	63,260	1,917	68	51.0	18.0	42.0	93.0	0.032	1.7	
46	8	15171	\$18,372,340	\$1,092,831,454	\$145,703	1,711	64,971	1,395	85	52.0	24.0	55.0	77.0	0.028	0.9	
47	3	132	\$16,284,053	\$1,109,115,506	\$17,102	250	65,221	242	6	52.7	58.0	6.0	94.0	0.016	0.6	
48	5	14009	\$12,078,117	\$1,121,193,623	\$76,416	1,645	66,866	1,505	140	55.7	31.0	83.0	53.0	0.023	1.2	
49	5	14015	\$33,418,007	\$1,154,611,630	\$314,154	1,420	68,286	1,291	114	56.0	71.0	58.0	39.0	0.012	1.6	
50	4	15014	\$25,766,793	\$1,180,378,423	\$381,174	1,903	70,189	1,540	115	56.0	65.0	79.0	24.0	0.014	2.0	
51	3	14768	\$25,767,103	\$1,206,145,527	\$417,404	1,463	71,652	1,163	116	56.7	48.0	51.0	71.0	0.018	1.0	
52	8	15174	\$25,072,619	\$1,231,218,145	\$180,503	2,393	74,045	2,063	208	56.7	60.0	89.0	21.0	0.015	1.5	
53	4	15013	\$31,448,504	\$1,262,666,650	\$311,889	3,312	77,357	1,916	147	57.7	39.0	75.0	59.0	0.020	0.9	
54	4	117	\$12,656,527	\$1,275,323,177	\$55,820	304	77,661	260	23	58.7	87.0	39.0	50.0	0.010	1.3	
55	7	15710	\$33,197,638	\$1,308,520,815	\$141,142	2,206	79,867	2,052	154	61.3	78.0	87.0	19.0	0.011	1.9	
56	4	15197	\$37,863,693	\$1,346,384,508	\$88,321	1,819	81,686	1,389	134	63.0	79.0	70.0	40.0	0.011	1.2	
57	5	14006	\$9,965,944	\$1,356,350,452	\$51,008	1,998	83,684	1,259	95	63.3	28.0	106.0	56.0	0.024	1.0	
58	8	348	\$5,130,221	\$1,361,480,673	\$145,931	258	83,942	196	41	63.3	62.0	56.0	72.0	0.015	0.9	
59	4	414	\$10,728,412	\$1,372,209,085	\$16,252	481	84,423	472	9	63.7	63.0	48.0	80.0	0.015	0.9	
60	5	14016	\$28,742,949	\$1,400,952,034	\$244,389	615	85,038	525	90	64.0	101.0	53.0	38.0	0.007	1.4	
61	7	97	\$17,951,032	\$1,418,903,066	\$33,358	1,084	86,122	697	56	64.0	69.0	74.0	49.0	0.012	1.0	
62	8	333	\$7,188,009	\$1,426,091,075	\$49,240	557	86,679	533	24	65.0	56.0	73.0	66.0	0.016	0.9	
63	3	128	\$16,534,626	\$1,442,625,701	\$44,887	537	87,216	485	11	66.0	82.0	49.0	67.0	0.010	0.9	
64	4	15200	\$32,091,573	\$1,474,717,274	\$278,986	1,441	88,657	1,282	137	66.3	47.0	37.0	115.0	0.018	0.4	
65	5	14023	\$11,794,178	\$1,486,511,451	\$479,586	966	89,623	688	200	66.7	66.0	86.0	48.0	0.013	1.1	
66	7	495	\$9,297,798	\$1,495,809,249	\$38,619	617	90,240	563	28	66.7	46.0	59.0	95.0	0.018	0.6	
67	7	15130	\$28,683,567	\$1,524,492,817	\$107,718	1,977	92,217	1,744	181	68.7	75.0	84.0	47.0	0.012	1.3	
68	3	15945	\$42,738,907	\$1,567,231,724	\$108,396	1,241	93,458	1,094	123	68.7	109.0	77.0	20.0	0.005	1.5	
69	4	133	\$21,741,167	\$1,588,972,891	\$39,914	479	93,937	440	13	69.7	88.0	35.0	86.0	0.009	1.0	
70	7	347	\$9,037,461	\$1,598,010,353	\$71,745	826	94,763	561	35	69.7	61.0	85.0	63.0	0.015	1.0	
71	8	14701	\$20,179,405	\$1,618,189,758	\$136,541	1,610	96,373	1,433	177	70.7	84.0	101.0	27.0	0.010	1.5	
72	7	451	\$10,885,237	\$1,629,074,994	\$6,462	226	96,599	204	6	71.0	122.0	76.0	15.0	0.004	1.5	
73	4	14891	\$3,579,238	\$1,632,654,232	\$837	1,879	98,478	0	2	72.0	3.0	47.0	166.0	0.182	0.2	
74	3	14133	\$22,378,280	\$1,655,032,512	\$54,135	813	99,291	283	34	73.0	81.0	57.0	81.0	0.010	0.9	
75	7	15711	\$4,556,302	\$1,659,588,815	\$27,791	13	99,304	0	10	73.0	150.0	33.0	36.0	0.001	1.2	
76	0	15946	\$455,185,756	\$2,114,774,571	\$752	37	99,341	37	0	75.0	175.0	41.0	9.0	0.000	0.3	
77	7	14055	\$8,346,415	\$2,123,120,986	\$4,915	1,863	101,204	116	5	75.7	9.0	72.0	146.0	0.047	0.2	
78	7	15173	\$36,318,680	\$2,159,439,666	\$107,218	1,863	103,067	1,710	153	77.3	98.0	100.0	34.0	0.007	1.2	
79	7	386	\$9,197,361	\$2,168,637,027	\$69,601	469	103,536	419	50	78.0	74.0	68.0	92.0	0.012	0.5	
80	4	488	\$6,338,309	\$2,174,975,336	\$184,869	849	104,385	622	59	79.0	52.0	103.0	82.0	0.017	1.0	
81	7	15706	\$23,974,704	\$2,198,950,040	\$65,020	2,288	106,673	1,264	135	79.3	72.0	102.0	64.0	0.012	0.8	
82	3	101	\$16,534,356	\$2,215,484,395	\$20,203	221	106,894	208	9	79.7	103.0	27.0	109.0	0.006	0.5	

DC FEEDER UNDERGROUNDING RANKING MODEL for Undergrounding each feeder's main and laterals for outages 1/10 thru 12/18					Impacts by feeder (sort Desc)								
					SAIFI		SAIDI			CAIDI			
		UG Cost/Feeder			OH	New	System	OH	New	System	OH	New	
System Totals:▶		495	\$3,418,248,395			0.6	0.4	316	207	108	304	327	268
Selected Feeders	Impact▶	36%	100.0%			na	na	na	na	na	na	na	na
	Totals:▶	180	\$3,418,248,395			0.8	0.3	340	243	97	320	319	324
Rank	Ward	Feeder	\$	Cum	n	n	n	n	n	n	n	n	n
42	3	14894	\$800,882	\$1,027,572,779	0.3	0.0	560	560	0	2,042.8	2,043.9	144.0	
43	8	15172	\$21,366,843	\$1,048,939,622	1.2	0.1	253	229	25	199.5	188.4	440.2	
44	4	485	\$1,229,947	\$1,050,169,569	0.6	0.3	499	215	284	518.8	343.0	849.2	
45	2	15943	\$24,289,544	\$1,074,459,114	0.5	1.2	863	382	480	495.3	740.6	391.9	
46	8	15171	\$18,372,340	\$1,092,831,454	0.6	0.3	392	296	96	419.7	473.8	310.3	
47	3	132	\$16,284,053	\$1,109,115,506	0.5	0.1	1072	1014	58	1,873.2	2,000.8	882.9	
48	5	14009	\$12,078,117	\$1,121,193,623	0.8	0.3	228	171	57	197.7	205.3	177.9	
49	5	14015	\$33,418,007	\$1,154,611,630	1.0	0.5	700	287	413	449.8	281.8	767.6	
50	4	15014	\$25,766,793	\$1,180,378,423	1.2	0.8	574	184	389	281.8	151.3	476.1	
51	3	14768	\$25,767,103	\$1,206,145,527	0.7	0.3	566	312	254	587.2	459.8	890.0	
52	8	15174	\$25,072,619	\$1,231,218,145	1.3	0.1	181	158	24	122.6	118.3	160.7	
53	4	15013	\$31,448,504	\$1,262,666,650	0.8	0.1	236	194	42	269.2	248.5	435.5	
54	4	117	\$12,656,527	\$1,275,323,177	0.9	0.4	451	397	54	351.9	443.1	139.4	
55	7	15710	\$33,197,638	\$1,308,520,815	1.4	0.5	435	163	272	228.5	117.7	522.3	
56	4	15197	\$37,863,693	\$1,346,384,508	1.0	0.2	244	224	20	206.8	222.2	116.9	
57	5	14006	\$9,965,944	\$1,356,350,452	0.8	0.2	137	119	17	130.3	147.3	72.7	
58	8	348	\$5,130,221	\$1,361,480,673	0.7	0.2	540	296	245	599.7	435.5	1,100.3	
59	4	414	\$10,728,412	\$1,372,209,085	0.6	0.3	354	327	26	412.8	545.4	103.0	
60	5	14016	\$28,742,949	\$1,400,952,034	1.0	0.3	361	308	53	265.6	302.0	156.7	
61	7	97	\$17,951,032	\$1,418,903,066	0.9	0.1	222	206	15	211.6	228.6	105.5	
62	8	333	\$7,188,009	\$1,426,091,075	0.7	0.2	223	208	15	240.8	282.3	79.7	
63	3	128	\$16,534,626	\$1,442,625,701	0.7	0.2	446	319	126	507.7	443.2	803.0	
64	4	15200	\$32,091,573	\$1,474,717,274	0.4	0.0	416	406	10	1,053.6	1,055.9	967.9	
65	5	14023	\$11,794,178	\$1,486,511,451	0.9	0.2	550	163	386	479.6	180.5	1,602.7	
66	7	495	\$9,297,798	\$1,495,809,249	0.5	0.1	279	276	4	443.4	554.0	26.6	
67	7	15130	\$28,683,567	\$1,524,492,817	0.9	0.4	190	169	21	149.6	185.3	57.9	
68	3	15945	\$42,738,907	\$1,567,231,724	1.4	0.1	224	189	35	149.6	138.7	255.8	
69	4	133	\$21,741,167	\$1,588,972,891	0.6	0.4	880	416	464	879.0	752.7	1,034.7	
70	7	347	\$9,037,461	\$1,598,010,353	0.7	0.2	391	164	227	410.3	220.0	1,101.3	
71	8	14701	\$20,179,405	\$1,618,189,758	1.2	0.3	155	128	27	104.2	106.9	93.4	
72	7	451	\$10,885,237	\$1,629,074,994	1.5	0.0	205	189	16	136.4	128.5	532.8	
73	4	14891	\$3,579,238	\$1,632,654,232	0.1	0.1	436	346	90	2,256.0	4,299.4	798.1	
74	3	14133	\$22,378,280	\$1,655,032,512	0.6	0.4	370	289	81	389.6	487.0	227.5	
75	7	15711	\$4,556,302	\$1,659,588,815	1.1	0.1	467	431	35	398.8	407.2	318.7	
76	0	15946	\$455,185,756	\$2,114,774,571	1.9	-1.6	250	392	-142	894.3	204.3	86.8	
77	7	14055	\$8,346,415	\$2,123,120,986	0.2	0.0	213	212	1	1,098.7	1,173.7	56.6	
78	7	15173	\$36,318,680	\$2,159,439,666	1.1	0.2	150	133	17	120.4	124.3	96.7	
79	7	386	\$9,197,361	\$2,168,637,027	0.5	0.0	231	230	1	442.2	443.5	278.3	
80	4	488	\$6,338,309	\$2,174,975,336	0.6	0.4	666	127	539	649.5	215.1	1,238.1	
81	7	15706	\$23,974,704	\$2,198,950,040	0.7	0.0	133	127	5	168.7	171.7	119.8	
82	3	101	\$16,534,356	\$2,215,484,395	0.4	0.1	512	482	30	946.2	1,167.6	236.2	

DC FEEDER UNDERGROUNDING RANKING MODEL for Undergrounding each feeder's main and laterals					Customer Interruptions (CI)						
for outages 1/10 thru 12/18		UG Cost/Feeder			System	OH		UG impacts on CI			
System Totals:►		495	\$3,418,248,395		285,259	174,193		Total System		OH only	
Selected Feeder	Impact►	36%	100.0%		74.8%	87.9%		53.7%		87.9%	
	Totals:►	180	\$3,418,248,395		213,481	153,103					
Rank	Ward	Feeder	\$	Cum	n	n	Cum	%	Cum	%	Cum
42	3	14894	\$800,882	\$1,027,572,779	197	196.6	84,559	0.07%	29.64%	0.11%	48.54%
43	8	15172	\$21,366,843	\$1,048,939,622	1,942	1,856.4	86,415	0.65%	30.29%	1.07%	49.61%
44	4	485	\$1,229,947	\$1,050,169,569	699	456.2	86,871	0.16%	30.45%	0.26%	49.87%
45	2	15943	\$24,289,544	\$1,074,459,114	3,566	1,057.1	87,928	0.37%	30.82%	0.61%	50.48%
46	8	15171	\$18,372,340	\$1,092,831,454	1,596	1,068.7	88,997	0.37%	31.20%	0.61%	51.09%
47	3	132	\$16,284,053	\$1,109,115,506	143	126.7	89,124	0.04%	31.24%	0.07%	51.16%
48	5	14009	\$12,078,117	\$1,121,193,623	1,895	1,371.9	90,496	0.48%	31.72%	0.79%	51.95%
49	5	14015	\$33,418,007	\$1,154,611,630	2,210	1,445.7	91,941	0.51%	32.23%	0.83%	52.78%
50	4	15014	\$25,766,793	\$1,180,378,423	3,873	2,317.2	94,259	0.81%	33.04%	1.33%	54.11%
51	3	14768	\$25,767,103	\$1,206,145,527	1,411	993.0	95,252	0.35%	33.39%	0.57%	54.68%
52	8	15174	\$25,072,619	\$1,231,218,145	3,539	3,186.4	98,438	1.12%	34.51%	1.83%	56.51%
53	4	15013	\$31,448,504	\$1,262,666,650	2,905	2,584.0	101,022	0.91%	35.41%	1.48%	57.99%
54	4	117	\$12,656,527	\$1,275,323,177	390	272.6	101,294	0.10%	35.51%	0.16%	58.15%
55	7	15710	\$33,197,638	\$1,308,520,815	4,200	3,049.6	104,344	1.07%	36.58%	1.75%	59.90%
56	4	15197	\$37,863,693	\$1,346,384,508	2,149	1,835.4	106,180	0.64%	37.22%	1.05%	60.96%
57	5	14006	\$9,965,944	\$1,356,350,452	2,097	1,618.7	107,798	0.57%	37.79%	0.93%	61.88%
58	8	348	\$5,130,221	\$1,361,480,673	232	175.1	107,973	0.06%	37.85%	0.10%	61.98%
59	4	414	\$10,728,412	\$1,372,209,085	412	288.5	108,262	0.10%	37.95%	0.17%	62.15%
60	5	14016	\$28,742,949	\$1,400,952,034	836	626.4	108,888	0.22%	38.17%	0.36%	62.51%
61	7	97	\$17,951,032	\$1,418,903,066	1,135	978.3	109,866	0.34%	38.51%	0.56%	63.07%
62	8	333	\$7,188,009	\$1,426,091,075	516	410.0	110,276	0.14%	38.66%	0.24%	63.31%
63	3	128	\$16,534,626	\$1,442,625,701	472	387.0	110,663	0.14%	38.79%	0.22%	63.53%
64	4	15200	\$32,091,573	\$1,474,717,274	569	554.3	111,218	0.19%	38.99%	0.32%	63.85%
65	5	14023	\$11,794,178	\$1,486,511,451	1,108	874.6	112,092	0.31%	39.29%	0.50%	64.35%
66	7	495	\$9,297,798	\$1,495,809,249	388	307.0	112,399	0.11%	39.40%	0.18%	64.53%
67	7	15130	\$28,683,567	\$1,524,492,817	2,512	1,807.9	114,207	0.63%	40.04%	1.04%	65.56%
68	3	15945	\$42,738,907	\$1,567,231,724	1,859	1,686.8	115,894	0.59%	40.63%	0.97%	66.53%
69	4	133	\$21,741,167	\$1,588,972,891	480	264.8	116,159	0.09%	40.72%	0.15%	66.68%
70	7	347	\$9,037,461	\$1,598,010,353	788	617.6	116,776	0.22%	40.94%	0.35%	67.04%
71	8	14701	\$20,179,405	\$1,618,189,758	2,396	1,923.4	118,700	0.67%	41.61%	1.10%	68.14%
72	7	451	\$10,885,237	\$1,629,074,994	340	332.9	119,033	0.12%	41.73%	0.19%	68.33%
73	4	14891	\$3,579,238	\$1,632,654,232	363	151.3	119,184	0.05%	41.78%	0.09%	68.42%
74	3	14133	\$22,378,280	\$1,655,032,512	772	482.2	119,666	0.17%	41.95%	0.28%	68.70%
75	7	15711	\$4,556,302	\$1,659,588,815	15	13.8	119,680	0.00%	41.95%	0.01%	68.71%
76	0	15946	\$455,185,756	\$2,114,774,571	10	71.0	119,751	0.02%	41.98%	0.04%	68.75%
77	7	14055	\$8,346,415	\$2,123,120,986	361	336.6	120,088	0.12%	42.10%	0.19%	68.94%
78	7	15173	\$36,318,680	\$2,159,439,666	2,318	1,990.5	122,078	0.70%	42.80%	1.14%	70.08%
79	7	386	\$9,197,361	\$2,168,637,027	245	243.1	122,321	0.09%	42.88%	0.14%	70.22%
80	4	488	\$6,338,309	\$2,174,975,336	871	501.3	122,823	0.18%	43.06%	0.29%	70.51%
81	7	15706	\$23,974,704	\$2,198,950,040	1,800	1,695.6	124,518	0.59%	43.65%	0.97%	71.48%
82	3	101	\$16,534,356	\$2,215,484,395	120	91.2	124,609	0.03%	43.68%	0.05%	71.54%

DC FEEDER UNDERGROUNDING RANKING MODEL for Undergrounding each feeder's main and laterals					Customer Minutes/Interruption (CMI)						
for outages 1/10 thru 12/18		UG Cost/Feeder			System	OH		UG impacts on CMI			
System Totals:►		495	\$3,418,248,395		86,785,858	56,992,293		Total System		OH only	
Selected Feeders	Impact►	36%	100.0%		78.8%	85.7%		56.3%		85.7%	
	Totals:►	180	\$3,418,248,395		68,414,270	48,866,835					
Rank	Ward	Feeder	\$	Cum	n	n	Cum	%	Cum	%	Cum
42	3	14894	\$800,882	\$1,027,572,779	401,852	401,836	32,343,642	0.46%	37.27%	0.71%	56.75%
43	8	15172	\$21,366,843	\$1,048,939,622	387,284	349,735	32,693,377	0.40%	37.67%	0.61%	57.36%
44	4	485	\$1,229,947	\$1,050,169,569	362,569	156,455	32,849,832	0.18%	37.85%	0.27%	57.64%
45	2	15943	\$24,289,544	\$1,074,459,114	1,766,101	782,863	33,632,695	0.90%	38.75%	1.37%	59.01%
46	8	15171	\$18,372,340	\$1,092,831,454	670,026	506,289	34,138,984	0.58%	39.34%	0.89%	59.90%
47	3	132	\$16,284,053	\$1,109,115,506	267,996	253,579	34,392,563	0.29%	39.63%	0.44%	60.35%
48	5	14009	\$12,078,117	\$1,121,193,623	374,744	281,645	34,674,207	0.32%	39.95%	0.49%	60.84%
49	5	14015	\$33,418,007	\$1,154,611,630	993,891	407,430	35,081,638	0.47%	40.42%	0.71%	61.56%
50	4	15014	\$25,766,793	\$1,180,378,423	1,091,613	350,670	35,432,307	0.40%	40.83%	0.62%	62.17%
51	3	14768	\$25,767,103	\$1,206,145,527	828,305	456,598	35,888,905	0.53%	41.35%	0.80%	62.97%
52	8	15174	\$25,072,619	\$1,231,218,145	433,759	377,101	36,266,006	0.43%	41.79%	0.66%	63.63%
53	4	15013	\$31,448,504	\$1,262,666,650	782,168	642,175	36,908,181	0.74%	42.53%	1.13%	64.76%
54	4	117	\$12,656,527	\$1,275,323,177	137,071	120,770	37,028,951	0.14%	42.67%	0.21%	64.97%
55	7	15710	\$33,197,638	\$1,308,520,815	959,756	358,857	37,387,808	0.41%	43.08%	0.63%	65.60%
56	4	15197	\$37,863,693	\$1,346,384,508	444,478	407,800	37,795,608	0.47%	43.55%	0.72%	66.32%
57	5	14006	\$9,965,944	\$1,356,350,452	273,282	238,469	38,034,077	0.27%	43.83%	0.42%	66.74%
58	8	348	\$5,130,221	\$1,361,480,673	139,429	76,242	38,110,319	0.09%	43.91%	0.13%	66.87%
59	4	414	\$10,728,412	\$1,372,209,085	170,035	157,319	38,267,638	0.18%	44.09%	0.28%	67.15%
60	5	14016	\$28,742,949	\$1,400,952,034	221,917	189,147	38,456,784	0.22%	44.31%	0.33%	67.48%
61	7	97	\$17,951,032	\$1,418,903,066	240,118	223,619	38,680,404	0.26%	44.57%	0.39%	67.87%
62	8	333	\$7,188,009	\$1,426,091,075	124,128	115,719	38,796,122	0.13%	44.70%	0.20%	68.07%
63	3	128	\$16,534,626	\$1,442,625,701	239,412	171,531	38,967,654	0.20%	44.90%	0.30%	68.37%
64	4	15200	\$32,091,573	\$1,474,717,274	599,432	585,241	39,552,895	0.67%	45.58%	1.03%	69.40%
65	5	14023	\$11,794,178	\$1,486,511,451	531,206	157,883	39,710,778	0.18%	45.76%	0.28%	69.68%
66	7	495	\$9,297,798	\$1,495,809,249	172,241	170,073	39,880,851	0.20%	45.95%	0.30%	69.98%
67	7	15130	\$28,683,567	\$1,524,492,817	375,871	335,048	40,215,899	0.39%	46.34%	0.59%	70.56%
68	3	15945	\$42,738,907	\$1,567,231,724	278,045	234,010	40,449,909	0.27%	46.61%	0.41%	70.97%
69	4	133	\$21,741,167	\$1,588,972,891	421,612	199,327	40,649,236	0.23%	46.84%	0.35%	71.32%
70	7	347	\$9,037,461	\$1,598,010,353	323,141	135,851	40,785,087	0.16%	47.00%	0.24%	71.56%
71	8	14701	\$20,179,405	\$1,618,189,758	249,672	205,572	40,990,660	0.24%	47.23%	0.36%	71.92%
72	7	451	\$10,885,237	\$1,629,074,994	46,327	42,776	41,033,436	0.05%	47.28%	0.08%	72.00%
73	4	14891	\$3,579,238	\$1,632,654,232	819,671	650,442	41,683,879	0.75%	48.03%	1.14%	73.14%
74	3	14133	\$22,378,280	\$1,655,032,512	300,629	234,807	41,918,686	0.27%	48.30%	0.41%	73.55%
75	7	15711	\$4,556,302	\$1,659,588,815	6,068	5,608	41,924,294	0.01%	48.31%	0.01%	73.56%
76	0	15946	\$455,185,756	\$2,114,774,571	9,239	14,501	41,938,795	0.02%	48.32%	0.03%	73.59%
77	7	14055	\$8,346,415	\$2,123,120,986	396,390	395,020	42,333,815	0.46%	48.78%	0.69%	74.28%
78	7	15173	\$36,318,680	\$2,159,439,666	279,084	247,366	42,581,181	0.29%	49.06%	0.43%	74.71%
79	7	386	\$9,197,361	\$2,168,637,027	108,400	107,844	42,689,025	0.12%	49.19%	0.19%	74.90%
80	4	488	\$6,338,309	\$2,174,975,336	565,810	107,847	42,796,872	0.12%	49.31%	0.19%	75.09%
81	7	15706	\$23,974,704	\$2,198,950,040	303,743	291,180	43,088,051	0.34%	49.65%	0.51%	75.60%
82	3	101	\$16,534,356	\$2,215,484,395	113,196	106,480	43,194,532	0.12%	49.77%	0.19%	75.79%

DC FEEDER UNDERGROUNDING RANKING MODEL for Undergrounding each feeder's main and laterals for outages 1/10 thru 12/18					Costs						
					Main line			Primary Lateral		OH Line Removal	Permitting
		UG Cost/Feeder	Main Line	Transformers	Risers	Cables	Transformers				
System Totals:►		495	\$3,418,248,395								
Selected	Impact►	36%	100.0%								
Feeder	Totals:►	180	\$3,418,248,395								
			\$1,687,140,895	\$315,819,727	N/A	#####	\$262,422,414	\$54,154,224	\$26,706,470		
Rank	Ward	Feeder	\$	Cum	\$	\$	\$	\$	\$	\$	
42	3	14894	\$800,882	\$1,027,572,779	\$583,707	\$0	N/A	\$190,977	\$0	\$17,545	\$8,652
43	8	15172	\$21,366,843	\$1,048,939,622	\$7,507,417	\$2,144,692	N/A	\$7,977,850	\$3,152,939	\$391,082	\$192,864
44	4	485	\$1,229,947	\$1,050,169,569	\$980,519	\$175,709	N/A	\$32,444	\$9,857	\$21,041	\$10,377
45	2	15943	\$24,289,544	\$1,074,459,114	\$5,926,315	\$1,593,064	N/A	\$12,039,739	\$4,558,146	\$115,380	\$56,900
46	8	15171	\$18,372,340	\$1,092,831,454	\$10,590,976	\$3,437,187	N/A	\$2,680,656	\$1,209,406	\$304,131	\$149,984
47	3	132	\$16,284,053	\$1,109,115,506	\$8,980,931	\$1,924,603	N/A	\$4,057,375	\$1,038,915	\$189,015	\$93,214
48	5	14009	\$12,078,117	\$1,121,193,623	\$6,269,290	\$2,312,953	N/A	\$2,174,731	\$1,040,059	\$188,248	\$92,836
49	5	14015	\$33,418,007	\$1,154,611,630	\$14,975,326	\$3,980,773	N/A	\$10,158,473	\$3,622,565	\$455,995	\$224,876
50	4	15014	\$25,766,793	\$1,180,378,423	\$9,758,459	\$2,854,004	N/A	\$8,959,656	\$3,552,355	\$430,176	\$212,144
51	3	14768	\$25,767,103	\$1,206,145,527	\$7,716,422	\$40,298	N/A	\$17,531,687	\$105,486	\$249,947	\$123,263
52	8	15174	\$25,072,619	\$1,231,218,145	\$12,639,723	\$3,890,366	N/A	\$5,470,930	\$2,394,904	\$453,198	\$223,497
53	4	15013	\$31,448,504	\$1,262,666,650	\$14,290,851	\$3,713,585	N/A	\$9,399,816	\$3,205,937	\$561,439	\$276,877
54	4	117	\$12,656,527	\$1,275,323,177	\$5,611,517	\$928,009	N/A	\$4,864,509	\$1,045,093	\$138,901	\$68,500
55	7	15710	\$33,197,638	\$1,308,520,815	\$12,972,821	\$4,103,733	N/A	\$10,847,474	\$4,724,348	\$367,853	\$181,409
56	4	15197	\$37,863,693	\$1,346,384,508	\$13,640,648	\$2,398,877	N/A	\$17,139,492	\$3,955,949	\$488,044	\$240,682
57	5	14006	\$9,965,944	\$1,356,350,452	\$3,334,967	\$1,320,102	N/A	\$3,303,925	\$1,774,312	\$155,802	\$76,835
58	8	348	\$5,130,221	\$1,361,480,673	\$3,464,450	\$732,286	N/A	\$609,032	\$219,367	\$70,379	\$34,708
59	4	414	\$10,728,412	\$1,372,209,085	\$5,436,303	\$883,619	N/A	\$3,525,651	\$708,368	\$116,847	\$57,624
60	5	14016	\$28,742,949	\$1,400,952,034	\$14,778,427	\$3,563,654	N/A	\$7,385,718	\$2,200,024	\$545,908	\$269,218
61	7	97	\$17,951,032	\$1,418,903,066	\$11,432,453	\$2,271,393	N/A	\$2,987,974	\$785,577	\$317,204	\$156,431
62	8	333	\$7,188,009	\$1,426,091,075	\$5,128,130	\$1,436,553	N/A	\$319,174	\$115,980	\$126,023	\$62,149
63	3	128	\$16,534,626	\$1,442,625,701	\$5,587,599	\$1,077,674	N/A	\$7,617,916	\$2,060,846	\$127,643	\$62,948
64	4	15200	\$32,091,573	\$1,474,717,274	\$16,913,485	\$2,614,769	N/A	\$9,858,033	\$1,933,952	\$516,579	\$254,754
65	5	14023	\$11,794,178	\$1,486,511,451	\$6,084,569	\$2,035,303	N/A	\$2,345,176	\$1,012,602	\$211,985	\$104,542
66	7	495	\$9,297,798	\$1,495,809,249	\$4,322,428	\$1,449,300	N/A	\$2,258,741	\$1,106,935	\$107,420	\$52,975
67	7	15130	\$28,683,567	\$1,524,492,817	\$15,791,411	\$2,769,526	N/A	\$7,688,749	\$1,685,379	\$501,289	\$247,214
68	3	15945	\$42,738,907	\$1,567,231,724	\$16,351,327	\$4,173,103	N/A	\$16,470,091	\$5,169,006	\$385,346	\$190,035
69	4	133	\$21,741,167	\$1,588,972,891	\$9,828,182	\$2,020,657	N/A	\$7,684,149	\$1,897,470	\$208,089	\$102,620
70	7	347	\$9,037,461	\$1,598,010,353	\$6,124,065	\$1,425,087	N/A	\$936,374	\$312,774	\$160,172	\$78,990
71	8	14701	\$20,179,405	\$1,618,189,758	\$9,782,616	\$2,973,589	N/A	\$4,916,104	\$1,951,303	\$372,227	\$183,566
72	7	451	\$10,885,237	\$1,629,074,994	\$7,736,090	\$1,184,175	N/A	\$1,376,549	\$265,413	\$216,327	\$106,683
73	4	14891	\$3,579,238	\$1,632,654,232	\$3,465,902	\$0	N/A	\$1,458	\$0	\$74,927	\$36,951
74	3	14133	\$22,378,280	\$1,655,032,512	\$4,786,163	\$1,010,284	N/A	\$12,824,421	\$3,545,553	\$141,887	\$69,972
75	7	15711	\$4,556,302	\$1,659,588,815	\$3,061,816	\$837,558	N/A	\$394,194	\$136,904	\$84,271	\$41,559
76	0	15946	\$455,185,756	\$2,114,774,571	\$226,833,704	\$0	N/A	\$211,839,627	\$0	\$11,058,742	\$5,453,683
77	7	14055	\$8,346,415	\$2,123,120,986	\$7,824,624	\$152,281	N/A	\$53,407	\$1,271	\$210,850	\$103,982
78	7	15173	\$36,318,680	\$2,159,439,666	\$23,523,573	\$5,794,020	N/A	\$4,530,059	\$1,528,896	\$630,967	\$311,165
79	7	386	\$9,197,361	\$2,168,637,027	\$5,468,197	\$1,581,820	N/A	\$1,382,878	\$539,752	\$150,495	\$74,218
80	4	488	\$6,338,309	\$2,174,975,336	\$3,028,615	\$927,651	N/A	\$1,527,851	\$734,801	\$79,958	\$39,432
81	7	15706	\$23,974,704	\$2,198,950,040	\$10,906,950	\$4,140,017	N/A	\$5,533,287	\$2,883,233	\$342,373	\$168,843
82	3	101	\$16,534,356	\$2,215,484,395	\$11,879,166	\$1,648,023	N/A	\$2,261,990	\$396,068	\$233,806	\$115,303

DC FEEDER UNDERGROUNDING RANKING MODEL for Undergrounding each feeder's main and laterals for outages 1/10 thru 12/18					VOS	Customers				System	CI	CMI	Avg	CMI/\$	System							
System Totals:▶		495		\$3,418,248,395		\$20,913,000		274,664		250,117		24,547				SAIDI, SAIFI, CMI/\$				na	1.0	
Selected Feeders	Impact▶	36%	100.0%			100.0%		73.3%		58.1%		46.4%								na	na	
	Totals:▶	180	\$3,418,248,395			\$20,913,000		201,192		145,439		11,392								0.014	1.1	
Rank	Ward	Feeder	\$	Cum	\$	n	Cum	n	n	n	n	n	n	n	n	n						
83	7	152	\$10,901,322	\$2,226,385,717	\$29,885	333	107,227	317	16	81.7	80.0	46.0	119.0	0.011	0.4							
84	3	87	\$14,278,944	\$2,240,664,661	\$64,332	361	107,588	331	30	81.7	89.0	45.0	111.0	0.009	0.5							
85	8	15175	\$15,216,255	\$2,255,880,915	\$73,871	1,859	109,447	711	73	83.7	43.0	91.0	117.0	0.019	0.6							
86	5	14005	\$16,884,499	\$2,272,765,414	\$178,802	386	109,833	262	118	87.0	111.0	66.0	84.0	0.005	1.1							
87	8	14753	\$20,811,598	\$2,293,577,012	\$43,026	840	110,673	752	88	88.0	106.0	96.0	62.0	0.006	1.4							
88	8	323	\$5,660,274	\$2,299,237,286	\$41,641	579	111,252	505	38	88.7	59.0	95.0	112.0	0.015	0.5							
89	7	372	\$19,782,131	\$2,319,019,417	\$59,709	751	112,003	695	46	91.0	94.0	81.0	98.0	0.007	0.5							
90	7	14809	\$9,680,659	\$2,328,700,076	\$45	14	112,017	9	0	94.7	161.0	50.0	73.0	0.000	0.8							
91	7	15709	\$26,993,279	\$2,355,693,355	\$132,278	2,585	114,602	2,338	247	95.0	105.0	126.0	54.0	0.006	1.1							
92	8	499	\$4,155,130	\$2,359,848,485	\$52,882	244	114,846	205	36	95.0	77.0	78.0	130.0	0.011	0.4							
93	4	15007	\$2,184,635	\$2,362,033,120	\$6,549	281	115,127	276	5	95.3	68.0	111.0	107.0	0.013	0.6							
94	4	15198	\$27,745,570	\$2,389,778,690	\$45,066	1,674	116,801	1,635	39	96.0	86.0	88.0	114.0	0.010	0.5							
95	8	15085	\$24,201,991	\$2,413,980,681	\$32,641	1,753	118,554	1,546	58	97.3	112.0	122.0	58.0	0.005	1.2							
96	7	328	\$9,129,744	\$2,423,110,424	\$10,576	403	118,957	395	8	97.3	95.0	92.0	105.0	0.007	0.5							
97	4	15011	\$21,413,672	\$2,444,524,096	\$26,517	1,400	120,357	1,269	81	98.7	93.0	107.0	96.0	0.008	0.9							
98	4	15010	\$28,941,209	\$2,473,465,305	\$156,526	2,842	123,199	1,702	131	100.0	85.0	109.0	106.0	0.010	0.5							
99	7	205	\$15,751,169	\$2,489,216,474	\$19,730	550	123,749	512	31	100.3	135.0	121.0	45.0	0.003	1.0							
100	3	292	\$14,511,023	\$2,503,727,498	\$10,295	134	123,883	114	8	100.3	138.0	64.0	99.0	0.002	0.9							
101	7	327	\$8,745,955	\$2,512,473,453	\$15,519	322	124,205	287	17	100.3	99.0	80.0	122.0	0.007	0.4							
102	4	15006	\$21,493,358	\$2,533,966,811	\$249,652	2,502	126,707	2,204	289	101.3	73.0	108.0	123.0	0.012	0.5							
103	7	365	\$12,231,832	\$2,546,198,643	\$18,972	709	127,416	694	15	101.3	83.0	82.0	139.0	0.010	0.4							
104	4	15008	\$2,013,913	\$2,548,212,557	\$1,129	208	127,624	0	2	101.7	64.0	99.0	142.0	0.014	0.7							
105	3	14150	\$2,831,875	\$2,551,044,432	\$12,903	2,797	130,421	819	48	103.7	10.0	137.0	164.0	0.045	0.5							
106	3	82	\$14,234,445	\$2,565,278,877	\$17,472	617	131,038	322	10	103.7	97.0	90.0	124.0	0.007	0.6							
107	7	15177	\$30,405,688	\$2,595,684,565	\$44,819	2,101	133,139	1,736	148	104.3	100.0	112.0	101.0	0.007	0.7							
108	3	102	\$17,177,930	\$2,612,862,495	\$6,536	579	133,718	333	13	105.7	132.0	117.0	68.0	0.003	0.8							
109	7	14813	\$8,891,899	\$2,621,754,394	\$1,423	219	133,937	0	2	106.0	102.0	63.0	153.0	0.006	0.1							
110	3	181	\$10,700,818	\$2,632,455,213	\$146,375	255	134,192	194	60	106.0	124.0	94.0	100.0	0.004	0.6							
111	8	14752	\$26,145,532	\$2,658,600,745	\$53,840	1,385	135,577	1,224	156	106.3	115.0	113.0	91.0	0.005	0.7							
112	7	14261	\$33,930,108	\$2,692,530,853	\$52,004	1,317	136,894	1,227	90	106.7	139.0	130.0	51.0	0.002	0.9							
113	7	380	\$9,244,132	\$2,701,774,985	\$56,440	629	137,523	218	22	106.7	107.0	116.0	97.0	0.006	0.6							
114	7	366	\$13,874,197	\$2,715,649,182	\$31,761	491	138,014	466	25	107.7	116.0	105.0	102.0	0.004	0.5							
115	4	15015	\$25,205,928	\$2,740,855,109	\$40,503	3,865	141,879	2,232	136	108.7	91.0	131.0	104.0	0.008	0.5							
116	8	329	\$8,460,225	\$2,749,315,334	\$3,619	303	142,182	294	9	109.7	130.0	114.0	85.0	0.003	0.6							
117	7	14158	\$7,000,518	\$2,756,315,853	\$2,475	8	142,190	0	4	110.0	171.0	118.0	41.0	0.000	1.5							
118	7	494	\$7,415,519	\$2,763,731,372	\$10,762	334	142,524	298	26	110.0	131.0	124.0	75.0	0.003	0.6							
119	3	309	\$11,765,765	\$2,775,497,136	\$6,999	522	143,046	470	31	111.7	110.0	104.0	121.0	0.005	0.8							
120	7	244	\$10,878,423	\$2,786,375,560	\$6,634	367	143,413	356	8	112.0	114.0	93.0	129.0	0.005	0.8							
121	7	14031	\$36,510,145	\$2,822,885,704	\$58,604	1,204	144,617	1,071	128	112.3	141.0	127.0	69.0	0.002	0.9							

DC FEEDER UNDERGROUNDING RANKING MODEL for Undergrounding each feeder's main and laterals for outages 1/10 thru 12/18					Impacts by feeder (sort Desc)								
					SAIFI		SAIDI			CAIDI			
		UG Cost/Feeder			OH	New	System	OH	New	System	OH	New	
System Totals:►		495	\$3,418,248,395			0.6	0.4	316	207	108	304	327	268
Selected Feeders	Impact►	36%	100.0%			na	na	na	na	na	na	na	na
	Totals:►	180	\$3,418,248,395			0.8	0.3	340	243	97	320	319	324
Rank	Ward	Feeder	\$	Cum	n	n	n	n	n	n	n	n	n
83	7	152	\$10,901,322	\$2,226,385,717	0.3	0.0	353	347	5	982.4	1,005.2	391.2	
84	3	87	\$14,278,944	\$2,240,664,661	0.4	0.1	397	360	37	800.3	891.7	403.4	
85	8	15175	\$15,216,255	\$2,255,880,915	0.4	0.3	188	156	32	290.0	416.3	116.9	
86	5	14005	\$16,884,499	\$2,272,765,414	0.6	0.5	304	234	69	281.6	408.1	137.5	
87	8	14753	\$20,811,598	\$2,293,577,012	0.8	0.6	276	149	127	199.0	196.7	201.6	
88	8	323	\$5,660,274	\$2,299,237,286	0.4	0.1	154	150	4	295.5	371.6	37.2	
89	7	372	\$19,782,131	\$2,319,019,417	0.5	0.0	188	181	8	372.9	380.6	253.2	
90	7	14809	\$9,680,659	\$2,328,700,076	0.7	0.1	327	312	15	416.3	463.2	131.6	
91	7	15709	\$26,993,279	\$2,355,693,355	0.8	0.2	84	64	20	78.9	77.5	83.2	
92	8	499	\$4,155,130	\$2,359,848,485	0.3	0.1	336	185	151	819.8	661.9	1,158.6	
93	4	15007	\$2,184,635	\$2,362,033,120	0.4	0.2	239	98	142	400.8	226.0	858.9	
94	4	15198	\$27,745,570	\$2,389,778,690	0.4	0.1	217	159	58	468.1	403.1	837.9	
95	8	15085	\$24,201,991	\$2,413,980,681	0.8	0.4	115	72	43	97.8	91.0	111.6	
96	7	328	\$9,129,744	\$2,423,110,424	0.4	0.0	156	155	1	346.0	350.1	142.6	
97	4	15011	\$21,413,672	\$2,444,524,096	0.5	0.4	146	117	29	159.2	240.7	66.7	
98	4	15010	\$28,941,209	\$2,473,465,305	0.4	0.0	124	101	23	254.9	230.3	475.4	
99	7	205	\$15,751,169	\$2,489,216,474	0.9	0.0	83	73	10	84.1	77.3	256.3	
100	3	292	\$14,511,023	\$2,503,727,498	0.5	0.4	366	248	118	399.4	526.4	264.6	
101	7	327	\$8,745,955	\$2,512,473,453	0.3	0.1	193	182	11	429.2	546.6	97.5	
102	4	15006	\$21,493,358	\$2,533,966,811	0.3	0.1	147	102	45	317.5	314.9	323.3	
103	7	365	\$12,231,832	\$2,546,198,643	0.2	0.1	282	177	106	776.8	794.7	748.6	
104	4	15008	\$2,013,913	\$2,548,212,557	0.2	0.4	220	137	83	337.2	638.9	188.9	
105	3	14150	\$2,831,875	\$2,551,044,432	0.1	0.4	141	46	96	295.7	467.3	251.7	
106	3	82	\$14,234,445	\$2,565,278,877	0.3	0.3	278	157	121	482.7	498.4	463.7	
107	7	15177	\$30,405,688	\$2,595,684,565	0.5	0.3	114	95	18	158.7	206.9	72.1	
108	3	102	\$17,177,930	\$2,612,862,495	0.7	0.1	172	87	84	214.4	122.4	980.8	
109	7	14813	\$8,891,899	\$2,621,754,394	0.1	0.0	263	263	0	1,920.0	1,920.0	0.0	
110	3	181	\$10,700,818	\$2,632,455,213	0.5	0.1	303	151	152	507.5	323.6	1,164.0	
111	8	14752	\$26,145,532	\$2,658,600,745	0.5	0.1	113	91	21	167.1	170.3	154.5	
112	7	14261	\$33,930,108	\$2,692,530,853	0.9	0.0	61	59	2	68.7	67.6	146.1	
113	7	380	\$9,244,132	\$2,701,774,985	0.5	0.2	459	88	371	712.1	181.2	2,318.3	
114	7	366	\$13,874,197	\$2,715,649,182	0.5	0.0	126	122	4	266.9	265.8	307.4	
115	4	15015	\$25,205,928	\$2,740,855,109	0.4	0.1	70	55	16	129.1	123.6	153.0	
116	8	329	\$8,460,225	\$2,749,315,334	0.6	0.1	103	89	14	160.1	160.5	157.5	
117	7	14158	\$7,000,518	\$2,756,315,853	1.0	0.5	111	87	24	72.6	87.0	45.2	
118	7	494	\$7,415,519	\$2,763,731,372	0.6	0.0	76	68	8	118.5	108.4	685.2	
119	3	309	\$11,765,765	\$2,775,497,136	0.3	0.4	160	123	38	211.7	363.1	90.0	
120	7	244	\$10,878,423	\$2,786,375,560	0.3	0.6	371	151	220	439.2	538.3	389.8	
121	7	14031	\$36,510,145	\$2,822,885,704	0.7	0.2	84	62	22	91.2	87.8	102.5	

DC FEEDER UNDERGROUNDING RANKING MODEL for Undergrounding each feeder's main and laterals					Customer Interruptions (CI)						
for outages 1/10 thru 12/18		UG Cost/Feeder			System	OH		UG impacts on CI			
System Totals:►		495	\$3,418,248,395		285,259	174,193		Total System		OH only	
Selected Feeder	Impact►	36%	100.0%		74.8%	87.9%		53.7%		87.9%	
	Totals:►	180	\$3,418,248,395		213,481	153,103					
Rank	Ward	Feeder	\$	Cum	n	n	Cum	%	Cum	%	Cum
83	7	152	\$10,901,322	\$2,226,385,717	120	115.1	124,724	0.04%	43.72%	0.07%	71.60%
84	3	87	\$14,278,944	\$2,240,664,661	179	145.7	124,870	0.05%	43.77%	0.08%	71.68%
85	8	15175	\$15,216,255	\$2,255,880,915	1,207	698.0	125,568	0.24%	44.02%	0.40%	72.09%
86	5	14005	\$16,884,499	\$2,272,765,414	416	221.6	125,790	0.08%	44.10%	0.13%	72.21%
87	8	14753	\$20,811,598	\$2,293,577,012	1,166	634.6	126,424	0.22%	44.32%	0.36%	72.58%
88	8	323	\$5,660,274	\$2,299,237,286	302	233.2	126,657	0.08%	44.40%	0.13%	72.71%
89	7	372	\$19,782,131	\$2,319,019,417	379	356.4	127,014	0.12%	44.53%	0.20%	72.92%
90	7	14809	\$9,680,659	\$2,328,700,076	11	9.4	127,023	0.00%	44.53%	0.01%	72.92%
91	7	15709	\$26,993,279	\$2,355,693,355	2,764	2,129.0	129,152	0.75%	45.28%	1.22%	74.14%
92	8	499	\$4,155,130	\$2,359,848,485	100	68.2	129,221	0.02%	45.30%	0.04%	74.18%
93	4	15007	\$2,184,635	\$2,362,033,120	168	121.4	129,342	0.04%	45.34%	0.07%	74.25%
94	4	15198	\$27,745,570	\$2,389,778,690	775	659.5	130,001	0.23%	45.57%	0.38%	74.63%
95	8	15085	\$24,201,991	\$2,413,980,681	2,069	1,395.5	131,397	0.49%	46.06%	0.80%	75.43%
96	7	328	\$9,129,744	\$2,423,110,424	182	178.3	131,575	0.06%	46.12%	0.10%	75.53%
97	4	15011	\$21,413,672	\$2,444,524,096	1,285	683.3	132,259	0.24%	46.36%	0.39%	75.93%
98	4	15010	\$28,941,209	\$2,473,465,305	1,388	1,248.8	133,507	0.44%	46.80%	0.72%	76.64%
99	7	205	\$15,751,169	\$2,489,216,474	540	519.7	134,027	0.18%	46.98%	0.30%	76.94%
100	3	292	\$14,511,023	\$2,503,727,498	123	63.2	134,090	0.02%	47.01%	0.04%	76.98%
101	7	327	\$8,745,955	\$2,512,473,453	145	107.0	134,197	0.04%	47.04%	0.06%	77.04%
102	4	15006	\$21,493,358	\$2,533,966,811	1,158	806.6	135,004	0.28%	47.33%	0.46%	77.50%
103	7	365	\$12,231,832	\$2,546,198,643	258	157.7	135,162	0.06%	47.38%	0.09%	77.59%
104	4	15008	\$2,013,913	\$2,548,212,557	136	44.8	135,206	0.02%	47.40%	0.03%	77.62%
105	3	14150	\$2,831,875	\$2,551,044,432	1,338	273.5	135,480	0.10%	47.49%	0.16%	77.78%
106	3	82	\$14,234,445	\$2,565,278,877	356	194.7	135,675	0.07%	47.56%	0.11%	77.89%
107	7	15177	\$30,405,688	\$2,595,684,565	1,506	967.4	136,642	0.34%	47.90%	0.56%	78.44%
108	3	102	\$17,177,930	\$2,612,862,495	463	413.8	137,056	0.15%	48.05%	0.24%	78.68%
109	7	14813	\$8,891,899	\$2,621,754,394	30	30.0	137,086	0.01%	48.06%	0.02%	78.70%
110	3	181	\$10,700,818	\$2,632,455,213	152	119.0	137,205	0.04%	48.10%	0.07%	78.77%
111	8	14752	\$26,145,532	\$2,658,600,745	933	741.2	137,946	0.26%	48.36%	0.43%	79.19%
112	7	14261	\$33,930,108	\$2,692,530,853	1,163	1,146.1	139,092	0.40%	48.76%	0.66%	79.85%
113	7	380	\$9,244,132	\$2,701,774,985	405	304.5	139,396	0.11%	48.87%	0.17%	80.02%
114	7	366	\$13,874,197	\$2,715,649,182	232	225.9	139,622	0.08%	48.95%	0.13%	80.15%
115	4	15015	\$25,205,928	\$2,740,855,109	2,104	1,709.9	141,332	0.60%	49.55%	0.98%	81.14%
116	8	329	\$8,460,225	\$2,749,315,334	195	167.6	141,500	0.06%	49.60%	0.10%	81.23%
117	7	14158	\$7,000,518	\$2,756,315,853	12	8.0	141,508	0.00%	49.61%	0.00%	81.24%
118	7	494	\$7,415,519	\$2,763,731,372	214	210.5	141,718	0.07%	49.68%	0.12%	81.36%
119	3	309	\$11,765,765	\$2,775,497,136	395	176.2	141,895	0.06%	49.74%	0.10%	81.46%
120	7	244	\$10,878,423	\$2,786,375,560	310	103.1	141,998	0.04%	49.78%	0.06%	81.52%
121	7	14031	\$36,510,145	\$2,822,885,704	1,108	852.5	142,850	0.30%	50.08%	0.49%	82.01%

DC FEEDER UNDERGROUNDING RANKING MODEL for Undergrounding each feeder's main and laterals					Customer Minutes/Interruption (CMI)						
for outages 1/10 thru 12/18		UG Cost/Feeder			System	OH		UG impacts on CMI			
System Totals:►		495	\$3,418,248,395		86,785,858	56,992,293		Total System		OH only	
Selected Feeders	Impact►	36%	100.0%		78.8%	85.7%		56.3%		85.7%	
	Totals:►	180	\$3,418,248,395		68,414,270	48,866,835					
Rank	Ward	Feeder	\$	Cum	n	n	Cum	%	Cum	%	Cum
83	7	152	\$10,901,322	\$2,226,385,717	117,410	115,672	43,310,204	0.13%	49.90%	0.20%	75.99%
84	3	87	\$14,278,944	\$2,240,664,661	143,483	129,950	43,440,154	0.15%	50.05%	0.23%	76.22%
85	8	15175	\$15,216,255	\$2,255,880,915	350,099	290,572	43,730,726	0.33%	50.39%	0.51%	76.73%
86	5	14005	\$16,884,499	\$2,272,765,414	117,217	90,439	43,821,166	0.10%	50.49%	0.16%	76.89%
87	8	14753	\$20,811,598	\$2,293,577,012	231,940	124,849	43,946,015	0.14%	50.64%	0.22%	77.11%
88	8	323	\$5,660,274	\$2,299,237,286	89,203	86,648	44,032,663	0.10%	50.74%	0.15%	77.26%
89	7	372	\$19,782,131	\$2,319,019,417	141,451	135,656	44,168,319	0.16%	50.89%	0.24%	77.50%
90	7	14809	\$9,680,659	\$2,328,700,076	4,578	4,373	44,172,692	0.01%	50.90%	0.01%	77.51%
91	7	15709	\$26,993,279	\$2,355,693,355	217,938	165,097	44,337,790	0.19%	51.09%	0.29%	77.80%
92	8	499	\$4,155,130	\$2,359,848,485	81,953	45,146	44,382,936	0.05%	51.14%	0.08%	77.88%
93	4	15007	\$2,184,635	\$2,362,033,120	67,225	27,441	44,410,376	0.03%	51.17%	0.05%	77.92%
94	4	15198	\$27,745,570	\$2,389,778,690	362,963	265,800	44,676,176	0.31%	51.48%	0.47%	78.39%
95	8	15085	\$24,201,991	\$2,413,980,681	202,240	127,053	44,803,229	0.15%	51.63%	0.22%	78.61%
96	7	328	\$9,129,744	\$2,423,110,424	62,919	62,412	44,865,641	0.07%	51.70%	0.11%	78.72%
97	4	15011	\$21,413,672	\$2,444,524,096	204,580	164,456	45,030,097	0.19%	51.89%	0.29%	79.01%
98	4	15010	\$28,941,209	\$2,473,465,305	353,682	287,667	45,317,764	0.33%	52.22%	0.50%	79.52%
99	7	205	\$15,751,169	\$2,489,216,474	45,466	40,170	45,357,934	0.05%	52.26%	0.07%	79.59%
100	3	292	\$14,511,023	\$2,503,727,498	49,019	33,268	45,391,202	0.04%	52.30%	0.06%	79.64%
101	7	327	\$8,745,955	\$2,512,473,453	62,163	58,469	45,449,671	0.07%	52.37%	0.10%	79.75%
102	4	15006	\$21,493,358	\$2,533,966,811	367,708	254,032	45,703,703	0.29%	52.66%	0.45%	80.19%
103	7	365	\$12,231,832	\$2,546,198,643	200,177	125,344	45,829,048	0.14%	52.81%	0.22%	80.41%
104	4	15008	\$2,013,913	\$2,548,212,557	45,806	28,599	45,857,647	0.03%	52.84%	0.05%	80.46%
105	3	14150	\$2,831,875	\$2,551,044,432	395,588	127,785	45,985,432	0.15%	52.99%	0.22%	80.69%
106	3	82	\$14,234,445	\$2,565,278,877	171,834	97,053	46,082,485	0.11%	53.10%	0.17%	80.86%
107	7	15177	\$30,405,688	\$2,595,684,565	238,999	200,192	46,282,677	0.23%	53.33%	0.35%	81.21%
108	3	102	\$17,177,930	\$2,612,862,495	99,351	50,653	46,333,330	0.06%	53.39%	0.09%	81.30%
109	7	14813	\$8,891,899	\$2,621,754,394	57,583	57,583	46,390,913	0.07%	53.45%	0.10%	81.40%
110	3	181	\$10,700,818	\$2,632,455,213	77,279	38,492	46,429,404	0.04%	53.50%	0.07%	81.47%
111	8	14752	\$26,145,532	\$2,658,600,745	155,854	126,247	46,555,652	0.15%	53.64%	0.22%	81.69%
112	7	14261	\$33,930,108	\$2,692,530,853	79,960	77,444	46,633,096	0.09%	53.73%	0.14%	81.82%
113	7	380	\$9,244,132	\$2,701,774,985	288,465	55,162	46,688,258	0.06%	53.80%	0.10%	81.92%
114	7	366	\$13,874,197	\$2,715,649,182	61,868	60,058	46,748,316	0.07%	53.87%	0.11%	82.03%
115	4	15015	\$25,205,928	\$2,740,855,109	271,725	211,376	46,959,692	0.24%	54.11%	0.37%	82.40%
116	8	329	\$8,460,225	\$2,749,315,334	31,148	26,897	46,986,589	0.03%	54.14%	0.05%	82.44%
117	7	14158	\$7,000,518	\$2,756,315,853	887	696	46,987,285	0.00%	54.14%	0.00%	82.44%
118	7	494	\$7,415,519	\$2,763,731,372	25,398	22,810	47,010,095	0.03%	54.17%	0.04%	82.49%
119	3	309	\$11,765,765	\$2,775,497,136	83,699	63,975	47,074,071	0.07%	54.24%	0.11%	82.60%
120	7	244	\$10,878,423	\$2,786,375,560	136,156	55,491	47,129,562	0.06%	54.31%	0.10%	82.69%
121	7	14031	\$36,510,145	\$2,822,885,704	101,039	74,848	47,204,409	0.09%	54.39%	0.13%	82.83%

DC FEEDER UNDERGROUNDING RANKING MODEL for Undergrounding each feeder's main and laterals for outages 1/10 thru 12/18					Costs						
					Main line			Primary Lateral		OH Line Removal	Permitting
System Totals:►		UG Cost/Feeder		Main Line	Transformers	Risers	Cables	Transformers			
Selected Feeder	Impact►	36%		100.0%		NA					
Totals:►		180	\$3,418,248,395		\$1,687,140,895	\$315,819,727	N/A	#####	\$262,422,414	\$54,154,224	\$26,706,470
Rank	Ward	Feeder	\$	Cum	\$	\$	\$	\$	\$	\$	\$
83	7	152	\$10,901,322	\$2,226,385,717	\$7,745,969	\$953,280	N/A	\$1,622,150	\$255,769	\$217,093	\$107,061
84	3	87	\$14,278,944	\$2,240,664,661	\$8,772,016	\$1,519,041	N/A	\$3,062,196	\$668,941	\$171,952	\$84,799
85	8	15175	\$15,216,255	\$2,255,880,915	\$8,445,625	\$2,569,425	N/A	\$2,735,252	\$1,133,494	\$222,654	\$109,803
86	5	14005	\$16,884,499	\$2,272,765,414	\$10,835,005	\$4,203,953	N/A	\$960,119	\$457,397	\$286,658	\$141,367
87	8	14753	\$20,811,598	\$2,293,577,012	\$13,529,355	\$3,895,591	N/A	\$2,050,595	\$743,177	\$397,065	\$195,815
88	8	323	\$5,660,274	\$2,299,237,286	\$3,121,679	\$1,365,785	N/A	\$649,805	\$376,883	\$97,861	\$48,261
89	7	372	\$19,782,131	\$2,319,019,417	\$13,224,692	\$2,845,670	N/A	\$2,463,493	\$775,123	\$316,882	\$156,272
90	7	14809	\$9,680,659	\$2,328,700,076	\$9,273,680	\$61,738	N/A	\$0	\$0	\$231,215	\$114,025
91	7	15709	\$26,993,279	\$2,355,693,355	\$14,789,831	\$4,941,425	N/A	\$4,587,563	\$2,010,184	\$444,881	\$219,395
92	8	499	\$4,155,130	\$2,359,848,485	\$3,402,890	\$157,041	N/A	\$434,501	\$23,006	\$92,216	\$45,477
93	4	15007	\$2,184,635	\$2,362,033,120	\$2,109,652	\$0	N/A	\$5,131	\$0	\$46,781	\$23,070
94	4	15198	\$27,745,570	\$2,389,778,690	\$8,827,280	\$2,699,387	N/A	\$11,038,458	\$4,732,204	\$300,197	\$148,044
95	8	15085	\$24,201,991	\$2,413,980,681	\$15,203,462	\$707,578	N/A	\$7,194,430	\$416,098	\$455,695	\$224,728
96	7	328	\$9,129,744	\$2,423,110,424	\$5,055,025	\$1,027,747	N/A	\$2,237,765	\$610,457	\$133,107	\$65,643
97	4	15011	\$21,413,672	\$2,444,524,096	\$5,095,880	\$1,434,360	N/A	\$10,341,667	\$4,210,692	\$221,727	\$109,346
98	4	15010	\$28,941,209	\$2,473,465,305	\$10,231,747	\$3,098,296	N/A	\$10,619,010	\$4,557,225	\$291,283	\$143,648
99	7	205	\$15,751,169	\$2,489,216,474	\$9,815,158	\$1,871,935	N/A	\$2,911,731	\$778,618	\$250,294	\$123,434
100	3	292	\$14,511,023	\$2,503,727,498	\$11,498,301	\$1,570,581	N/A	\$935,412	\$163,942	\$229,573	\$113,215
101	7	327	\$8,745,955	\$2,512,473,453	\$4,652,557	\$812,067	N/A	\$2,457,136	\$599,591	\$150,422	\$74,182
102	4	15006	\$21,493,358	\$2,533,966,811	\$5,928,910	\$2,591,863	N/A	\$7,765,728	\$4,760,199	\$299,137	\$147,521
103	7	365	\$12,231,832	\$2,546,198,643	\$5,373,721	\$433,759	N/A	\$5,648,420	\$536,036	\$160,664	\$79,232
104	4	15008	\$2,013,913	\$2,548,212,557	\$1,947,203	\$0	N/A	\$1,176	\$0	\$43,890	\$21,645
105	3	14150	\$2,831,875	\$2,551,044,432	\$1,757,965	\$156,801	N/A	\$774,641	\$93,487	\$32,804	\$16,177
106	3	82	\$14,234,445	\$2,565,278,877	\$5,213,437	\$952,467	N/A	\$6,303,725	\$1,530,490	\$156,933	\$77,393
107	7	15177	\$30,405,688	\$2,595,684,565	\$17,582,756	\$5,696,405	N/A	\$4,410,034	\$1,877,575	\$561,842	\$277,076
108	3	102	\$17,177,930	\$2,612,862,495	\$10,041,247	\$1,819,437	N/A	\$4,055,804	\$981,536	\$187,459	\$92,447
109	7	14813	\$8,891,899	\$2,621,754,394	\$8,530,152	\$0	N/A	\$0	\$0	\$242,271	\$119,477
110	3	181	\$10,700,818	\$2,632,455,213	\$6,731,507	\$1,925,807	N/A	\$1,392,631	\$444,617	\$138,135	\$68,122
111	8	14752	\$26,145,532	\$2,658,600,745	\$11,324,573	\$3,920,830	N/A	\$7,102,239	\$3,352,948	\$297,988	\$146,954
112	7	14261	\$33,930,108	\$2,692,530,853	\$17,105,888	\$2,711,655	N/A	\$11,022,176	\$2,291,896	\$534,768	\$263,724
113	7	380	\$9,244,132	\$2,701,774,985	\$6,529,121	\$1,043,331	N/A	\$1,161,651	\$246,989	\$176,163	\$86,876
114	7	366	\$13,874,197	\$2,715,649,182	\$8,077,792	\$2,106,506	N/A	\$2,486,663	\$892,860	\$207,866	\$102,510
115	4	15015	\$25,205,928	\$2,740,855,109	\$8,521,400	\$2,609,191	N/A	\$9,427,161	\$4,123,470	\$351,407	\$173,298
116	8	329	\$8,460,225	\$2,749,315,334	\$5,310,607	\$1,519,443	N/A	\$983,491	\$428,193	\$146,329	\$72,163
117	7	14158	\$7,000,518	\$2,756,315,853	\$5,023,592	\$1,731,554	N/A	\$38,972	\$17,306	\$126,641	\$62,454
118	7	494	\$7,415,519	\$2,763,731,372	\$5,319,804	\$1,357,385	N/A	\$400,788	\$144,466	\$129,308	\$63,769
119	3	309	\$11,765,765	\$2,775,497,136	\$7,016,201	\$1,403,056	N/A	\$2,488,766	\$657,774	\$133,923	\$66,045
120	7	244	\$10,878,423	\$2,786,375,560	\$4,475,013	\$1,043,810	N/A	\$3,847,563	\$1,350,418	\$108,240	\$53,379
121	7	14031	\$36,510,145	\$2,822,885,704	\$17,492,654	\$2,492,744	N/A	\$13,178,563	\$2,385,764	\$643,214	\$317,205

DC FEEDER UNDERGROUNDING RANKING MODEL for Undergrounding each feeder's main and laterals for outages 1/10 thru 12/18					VOS	Customers				System Reductions▶	CI	CMI	Avg	CMI/\$	
		UG Cost/Feeder		Total		Resi- dential	Com- mercial	53.7%	56.3%		55.0%				
System Totals:▶		495	\$3,418,248,395			\$20,913,000	274,664	250,117	24,547	Averaged Rankings (Sort Ascending)					na
Selected	Impact▶	36%	100.0%		100.0%	73.3%	58.1%	46.4%	SAIDI, SAIFI, CMI/\$		CMI/\$	SAIDI	SAIFI	na	na
Feeders	Totals:▶	180	\$3,418,248,395		\$20,913,000	201,192	145,439	11,392						0.014	1.1
Rank	Ward	Feeder	\$	Cum	\$	n	Cum	n	n	n	n	n	n	n	n
122	3	14765	\$20,930,970	\$2,843,816,674	\$22,243	828	145,445	764	62	114.3	133.0	120.0	90.0	0.003	0.6
123	8	14718	\$4,677,225	\$2,848,493,899	\$413	2	145,447	0	1	115.0	173.0	98.0	74.0	0.000	1.1
124	4	15012	\$32,655,572	\$2,881,149,470	\$148,430	3,270	148,717	3,137	133	115.0	104.0	128.0	113.0	0.006	0.5
125	8	14755	\$24,733,643	\$2,905,883,114	\$41,453	3,558	152,275	1,487	168	115.7	96.0	135.0	116.0	0.007	0.4
126	3	15947	\$6,840,673	\$2,912,723,787	\$16,276	66	152,341	21	42	116.7	153.0	119.0	78.0	0.001	0.8
127	7	369	\$14,027,675	\$2,926,751,462	\$10,285	543	152,884	499	37	116.7	127.0	115.0	108.0	0.003	0.4
128	7	14806	\$7,448,328	\$2,934,199,790	\$413	2,020	154,904	0	3	117.7	76.0	139.0	138.0	0.012	0.2
129	3	15867	\$16,441,338	\$2,950,641,128	\$10,409	1,305	156,209	612	38	119.7	117.0	132.0	110.0	0.004	0.6
130	7	367	\$10,107,951	\$2,960,749,079	\$20,286	517	156,726	448	39	122.3	113.0	110.0	144.0	0.005	0.4
131	2	14146	\$24,710,484	\$2,985,459,563	\$19,063	582	157,308	557	22	124.7	128.0	97.0	149.0	0.003	0.5
132	3	14145	\$17,232,685	\$3,002,692,249	\$6,256	2,797	160,105	644	32	125.7	108.0	143.0	126.0	0.006	0.4
133	8	15165	\$1,445,778	\$3,004,138,027	\$675	1,297	161,402	1,297	0	126.3	70.0	159.0	150.0	0.012	0.3
134	7	479	\$13,048,266	\$3,017,186,292	\$23,960	769	162,171	702	67	126.7	144.0	149.0	87.0	0.002	0.6
135	7	167	\$9,703,199	\$3,026,889,492	\$18,354	578	162,749	475	103	127.3	125.0	129.0	128.0	0.004	0.6
136	8	120	\$9,498,355	\$3,036,387,847	\$15,333	586	163,335	549	37	130.7	118.0	123.0	151.0	0.004	0.4
137	3	14132	\$19,984,549	\$3,056,372,395	\$9,308	1,130	164,465	1,034	96	133.3	123.0	125.0	152.0	0.004	0.7
138	7	349	\$6,658,939	\$3,063,031,334	\$18,556	579	165,044	540	39	133.3	119.0	134.0	147.0	0.004	0.2
139	4	15016	\$27,339,140	\$3,090,370,474	\$8,738	1,974	167,018	1,632	58	136.7	129.0	138.0	143.0	0.003	0.5
140	7	14035	\$22,273,222	\$3,112,643,696	\$26,836	1,117	168,135	966	121	137.7	146.0	147.0	120.0	0.002	0.8
141	3	15949	\$8,712,677	\$3,121,356,373	\$3,437	187	168,322	170	17	137.7	152.0	136.0	125.0	0.001	0.5
142	4	491	\$1,829,619	\$3,123,185,992	\$61,951	237	168,559	187	47	138.0	126.0	152.0	136.0	0.003	0.5
143	7	388	\$10,373,092	\$3,133,559,084	\$29,244	695	169,254	599	21	138.7	137.0	145.0	134.0	0.002	0.5
144	8	496	\$8,329,408	\$3,141,888,492	\$51,717	580	169,834	553	27	140.0	147.0	155.0	118.0	0.002	0.5
145	6	228	\$2,956,731	\$3,144,845,223	\$13,898	326	170,160	285	41	140.3	121.0	144.0	156.0	0.004	1.1
146	8	15169	\$4,471,684	\$3,149,316,907	\$275	1	170,161	0	1	140.7	177.0	142.0	103.0	0.000	0.6
147	5	15094	\$27,442,881	\$3,176,759,788	\$35,124	1,990	172,151	1,774	216	141.7	140.0	150.0	135.0	0.002	0.6
148	8	324	\$6,762,952	\$3,183,522,740	\$3,637	255	172,406	224	25	141.7	148.0	140.0	137.0	0.002	0.4
149	3	52	\$5,227,154	\$3,188,749,894	\$891	117	172,523	111	6	141.7	151.0	133.0	141.0	0.001	0.3
150	7	345	\$4,716,296	\$3,193,466,190	\$5,001	356	172,879	311	45	142.7	134.0	146.0	148.0	0.003	0.5
151	6	14713	\$2,327,279	\$3,195,793,469	\$23,463	3,194	176,073	2,901	293	143.3	92.0	166.0	172.0	0.008	0.7
152	4	489	\$4,325,368	\$3,200,118,837	\$998	438	176,511	251	5	143.7	142.0	156.0	133.0	0.002	0.3
153	8	183	\$7,260,885	\$3,207,379,722	\$2,319	1,068	177,579	551	39	145.3	120.0	151.0	165.0	0.004	0.2
154	5	14017	\$18,353,939	\$3,225,733,661	\$16,218	2,291	179,870	1,123	136	146.0	136.0	157.0	145.0	0.002	0.3
155	7	14812	\$4,558,460	\$3,230,292,121	\$92	216	180,086	216	0	146.3	143.0	141.0	155.0	0.002	0.3
156	3	63	\$7,312,037	\$3,237,604,158	\$1,329	126	180,212	119	7	146.7	160.0	153.0	127.0	0.000	0.7
157	4	476	\$14,487,720	\$3,252,091,879	\$1,429	351	180,563	342	7	147.7	157.0	154.0	132.0	0.001	0.6
158	5	14019	\$3,801,868	\$3,255,893,747	\$1,878	509	181,072	334	25	154.0	145.0	160.0	157.0	0.002	0.2
159	7	14159	\$2,637,293	\$3,258,531,040	\$138	36	181,108	0	1	154.7	166.0	158.0	140.0	0.000	0.2
160	7	387	\$14,256,574	\$3,272,787,614	\$1,633	807	181,915	786	21	159.3	154.0	161.0	163.0	0.001	0.1

DC FEEDER UNDERGROUNDING RANKING MODEL for Undergrounding each feeder's main and laterals for outages 1/10 thru 12/18					Impacts by feeder (sort Desc)								
					SAIFI		SAIDI			CAIDI			
		UG Cost/Feeder			OH	New	System	OH	New	System	OH	New	
System Totals:►		495	\$3,418,248,395			0.6	0.4	316	207	108	304	327	268
Selected Feeders	Impact►	36%	100.0%			na	na	na	na	na	na	na	na
	Totals:►	180	\$3,418,248,395			0.8	0.3	340	243	97	320	319	324
Rank	Ward	Feeder	\$	Cum	n	n	n	n	n	n	n	n	n
122	3	14765	\$20,930,970	\$2,843,816,674	0.5	0.0	84	74	10	147.1	136.1	371.6	
123	8	14718	\$4,677,225	\$2,848,493,899	0.7	0.4	178	138	40	160.7	207.1	91.0	
124	4	15012	\$32,655,572	\$2,881,149,470	0.4	0.1	151	62	89	279.2	155.3	631.9	
125	8	14755	\$24,733,643	\$2,905,883,114	0.4	0.1	54	47	7	123.4	124.7	115.2	
126	3	15947	\$6,840,673	\$2,912,723,787	0.6	0.1	106	84	22	138.7	135.0	155.0	
127	7	369	\$14,027,675	\$2,926,751,462	0.4	0.0	100	88	12	224.8	211.1	433.1	
128	7	14806	\$7,448,328	\$2,934,199,790	0.2	0.0	43	43	0	191.5	191.6	140.5	
129	3	15867	\$16,441,338	\$2,950,641,128	0.4	0.2	74	54	19	127.3	133.2	113.2	
130	7	367	\$10,107,951	\$2,960,749,079	0.2	0.2	111	101	11	257.7	523.5	44.8	
131	2	14146	\$24,710,484	\$2,985,459,563	0.2	0.4	304	144	160	559.1	908.4	415.4	
132	3	14145	\$17,232,685	\$3,002,692,249	0.3	0.1	60	36	23	150.7	127.1	211.8	
133	8	15165	\$1,445,778	\$3,004,138,027	0.2	0.1	27	14	13	99.6	87.1	117.5	
134	7	479	\$13,048,266	\$3,017,186,292	0.5	0.1	39	30	10	64.2	54.3	149.0	
135	7	167	\$9,703,199	\$3,026,889,492	0.3	0.3	97	60	37	169.9	212.3	128.4	
136	8	120	\$9,498,355	\$3,036,387,847	0.2	0.2	140	69	71	352.6	455.2	289.0	
137	3	14132	\$19,984,549	\$3,056,372,395	0.1	0.6	134	68	67	180.3	457.0	111.6	
138	7	349	\$6,658,939	\$3,063,031,334	0.2	0.0	49	48	1	272.8	275.5	182.8	
139	4	15016	\$27,339,140	\$3,090,370,474	0.2	0.3	68	45	23	139.1	212.6	82.9	
140	7	14035	\$22,273,222	\$3,112,643,696	0.3	0.4	74	33	41	93.6	94.7	92.8	
141	3	15949	\$8,712,677	\$3,121,356,373	0.3	0.2	78	47	32	165.7	151.1	193.3	
142	4	491	\$1,829,619	\$3,123,185,992	0.3	0.3	263	27	237	496.5	106.3	848.7	
143	7	388	\$10,373,092	\$3,133,559,084	0.3	0.2	446	35	411	888.3	136.9	1,655.3	
144	8	496	\$8,329,408	\$3,141,888,492	0.4	0.1	284	23	260	579.3	66.2	1,916.8	
145	6	228	\$2,956,731	\$3,144,845,223	0.1	0.9	335	36	299	315.5	284.0	319.8	
146	8	15169	\$4,471,684	\$3,149,316,907	0.4	0.1	41	36	5	73.8	81.8	42.0	
147	5	15094	\$27,442,881	\$3,176,759,788	0.3	0.3	58	28	30	105.2	112.7	98.9	
148	8	324	\$6,762,952	\$3,183,522,740	0.2	0.1	62	40	22	170.5	178.2	158.1	
149	3	52	\$5,227,154	\$3,188,749,894	0.2	0.1	62	49	13	192.8	224.4	127.4	
150	7	345	\$4,716,296	\$3,193,466,190	0.2	0.3	114	34	79	222.0	198.2	234.1	
151	6	14713	\$2,327,279	\$3,195,793,469	0.0	0.7	186	6	180	261.3	203.5	263.8	
152	4	489	\$4,325,368	\$3,200,118,837	0.3	0.0	25	20	4	91.9	79.2	342.3	
153	8	183	\$7,260,885	\$3,207,379,722	0.1	0.1	42	27	15	198.6	302.2	123.2	
154	5	14017	\$18,353,939	\$3,225,733,661	0.2	0.1	63	20	44	204.9	105.7	351.6	
155	7	14812	\$4,558,460	\$3,230,292,121	0.1	0.1	52	40	12	197.2	307.7	90.2	
156	3	63	\$7,312,037	\$3,237,604,158	0.3	0.4	154	26	128	229.6	93.7	327.3	
157	4	476	\$14,487,720	\$3,252,091,879	0.3	0.4	64	24	40	104.4	91.7	113.7	
158	5	14019	\$3,801,868	\$3,255,893,747	0.1	0.1	19	13	7	103.0	110.4	92.1	
159	7	14159	\$2,637,293	\$3,258,531,040	0.2	0.0	16	16	1	72.6	71.3	170.0	
160	7	387	\$14,256,574	\$3,272,787,614	0.1	0.0	15	12	3	120.9	116.5	144.1	

DC FEEDER UNDERGROUNDING RANKING MODEL for Undergrounding each feeder's main and laterals					Customer Interruptions (CI)						
for outages 1/10 thru 12/18		UG Cost/Feeder			System	OH		UG impacts on CI			
System Totals:►		495	\$3,418,248,395		285,259	174,193		Total System		OH only	
Selected Feeders	Impact►	36%	100.0%		74.8%	87.9%		53.7%		87.9%	
	Totals:►	180	\$3,418,248,395		213,481	153,103					
Rank	Ward	Feeder	\$	Cum	n	n	Cum	%	Cum	%	Cum
122	3	14765	\$20,930,970	\$2,843,816,674	473	450.3	143,300	0.16%	50.24%	0.26%	82.27%
123	8	14718	\$4,677,225	\$2,848,493,899	2	1.3	143,302	0.00%	50.24%	0.00%	82.27%
124	4	15012	\$32,655,572	\$2,881,149,470	1,763	1,304.5	144,606	0.46%	50.69%	0.75%	83.01%
125	8	14755	\$24,733,643	\$2,905,883,114	1,569	1,354.4	145,961	0.47%	51.17%	0.78%	83.79%
126	3	15947	\$6,840,673	\$2,912,723,787	51	41.2	146,002	0.01%	51.18%	0.02%	83.82%
127	7	369	\$14,027,675	\$2,926,751,462	242	227.5	146,229	0.08%	51.26%	0.13%	83.95%
128	7	14806	\$7,448,328	\$2,934,199,790	451	449.5	146,679	0.16%	51.42%	0.26%	84.20%
129	3	15867	\$16,441,338	\$2,950,641,128	754	531.8	147,211	0.19%	51.61%	0.31%	84.51%
130	7	367	\$10,107,951	\$2,960,749,079	223	99.3	147,310	0.03%	51.64%	0.06%	84.57%
131	2	14146	\$24,710,484	\$2,985,459,563	317	92.3	147,402	0.03%	51.67%	0.05%	84.62%
132	3	14145	\$17,232,685	\$3,002,692,249	1,106	797.8	148,200	0.28%	51.95%	0.46%	85.08%
133	8	15165	\$1,445,778	\$3,004,138,027	349	204.5	148,405	0.07%	52.02%	0.12%	85.20%
134	7	479	\$13,048,266	\$3,017,186,292	470	420.8	148,825	0.15%	52.17%	0.24%	85.44%
135	7	167	\$9,703,199	\$3,026,889,492	329	162.4	148,988	0.06%	52.23%	0.09%	85.53%
136	8	120	\$9,498,355	\$3,036,387,847	232	88.9	149,077	0.03%	52.26%	0.05%	85.58%
137	3	14132	\$19,984,549	\$3,056,372,395	842	167.4	149,244	0.06%	52.32%	0.10%	85.68%
138	7	349	\$6,658,939	\$3,063,031,334	104	101.1	149,345	0.04%	52.35%	0.06%	85.74%
139	4	15016	\$27,339,140	\$3,090,370,474	964	417.8	149,763	0.15%	52.50%	0.24%	85.98%
140	7	14035	\$22,273,222	\$3,112,643,696	882	383.9	150,147	0.13%	52.64%	0.22%	86.20%
141	3	15949	\$8,712,677	\$3,121,356,373	89	58.0	150,205	0.02%	52.66%	0.03%	86.23%
142	4	491	\$1,829,619	\$3,123,185,992	126	59.6	150,264	0.02%	52.68%	0.03%	86.26%
143	7	388	\$10,373,092	\$3,133,559,084	349	176.1	150,440	0.06%	52.74%	0.10%	86.36%
144	8	496	\$8,329,408	\$3,141,888,492	284	205.3	150,646	0.07%	52.81%	0.12%	86.48%
145	6	228	\$2,956,731	\$3,144,845,223	346	41.3	150,687	0.01%	52.82%	0.02%	86.51%
146	8	15169	\$4,471,684	\$3,149,316,907	1	0.4	150,687	0.00%	52.82%	0.00%	86.51%
147	5	15094	\$27,442,881	\$3,176,759,788	1,102	500.8	151,188	0.18%	53.00%	0.29%	86.79%
148	8	324	\$6,762,952	\$3,183,522,740	93	57.2	151,246	0.02%	53.02%	0.03%	86.83%
149	3	52	\$5,227,154	\$3,188,749,894	38	25.5	151,271	0.01%	53.03%	0.01%	86.84%
150	7	345	\$4,716,296	\$3,193,466,190	183	61.6	151,333	0.02%	53.05%	0.04%	86.88%
151	6	14713	\$2,327,279	\$3,195,793,469	2,272	94.9	151,428	0.03%	53.08%	0.05%	86.93%
152	4	489	\$4,325,368	\$3,200,118,837	117	111.4	151,539	0.04%	53.12%	0.06%	86.99%
153	8	183	\$7,260,885	\$3,207,379,722	226	95.4	151,634	0.03%	53.16%	0.05%	87.05%
154	5	14017	\$18,353,939	\$3,225,733,661	709	422.8	152,057	0.15%	53.30%	0.24%	87.29%
155	7	14812	\$4,558,460	\$3,230,292,121	57	27.9	152,085	0.01%	53.31%	0.02%	87.31%
156	3	63	\$7,312,037	\$3,237,604,158	85	35.4	152,120	0.01%	53.33%	0.02%	87.33%
157	4	476	\$14,487,720	\$3,252,091,879	217	91.9	152,212	0.03%	53.36%	0.05%	87.38%
158	5	14019	\$3,801,868	\$3,255,893,747	96	57.6	152,270	0.02%	53.38%	0.03%	87.41%
159	7	14159	\$2,637,293	\$3,258,531,040	8	8.0	152,278	0.00%	53.38%	0.00%	87.42%
160	7	387	\$14,256,574	\$3,272,787,614	100	84.5	152,363	0.03%	53.41%	0.05%	87.47%

DC FEEDER UNDERGROUNDING RANKING MODEL for Undergrounding each feeder's main and laterals					Customer Minutes/Interruption (CMI)						
for outages 1/10 thru 12/18		UG Cost/Feeder			System	OH		UG impacts on CMI			
System Totals:►		495	\$3,418,248,395		86,785,858	56,992,293		Total System		OH only	
Selected Feeders	Impact►	36%	100.0%		78.8%	85.7%		56.3%		85.7%	
	Totals:►	180	\$3,418,248,395		68,414,270	48,866,835					
Rank	Ward	Feeder	\$	Cum	n	n	Cum	%	Cum	%	Cum
122	3	14765	\$20,930,970	\$2,843,816,674	69,521	61,265	47,265,674	0.07%	54.46%	0.11%	82.93%
123	8	14718	\$4,677,225	\$2,848,493,899	357	276	47,265,950	0.00%	54.46%	0.00%	82.93%
124	4	15012	\$32,655,572	\$2,881,149,470	492,144	202,630	47,468,580	0.23%	54.70%	0.36%	83.29%
125	8	14755	\$24,733,643	\$2,905,883,114	193,610	168,907	47,637,487	0.19%	54.89%	0.30%	83.59%
126	3	15947	\$6,840,673	\$2,912,723,787	7,009	5,563	47,643,050	0.01%	54.90%	0.01%	83.60%
127	7	369	\$14,027,675	\$2,926,751,462	54,478	48,032	47,691,082	0.06%	54.95%	0.08%	83.68%
128	7	14806	\$7,448,328	\$2,934,199,790	86,318	86,131	47,777,213	0.10%	55.05%	0.15%	83.83%
129	3	15867	\$16,441,338	\$2,950,641,128	96,034	70,866	47,848,079	0.08%	55.13%	0.12%	83.96%
130	7	367	\$10,107,951	\$2,960,749,079	57,541	51,989	47,900,069	0.06%	55.19%	0.09%	84.05%
131	2	14146	\$24,710,484	\$2,985,459,563	177,000	83,849	47,983,917	0.10%	55.29%	0.15%	84.19%
132	3	14145	\$17,232,685	\$3,002,692,249	166,647	101,423	48,085,341	0.12%	55.41%	0.18%	84.37%
133	8	15165	\$1,445,778	\$3,004,138,027	34,730	17,809	48,103,150	0.02%	55.43%	0.03%	84.40%
134	7	479	\$13,048,266	\$3,017,186,292	30,165	22,848	48,125,997	0.03%	55.45%	0.04%	84.44%
135	7	167	\$9,703,199	\$3,026,889,492	55,807	34,479	48,160,476	0.04%	55.49%	0.06%	84.50%
136	8	120	\$9,498,355	\$3,036,387,847	81,827	40,450	48,200,927	0.05%	55.54%	0.07%	84.57%
137	3	14132	\$19,984,549	\$3,056,372,395	151,766	76,495	48,277,422	0.09%	55.63%	0.13%	84.71%
138	7	349	\$6,658,939	\$3,063,031,334	28,397	27,849	48,305,271	0.03%	55.66%	0.05%	84.76%
139	4	15016	\$27,339,140	\$3,090,370,474	134,088	88,808	48,394,079	0.10%	55.76%	0.16%	84.91%
140	7	14035	\$22,273,222	\$3,112,643,696	82,581	36,362	48,430,440	0.04%	55.80%	0.06%	84.98%
141	3	15949	\$8,712,677	\$3,121,356,373	14,666	8,762	48,439,203	0.01%	55.81%	0.02%	84.99%
142	4	491	\$1,829,619	\$3,123,185,992	62,433	6,342	48,445,545	0.01%	55.82%	0.01%	85.00%
143	7	388	\$10,373,092	\$3,133,559,084	309,643	24,098	48,469,643	0.03%	55.85%	0.04%	85.05%
144	8	496	\$8,329,408	\$3,141,888,492	164,537	13,582	48,483,226	0.02%	55.87%	0.02%	85.07%
145	6	228	\$2,956,731	\$3,144,845,223	109,301	11,735	48,494,960	0.01%	55.88%	0.02%	85.09%
146	8	15169	\$4,471,684	\$3,149,316,907	41	36	48,494,997	0.00%	55.88%	0.00%	85.09%
147	5	15094	\$27,442,881	\$3,176,759,788	115,901	56,434	48,551,431	0.07%	55.94%	0.10%	85.19%
148	8	324	\$6,762,952	\$3,183,522,740	15,867	10,196	48,561,627	0.01%	55.96%	0.02%	85.21%
149	3	52	\$5,227,154	\$3,188,749,894	7,303	5,732	48,567,359	0.01%	55.96%	0.01%	85.22%
150	7	345	\$4,716,296	\$3,193,466,190	40,516	12,220	48,579,580	0.01%	55.98%	0.02%	85.24%
151	6	14713	\$2,327,279	\$3,195,793,469	593,654	19,303	48,598,882	0.02%	56.00%	0.03%	85.27%
152	4	489	\$4,325,368	\$3,200,118,837	10,762	8,822	48,607,705	0.01%	56.01%	0.02%	85.29%
153	8	183	\$7,260,885	\$3,207,379,722	44,982	28,836	48,636,540	0.03%	56.04%	0.05%	85.34%
154	5	14017	\$18,353,939	\$3,225,733,661	145,178	44,678	48,681,218	0.05%	56.09%	0.08%	85.42%
155	7	14812	\$4,558,460	\$3,230,292,121	11,173	8,578	48,689,796	0.01%	56.10%	0.02%	85.43%
156	3	63	\$7,312,037	\$3,237,604,158	19,463	3,321	48,693,117	0.00%	56.11%	0.01%	85.44%
157	4	476	\$14,487,720	\$3,252,091,879	22,619	8,427	48,701,544	0.01%	56.12%	0.01%	85.45%
158	5	14019	\$3,801,868	\$3,255,893,747	9,924	6,363	48,707,907	0.01%	56.12%	0.01%	85.46%
159	7	14159	\$2,637,293	\$3,258,531,040	589	570	48,708,476	0.00%	56.12%	0.00%	85.47%
160	7	387	\$14,256,574	\$3,272,787,614	12,138	9,850	48,718,326	0.01%	56.14%	0.02%	85.48%

DC FEEDER UNDERGROUNDING RANKING MODEL for Undergrounding each feeder's main and laterals for outages 1/10 thru 12/18					Costs						
					Main line			Primary Lateral		OH Line Removal	Permitting
		UG Cost/Feeder		Main Line	Transformers	Risers	Cables	Transformers			
System Totals:▶		495	\$3,418,248,395		NA						
Selected	Impact▶	36%	100.0%								
Feeder	Totals:▶	180	\$3,418,248,395		\$1,687,140,895	\$315,819,727	N/A	#####	\$262,422,414	\$54,154,224	\$26,706,470
Rank	Ward	Feeder	\$	Cum	\$	\$	\$	\$	\$	\$	\$
122	3	14765	\$20,930,970	\$2,843,816,674	\$7,856,774	\$2,137,378	N/A	\$7,464,612	\$3,121,415	\$234,932	\$115,858
123	8	14718	\$4,677,225	\$2,848,493,899	\$4,408,215	\$91,908	N/A	\$0	\$0	\$118,608	\$58,492
124	4	15012	\$32,655,572	\$2,881,149,470	\$10,355,249	\$2,797,977	N/A	\$13,679,311	\$5,182,555	\$428,944	\$211,536
125	8	14755	\$24,733,643	\$2,905,883,114	\$13,227,466	\$4,719,458	N/A	\$4,143,222	\$1,981,758	\$443,182	\$218,558
126	3	15947	\$6,840,673	\$2,912,723,787	\$3,287,232	\$694,258	N/A	\$2,148,335	\$541,839	\$113,190	\$55,820
127	7	369	\$14,027,675	\$2,926,751,462	\$7,323,059	\$2,362,263	N/A	\$2,778,617	\$1,235,794	\$219,630	\$108,312
128	7	14806	\$7,448,328	\$2,934,199,790	\$7,152,403	\$0	N/A	\$2,022	\$0	\$196,834	\$97,070
129	3	15867	\$16,441,338	\$2,950,641,128	\$6,604,992	\$1,612,746	N/A	\$6,175,810	\$1,777,886	\$180,761	\$89,143
130	7	367	\$10,107,951	\$2,960,749,079	\$5,236,179	\$1,803,833	N/A	\$1,835,581	\$1,028,581	\$136,473	\$67,303
131	2	14146	\$24,710,484	\$2,985,459,563	\$7,939,608	\$2,445,229	N/A	\$10,185,240	\$3,736,781	\$270,317	\$133,309
132	3	14145	\$17,232,685	\$3,002,692,249	\$3,075,670	\$633,981	N/A	\$10,276,083	\$2,981,395	\$177,849	\$87,707
133	8	15165	\$1,445,778	\$3,004,138,027	\$1,386,960	\$0	N/A	\$0	\$0	\$39,392	\$19,426
134	7	479	\$13,048,266	\$3,017,186,292	\$6,150,386	\$1,777,036	N/A	\$3,396,986	\$1,508,089	\$144,505	\$71,263
135	7	167	\$9,703,199	\$3,026,889,492	\$7,573,751	\$827,007	N/A	\$859,895	\$114,645	\$219,603	\$108,299
136	8	120	\$9,498,355	\$3,036,387,847	\$6,213,015	\$2,136,799	N/A	\$640,096	\$282,602	\$151,252	\$74,591
137	3	14132	\$19,984,549	\$3,056,372,395	\$10,974,523	\$2,251,527	N/A	\$5,092,684	\$1,219,856	\$298,668	\$147,290
138	7	349	\$6,658,939	\$3,063,031,334	\$3,424,994	\$975,576	N/A	\$1,456,725	\$686,986	\$76,789	\$37,869
139	4	15016	\$27,339,140	\$3,090,370,474	\$13,190,181	\$4,036,520	N/A	\$6,791,514	\$2,715,173	\$405,686	\$200,067
140	7	14035	\$22,273,222	\$3,112,643,696	\$11,929,878	\$1,681,924	N/A	\$6,836,694	\$1,243,160	\$389,488	\$192,078
141	3	15949	\$8,712,677	\$3,121,356,373	\$3,908,331	\$897,249	N/A	\$2,953,427	\$788,105	\$110,883	\$54,683
142	4	491	\$1,829,619	\$3,123,185,992	\$1,138,570	\$224,387	N/A	\$330,724	\$77,155	\$39,368	\$19,414
143	7	388	\$10,373,092	\$3,133,559,084	\$3,699,320	\$1,219,283	N/A	\$3,538,247	\$1,788,662	\$85,443	\$42,137
144	8	496	\$8,329,408	\$3,141,888,492	\$4,749,953	\$1,520,668	N/A	\$1,301,758	\$558,260	\$133,120	\$65,649
145	6	228	\$2,956,731	\$3,144,845,223	\$215,746	\$10,965	N/A	\$1,887,242	\$753,545	\$59,761	\$29,471
146	8	15169	\$4,471,684	\$3,149,316,907	\$4,230,742	\$61,738	N/A	\$0	\$0	\$120,017	\$59,187
147	5	15094	\$27,442,881	\$3,176,759,788	\$14,461,302	\$308,270	N/A	\$11,391,436	\$285,068	\$667,582	\$329,222
148	8	324	\$6,762,952	\$3,183,522,740	\$4,903,316	\$1,078,578	N/A	\$463,278	\$145,506	\$115,376	\$56,899
149	3	52	\$5,227,154	\$3,188,749,894	\$1,111,329	\$205,101	N/A	\$2,957,778	\$911,615	\$27,680	\$13,650
150	7	345	\$4,716,296	\$3,193,466,190	\$1,829,149	\$307,833	N/A	\$1,891,582	\$577,089	\$74,101	\$36,543
151	6	14713	\$2,327,279	\$3,195,793,469	\$273,767	\$51,688	N/A	\$1,369,254	\$587,371	\$30,270	\$14,928
152	4	489	\$4,325,368	\$3,200,118,837	\$1,797,841	\$562,660	N/A	\$1,286,103	\$614,509	\$43,033	\$21,222
153	8	183	\$7,260,885	\$3,207,379,722	\$4,736,857	\$1,096,368	N/A	\$953,087	\$300,389	\$116,655	\$57,529
154	5	14017	\$18,353,939	\$3,225,733,661	\$9,613,499	\$3,299,956	N/A	\$3,429,220	\$1,528,731	\$323,163	\$159,370
155	7	14812	\$4,558,460	\$3,230,292,121	\$4,373,009	\$0	N/A	\$0	\$0	\$124,201	\$61,250
156	3	63	\$7,312,037	\$3,237,604,158	\$5,879,686	\$891,545	N/A	\$316,460	\$65,988	\$106,056	\$52,302
157	4	476	\$14,487,720	\$3,252,091,879	\$6,846,605	\$1,253,539	N/A	\$4,980,187	\$1,202,986	\$136,894	\$67,510
158	5	14019	\$3,801,868	\$3,255,893,747	\$3,665,467	\$0	N/A	\$0	\$0	\$91,351	\$45,050
159	7	14159	\$2,637,293	\$3,258,531,040	\$2,539,135	\$0	N/A	\$0	\$0	\$65,738	\$32,419
160	7	387	\$14,256,574	\$3,272,787,614	\$5,933,351	\$1,480,454	N/A	\$4,742,030	\$1,777,969	\$216,166	\$106,604

DC FEEDER UNDERGROUNDING RANKING MODEL for Undergrounding each feeder's main and laterals for outages 1/10 thru 12/18					VOS	Customers				System Reductions▶	CI	CMI	Avg	CMI/\$	
UG Cost/Feeder		Total	Resi- dential	Com- mercial		53.7%	56.3%	55.0%							
System Totals:▶		495	\$3,418,248,395	\$20,913,000		274,664	250,117	24,547	SAIDI, SAIFI, CMI/\$				na		
Selected Feeders	Impact▶	36%	100.0%	100.0%		73.3%	58.1%	46.4%					na	na	
Totals:▶		180	\$3,418,248,395	\$20,913,000	201,192	145,439	11,392	0.014					1.1		
Rank	Ward	Feeder	\$	Cum	\$	n	Cum	n	n	n	n	n	n	n	n
161	3	413	\$6,567,251	\$3,279,354,865	\$8,772	78	181,993	18	51	159.7	163.0	148.0	168.0	0.000	0.6
162	5	14022	\$22,979,607	\$3,302,334,472	\$3,835	989	182,982	938	51	160.3	158.0	162.0	161.0	0.000	0.1
163	5	14021	\$3,402,857	\$3,305,737,329	\$9,907	41	183,023	1	34	164.0	170.0	163.0	159.0	0.000	0.4
164	3	15950	\$10,401,670	\$3,316,138,999	\$2,333	415	183,438	229	27	164.3	169.0	170.0	154.0	0.000	0.1
165	7	14716	\$5,726,494	\$3,321,865,493	\$139	410	183,848	0	2	165.7	167.0	172.0	158.0	0.000	0.2
166	8	164	\$3,211,353	\$3,325,076,846	\$456	271	184,119	254	17	165.7	159.0	167.0	171.0	0.000	0.0
167	4	481	\$1,698,243	\$3,326,775,089	\$35	201	184,320	95	2	165.7	155.0	168.0	174.0	0.001	0.1
168	3	60	\$4,525,529	\$3,331,300,618	\$450	128	184,448	125	3	165.7	164.0	164.0	169.0	0.000	0.1
169	8	56	\$980,739	\$3,332,281,357	\$4,484	79	184,527	10	66	166.0	165.0	171.0	162.0	0.000	0.8
170	7	14811	\$6,739,905	\$3,339,021,262	\$8	4,577	189,104	120	0	166.3	149.0	175.0	175.0	0.001	0.1
171	4	14987	\$25,733,862	\$3,364,755,124	\$2,725	2,123	191,227	2,039	84	167.0	162.0	169.0	170.0	0.000	0.0
172	8	14756	\$4,980,432	\$3,369,735,556	\$0	1	191,228	1	0	168.0	180.0	165.0	159.0	0.000	0.1
173	7	14715	\$8,744,954	\$3,378,480,511	\$4	2,175	193,403	19	0	168.7	156.0	174.0	176.0	0.001	0.3
174	6	14020	\$7,623,776	\$3,386,104,287	\$619	37	193,440	0	37	174.0	176.0	173.0	173.0	0.000	0.3
175	8	14709	\$6,307,902	\$3,392,412,189	\$47	14	193,454	13	1	174.3	179.0	177.0	167.0	0.000	0.2
176	7	14058	\$12,257,228	\$3,404,669,417	\$185	3,824	197,278	3,824	0	174.7	168.0	178.0	178.0	0.000	0.1
177	5	15458	\$267,675	\$3,404,937,092	\$69	7	197,285	0	7	175.7	174.0	176.0	177.0	0.000	0.0
178	6	15702	\$2,596,698	\$3,407,533,790	\$16	3,086	200,371	2,582	161	177.3	172.0	180.0	180.0	0.000	0.9
179	8	119	\$5,026,048	\$3,412,559,837	\$4	385	200,756	364	21	178.7	178.0	179.0	179.0	0.000	0.0
180	7	99	\$5,688,558	\$3,418,248,395	\$118,436	436	201,192	381	41	68.0	49.0	67.0	88.0	0.018	0.7

DC FEEDER UNDERGROUNDING RANKING MODEL for Undergrounding each feeder's main and laterals for outages 1/10 thru 12/18					Impacts by feeder (sort Desc)								
					SAIFI		SAIDI			CAIDI			
		UG Cost/Feeder			OH	New	System	OH	New	System	OH	New	
System Totals:►		495	\$3,418,248,395			0.6	0.4	316	207	108	304	327	268
Selected Feeders	Impact►	36%	100.0%			na	na	na	na	na	na	na	na
	Totals:►	180	\$3,418,248,395			0.8	0.3	340	243	97	320	319	324
Rank	Ward	Feeder	\$	Cum	n	n	n	n	n	n	n	n	n
161	3	413	\$6,567,251	\$3,279,354,865	0.1	0.5	151	31	120	265.3	479.5	237.4	
162	5	14022	\$22,979,607	\$3,302,334,472	0.1	0.0	13	11	2	111.6	101.2	299.0	
163	5	14021	\$3,402,857	\$3,305,737,329	0.1	0.3	124	10	114	277.3	88.1	339.9	
164	3	15950	\$10,401,670	\$3,316,138,999	0.1	0.0	7	4	3	46.3	28.2	359.4	
165	7	14716	\$5,726,494	\$3,321,865,493	0.1	0.1	4	3	1	18.3	24.7	11.9	
166	8	164	\$3,211,353	\$3,325,076,846	0.0	0.0	7	6	1	154.8	141.3	265.0	
167	4	481	\$1,698,243	\$3,326,775,089	0.0	0.1	7	5	2	52.0	241.3	14.4	
168	3	60	\$4,525,529	\$3,331,300,618	0.1	0.0	15	9	5	244.2	185.2	592.1	
169	8	56	\$980,739	\$3,332,281,357	0.1	0.7	125	3	122	153.7	28.3	173.2	
170	7	14811	\$6,739,905	\$3,339,021,262	0.0	0.1	17	2	15	122.6	99.8	126.6	
171	4	14987	\$25,733,862	\$3,364,755,124	0.0	0.0	5	5	0	111.2	109.7	148.5	
172	8	14756	\$4,980,432	\$3,369,735,556	0.1	0.0	8	8	0	75.0	75.0	0.0	
173	7	14715	\$8,744,954	\$3,378,480,511	0.0	0.3	655	2	652	2,411.6	125.5	2,580.1	
174	6	14020	\$7,623,776	\$3,386,104,287	0.0	0.3	32	3	29	93.9	98.7	93.5	
175	8	14709	\$6,307,902	\$3,392,412,189	0.1	0.1	2	1	1	9.5	10.8	8.7	
176	7	14058	\$12,257,228	\$3,404,669,417	0.0	0.1	172	1	171	1,480.8	114.5	1,536.7	
177	5	15458	\$267,675	\$3,404,937,092	0.0	0.0	1	1	0	93.2	93.2	0.0	
178	6	15702	\$2,596,698	\$3,407,533,790	0.0	0.9	115	0	115	124.5	468.0	124.4	
179	8	119	\$5,026,048	\$3,412,559,837	0.0	0.0	3	0	3	91.2	324.0	89.4	
180	7	99	\$5,688,558	\$3,418,248,395	0.5	0.1	718	230	488	1,047.8	421.6	3,495.3	

DC FEEDER UNDERGROUNDING RANKING MODEL for Undergrounding each feeder's main and laterals					Customer Interruptions (CI)						
for outages 1/10 thru 12/18		UG Cost/Feeder			System	OH		UG impacts on CI			
System Totals:►		495	\$3,418,248,395		285,259	174,193		Total System		OH only	
Selected Feeder	Impact►	36%	100.0%		74.8%	87.9%		53.7%		87.9%	
	Totals:►	180	\$3,418,248,395		213,481	153,103					
Rank	Ward	Feeder	\$	Cum	n	n	Cum	%	Cum	%	Cum
161	3	413	\$6,567,251	\$3,279,354,865	44	5.1	152,368	0.00%	53.41%	0.00%	87.47%
162	5	14022	\$22,979,607	\$3,302,334,472	116	109.4	152,477	0.04%	53.45%	0.06%	87.53%
163	5	14021	\$3,402,857	\$3,305,737,329	18	4.6	152,482	0.00%	53.45%	0.00%	87.54%
164	3	15950	\$10,401,670	\$3,316,138,999	59	55.4	152,537	0.02%	53.47%	0.03%	87.57%
165	7	14716	\$5,726,494	\$3,321,865,493	92	46.1	152,583	0.02%	53.49%	0.03%	87.59%
166	8	164	\$3,211,353	\$3,325,076,846	12	10.9	152,594	0.00%	53.49%	0.01%	87.60%
167	4	481	\$1,698,243	\$3,326,775,089	27	4.6	152,599	0.00%	53.49%	0.00%	87.60%
168	3	60	\$4,525,529	\$3,331,300,618	8	6.6	152,605	0.00%	53.50%	0.00%	87.61%
169	8	56	\$980,739	\$3,332,281,357	64	8.7	152,614	0.00%	53.50%	0.00%	87.61%
170	7	14811	\$6,739,905	\$3,339,021,262	627	92.4	152,706	0.03%	53.53%	0.05%	87.66%
171	4	14987	\$25,733,862	\$3,364,755,124	103	98.5	152,805	0.03%	53.57%	0.06%	87.72%
172	8	14756	\$4,980,432	\$3,369,735,556	0	0.1	152,805	0.00%	53.57%	0.00%	87.72%
173	7	14715	\$8,744,954	\$3,378,480,511	591	40.5	152,845	0.01%	53.58%	0.02%	87.74%
174	6	14020	\$7,623,776	\$3,386,104,287	12	1.0	152,846	0.00%	53.58%	0.00%	87.75%
175	8	14709	\$6,307,902	\$3,392,412,189	3	1.0	152,847	0.00%	53.58%	0.00%	87.75%
176	7	14058	\$12,257,228	\$3,404,669,417	444	17.4	152,865	0.01%	53.59%	0.01%	87.76%
177	5	15458	\$267,675	\$3,404,937,092	0	0.1	152,865	0.00%	53.59%	0.00%	87.76%
178	6	15702	\$2,596,698	\$3,407,533,790	2,856	0.4	152,865	0.00%	53.59%	0.00%	87.76%
179	8	119	\$5,026,048	\$3,412,559,837	15	0.1	152,865	0.00%	53.59%	0.00%	87.76%
180	7	99	\$5,688,558	\$3,418,248,395	299	237.9	153,103	0.08%	53.67%	0.14%	87.89%

DC FEEDER UNDERGROUNDING RANKING MODEL for Undergrounding each feeder's main and laterals					Customer Minutes/Interruption (CMI)						
for outages 1/10 thru 12/18		UG Cost/Feeder			System	OH		UG impacts on CMI			
System Totals:►		495	\$3,418,248,395		86,785,858	56,992,293		Total System		OH only	
Selected Feeders	Impact►	36%	100.0%		78.8%	85.7%		56.3%		85.7%	
	Totals:►	180	\$3,418,248,395		68,414,270	48,866,835					
Rank	Ward	Feeder	\$	Cum	n	n	Cum	%	Cum	%	Cum
161	3	413	\$6,567,251	\$3,279,354,865	11,786	2,450	48,720,776	0.00%	56.14%	0.00%	85.49%
162	5	14022	\$22,979,607	\$3,302,334,472	12,895	11,068	48,731,844	0.01%	56.15%	0.02%	85.51%
163	5	14021	\$3,402,857	\$3,305,737,329	5,083	401	48,732,245	0.00%	56.15%	0.00%	85.51%
164	3	15950	\$10,401,670	\$3,316,138,999	2,718	1,560	48,733,806	0.00%	56.15%	0.00%	85.51%
165	7	14716	\$5,726,494	\$3,321,865,493	1,678	1,137	48,734,943	0.00%	56.16%	0.00%	85.51%
166	8	164	\$3,211,353	\$3,325,076,846	1,892	1,538	48,736,482	0.00%	56.16%	0.00%	85.51%
167	4	481	\$1,698,243	\$3,326,775,089	1,427	1,099	48,737,581	0.00%	56.16%	0.00%	85.52%
168	3	60	\$4,525,529	\$3,331,300,618	1,872	1,214	48,738,795	0.00%	56.16%	0.00%	85.52%
169	8	56	\$980,739	\$3,332,281,357	9,886	245	48,739,039	0.00%	56.16%	0.00%	85.52%
170	7	14811	\$6,739,905	\$3,339,021,262	76,927	9,223	48,748,262	0.01%	56.17%	0.02%	85.53%
171	4	14987	\$25,733,862	\$3,364,755,124	11,416	10,805	48,759,068	0.01%	56.18%	0.02%	85.55%
172	8	14756	\$4,980,432	\$3,369,735,556	8	8	48,759,076	0.00%	56.18%	0.00%	85.55%
173	7	14715	\$8,744,954	\$3,378,480,511	1,424,262	5,088	48,764,164	0.01%	56.19%	0.01%	85.56%
174	6	14020	\$7,623,776	\$3,386,104,287	1,168	99	48,764,263	0.00%	56.19%	0.00%	85.56%
175	8	14709	\$6,307,902	\$3,392,412,189	25	11	48,764,274	0.00%	56.19%	0.00%	85.56%
176	7	14058	\$12,257,228	\$3,404,669,417	657,441	1,997	48,766,271	0.00%	56.19%	0.00%	85.57%
177	5	15458	\$267,675	\$3,404,937,092	10	10	48,766,282	0.00%	56.19%	0.00%	85.57%
178	6	15702	\$2,596,698	\$3,407,533,790	355,434	208	48,766,489	0.00%	56.19%	0.00%	85.57%
179	8	119	\$5,026,048	\$3,412,559,837	1,347	36	48,766,525	0.00%	56.19%	0.00%	85.57%
180	7	99	\$5,688,558	\$3,418,248,395	313,071	100,310	48,866,835	0.12%	56.31%	0.18%	85.74%

DC FEEDER UNDERGROUNDING RANKING MODEL for Undergrounding each feeder's main and laterals for outages 1/10 thru 12/18					Costs						
					Main line			Primary Lateral		OH Line Removal	Permitting
System Totals:▶		495	\$3,418,248,395		Main Line	Transformers	Risers	Cables	Transformers		
Selected Impact▶		36%	100.0%		NA						
Feeder Totals:▶		180	\$3,418,248,395		\$1,687,140,895	\$315,819,727	N/A	#####	\$262,422,414	\$54,154,224	\$26,706,470
Rank	Ward	Feeder	\$	Cum	\$	\$	\$	\$	\$	\$	\$
161	3	413	\$6,567,251	\$3,279,354,865	\$4,025,358	\$534,449	N/A	\$1,582,821	\$264,398	\$107,306	\$52,919
162	5	14022	\$22,979,607	\$3,302,334,472	\$7,883,464	\$2,372,935	N/A	\$8,594,093	\$3,706,615	\$282,958	\$139,542
163	5	14021	\$3,402,857	\$3,305,737,329	\$3,263,398	\$0	N/A	\$1,011	\$0	\$92,721	\$45,726
164	3	15950	\$10,401,670	\$3,316,138,999	\$5,826,593	\$1,357,864	N/A	\$2,368,486	\$630,761	\$145,977	\$71,989
165	7	14716	\$5,726,494	\$3,321,865,493	\$5,414,797	\$91,908	N/A	\$0	\$0	\$147,197	\$72,591
166	8	164	\$3,211,353	\$3,325,076,846	\$2,093,605	\$1,043,200	N/A	\$1,011	\$691	\$48,786	\$24,059
167	4	481	\$1,698,243	\$3,326,775,089	\$1,012,721	\$285,050	N/A	\$248,272	\$115,111	\$24,840	\$12,250
168	3	60	\$4,525,529	\$3,331,300,618	\$2,152,393	\$394,942	N/A	\$1,502,594	\$422,736	\$35,405	\$17,460
169	8	56	\$980,739	\$3,332,281,357	\$694,935	\$93,025	N/A	\$120,379	\$56,416	\$10,705	\$5,279
170	7	14811	\$6,739,905	\$3,339,021,262	\$6,397,039	\$91,908	N/A	\$0	\$0	\$168,072	\$82,886
171	4	14987	\$25,733,862	\$3,364,755,124	\$10,025,934	\$2,300,070	N/A	\$9,934,919	\$2,921,370	\$369,398	\$182,171
172	8	14756	\$4,980,432	\$3,369,735,556	\$4,434,570	\$57,246	N/A	\$281,369	\$4,658	\$135,678	\$66,910
173	7	14715	\$8,744,954	\$3,378,480,511	\$7,873,113	\$115,156	N/A	\$433,646	\$8,629	\$210,568	\$103,843
174	6	14020	\$7,623,776	\$3,386,104,287	\$7,262,605	\$91,908	N/A	\$0	\$0	\$180,331	\$88,931
175	8	14709	\$6,307,902	\$3,392,412,189	\$5,973,168	\$91,908	N/A	\$0	\$0	\$162,626	\$80,200
176	7	14058	\$12,257,228	\$3,404,669,417	\$11,658,796	\$123,477	N/A	\$0	\$0	\$318,088	\$156,867
177	5	15458	\$267,675	\$3,404,937,092	\$256,785	\$0	N/A	\$0	\$0	\$7,293	\$3,597
178	6	15702	\$2,596,698	\$3,407,533,790	\$1,039,640	\$143,116	N/A	\$1,124,635	\$256,505	\$21,968	\$10,834
179	8	119	\$5,026,048	\$3,412,559,837	\$3,521,763	\$1,380,822	N/A	\$1,011	\$544	\$81,644	\$40,263
180	7	99	\$5,688,558	\$3,418,248,395	\$2,855,249	\$997,211	N/A	\$1,167,760	\$540,497	\$85,619	\$42,223

**POTOMAC ELECTRIC POWER COMPANY**  
**BEFORE THE**  
**PUBLIC SERVICE COMMISSION OF THE DISTRICT OF COLUMBIA**  
**DIRECT TESTIMONY OF AARON SMITH**  
**FORMAL CASE NO. 1145**

1   **Q1.   Please state your name and position.**

2   A1.           My name is Aaron Smith. I am Manager of Engineering and Project  
3           Management at Pepco. I am testifying on behalf of Potomac Electric Power Company  
4           (Pepco or the Company).

5   **Q2.   What are your responsibilities in your role as Manager of Engineering and Project**  
6           **Management?**

7   A2.           I am responsible for the management of a project management team that fully  
8           supports the Technical Services division of Pepco Holdings. This division is  
9           responsible for the execution of the District of Columbia Power Line Undergrounding  
10          (DC PLUG) initiative, among other projects.

11   **Q3.   Could you please describe your educational and professional background and**  
12          **experience?**

13   A3.           I earned a Bachelor's Degree in Electrical Engineering from Tennessee State  
14           University in 2004 and a Master's Degree in Engineering Management from the  
15           George Washington University in 2018. I have over 14 years of experience in  
16           construction, engineering, project and program management. Prior to joining Pepco, I  
17           served in various engineering, construction, project management and leadership roles  
18           while working as a civilian for the Naval Facilities and Engineering Command under  
19           the Department of Defense. I also served as an officer in the United States Navy for  
20           over four years, where I led both military and civilian teams in the execution of

1 engineering and construction projects in support of both Naval Fleet and Marine Corps  
2 mission critical military programs. Lastly, I am a licensed professional engineer in  
3 state of Illinois.

4 **Q4. Have you ever testified before the Public Service Commission of the District of**  
5 **Columbia (Commission)?**

6 A4. No, this is my first time sponsoring testimony before this Commission.

7 **Q5. Was your testimony prepared by you or under your direct supervision and**  
8 **control?**

9 A5. Yes. This testimony and accompanying exhibits were prepared by me or under  
10 my direct supervision and control. The sources for my testimony are Company records,  
11 public documents, and my personal knowledge and experience.

12 **Q6. What is the purpose of your testimony?**

13 A6. The District Department of Transportation (DDOT) and Pepco are required to  
14 file a Second Biennial Underground Infrastructure Improvement Projects Plan (Second  
15 Biennial Plan) in compliance with the Undergrounding Act.<sup>1</sup> The purpose of my  
16 testimony is to support certain aspects of the DC PLUG initiative that relate broadly to  
17 the construction effort under the Second Biennial Plan. Specifically, I am testifying  
18 about the feeder selection methodology, the selected feeders, feeder design, technical  
19 details regarding the selected feeders, general feeder construction timelines, projected  
20 costs and alternative funding sources, and employment of District of Columbia  
21 residents and contractors that are certified business enterprises (CBEs) or certified joint  
22 ventures.

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<sup>1</sup> As used in this testimony, the term "Undergrounding Act" refers to the *Electric Company Infrastructure Improvement Financing Act of 2014*, D.C. Law 20-102, as amended.

1   **Q7.   About which components of D.C. Code §34-1313.08 are you testifying?**

2   A7.           I am a principle witness with respect to the requirements of D.C. Code §34-  
3           1313.08(a), §34-1313.08(b), and §34-1313.08(c)(1)-(5). I also provide additional  
4           supporting testimony with respect to other requirements discussed below.

5   **Q8.   What is the purpose of the Second Biennial Plan?**

6   A8.           D.C. Code §34-1313.07(a) requires DDOT and Pepco to jointly file with the  
7           Commission and concurrently serve upon the Office of People's Counsel of the District  
8           of Columbia (OPC) an application for approval of the Second Biennial Plan. The  
9           purpose of the Second Biennial Plan is to present a plan that identifies the DDOT  
10          Underground Electric Company Infrastructure Improvement Activity and the Electric  
11          Company Infrastructure Improvement Activity planned to be undertaken in a two-year  
12          period.<sup>2</sup> Under D.C. Code §34-1313.08, the Second Biennial Plan is required to  
13          include such information as a measurement and ranking of the reliability performance  
14          of Pepco's overhead feeders, recommended feeders to be placed underground, project  
15          details and itemized cost estimates associated with placing the selected feeders  
16          underground, and other information, including a description of the customer and  
17          community education as well as outreach efforts taken to identify District of Columbia  
18          residents to be employed by DDOT and Pepco during construction.

19   **Q9.   Please describe generally how the Second Biennial Plan differs from the First**  
20   **Biennial Plan.**

21   A9.           DDOT and Pepco jointly filed with the Commission the first Biennial  
22          Underground Infrastructure Improvement Projects Plan (First Biennial Plan) on July 3,

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<sup>2</sup> D.C. Code §34-1311.01(41).

1        2017. Several key distinctions exist between the First Biennial Plan and the Second  
2        Biennial Plan. First, the Second Biennial Plan includes the selection of 10 feeders for  
3        placement underground whereas the First Biennial Plan selected six. Second, the  
4        ranking of feeders upon which the Second Biennial Plan's feeder selection is based  
5        reflects nine years of feeder outage data (and thereby nine years of historical reliability  
6        performance data) as opposed to the First Biennial Plan's seven years of feeder outage  
7        data. Finally, the amount of funding for the improvements contained in the First  
8        Biennial Plan and the Second Biennial Plan differ.

9        **Q10. Is it in the public interest for the Commission to grant the authorizations and**  
10       **approvals that DDOT and Pepco seek in the Second Biennial Plan?**

11       A10.        Yes. The District is expected to experience increasing effects from severe  
12       weather events, including those due to climate change—as was found in the Task  
13       Force's Final Report,<sup>3</sup> by the D.C. Council in enacting the Undergrounding Act,<sup>4</sup> and  
14       by the Commission in Order No. 19167. Severe weather events that heavily impacted  
15       the District of Columbia between 2010 and 2018 include the February 2010 winter  
16       storm, the June 2012 Derecho, the January 2016 blizzard, and the March 2018 Winter  
17       Storm Riley.<sup>5</sup> Meanwhile, Pepco customers, D.C. residents, and the D.C. Council have  
18       for years expressed concerns regarding system reliability and resilience.<sup>6</sup> The electric  
19       system modernization required to address these concerns will demand an  
20       unprecedented investment in the electric distribution infrastructure in the District.<sup>7</sup>

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<sup>3</sup> *Mayor's Power Line Undergrounding Task Force, Findings & Recommendations* ("Final Report") at 53 (Oct. 2013).

<sup>4</sup> D.C. Code §34-1311.02(1)-(2).

<sup>5</sup> Order No. 19167 at ¶¶ 241-42.

<sup>6</sup> Order No. 19167 at ¶ 241.

<sup>7</sup> D.C. Code §34-1311.02(5); Order No. 19167 at ¶ 241.

1           The Joint Application represents a reasonable, cost-effective, and prudent next  
2           step in addressing those challenges, and one that is consistent with the Undergrounding  
3           Act (as was found with respect to the First Biennial Plan in Order No. 19167). In  
4           particular, the Joint Application ensures that the investment in the District's electric  
5           distribution infrastructure will be reasonable, cost-effective, and prudent—by using  
6           selection criteria that result in the greatest reduction in duration and frequency of  
7           outages once the feeders are placed underground as well as the greatest reduction in the  
8           minutes of interruption for every dollar spent to place those feeders underground,  
9           taking into account other relevant considerations (such as limiting the number of  
10          concurrent projects in a Ward at any one time, and maximizing the number of  
11          customers in each Ward who will realize the benefits associated with the Second  
12          Biennial Plan). The improvements contemplated by the Joint Application, when  
13          completed, will substantially benefit Pepco's customers and the District as a whole.

14   **Q11. Please describe how DDOT and Pepco may fine tune their feeder prioritization**  
15   **and selection (*i.e.*, which feeders are to be placed underground) to take advantage**  
16   **of the opportunities for collaboration with other utilities, government agencies or**  
17   **other entities.**

18   A11.         DDOT and Pepco are committed to working with other utilities, government  
19                 agencies and other entities to identify potential opportunities for coordination on future  
20                 projects as they relate to the DC PLUG initiative. DDOT and Pepco hold recurring  
21                 meetings with other utilities and government agencies in an effort to identify these  
22                 opportunities. For further discussion of those efforts, please refer to DDOT Witness  
23                 Williams's Direct Testimony. To the extent that Pepco, DDOT and other entities

1 identify these opportunities, DDOT and Pepco will make every effort to adjust the  
2 timing or schedule of the Second Biennial Plan or future plans to take advantage of the  
3 coordination opportunities.

4 **Q12. Will DDOT and Pepco seek to place more feeders underground in subsequent**  
5 **biennial plans?**

6 A12. In accordance with the Undergrounding Act, DDOT and Pepco are placing  
7 feeders underground to improve the resilience of the electric distribution system  
8 serving the District of Columbia. DDOT and Pepco will continue to implement the DC  
9 PLUG initiative and file future biennial plans in accordance with the Undergrounding  
10 Act. Given the approximately \$500 million funding contemplated by the  
11 Undergrounding Act, DDOT and Pepco will strive to place underground all or part of  
12 up to thirty feeders throughout the course of the DC PLUG initiative.

13 **FEEDER DESIGN AND LOCATION**

14 **Q13. Are the Electric Company Underground Infrastructure Improvements DDOT**  
15 **and Pepco are proposing in the Second Biennial Plan appropriately designed and**  
16 **located?**

17 A13. Yes. Pepco designed the proposed Electric Company Underground  
18 Infrastructure Improvements in the Second Biennial Plan based on Company standards  
19 that are in accordance with sound engineering principles and generally accepted  
20 principles of electric distribution system design. The feeders were chosen as described  
21 above, and their locations are shown in the Feeder Locations and One-Line Drawings  
22 in Appendix D.

1   **Q14. What other factors did DDOT and Pepco consider during the initial design of the**  
2   **proposed improvements?**

3   A14.           In addition, DDOT and Pepco modified their designs to facilitate load increases  
4           as well as to accommodate changes in technology or operating conditions that may  
5           occur in the future. In addition, DDOT and Pepco incorporated methods and  
6           technologies into their designs to minimize project costs and maximize reliability  
7           benefits. For example, DDOT and Pepco have incorporated innovative manhole and  
8           transformer configurations, including newly-designed partially grated tops for three-  
9           phase transformer vaults, in an effort to economically enhance reliability and resilience  
10          and manage future maintenance costs.

11   **Q15. Do the preliminary schematics included in the Second Biennial Plan constitute a**  
12   **redesign of the overhead feeders that Pepco proposes to place underground?**

13   A15.           Yes. DDOT and Pepco's designs are consistent with Pepco's existing  
14          underground design criteria for radial feeders, which calls for a loop configuration to  
15          enhance reliability and resilience and minimize the impact of faults. This loop design  
16          constitutes a redesign of the overhead feeder configuration, which does not include a  
17          loop. In general, for each of the feeders proposed to be placed underground, the route  
18          of the underground feeder closely resembles the route of the overhead feeder.  
19          However, in the course of performing detailed engineering analysis and field surveys,  
20          some changes may be made to the feeders' designs and/or routes to avoid physical  
21          obstructions or to improve the reliability, resilience and/or the operational efficiency of  
22          the underground system (*e.g.*, to accommodate new ties to neighboring feeders).

1 **Q16. Will the final post-construction configuration of the underground feeders adhere**  
2 **to the preliminary schematics contained in the Second Biennial Plan?**

3 A16. In most cases, the final, constructed configuration of the underground feeders  
4 will closely resemble the preliminary schematics appended to the Second Biennial  
5 Plan. However, before DDOT and Pepco begin construction, they will perform physical  
6 field surveys of each project site and further analyze each feeder to be placed  
7 underground. They will then use the results of those surveys and analyses to modify  
8 their preliminary design schematics and produce final engineering designs and  
9 construction plans.

10 **Q17. What other measures will DDOT and Pepco use to modify the final engineering**  
11 **designs?**

12 A17. From the time that DDOT and Pepco file the Second Biennial Plan to the time  
13 that civil and electrical engineering designs are finalized, DDOT and Pepco will look  
14 for opportunities to allow certain portions of DC PLUG initiative feeders to remain  
15 overhead without impacting the anticipated reliability and resilience gains associated  
16 with placing the feeder underground. For instance, if DDOT and Pepco identify a  
17 section of a selected feeder's primary lateral line that has neither experienced nor is  
18 susceptible to overhead outages, the final engineering designs may call for that section  
19 of the feeder to remain overhead. This will allow DDOT and Pepco to apply the cost  
20 of placing that section of the feeder underground to a future DC PLUG initiative feeder.

1

2 **Q18. Have DDOT and Pepco assessed potential obstacles to the timely completion of a**  
3 **project, including, but not limited to, the need to obtain environmental or other**  
4 **permits or private easements, the existence of historically sensitive sites, required**  
5 **tree removal, and significant traffic disruptions, as required by D.C. Code §34-**  
6 **1313.08(c)(3)?**

7 A18. As of this filing, DDOT and Pepco have not identified any specific obstacles to  
8 the design or construction of the feeders selected for placement underground in the  
9 Second Biennial Plan. Throughout the DC PLUG initiative, DDOT and Pepco will  
10 continue to identify potential risk factors and mitigation techniques. At this stage,  
11 DDOT and Pepco recognize that the risks commonly associated with this program are  
12 the same as the obstacles and risks associated with any large capital project DDOT or  
13 Pepco may undertake. Common sources of risk include adverse weather, availability  
14 of skilled contractor resources and the availability of materials. DDOT and Pepco  
15 intend to take all proper precautions to minimize risk and maintain safety. DDOT and  
16 Pepco will also, to the greatest extent possible, address the concern of traffic disruptions  
17 by prioritizing and scheduling feeders to be placed underground in such a way that the  
18 work is spread out among the five wards.

19 **Q19. Please describe DDOT's and Pepco's efforts to coordinate with other utilities.**

20 A19. DDOT hosts monthly utility coordination meetings in which Pepco participates  
21 along with the gas company, water utility and other utilities. The purpose of those  
22 meetings is to discuss the planned utility capital investment work for all participating  
23 utilities along with work associated with the DC PLUG initiative and, together with the

1 attending utilities, to identify opportunities for collaboration or other involvement.  
2 Estimated construction schedules and civil engineering designs are shared according to  
3 standard design milestones with the gas company, water utility, and other utilities that  
4 own or plan to construct facilities that may be affected by the DC PLUG initiative.  
5 Additional information regarding the utility coordination guidelines can be found in the  
6 Utility Coordination Protocol section of the Joint Application.

7 **TECHNICAL DETAILS REGARDING SELECTED FEEDERS**

8 **Q19. Please identify and describe feeder number and location (by street address, Ward,**  
9 **and neighborhood) for each mainline primary and lateral feeder recommended**  
10 **by DDOT and Pepco to be placed underground, as required by D.C. Code §34-**  
11 **1313.08(a)(3)(A).**

12 A19. The feeder number and location for each feeder recommended to be placed  
13 underground can be found on the Feeder Description Summary Sheet for each feeder  
14 (Appendix C), along with cost estimates for that project. Additionally, location  
15 information for each feeder can be found in Appendices D (Feeder Locations and One-  
16 Line Drawings), E (Existing Overhead Electrical Schematics), F (Preliminary  
17 Electrical Schematics), and G (Preliminary Civil Schematics).

18 **Q20. Please identify overhead electrical cables, fuses, switches, transformers and**  
19 **ancillary equipment, including poles, that are to be placed underground or**  
20 **removed, as required by D.C. Code §34-1313.08(a)(3)(B).**

21 A20. The Existing Overhead Electrical Schematic for each feeder is included in  
22 Appendix E to the Second Biennial Plan and shows all overhead primary electrical  
23 wire, fuses, switches, transformers and ancillary equipment that will be removed. The

1 poles, which are also shown on Appendix E, will remain in place unless determined by  
2 final field surveys to be eligible for removal.

3 **Q21. What, if any, overhead electrical cables, fuses, switches, transformers and**  
4 **ancillary equipment, are to be left overhead?**

5 A21. Only overhead secondary lines and associated ancillary equipment and poles  
6 will remain overhead. All overhead equipment associated with the primary lines that  
7 are placed underground, such as overhead fuses, switches, transformers and other  
8 ancillary equipment associated with the primary lines, will be removed and placed  
9 underground.

10 **Q22. Do DDOT and Pepco intend to bury lines or cables (other than power lines) that**  
11 **are located on the same poles as a feeder that is slated to be placed underground?**

12 A22. No. DDOT and Pepco do not intend to bury telecommunications or other lines  
13 that may be on the poles from which Pepco removes the primary or lateral line that will  
14 be placed underground.

15 **Q23. Will the poles remain in place?**

16 A23. In most cases DDOT and Pepco expect the poles to remain in place. DDOT  
17 and Pepco will only remove poles if they have only primary feeder cable on them. If  
18 poles support other lines, such as telecommunications lines or existing overhead  
19 secondary wires, then DDOT and Pepco will leave the poles in place. In order to decide  
20 whether to remove poles or leave them standing, DDOT and Pepco will perform field  
21 surveys and detailed engineering analyses. Once DDOT and Pepco complete their  
22 detailed construction designs, they will be able to determine exactly which poles will  
23 remain in place and which poles will be removed. DDOT and Pepco anticipate that the

1 number of poles that will be removed once a feeder is placed underground will be  
2 minimal.

3 **Q24. What is a parallel feeder?**

4 A24. A parallel feeder is a feeder whose length (or some portion thereof) runs along  
5 the same route as a feeder selected to be placed underground as part of the DC PLUG  
6 initiative. For the purposes of this initiative, a feeder may be considered parallel even  
7 if only a small portion of its length runs along the same route as the feeder to be placed  
8 underground. If appropriate, the portion of the parallel feeder(s) that shares the route  
9 with a feeder selected for undergrounding will be placed underground at the same time  
10 as the selected feeder is placed underground.

11 **Q25. Where in the Second Biennial Plan do DDOT and Pepco identify overhead**  
12 **primary and lateral feeders currently located parallel to the selected primary and**  
13 **lateral feeders that are recommended to be placed underground, as required by**  
14 **D.C. Code §34-131 3.08(a)(3)(C)?**

15 A25. Parallel overhead primary and lateral feeders are listed in Appendix B, Feeder  
16 Prioritization, shown in Feeder Locations and One-Line Drawings (Appendix D) and  
17 included in the Preliminary Electrical Schematics (Appendix F).

18 **Q26. Using the Preliminary Electrical Schematic for Feeder 467 as an example, please**  
19 **describe how overhead primary and lateral feeders currently located parallel to**  
20 **the selected primary and lateral feeders that are recommended to be placed**  
21 **underground are shown on the drawing.**

22 A26. On the Preliminary Electrical Schematics in Appendix F, the locations of  
23 parallel feeders that are proposed to be placed underground are shown in callout boxes

1 adjacent to the primary mainline or lateral feeder recommended to be placed  
2 underground. On the Preliminary Electrical Schematic for Feeder 467, for example,  
3 Feeders 128 and 476 are shown as parallel feeders. By placing sections of parallel  
4 feeders underground, DDOT and Pepco will provide additional reliability and  
5 resilience benefits for customers on those parallel feeders. Accordingly, customers  
6 who are served by feeders to which DC PLUG initiative feeders are tied will also realize  
7 potential reliability and resilience benefits, even though their specific feeder is not  
8 being placed underground.

9 **Q27. Please explain what it means to “convert” a feeder.**

10 A27. In general, feeder conversion involves changing a feeder’s voltage from 4kV to  
11 13kV by replacing transformers and other ancillary equipment. Then, Pepco builds ties  
12 to neighboring 13kV feeders so that load can be transferred to the new 13kV feeder. In  
13 many cases, this new 13kV feeder becomes an extension of an existing 13kV feeder.  
14 Pepco’s 13kV conversion program is intended to address increasing load demands,  
15 maintain reliability, replace aging infrastructure and provide for future demands so that  
16 they can be met under adverse conditions.

17 Under the Second Biennial Plan, DDOT and Pepco will place Feeders 118 and  
18 467 underground as 4kV primary network feeders because they are necessary to ensure  
19 the performance of the 4kV network. However, these feeders will be built to 13kV  
20 standards. Therefore, in the future if there is a need, Pepco will be able to convert them  
21 to 13kV at minimal cost.

1 **Q28. Will overhead secondary feeder circuits and ancillary above-ground equipment,**  
2 **including poles, be placed underground or removed as part of the Second Biennial**  
3 **Plan?**

4 A28. No, all secondary feeder circuits and their ancillary equipment will remain  
5 overhead. As discussed above, all existing poles will remain in place unless field  
6 surveys and detailed engineering analysis determines a pole is eligible to be removed.

7 **Q29. Please describe Pepco's activities with regard to the installation of Distribution**  
8 **Automation (DA)<sup>8</sup> devices in its District of Columbia electric distribution system.**

9 A29. Since DDOT and Pepco filed the First Triennial Plan, Pepco has been refining  
10 its strategy for installing DA devices on the underground system through its  
11 Underground Technology Enhancement Program (UTEP). Through UTEP, Pepco has  
12 identified an effective and feasible underground DA design that includes installing one  
13 mid-line interrupter and one automated feeder tie switch to adjacent feeders on the main  
14 trunk of each feeder chosen for DA installation. The mid-line interrupter allows for  
15 automatic isolation of customers in the event of a fault past the location of the  
16 interrupter so that customers located between the substation and the interrupter will not  
17 experience an outage. In the event a fault occurs between the substation circuit breaker  
18 and the mid-line interrupter, the automated tie switch allows restoration of service to  
19 customers between the interrupter and the end of the circuit. In this case, the customers  
20 between the interrupter and the end of the circuit will only experience a momentary  
21 interruption while the switching operation is performed remotely. For a detailed

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<sup>8</sup> Pepco's DA program involves installing advanced control systems across the distribution system in order to automatically identify and isolate faults in real time and restore service to customers in the impacted parts of the system.

1 description of the status of Pepco's UTEP initiative, please see the "Incorporation of  
2 Innovative Methods and Advanced Technology" section of the Second Biennial Plan.

3 **Q30. Will Pepco continue to evaluate the opportunities to install additional DA devices**  
4 **in its District of Columbia electric distribution system?**

5 A30. Yes, DDOT and Pepco will continue to evaluate the potential to use proven,  
6 cost-effective technologies, including DA, as contemplated by D.C. Code §34-  
7 1313.08(a)(3)(F).

8 **Q31. Do any of the feeders selected for placement underground in the Second Biennial**  
9 **Plan currently have DA devices installed on them?**

10 A31. Yes, Feeder 14767 has DA devices installed and is part an activated Automatic  
11 Sectionalizing and Reclosing (ASR) scheme. Feeders 15001, 15021, 14008, 14093,  
12 14702 and 15166 each have DA devices installed on them and are each planned to be  
13 part of an ASR scheme. The final civil and electrical engineering designs for Feeders  
14 15001, 15021, 14008, 14093, 14702 and 15166 will reflect DA devices and the  
15 corresponding civil infrastructure to house and support them. Due to the unique  
16 constraints of installing DA devices on the underground system (as opposed to the  
17 overhead system), these feeders' DA devices are not reflected in the preliminary civil  
18 and electrical schematics included with the Second Biennial Plan.

19 **Q32. Where in the Second Biennial Plan does Pepco identify interties that will enable a**  
20 **feeder to receive power from multiple directions or sources, as required by D.C.**  
21 **Code §34-1313.08(a)(3)(G)?**

22 A32. A depiction of the interties that will enable a feeder to receive power from  
23 multiple directions or sources can be found in the Preliminary Electrical Schematics

1 (Appendix F). Additionally, a list of the intertie feeders for each feeder selected to be  
2 placed underground is shown in Appendix B, Feeder Prioritization.

3 **Q33. Using the Preliminary Electrical Schematic for Feeder 467 as an example, please**  
4 **discuss how to identify interties that will enable the feeder to receive power from**  
5 **multiple directions or sources.**

6 A33. In the Preliminary Electrical Schematic for Feeder 467, near the corner of  
7 Livingston St., NW and 39<sup>th</sup> St., NW, there is an indication of a tie between Feeders  
8 128 and 467. This tie point, also referred to in the Undergrounding Act as an intertie,  
9 is identified in black font as follows “Feeder 128 / Feeder 467”.

10 **Q34. How is DC PLUG initiative work affected by Pepco priority feeder work?**

11 A34. The DC PLUG initiative is focused on improving electric distribution system  
12 resilience and reducing the number and frequency of outages during severe weather  
13 events by placing selected feeders underground, as discussed in D.C. Code §34-  
14 1311.02(2). The DC PLUG initiative identifies feeders to place underground based on  
15 a measurement of outage data currently over a nine-year period. Pepco’s normal  
16 priority feeder work is intended to improve the overall reliability of the electric  
17 distribution system by selecting the least reliable two percent (2%) of the District of  
18 Columbia feeders on an annual basis and implementing the specific corrective actions  
19 that likely will improve the reliability of the feeders and, therefore, the system. There  
20 is some overlap in feeders resulting from these two selection processes. If a feeder is  
21 selected as a DC PLUG feeder and received Priority Feeder program feeder in the  
22 previous year then the DC PLUG selection will be deferred until the reliability  
23 performance of the Priority Feeder construction has been evaluated. Similarly, if a

1 feeder is already scheduled for construction as a DC PLUG feeder, Priority Feeder  
2 construction will be deferred until the result of the DC PLUG construction are  
3 evaluated.

4 **Q35. Where in the Second Biennial Plan do DDOT and Pepco discuss the capability to**  
5 **meet current load and future load projections, as required by D.C. Code §34-**  
6 **1313.08(a)(3)(H)?**

7 A35. Each Feeder Description Summary Sheet in Appendix C contains a table of  
8 each feeder's capability to meet current load and future load projections. Also, there is  
9 a discussion of the capability to meet future load projections in the "Interties, Future  
10 Load and Feeder Conversion" section of the Second Biennial Plan.

11 **Q36. Will all of the primary overhead portions of the Second Biennial Plan Feeders be**  
12 **fully undergrounded?**

13 A36. No. The Second Biennial Plan proposes to place underground only those  
14 primary feeders segments that are vulnerable to tree and storm-driven outages. This  
15 strategy will minimize costs while providing the improvement to feeder reliability of  
16 undergrounding overhead facilities. These vulnerable segments were identified using a  
17 combination of a reliability data and field inspections.

18 **GENERAL FEEDER CONSTRUCTION TIMELINE**

19 **Q37. How many years are covered under this Second Biennial Plan?**

20 A37. The Second Biennial Plan covers two calendar years. However, construction  
21 of feeders may not coincide with the two-year period immediately following an  
22 approval of the Second Biennial Plan. Subsequent to the appropriate regulatory  
23 considerations, the schedule and timeline described by the Undergrounding Act and

1 procurement timelines, construction on the inaugural feeder of the Second Biennial  
2 Plan is estimated to start in 2022.

3 **Q38. When will DDOT and Pepco present a project timeline for the DC PLUG**  
4 **initiative?**

5 A38. In accordance with D.C. Code §34-1313.08(3)(b), DDOT and Pepco will file a  
6 project schedule that reflects the estimated start and projected end dates for  
7 construction of each of the feeders selected to be placed underground in the Second  
8 Biennial Plan within 90 days following the Commission's approval of the Second  
9 Biennial Plan.

10 **PROJECTED COSTS**

11 **Q39. Where in the Second Biennial Plan do DDOT and Pepco identify proposed Electric**  
12 **Company Infrastructure Improvements and DDOT Underground Electric**  
13 **Company Infrastructure Improvements that will be funded by the Underground**  
14 **Project Charge and the DDOT Charges, as required by D.C. Code §34-**  
15 **1313.08(a)(3)(E)?**

16 A39. A list of the improvements that will be funded by the Underground Project  
17 Charge and DDOT Charge can be found on the Feeder Description Summary Sheets  
18 for each feeder (Appendix C). DDOT Witness Williams discusses the DDOT Charges,  
19 and Company Witness Blazunas discusses the Underground Rider.

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**Q40. Where in the Second Biennial Plan does Pepco include an itemized estimate of the projected Electric Company Infrastructure Improvement Costs, as required by D.C. Code §34-1313.08(c)(1)?**

A40. Appendix B—Feeder Prioritization—and Appendix C—Feeder Description Summary Sheets—provide a summary of the Second Biennial Plan’s total estimated costs for each feeder. Appendix H of the Second Biennial Plan provides Itemized Feeder Cost Estimates for each feeder. The cost of the Second Biennial Plan is approximately \$264 million. Company Witness Blazunas discusses the proposed Underground Project Charges required by D.C. Code §34-1313.08(c)(1). DDOT Witness Williams discusses the DDOT Charges, and Company Witness Blazunas discusses the Underground Rider.

**Q41. Where in the Second Biennial Plan do DDOT and Pepco include an itemized estimate of the DDOT Underground Electric Company Infrastructure Improvement Costs associated with the DDOT Underground Electric Company Infrastructure Improvement Activity, as required by D.C. Code §34-1313.08(c)(2)?**

A41. As previously discussed, Appendix H of the Second Biennial Plan provides Itemized Feeder Cost Estimates for each feeder. Further cost detail is provided in the confidential workpapers filed with the Second Biennial Plan.

1

2 **Q42. Are the projected costs associated with the proposed Electric Company**  
3 **Infrastructure Improvement Activity prudent?**

4 A42. Yes. The costs are prudent because they include all costs necessary to perform  
5 the work and complete the projects that are included in the Electric Company  
6 Infrastructure Improvement Activity pursuant to the Undergrounding Act, and these  
7 costs will be incurred by Pepco in a cost-effective manner to promote an efficient use  
8 of customer funds.

9 **Q43. Are alternate sources of funds available for relocation of the overhead equipment**  
10 **and ancillary facilities that will utilize DDOT Underground Electric Company**  
11 **Infrastructure Improvements, such as Contributions in Aid of Construction, the**  
12 **grant of federal highway or economic development funds or other sources?**

13 A43. No available alternate funding sources for the relocation of the overhead  
14 equipment and ancillary facilities have been identified at this time.

15 **Q44. Are there any costs associated with underground construction approved under**  
16 **the First Triennial Plan included in the Second Biennial Plan?**

17 A44. Yes. In the First Triennial Plan, the Company selected and the Commission  
18 approved 21 feeders to be placed underground.<sup>9</sup> Pepco performed detailed design work  
19 on three of those feeders. The design for Feeder 15707 were 100% complete because  
20 this feeder was selected as an opportunity feeder under the First Triennial Plan.<sup>10</sup>  
21 Construction of conduit proceeded under the approved design, however electrical

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<sup>9</sup> Order No. 17697 at Pages 70-71.

<sup>10</sup> Opportunity project feeders minimize costs by identifying areas where DC PLUG initiative work can be coordinated with DDOT reconstruction and planned resurfacing projects.

1 construction was never completed due to legal challenges to the First Triennial Plan's  
2 funding mechanism. Since that time Feeder 15707 was chosen for remediation under  
3 Pepco's Benning Area Reliability Plan initiative and excluded from DC PLUG  
4 selection pending the results of that reliability construction. Due to feeder  
5 reconfigurations and reconductoring of overhead wire under the Benning Area  
6 Reliability Plan, this conduit will no longer be part of a DC PLUG initiative feeder and  
7 will remain unused.

8 **EMPLOYMENT OF DISTRICT OF COLUMBIA RESIDENTS AND**  
9 **CONTRACTORS**

10 **Q45. Please discuss the requirements of the Undergrounding Act with respect to the**  
11 **engagement of District of Columbia residents and CBEs.**

12 A45. D.C. Code §34-1311.02(7)<sup>11</sup> states that the Mayor (through DDOT) and Pepco  
13 should make every practical effort to ensure that District residents are hired for newly  
14 created jobs funded by any mechanism in which the costs of such funding are paid by  
15 the District from the DDOT Charge or recovered by Pepco through the Underground  
16 Project Charge, with a goal that 100% of all related jobs are filled by District of  
17 Columbia residents and 100% of the construction contracts are awarded to CBEs. To  
18 that end, a description of the efforts taken to identify District of Columbia residents  
19 DDOT and Pepco contractors can employ during this initiative can be found in the  
20 "Focus on District of Columbia Businesses and Residents" section of the Second  
21 Biennial Plan.

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<sup>11</sup> See the "Power Line Undergrounding Program Certified Business Enterprise Utilization Act of 2019," D.C. Law 23-020, effective September 11, 2019.

1 **Q46. Please briefly discuss the plan to identify District of Columbia residents and**  
2 **CBEs.**

3 A46. DDOT Witness Williams will discuss DDOT's activities within its  
4 organization. The following are the actions that Pepco or Pepco and DDOT intend to  
5 take to identify District of Columbia residents and CBEs.

6 First, Pepco will determine its hiring and contracting needs. The direct hiring  
7 opportunities may include journey electrical workers, electrical apprentices, skilled  
8 laborers and engineers. Pepco will make every practical effort to identify and hire  
9 qualified local residents for all of these positions.

10 Second, Pepco will identify employment and contracting opportunities. These  
11 opportunities may include the installation of cable and other electrical equipment and  
12 engineering design.

13 Third, Pepco will identify local qualified candidates for opportunities. To that  
14 end, DDOT and Pepco have jointly hosted forums for contractors during the planning  
15 stages of the First Biennial Plan, during which DDOT and Pepco familiarized  
16 contractors with the DC PLUG initiative, the work that would be required, the Pepco  
17 procurement process, and explained how to register as an approved Pepco supplier or  
18 CBE in the District of Columbia. Pepco also used that opportunity to underscore the  
19 District of Columbia-focused goal prescribed by the Undergrounding Act. DDOT and  
20 Pepco will continue this work during the Second Biennial Plan.

21 **Q47. Please discuss Pepco's efforts to engage District of Columbia CBEs and residents.**

22 A47. Although not required by the Original Act or the Undergrounding Act, Pepco  
23 has created a Capability & Capacity Building (C&C) Program to expand and develop

1 the pool of qualified CBE construction contractors. Pepco's C&C Program creates  
2 opportunities for CBE firms to become qualified to work on Pepco's system by setting  
3 up and awarding discrete work packages for existing feeders that are similar to the type  
4 of work that contractors perform on DC PLUG initiative projects. Through this  
5 innovative program, Pepco provides CBE construction contractors the opportunity to  
6 demonstrate their capability and capacity to perform work in accordance with Pepco  
7 standards on existing Pepco projects and become qualified to bid on and perform DC  
8 PLUG initiative construction projects as well as normal Pepco projects.

9 Finally, Pepco has hired a District of Columbia resident to serve as the  
10 Community Relations Coordinator for the DC PLUG team. The Community Relations  
11 Coordinator acts as the DC PLUG initiative's interface with customers and to execute  
12 the Education Plan (Appendix N).

13 **Q48. Does the Second Biennial Plan satisfy the requirements of D.C. Code §34-1313.08,**  
14 **as required by D.C. Code §34-1313.10(b)(1)?**

15 A48. Yes, for the reasons discussed above and in the testimonies of Company  
16 Witnesses McGowan, Blazunas and Lipari and DDOT Witness Williams as well as in  
17 the Second Biennial Plan, DDOT and Pepco have satisfied the requirements of D.C.  
18 Code §34-1313.08.

19 **Q49. Should the Commission approve the Second Biennial Plan as jointly submitted by**  
20 **DDOT and Pepco?**

21 A49. Yes.

22 **Q50. Does this complete your Direct Testimony?**

23 A50. Yes, it does

**POTOMAC ELECTRIC POWER COMPANY**

**BEFORE THE  
PUBLIC SERVICE COMMISSION OF THE DISTRICT OF COLUMBIA  
TESTIMONY OF MATTHEW KOZEY  
FORMAL CASE NO. 1145**

1   **Q1.   Please state your name and position.**

2   A1.           My name is Matthew Kozey, and I am the Communications Manager for the Pepco  
3           region. I am testifying on behalf of Potomac Electric Power Company (Pepco or the  
4           Company).

5   **Q2.   What are your responsibilities in your role as Communications Manager?**

6   A2.           I am responsible for developing and executing integrated communications  
7           strategies for Pepco in the District of Columbia and Maryland.

8   **Q3.   Please state your occupational history.**

9   A3.           I joined Pepco Holdings in 2013 as a Regulatory Strategy Policy Lead, drafting  
10          testimony and compiling data for regulatory reporting on behalf of the Power Delivery  
11          group. From 2016 to 2018, I served as the Manager of Regulatory Affairs for the District  
12          of Columbia, overseeing Pepco's regulatory activity before the Public Service Commission  
13          of the District of Columbia. I assumed my current role as Communications Manager in  
14          January 2018.

15               Prior to joining Pepco, I worked as an analyst and project manager for a non-profit  
16          research firm and spent time as a legal fellow on a U.S. House of Representatives  
17          Subcommittee staff.

18   **Q4.   Please state your educational history.**

19   A4.           I earned a Bachelor of Arts in Political Science and a Juris Doctor from the  
20          University of North Carolina at Chapel Hill.

1 **Q4. Have you ever testified before the Public Service Commission of the District of**  
2 **Columbia (Commission)?**

3 A4. No.

4 **Q5. Was your Direct Testimony prepared by you or under your direction?**

5 A5. Yes, this Direct Testimony was prepared by me or under my direct supervision and  
6 control. The source documents for my testimony are Company records, public documents,  
7 and my personal knowledge and experience.

8 **Q6. What is the purpose of your Direct Testimony?**

9 A6. The purpose of my Direct Testimony is to provide an overview of the District of  
10 Columbia Power Line Undergrounding (DC PLUG) Education Plan (Education Plan), and  
11 the strategy underlying the Education Plan that Pepco and the District Department of  
12 Transportation (DDOT) are jointly proposing. I also provide the budget for the Education  
13 Plan. Finally, I demonstrate the reasonableness of the Education Plan. Appendix N to the  
14 Second Biennial Plan contains both the Education Plan and the accompanying budget.

### **HISTORY OF THE EDUCATION PLAN**

15 **Q7. What gave rise to the creation of this Education Plan?**

16 A7. In August 2012, Mayor Gray convened a Task Force to provide advice on actions  
17 that may be taken to reduce future storm-related power outages. The Task Force carefully  
18 studied the issue of placing power lines underground to improve electric system reliability  
19 and public safety in the District of Columbia during a variety of weather conditions. The  
20 Task Force recommended that DDOT and Pepco develop a public awareness and  
21 communications plan and budget and engage in comprehensive customer education. In

1       October 2013 the Task Force issued its Final Report which specifically discussed the  
2       implementation of a communications plan. The Task Force found that:

3               ...a comprehensive communications program is an essential strategy for  
4               informing stakeholders—ratepayers, utility consumers, and taxpayers—  
5               about the expected benefits of power line undergrounding and engaging  
6               the community during project planning and implementation. The  
7               District and Pepco will implement a communications program that  
8               presents the scope, program design, and impact of undergrounding to  
9               build public understanding of the planned electric system  
10              improvements.<sup>1</sup>

11             As a result, the Task Force recommended that Pepco and the District should prepare  
12             a comprehensive communication plan to inform, educate and update ratepayers, consumers  
13             and other stakeholders about undergrounding program development and implementation.

14             In response to the Task Force’s recommendations, the Council of the District of  
15             Columbia enacted the Electric Company Infrastructure Improvement Financing Act of  
16             2014 (the Original Act) (D.C. Law 20-102)<sup>2</sup> became effective May 3, 2014. In accordance  
17             with DC Code §34-1313.07(a), Pepco and DDOT filed an application with the  
18             Commission, seeking the approval of their first biennial Underground Infrastructure  
19             Improvement Projects Plan (the First Briennial Plan).

20             DDOT and Pepco also included in the First Briennial Plan a comprehensive  
21             communication plan to inform, educate and update customers and other stakeholders about  
22             undergrounding program development and implementation (the Education Plan).

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<sup>1</sup>       Page 101 of the October 2013 Power Line Undergrounding Task Force’s Finding and Recommendations report (Final Report).

<sup>2</sup>       The Original Act was subsequently amended; however, these amendments did not modify any aspect of the Education Plan.

1  
2 **Q8. Did any party object to the proposed Education Plan that DDOT and Pepco filed with**  
3 **the First Triennial Plan?**

4 A8. Yes, the Office of the People's Counsel (OPC) filed a protest to the First Triennial  
5 Plan, contending, among other things, that DDOT and Pepco "failed to demonstrate that  
6 the [Education Plan] is properly designed to effectively disseminate pertinent, timely and  
7 accurate information to those District residents and businesses directly affected by the  
8 undergrounding infrastructure improvement projects in the Triennial Plan."<sup>3</sup> In its protest,  
9 OPC filed a number of recommendations addressing the Education Plan.<sup>4</sup>

10 **Q9. Did DDOT and Pepco address OPC's concerns regarding the Education Plan?**

11 A9. Yes, in response to OPC's Protest, DDOT and Pepco met with OPC to review the  
12 recommendations, and the parties were able to resolve OPC's issues relating to the  
13 Education Plan. On September 15, 2014, Pepco filed a "Joint Stipulation of the Office of  
14 People's Counsel, Potomac Electric Power Company and the District Department of  
15 Transportation Resolving Recommendations 1-13 and 16-25 of the Protest of the Office of  
16 the People's Counsel in Formal Case No. 1116" (Joint Stipulation).

17 **Q10. Please describe the key terms relating to communications in the Joint Stipulation.**

18 A10. In addition to the timeframes outlined in the Education Plan, DDOT and Pepco  
19 agreed to provide a *pro forma* timeline that further defined the timeframes in which  
20 notifications regarding impending construction will be sent to affected residents and  
21 businesses. DDOT and Pepco also agreed to provide all affected Wards (*i.e.*, Wards 3, 4,

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<sup>3</sup> OPC Protest at 5-6.

<sup>4</sup> Recommendations 1-13 addressed technical and other aspects of system design, construction and operation, while Recommendations 16-25 addressed the Education Plan.

1 5, 7, and 8) with a central place for residents to get information regarding the DC PLUG  
2 initiative. Specifically, a mobile, pop-up outreach center that DDOT and Pepco can move  
3 around the affected areas. This option is more flexible and cost effective than acquiring  
4 brick and mortar locations in each of the five affected wards. Additionally, DDOT and  
5 Pepco agreed to work with the DC Public Library service to designate a DC PLUG  
6 initiative information resource hub (*e.g.*, an information kiosk, such as a banner or poster  
7 alongside fact sheets and other informational handouts) in a public library in each of Wards  
8 3, 4, 5, 7, and 8.

9 **Q11. Did the Education Plan filed with the First Triennial Plan incorporate the**  
10 **communications items from the Joint Stipulation?**

11 A11. Yes.

12 **Q12. Are there any other stipulations pertaining to the Education Plan?**

13 A12. Yes. A complete list of stipulations pertaining to the Education Plan is attached to  
14 my testimony as PEPCO (D)-1.

15 **Q13. Did the Commission approve the Education Plan and the Joint Stipulation?**

16 A13. Yes. The Commission first approved the Education Plan in November 2014 in  
17 Order No. 17697, as clarified by Order No. 17770. Pepco filed the Education Plan again  
18 in the First Biennial Plan, which the Commission approved on November 9, 2017 in Order  
19 No. 19167.<sup>5</sup>

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<sup>5</sup> Order No. 19167 at Paragraph 207.

1 **Q14. Did the orders approving the Joint Stipulation add requirements for the Education**  
2 **Plan?**

3 A14. Yes. Order No. 17697, as clarified by Order No. 17770, added three requirements:  
4 1) at least 30-15-7 days advance notice of impending construction in impacted  
5 neighborhoods; 2) weekly updates placed on the DC PLUG website, which will be linked  
6 to from Pepco.com to facilitate the public having as much information regarding the  
7 operations of the DC PLUG initiative as possible; and, 3) the requirement that absent  
8 unavoidable circumstances, Pepco and DDOT could not conduct construction in residential  
9 areas between 7 p.m. and 7 a.m. Monday – Saturday. These requirements were also  
10 incorporated into Order No. 19167.

11 **Q15. Is the Education Plan included in Appendix N of the Second Biennial Plan the same**  
12 **as the Education Plan approved in Order No. 19167?**

13 A15. In large part, yes. However, some improvements have been made to the Education  
14 Plan filed here since the filing and approval of the First Biennial Plan, as the tools available  
15 to communicate information relating to customers have changed. For example, the  
16 Education Plan now reflects the increased use of digital communications channels to reach  
17 impacted customers.

**RESIDENT, BUSINESS AND OTHER STAKEHOLDER EDUCATION**  
**AND OUTREACH**

18 **Q16. Why is the Education Plan important to the DC PLUG initiative?**

19 A16. District of Columbia residents, businesses, and other stakeholders are necessarily  
20 going to be impacted in their daily lives by the construction required to implement the DC  
21 PLUG initiative. The initiative targets feeders in different neighborhoods each year  
22 throughout the life of the initiative, and residents, businesses, and other stakeholders will

1 need to receive updates on construction in their areas and have the opportunity to provide  
2 feedback as the project progresses through the feeders selected in the Second Biennial Plan.  
3 It will be important to communicate, for instance, the schedule of work, road closings, and  
4 transportation issues throughout the life of the DC PLUG initiative. It is also critical for  
5 DDOT and Pepco to share with residents, businesses, and other stakeholders the benefits  
6 of the DC PLUG initiative as well as information related to construction, including  
7 temporary inconveniences that they may experience. Without this balanced education, the  
8 community may not understand what work is occurring and may view the efforts only as  
9 inconvenient, overlooking the benefits for residents of the District of Columbia. Residents,  
10 businesses, and other stakeholders will receive ongoing communications regarding DC  
11 PLUG construction activities so that they can make adjustments, including better avoiding  
12 traffic and parking disruptions the work may cause. It is important to the success of the  
13 DC PLUG initiative that all residents, businesses, and other stakeholders understand that  
14 the short-term inconveniences that they may experience will be offset by the long-term  
15 benefits, including greater resiliency – the ability to better weather major storms – as power  
16 lines are placed underground.

17 **Q17. What are the objectives of the Education Plan?**

18 A17. The activities in the Education Plan are designed to: (1) deliver information related  
19 to DC PLUG initiative construction planning, including the project work affecting each  
20 ward and coordination with compatible or concurrent initiatives, and project progress;  
21 (2) provide timely notice to, and the opportunity to collect feedback from, residents,  
22 businesses and other stakeholders through thoughtful community outreach and public  
23 awareness activities; and, (3) educate residents, local businesses, and other stakeholders

1 about the benefits of placing distribution feeders underground, including increasing the  
2 resiliency and reliability of the electric system in the face of increasingly severe weather.

3 **Q18. Is the proposed Education Plan reasonable?**

4 A18. Yes. The Education Plan provides sensible and appropriate communications  
5 activities to keep District of Columbia residents, businesses, and stakeholders informed  
6 throughout the initiative. In the process, DDOT and Pepco have carefully considered the  
7 many factors that go into achieving the most effectively scoped Education Plan. In addition  
8 to the factors discussed above, DDOT, Pepco, and the District have listened to the concerns  
9 expressed previously by parties involved in this proceeding, particularly OPC, that the  
10 maximum amount of funds designated for the DC PLUG initiative be spent on placing the  
11 lines underground. The Education Plan strikes the appropriate balance between effectively  
12 communicating with the community and preserving the dollars for use on placing lines  
13 underground. Importantly, the Commission agreed that the Education Plan was reasonable  
14 when it approved the plan in Order No. 19167.

15 **Q19. When is the Education Plan anticipated to be implemented?**

16 A19. Education and outreach activities related to project work outlined in the First  
17 Biennial Plan are currently taking place pursuant to the Education Plan approved in  
18 November 9, 2017 in Order No. 19167. Execution of the activities in this Education Plan  
19 will largely be a continuation of the activities in the currently approved Education Plan.  
20 Any additional activities will begin following the approval of the Second Biennial Plan,  
21 which is anticipated in 2019.

22 **Q20. What is the duration of the activities in the Education Plan?**

23 A20. The Education Plan activities will continue for the duration of the construction  
24 associated with the Second Biennial Plan. The initiative targets feeders in different

1 neighborhoods each year throughout the life of the initiative, and residents, businesses, and  
2 other stakeholders will need to receive updates on construction in their areas and have the  
3 opportunity to provide feedback as the project progresses through the feeders outlined in  
4 the Second Biennial Plan. It will be important to communicate, for instance, the schedule  
5 of work, road closings, and transportation issues throughout the life of the DC PLUG  
6 initiative. While some communications activities can be created once and leveraged over  
7 the life of the initiative, others will need to be customized or deployed repeatedly to inform  
8 residents, businesses, and other stakeholders about ongoing construction activities in their  
9 specific areas.

10 **Q21. What types of outreach and materials will be used to implement the Education Plan?**

11 A21. In very general terms, the Education Plan will engage and communicate with  
12 relevant audiences through outreach to residents, businesses, and other stakeholders;  
13 earned and paid media; digital communications; letters and direct mail; phone calls to  
14 affected customers; and hard copy collateral, such as fact sheets. The Education Plan  
15 contains more detail on these strategies and tactics.

16 **Q22. Will all of the outreach and materials be used over the life of the DC PLUG initiative?**

17 A22. Yes. The outreach and materials will likely be used over time during the life of the  
18 DC PLUG initiative. However, changes may be necessary. If, as the DC PLUG initiative  
19 progresses, certain outreach and materials are no longer relevant, they will not be used.  
20 Others may be added to the collateral for the campaign.

**EDUCATION PLAN BUDGET**

**Q23. Where in the Education Plan can the Commission find the budget information?**

A23. A discussion of the budget is located in Section 7 of the Education Plan, and the detailed proposed budget can be found in Appendix N of the Second Biennial Plan.

**Q24. Does the Second Biennial Plan Education Plan Budget differ from the Education Plan Budget proposed in the First Biennial Plan?**

A24. Yes, the budgeted amount for the Education Plan has been supplemented to meet the incremental costs associated with communications surrounding ten more feeders.

**Q25. What is the total budget for the Education Plan?**

A25. The total budget for the Education Plan is \$934,500.

**Q26. What amount will be recovered by Pepco through the Underground Project Charge?**

A26. Pepco will recover \$934,500 through the Underground Project Charge.<sup>6</sup>

**Q27. Is the budget for the Education Plan reasonable?**

A27. Yes. The Education Plan is scalable and flexible to address community needs and interests throughout the duration of project construction. The current Education Plan will effectively communicate the necessary project-related information while also ensuring that the bulk of the funds allotted to the DC PLUG initiative will be directed toward placing power lines underground. As a result, the budget that supports the Education Plan is reasonable given the objectives.

**Q28. Are the line items in the budget consistent with the outreach and materials that are identified in the Education Plan?**

A29. Yes.

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<sup>6</sup> Company Witness Blazunas will discuss how the charge will be designed and collected.

1    **Q29. Does this conclude your Direct Testimony?**

2    A30.            Yes, it does.

**POTOMAC ELECTRIC POWER COMPANY**  
**BEFORE THE**  
**PUBLIC SERVICE COMMISSION OF THE DISTRICT OF COLUMBIA**  
**DIRECT TESTIMONY OF PETER R. BLAZUNAS**  
**FORMAL CASE NO. 1145**

1   **Q1.   Please state your name, position, and business address.**

2   A1.           My name is Peter R. Blazunas. I am the Manager of Rate Administration for  
3           Pepco in the Regulatory Affairs Department of Pepco Holdings LLC (PHI). I am  
4           testifying on behalf of Pepco.

5   **Q2.   What are your responsibilities in your role as the Manager of Rate**  
6           **Administration?**

7   A2.           I am responsible for the development of electric rates, including tariff  
8           surcharges, for Pepco's Maryland and District of Columbia jurisdictions. I also  
9           participate in the development of Pepco's policies and practices with respect to rate  
10          design and assist with regulatory compliance matters, including tariff administration  
11          and periodic filings.

12   **Q3.   Please state your educational background and professional experience.**

13   A3.           I received a Bachelor of Arts degree in Economics from the University of  
14          Dayton and a Master of Arts degree in Economics from the University of Akron. I  
15          began my career with FirstEnergy Corp. (FirstEnergy) in 2012 as a State Regulatory  
16          Analyst in the Ohio Rates and Regulatory Affairs Department. During my time at  
17          FirstEnergy, I was the lead analyst responsible for various riders, such as the First  
18          Energy Ohio utilities' Delivery Capital Recovery Rider ("Rider DCR") and  
19          uncollectible riders. I also provided support in various regulatory proceedings,  
20          including rate proceedings and regulatory audits. Further, I served as Adjunct Faculty

1 in the Department of Economics at the University of Akron from 2012 to 2017, and  
2 from January to May of 2018 served as Adjunct Faculty in the Department of Applied  
3 General and Technical Studies at the University of Akron. In July 2017, I joined the  
4 Pepco Regulatory Strategy and Revenue Policy team of the Regulatory Affairs  
5 Department of PHI as a Senior Rate Analyst. I assumed my current position at PHI in  
6 November 2018.

7 **Q4. Have you previously submitted testimony before the Public Service Commission**  
8 **of the District of Columbia (Commission)?**

9 A4. Yes. I submitted testimony on behalf of Pepco with respect to rate design and  
10 cost recovery before the Commission in Formal Case No. 1130, Pepco's Application  
11 for Approval of its Transportation Electrification Program, and with respect to rate  
12 design in Formal Case No. 1156, Pepco's Application for Authority to Implement a  
13 Multiyear Rate Plan for Electric Service in the District of Columbia.

14 **Q5. What is the purpose of your Direct Testimony?**

15 A5. The purpose of my Direct Testimony is to provide a description of the  
16 methodology used in the Second Biennial Underground Infrastructure Improvement  
17 Projects Plan (Second Biennial Plan) to (A) calculate the revenue requirement and rates  
18 for the Underground Project Charge, as required by D.C. Code §34-1313.08(c)(6), and  
19 (B) calculate the rates under the Underground Rider to recover DDOT Underground  
20 Electric Company Infrastructure Improvement Charges (DDOT Charges) in the  
21 amount of \$30 million annually, as required by D.C. Code §34-1313.02(b)(2)(B).

22 My Direct Testimony and accompanying exhibits were prepared by me or under  
23 my direct supervision and control. In developing my Direct Testimony, I relied on  
24 Company records, public documents, and my personal knowledge and experience.

**UNDERGROUND PROJECT CHARGE**

**Q6. What is the Underground Project Charge?**

A6. D.C. Code §34-1311.01(42) defines the Underground Project Charge as “an annually adjusted surcharge paid by all distribution customers of the electric company (except for customers served under the electric company’s residential aid discount or a succeeding discount program) for its recovery of the Electric Company Infrastructure Improvement Costs, together with the electric company’s rate of return as approved by the Commission.”<sup>1</sup>

**Q7. Under what authority is Pepco proposing the Underground Project Charge?**

A7. D.C. Code §34-1313.07(c) provides that “as part of the initial application for approval of the biennial Underground Infrastructure Improvement Projects Plan filed pursuant to subsection (a) of this section, the electric company shall request authority to impose and collect specified Underground Project Charges from its electric distribution service customers to recover the Electric Company Infrastructure Improvement Costs associated with the Underground Infrastructure Improvement Projects Plan ...” As addressed in the rate design discussion below, Pepco’s Underground Project Charge – Rider UPC, attached as PEPCO (E)-1 implements D.C. Code §34-1313.07(c).

**Q8. As used in the definition of “Underground Project Charge,” what are “Electric Company Infrastructure Improvement Costs”?**

A8. Electric Company Infrastructure Improvement Costs are defined in D.C. Code §34-1311.01(21) as “costs incurred by the electric company, including the amortization

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<sup>1</sup> Pepco has set a separate Underground Project Charge for each applicable customer class, which is consistent with the distribution service customer class allocation methodology defined in D.C. Code §34-1311.01(8A).

1 of regulatory assets and capitalized costs relating to electric plant including  
2 depreciation expense and design and engineering work incurred, or expected to be  
3 incurred, by the electric company in undertaking Electric Company Infrastructure  
4 Improvement Activity, and contingency for the cost to complete and place in service  
5 the electric plant to be installed in the applicable biennial Underground Infrastructure  
6 Improvement Projects Plan, and the unrecovered value of electric company property  
7 that is retired, together with any demolition cost or similar cost that exceeds the salvage  
8 value of the property. The term includes preliminary expenses and investments  
9 associated with Electric Company Infrastructure Improvement Activity that are  
10 incurred by the electric company prior to receipt of an order applicable to costs incurred  
11 with respect to the Electric Company Infrastructure Improvement Activity in addition  
12 to expenses that may be incurred for development of annual construction plans,  
13 customer communication, and other expenses that may develop in support of the  
14 Electric Company Infrastructure Improvement Activity.”

15 **Q9. What level of Electric Company Infrastructure Improvement Costs does Pepco**  
16 **expect to place in-service in support of the Electric Company Infrastructure**  
17 **Improvement Activity<sup>2</sup> in the Second Biennial Plan?**

18 A9. Pepco expects to place in-service project costs in the amount of approximately  
19 \$6.9 million in the Second Biennial Plan through calendar year 2021.

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<sup>2</sup> D.C. Code §34-1311.01(20) defines Electric Company Infrastructure Improvement Activity as “the civil and electrical engineering for, and acquisition, construction and installation of, Electric Company Infrastructure Improvements and the removal of overhead electric distribution facilities no longer used, or useful, in providing electric distribution service in the District due to the construction of Electric Company Infrastructure Improvements.”

1

2 **Q10. Please describe the O&M expenses Pepco will recover during the implementation**  
3 **of the Second Biennial Plan.**

4 A10. A breakdown of the O&M expenses can be found on page 4 of PEPCO  
5 (E)-1. The O&M expenses include:

- 6 • Costs associated with the Company's portion of the Customer Education  
7 Plan;
- 8 • Costs associated with community outreach in the vicinity of construction  
9 activities;
- 10 • Commission costs associated with the Commission's evaluation of DC  
11 PLUG initiative filings; and
- 12 • Office of People's Counsel of the District of Columbia (OPC) costs  
13 associated with the OPC's review of the DC PLUG initiative filings.

14 All of these cost categories were previously approved in Order No. 17697, as  
15 clarified by Order No. 17770, to be included in the Underground Project Charge. In  
16 addition, the Underground Project Charge includes recovery of the following additional  
17 O&M expenses:

- 18 • The refund of Commission and OPC deposits related to previous DC PLUG  
19 filings; and
- 20 • The costs associated with an Opportunity Project selected in the First  
21 Triennial Plan that will no longer be part of the DC PLUG initiative, as  
22 discussed in the Direct Testimonies of Company Witnesses McGowan and  
23 Smith.

1 **Q11. Describe any O&M expenses that were included in previous plans that are no**  
2 **longer being included.**

3 A11. The O&M expenses associated with a “compliance coordinator” to track and  
4 report on District hiring are no longer being included in the DC PLUG initiative plans  
5 as that function is now being performed by DDOT in its normal course of operations  
6 for the DC PLUG initiative.

7 **Q12. Please describe the costs included in the Underground Project Charge revenue**  
8 **requirement.**

9 A12. The revenue requirement is calculated using Pepco’s portion of the projected  
10 capital costs, which includes the projected costs of engineering, design, and  
11 construction; actual labor; materials; and, allowance for funds used during  
12 construction. Additionally, the revenue requirement includes the O&M expenses  
13 described in my preceding response. The revenue requirement includes a return of  
14 investment through depreciation expense based on the plant investment that is placed  
15 into service and that is associated with Electric Company Infrastructure Improvement  
16 Activity. Pursuant to D.C. Code §34-1313.10(c)(3), the revenue requirement also  
17 includes a return on investment based on a rate of the return of 7.45%, as authorized in  
18 Pepco’s most recently decided base rate case, Formal Case No. 1150. The O&M  
19 expenses do not earn a return on investment.

20 **Q13. Please describe the specific development of the Underground Project Charge in**  
21 **the Second Biennial Plan.**

22 A13. The Underground Project Charge was developed following the same  
23 methodology approved by the Commission in Order Nos. 17697 (P 220) and 19167 (P

1 236). The development of the Underground Project Charge revenue requirement is  
2 provided in PEPCO (E)-1.

3 **Q14. Based on the revenue requirement calculation methodology discussed above, what**  
4 **is the annual Underground Project Charge revenue requirement associated with**  
5 **the Second Biennial Plan?**

6 A14. For the first 12-month rate period of the Second Biennial Plan, the Underground  
7 Project Charge revenue requirement is \$1,159,141, subject to adjustment in the future  
8 pursuant to D.C. Code §34-1313.15. For the second 12-month rate period of the Second  
9 Biennial Plan, the Underground Project Charge revenue requirement is \$2,008,117,  
10 also subject to adjustment in the future pursuant to D.C. Code §34-1313.15. A  
11 summary of the development of the annual revenue requirements for the rate years that  
12 are expected to correspond with calendar years 2020 and 2021 can be found on page 1  
13 of PEPCO (E)-1, as well as in Appendix I to the Second Biennial Plan.

14 **Q15. How will the Underground Project Charge be presented on customers' bills?**

15 A15. The Underground Project Charge will continue to appear as a separate line item,  
16 "Underground Charge, Pepco."

17 **Q16. Have you performed bill comparisons showing the impact of the Underground**  
18 **Project Charge?**

19 A16. Yes, bill comparisons for 2020 and 2021 for each distribution service customer  
20 class subject to the Underground Project Charge can be found in PEPCO (E)-3. The  
21 bill impacts are also provided in Appendix K to the Second Biennial Plan. Under the  
22 proposed Underground Project Charge rates, a Residential Standard Offer Service  
23 (SOS) customer using an average of 648 kWh per month will see an estimated total  
24 monthly bill increase for 2020 of \$0.02, or 0.03%.

1 **Q17. How is the Underground Project Charge annual revenue requirement allocated**  
2 **among Pepco's distribution service customer classes?**

3 A17. In accordance with D.C. Code §34-1311.01(8A) and §34-1313.10(c)(1), the  
4 Underground Project Charge revenue requirement is to be allocated among the  
5 distribution service customer classes in accordance with the distribution service  
6 customer class cost allocations. As used in D.C. Code §34-1311.01(8A), "distribution  
7 service customer class cost allocation" means the allocation of the electric company's  
8 revenue requirement to each customer rate class on the basis of the total rate class  
9 distribution service revenue minus the customer charge revenue.<sup>3</sup>

10 Consistent with D.C. Code §34-1311.01(8A) and §34-1313.10(c)(1), the  
11 Underground Project Charge revenue requirement is allocated among the customer  
12 classes in proportion to non-customer charge related distribution revenue, as approved  
13 in Formal Case No. 1150, which is the Company's most recently decided distribution  
14 base-rate case. This aligns the share of revenues collected from each class via the  
15 Underground Project Charge with the share of non-customer charge related base  
16 distribution revenues assigned to that class in Formal Case No. 1150. Also, as required  
17 by D.C. Code §34-1313.10(c)(1), customers served under the Residential Aid Discount  
18 (RAD) program, are not subject to the Underground Project Charge and are excluded  
19 from the allocation of the revenue requirement.

20 The allocation of the Underground Project Charge revenue requirements for the  
21 2020 and 2021 rate periods can be found on page 2 of PEPCO (E)-1. Pages 3 through

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<sup>3</sup> The Company uses the revenue requirement allocation methodology that was proposed by Pepco in Formal Case Nos. 1116 and 1145 and approved by the Commission in Order Nos. 17697 and 19167, respectively. It is my understanding that both Commission decisions were subsequently affirmed by the District of Columbia Court of Appeals.

1 10 of PEPCO (E)-1 provide schedules of projected O&M expenses, total capital  
2 expenditure, plant closings, electric plant in service, AFUDC, book depreciation, and  
3 tax depreciation for the feeder improvement projects for which costs are forecasted to  
4 be recovered via the Underground Project Charge.

5 **Q18. Please explain the rate design of the Underground Project Charge.**

6 A18. For each customer class, an Underground Project Charge volumetric rate is  
7 developed on a per-kilowatt-hour (kWh) basis by dividing the class revenue  
8 requirement by the forecasted billing determinants for that class for the applicable 12-  
9 month period. Page 2 of Pepco (E)-1 provides the Underground Project Charge rates  
10 for each class based on forecasted billing determinants for calendar years 2020 and  
11 2021.

12 **Q19. Please describe the annual adjustment to the Underground Project Charge.**

13 A19. Pursuant to D.C. Code §34-1313.15, the Company will file an adjustment to the  
14 Underground Project Charge on or before April 1 of each year following the issuance  
15 of an order authorizing the imposition and collection of the Underground Project  
16 Charge and for as long as the order remains in effect. The next adjustment filing is  
17 expected to be made on or before April 1, 2020.

18 **Q20. Does the annual adjustment also include a true-up of Underground Project**  
19 **Charge costs and collections from the prior calendar year?**

20 A20. Yes. Pepco's annual adjustment includes a true-up of Underground Project  
21 Charge costs and collections for the prior calendar year. For each class, an over- or  
22 under-recovery amount will be calculated as the difference between actual Electric  
23 Company Infrastructure Improvement Costs incurred during the prior calendar year  
24 (based on actual capital expenditures, plant closings, depreciation expense and O&M

1 expenses) and actual booked Underground Project Charge revenues during the same  
2 time period. For the purpose of calculating each distribution service customer class's  
3 true-up amount, actual Electric Company Infrastructure Improvement Costs will be  
4 allocated among the classes in proportion to the Underground Project Charge revenue  
5 requirement that was in effect during the period being reconciled. Underground Project  
6 Charge collections are tracked by distribution service customer class and will be  
7 directly assigned. For each class, the under-recovery amount will be added to, or the  
8 over-recovery amount credited to, that class's revenue requirement for the next rate  
9 period.

10 **Q21. Has Pepco filed an annual adjustment to the Underground Project Charge,**  
11 **including a true-up of the costs and collections from the prior calendar year?**

12 A21. Yes, pursuant to D.C. Code §34-1313.15(a) Pepco filed an annual adjustment  
13 to the 2019 Underground Project Charge, including a true-up of 2018 costs and  
14 collections, on April 1, 2019, with the revised rates effective April 1, 2019. The  
15 Commission approved the annual adjustment in Order No. 19930.

16 **Q22. At what point will the Electric Company Infrastructure Improvement Costs be**  
17 **transferred into rate base?**

18 A22. The Electric Company Infrastructure Improvement Costs will be incorporated  
19 into distribution rate base as part of the distribution rate case filing following  
20 completion of all Electric Company Infrastructure Improvement Activity and closing  
21 of all associated investment to electric plant. At that point, the Company would file a  
22 final adjustment to the Underground Project Charge to true-up actual costs and  
23 collections for each class as of the effective date of the Company's updated base rates,

1 with refunds or surcharges to occur during the following rate period. At the end of that  
2 rate period, the Underground Project Charge will be terminated.

3 **Q23. Have you updated the Underground Project Charge Rider – Rider UPC consistent**  
4 **with the Company’s request in this proceeding?**

5 A23. Yes, Rider UPC has been updated and is included in the tariff sheets provided  
6 as PEPCO (E)-5. Rider UPC is also provided in Appendix M to the Second Biennial  
7 Plan. Rider UPC is applicable to all rate schedules with the exception of customers  
8 who take service under Pepco’s Residential Aid Discount program (Rider RAD).

9 **UNDERGROUND RIDER**

10 **Q24. What is the DDOT Charge?**

11 A24. Pursuant to D.C. Code §34-1311.01(13), the DDOT Charge is a charge imposed  
12 by the District on Pepco pursuant to a financing order issued by the Commission. The  
13 District will use the amounts paid by Pepco for the DDOT Charge to fund the DDOT  
14 Underground Electric Company Infrastructure Improvement Costs.<sup>4</sup> The amount of  
15 DDOT Underground Electric Company Infrastructure Improvement Costs included in  
16 the financing order associated with the Second Biennial Plan will be \$60 million.  
17 Pursuant to D.C. Code §34-131301(a)(2)(B), in each month of the applicable two-year  
18 period Pepco will remit to the District 1/24<sup>th</sup> of the DDOT Charges approved for that  
19 period, or \$2.5 million, to be placed in the DDOT Underground Electric Company

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<sup>4</sup> Pursuant to D.C. Code §34-1311.01(14) , DDOT Underground Electric Company Infrastructure Improvement Costs is defined as “any cost incurred by DDOT, including capitalized costs relating to an underground electric plant, capitalized costs associated with design and engineering work, expenses that DDOT incurs for the development of annual construction plans, contingency for the cost complete and place in service the electric plant to be installed in the applicable biennial Underground Infrastructure Improvement Projects Plan and other expenses incurred or expected to be incurred by or for the account of DDOT in undertaking DDOT Underground Electric Company Infrastructure Improvement Activity, including preliminary expenses and investments and other costs that reasonably may be incurred in support of the DDOT Underground Electric Company Infrastructure Improvement Activity.”

1 Improvement Fund, established under D.C. Code §34-1313.03a for exclusive use in  
2 paying the DDOT Electric Company Infrastructure Improvement Costs.

3 **Q25. What is the Underground Rider?**

4 A25. Pursuant to §34-1311.01(42)(A), the Underground Rider is defined “as an  
5 annually adjusted rider to the electric company’s volumetric distribution service rates  
6 paid by all distribution service customers of the electric company (except for customers  
7 served under the electric company’s residential aid discount or a succeeding discount  
8 program) for its recovery of an amount equal to the aggregate of the DDOT  
9 Underground Electric Company Infrastructure Improvement Charges.”

10 **Q26. What is the annual revenue requirement under the Underground Rider?**

11 A26. The annual revenue requirement under the Underground Rider is one-half of  
12 the DDOT Charges included in the financing order associated with the Second Biennial  
13 Plan, or \$30 million per year, subject to a true-up adjustment in the future pursuant to  
14 D.C. Code §34-1313.14(a). A summary of the annual revenue requirements for 2020  
15 and 2021, respectively, can be found on page 1 of PEPCO (E)-2 and in Appendix J to  
16 the Second Biennial Plan.

17 **Q27. Have you performed bill comparisons showing the impact of the Underground**  
18 **Rider?**

19 A27. Yes, bill comparisons for 2020 and 2021 for each distribution service customer  
20 class subject to the Underground Rider can be found in PEPCO (E)-4. The bill impacts  
21 are also provided in Appendix L to the Second Biennial Plan. Under the proposed  
22 Underground Rider rates, a Residential Standard Offer Service (SOS) customer using  
23 an average of 648 kWh per month will see an estimated total monthly bill decrease for  
24 2020 of (\$0.06), or -0.08%.

1 **Q28. Does the Undergrounding Act provide for an allocation of the Underground**  
2 **Rider's annual revenue requirement among Pepco's distribution service customer**  
3 **classes?**

4 A28. Yes. D.C. Code §34-1313.01(a)(3) provides that the Underground Rider shall  
5 be assessed "... among the distribution service customer classes of the electric  
6 company in accordance with the distribution service customer class cost allocations  
7 approved by the Commission for the electric company and in effect pursuant to the  
8 electric company's most recently decided base rate case, in an amount sufficient for the  
9 electric company to recover the DDOT Underground Electric Company Infrastructure  
10 Charge; provided, that no such charges shall be assessed against the electric company's  
11 residential aid discount customer class or any succeeding customer class approved by  
12 the Commission for the purpose of providing economic relief to a specified low-income  
13 customer class."

14 **Q29. What methodology did you follow to implement the requirements of D.C. Code**  
15 **§34-1313.01(a)(3) (i.e., allocation of the revenue requirement)?**

16 A29. Consistent with D.C. Code §34-1313.01(a)(3), the Underground Rider revenue  
17 requirement is allocated among the customer classes in proportion to non-customer  
18 charge-related distribution revenue, as approved in Formal Case No. 1150, which is the  
19 Company's most recently decided distribution base rate case. This aligns the share of  
20 revenues collected from each class via the Underground Rider with the share of non-  
21 customer charge-related base distribution revenues assigned to that class in Formal  
22 Case No. 1150. Also, as required by D.C. Code §34-1313.01(a)(3), customers served  
23 under the RAD program are not subject to the Underground Rider and are excluded  
24 from the allocation of the revenue requirement. The allocation of the Underground

1 Rider revenue requirements for the 2020 and 2021 rate periods can be found on page 1  
2 of PEPCO (E)-2.

3 **Q30. Please explain the rate design of the Underground Rider.**

4 A30. Consistent with D.C. Code §34-1313.01(a)(3), the Underground Rider rates are  
5 developed for each applicable distribution service customer class as a volumetric rate  
6 (*i.e.*, on a per kilowatt-hour basis). The billing determinants used to set the rates are  
7 forecasted kWh sales for the applicable 12-month period, which ensures that the  
8 Underground Rider can reasonably be expected to generate sufficient revenues to  
9 permit Pepco to recover the DDOT Charges.

10 **Q31. Please describe the true-up mechanism that will be used to reconcile actual**  
11 **Underground Rider collections with forecasted collections to ensure that the**  
12 **collections under the Underground Rider are adequate to pay the DDOT Charges**  
13 **imposed on Pepco.**

14 A31. Under D.C. Code §34-1313.14(a), rates under the Underground Rider will be  
15 subject to true-up on, at most, a semi-annual basis. For each distribution service  
16 customer class subject to the Underground Rider, an over- or under-collection amount  
17 will be calculated as that class's Underground Rider collections less actual DDOT  
18 Charges imposed on Pepco attributable to that class during the true-up period. For the  
19 purpose of calculating the true-up, DDOT Charges imposed on Pepco will be imputed  
20 to distribution service customer classes consistent with the distribution service  
21 customer class cost allocation of the revenue requirement that was used to develop the  
22 Underground Rider rates that were in effect during period being reconciled.  
23 Collections from each class under the Underground Rider will be tracked separately  
24 and will be directly assigned to the applicable class. The amount of the true-up of the

1           Underground Rider will be allocated to each distribution service customer class in  
2           proportion to its contribution to the under-collection or over-collection. This  
3           methodology will ensure that the true-up is performed consistent with D.C. Code §34-  
4           1313.14(f)(1).<sup>5</sup>

5           **Q32. Have you prepared an Underground Rider tariff?**

6           A32.           Yes, the DDOT Underground Electric Company Infrastructure Improvement  
7           Charge Rider – Underground Rider is included in the tariff sheets provided as PEPCO  
8           (E)-3. The Underground Rider is also provided in Appendix M to the Second Biennial  
9           Plan. The Underground Rider is applicable to all rate schedules with the exception of  
10          customers who take service under Pepco's Rider RAD.

11          **Q33. Does this conclude your testimony?**

12          A33.           Yes, it does.

---

<sup>5</sup> D.C. Code §34-1313.14(f)(1), "In conducting the true-up, the recovery for the under-collection of the DDOT Underground Electric Company Infrastructure Improvement Charges through the Underground Rider shall be allocated to each customer class in the proportion to which customer class contributed to the under-collection of DDOT Underground Electric Company Infrastructure Improvement Charges."

**Pepco (E)-1**

Potomac Electric Power Company - District of Columbia  
Underground Project Charge - Rider "UPC"  
Second Biennial Plan  
September 30, 2019 Biennial Filing: Forecasted 2020-2021 Revenue Requirement Calculation

Forecasted Revenue Requirement		2020	2021
<b>I. Calculation of Average Rate Base</b>			
(1)	Gross Plant	\$ 2,788,213.14	\$ 7,041,029.09
(2)	Accumulated Depreciation	\$ 24,780.99	\$ 146,968.08
(3)	Deferred Tax Asset	\$ (6,724.48)	\$ (24,931.61)
(4)	Deferred Tax Liability	\$ 28,357.22	\$ 105,117.36
(5)	<b>Net Rate Base</b>	<b>\$ 2,741,799.42</b>	<b>\$ 6,813,875.27</b>
<b>II. Calculation of Operating Income</b>			
(6)	Operation & Maintenance Expense	\$ 778,950.00	\$ 1,223,767.00
(7)	Other O&M Expense	\$ 66,021.08	\$ -
(8)	Depreciation Expense	\$ 59,963.87	\$ 152,586.22
(9)	<b>Subtotal</b>	<b>\$ 904,934.95</b>	<b>\$ 1,376,353.22</b>
(10)	State Income Tax (Current)	\$ (97,666.99)	\$ (157,496.28)
(11)	Federal Income Tax (Current)	\$ (228,096.83)	\$ (367,825.40)
(12)	Deferred Taxes	\$ 56,714.43	\$ 96,805.85
(13)	Required Operating Income	\$ 635,885.57	\$ 947,837.39
(14)	Return Required	\$ 204,289.12	\$ 507,695.99
(15)	<b>Revenue Requirement</b>	<b>\$ 1,159,141.42</b>	<b>\$ 2,008,116.95</b>
<b>III. Income Statement Check</b>			
(16)	Revenue	\$ 1,159,141.42	\$ 2,008,116.95
(17)	Operation and Maintenance Expense	\$ 778,950.00	\$ 1,223,767.00
(18)	Amortization of Deferred Costs	\$ 66,021.08	\$ -
(19)	Depreciation Expense	\$ 59,963.87	\$ 152,586.22
(20)	Other Taxes	\$ -	\$ -
(21)	Interest Expense	\$ 72,561.83	\$ 180,329.48
(22)	<b>Net Income Before Taxes</b>	<b>\$ 181,644.64</b>	<b>\$ 451,434.25</b>
(23)	State Income Tax (Current)	\$ (2,037.83)	\$ 8,173.37
(24)	Federal Income Tax (Current)	\$ (4,759.25)	\$ 19,088.53
(25)	Income Tax Deferred	\$ 56,714.43	\$ 96,805.85
(26)	<b>Earnings</b>	<b>\$ 131,727.29</b>	<b>\$ 327,366.50</b>
(27)	<b>Return on Equity per WACC</b>	<b>\$ 131,727.29</b>	<b>\$ 327,366.50</b>
(28)	MACRS - Federal	\$ 266,063.90	\$ 504,381.86
(29)	MACRS - State	\$ 266,063.90	\$ 504,381.86
<b>IV. Calculation of Deferred Income Tax Liability</b>			
<b>Federal</b>			
(30)	Book Depreciation (AFUDC Equity)	\$ 245.55	\$ 567.47
(31)	Book Depreciation (Net of AFUDC Equity)	\$ 59,718.33	\$ 152,018.75
(32)	State Deferred Income Taxes	\$ 17,024.00	\$ 29,070.00
(33)	Tax Depreciation	\$ (266,063.90)	\$ (504,381.86)
(34)	Net Temporary Differences	\$ (189,321.57)	\$ (323,293.11)
(35)	Deferred Income Taxes at 21%	\$ (39,758.00)	\$ (67,892.00)
(36)	<b>Cumulative Deferred Income Tax Liability</b>	<b>\$ (39,758.00)</b>	<b>\$ (107,650.00)</b>
<b>State</b>			
(37)	Book Depreciation (AFUDC Equity)	\$ 245.55	\$ 567.47
(38)	Book Depreciation (Net of AFUDC Equity)	\$ 59,718.33	\$ 152,018.75
(39)	Tax Depreciation	\$ (266,063.90)	\$ (504,381.86)
(40)	Net Temporary Differences (Before NOLC)	\$ (206,345.57)	\$ (352,363.11)
(41)	Deferred Income Taxes at 8.25%	\$ (17,024.00)	\$ (29,070.00)
(42)	<b>Cumulative Deferred Income Tax Liability</b>	<b>\$ (17,024.00)</b>	<b>\$ (46,094.00)</b>

Potomac Electric Power Company - District of Columbia  
Underground Project Charge - Rider "UPC"  
Second Biennial Plan  
September 30, 2019 Biennial Filing: Forecasted 2020-2021 Revenue Requirement Calculation

Allocation of Forecasted 2020 and 2021 Revenue Requirements by Class and Calculation of Rider "UPC" by Class

Revenue Recovery Method	Total	Residential	MMA	GS-ND/T	GS-D-LV	GS-3A	MGT-LV / GT-LV	GT-3A	GT-3B	RT	SL/TS/OL LED	TN
(1) Total Authorized Base Revenue Requirement	\$ 396,697,247	\$ 76,740,338	\$ 10,804,681	\$ 14,589,672	\$ 31,763,556	\$ 68,336	\$ 202,004,191	\$ 52,040,852	\$ 421,572	\$ 6,739,346	\$ 1,450,638	\$ 74,065
(2) Authorized Energy Charge Recovery (Net of EDIT Credit)	\$ 108,715,835	\$ 27,357,286	\$ 3,013,724	\$ 8,847,074	\$ 14,435,913	\$ 25,182	\$ 44,185,203	\$ 10,157,054	\$ -	\$ -	\$ 676,422	\$ 17,977
(3) Authorized Demand Charge Recovery (Net of EDIT Credit)	\$ 194,689,507	\$ -	\$ -	\$ -	\$ 15,175,063	\$ 36,000	\$ 137,530,166	\$ 41,531,786	\$ 416,492	\$ -	\$ -	\$ -
(4) Other (Net of EDIT Credit)	\$ 7,507,677	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,739,346	\$ 768,331	\$ -
(5) Total Applicable Revenues	\$ 310,913,019	\$ 27,357,286	\$ 3,013,724	\$ 8,847,074	\$ 29,610,976	\$ 61,182	\$ 181,715,369	\$ 51,688,840	\$ 416,492	\$ 6,739,346	\$ 1,444,753	\$ 17,977
(6) Percentage Share of Total Energy and Demand Charge Recovery	100.00%	8.80%	0.97%	2.85%	9.52%	0.02%	58.45%	16.62%	0.13%	2.17%	0.46%	0.01%
(7) Annual Revenue Requirement (2020)	\$ 1,159,141.42											
(8) Annual Revenue Requirement by Class (2020)	\$ 1,159,141.42	\$ 101,993.04	\$ 11,235.72	\$ 32,983.53	\$ 110,395.21	\$ 228.10	\$ 677,468.61	\$ 192,705.59	\$ 1,552.76	\$ 25,125.53	\$ 5,386.31	\$ 67.02
(9) Forecasted Sales by Class (kWh) (2020)		2,047,966,056	289,883,040	250,891,017	503,915,894	1,186,042	4,768,425,194	2,261,094,079	197,762,704	332,165,696	90,061,339	2,640,536
(10) Underground Project Charge Rate (\$/kWh) by Class (2020)		\$ 0.00005	\$ 0.00004	\$ 0.00013	\$ 0.00022	\$ 0.00019	\$ 0.00014	\$ 0.00009	\$ 0.00001	\$ 0.00008	\$ 0.00006	\$ 0.00003
(11) Percentage Increase in Distribution Revenue (2020 vs. FC 1150)	0.29%	0.13%	0.10%	0.23%	0.35%	0.33%	0.34%	0.37%	0.37%	0.37%	0.37%	0.09%
(12) Annual Revenue Requirement (2021)	\$ 2,008,116.95											
(13) Annual Revenue Requirement by Class (2021)	\$ 2,008,116.95	\$ 176,694.53	\$ 19,464.96	\$ 57,141.25	\$ 191,250.60	\$ 395.16	\$ 1,173,658.52	\$ 333,846.54	\$ 2,690.03	\$ 43,527.91	\$ 9,331.33	\$ 116.11
(14) Forecasted Sales by Class (kWh) (2021)		2,065,298,307	289,818,285	247,478,082	497,060,995	1,169,908	4,703,559,070	2,230,335,830	195,072,487	332,383,588	90,365,268	2,604,616
(15) Underground Project Charge Rate (\$/kWh) by Class (2021)		\$ 0.00009	\$ 0.00007	\$ 0.00023	\$ 0.00038	\$ 0.00034	\$ 0.00025	\$ 0.00015	\$ 0.00001	\$ 0.00013	\$ 0.00010	\$ 0.00004
(16) Percentage Increase in Distribution Revenue (2021 vs. FC 1150)	0.51%	0.23%	0.18%	0.39%	0.60%	0.58%	0.58%	0.64%	0.64%	0.65%	0.64%	0.16%

**Notes:**

- (1) Source: Formal Cases 1150 and 1151 Pepco Exhibit 4 Pages 13-26 of 216.
- (2) Source: Formal Cases 1150 and 1151 Pepco Exhibit 4 Pages 13-26 of 216.
- (3) Source: Formal Cases 1150 and 1151 Pepco Exhibit 4 Pages 13-26 of 216.
- (4) Source: Formal Cases 1150 and 1151 Pepco Exhibit 4 Pages 13-26 of 216.
- (5) Calculation: Line (2) + Line (3) + Line (4)
- (6) Calculation: For each class, Line (5) divided by Total Applicable Revenues.
- (7) Source: See Page 1 of 14, Line (14) for 2020.
- (8) Calculation: For each class, Line (6) multiplied by Line (7).
- (9) Source: Refer to Line (26) of "Forecasted Billing Determinants" on Page 13 of 14.
- (10) Calculation: For each class, Line (8) divided by Line (9), rounded to 5 decimal points.
- (11) Calculation: For each class, Line (8) divided by Line (1).
- (12) Source: See Page 1 of 14, Line (14) for 2021.
- (13) Calculation: For each class, Line (6) multiplied by Line (12).
- (14) Source: Refer to Line (26) of "Forecasted Billing Determinants" on Page 14 of 14.
- (15) Calculation: Line (13) / Line (14).
- (16) Calculation: Line (13) / Line (1).

Potomac Electric Power Company - District of Columbia  
Underground Project Charge - Rider "UPC"  
Second Biennial Plan  
September 30, 2019 Biennial Filing: Forecasted 2020-2021 Revenue Requirement Calculation

Forecasted Operation and Maintenance ("O&M") Expense (2020 - 2021)

	Description	2020	2021
(1)	Customer Communication (Education Plan)	\$ 763,950	\$ 934,767
(2)	Customer Outreach Stations / Pop-Up Vehicles	\$ 15,000	\$ 15,000
(3)	PSC Costs	\$ -	\$ 125,000
(4)	OPC Costs	\$ -	\$ 149,000
(5)	Total	\$ 778,950	\$ 1,223,767

Potomac Electric Power Company - District of Columbia  
Underground Project Charge - Rider "UPC"  
Second Biennial Plan  
September 30, 2019 Biennial Filing: Forecasted 2020-2021 Revenue Requirement Calculation

Other O&M Expense (2020 - 2021)

	Description	2020	2021
(1)	Feeder 15707 Minnesota Avenue	\$ 216,000	\$ -
(2)	PSC Deposit Refund	\$ (59,183)	\$ -
(3)	OPC Deposit Refund	\$ (70,796)	
(4)	OPC Deposit Refund	\$ (20,000)	\$ -
(5)	<b>Total</b>	<b>\$ 66,021</b>	<b>\$ -</b>

**Potomac Electric Power Company - District of Columbia**  
**Underground Project Charge - Rider "UPC"**  
**Second Biennial Plan**  
**September 30, 2019 Biennial Filing: Forecasted 2020-2021 Revenue Requirement Calculation**

**Forecasted Capital Expenditure and Electric Plant In-Service (2020-2021)**

	Through December 31, 2019	
	CWIP Balance	EPIS Balance
Cash	\$ 5,541,686	\$ 127,918
AFUDC-Debt	\$ 65,755	\$ 840
AFUDC-Equity	\$ 113,106	\$ 1,445

	Month	Capital Expenditure	Electric Plant In-Service
(1)	Jan-20	\$ 405,931	\$ -
(2)	Feb-20	\$ 374,835	\$ -
(3)	Mar-20	\$ 1,783,607	\$ -
(4)	Apr-20	\$ 974,481	\$ -
(5)	May-20	\$ 652,268	\$ -
(6)	Jun-20	\$ 730,803	\$ -
(7)	Jul-20	\$ 883,828	\$ -
(8)	Aug-20	\$ 1,029,036	\$ 6,872,465
(9)	Sep-20	\$ 782,464	\$ -
(10)	Oct-20	\$ 662,405	\$ -
(11)	Nov-20	\$ 802,313	\$ -
(12)	Dec-20	\$ 580,698	\$ -
(13)	Jan-21	\$ 502,168	\$ -
(14)	Feb-21	\$ 797,178	\$ -
(15)	Mar-21	\$ 1,012,145	\$ -
(16)	Apr-21	\$ 1,140,949	\$ -
(17)	May-21	\$ 1,062,379	\$ -
(18)	Jun-21	\$ 1,283,778	\$ -
(19)	Jul-21	\$ 1,545,656	\$ -
(20)	Aug-21	\$ 3,074,112	\$ -
(21)	Sep-21	\$ 2,907,141	\$ -
(22)	Oct-21	\$ 3,005,134	\$ -
(23)	Nov-21	\$ 3,855,843	\$ -
(24)	Dec-21	\$ 4,705,694	\$ -
(25)	<b>Total</b>	<b>\$ 34,554,846</b>	<b>\$ 6,872,465</b>

Potomac Electric Power Company - District of Columbia  
Underground Project Charge - Rider "UPC"  
Second Biennial Plan  
September 30, 2019 Biennial Filing: Forecasted 2020-2021 Revenue Requirement Calculation

Forecast as of 12/31/2019

I. Electric Plant In Service

	7/31/2019	August 2019	September 2019	October 2019	November 2019	December 2019	12/31/2019
(1) Total Electric Plant In Service	\$ 100,038	\$ -	\$ 30,165	\$ -	\$ -	\$ -	\$ 130,203
(2) Cash	\$ 97,918	\$ -	\$ 30,000	\$ -	\$ -	\$ -	\$ 127,918
(3) AFUDC Debt	\$ 779	\$ -	\$ 61	\$ -	\$ -	\$ -	\$ 840
(4) AFUDC Equity	\$ 1,341	\$ -	\$ 105	\$ -	\$ -	\$ -	\$ 1,445

II. Accumulated Depreciation

(5) Accumulated Depreciation (as of 7/31/2019)	\$ 8,963
(6) Incremental Monthly Depreciation (EPIS as of 7/30/2019)	\$ 312
(7) Incremental Monthly Depreciation (Electric Plant In-Serviced September 2019)	\$ 54
(8) Incremental Monthly Depreciation (EPIS as of 12/31/2019)	\$ 366
(9) Accumulated Depreciation (as of 12/31/2019)	\$ 10,711

III. Accumulated Depreciation - Equity

(10) Accumulated Depreciation - Equity (as of 7/31/2019)	\$ 120
(11) Incremental Monthly Depreciation - Equity (EPIS as of 7/30/2019)	\$ 4
(12) Incremental Monthly Depreciation - Equity (Electric Plant In-Serviced September 2019)	\$ 0
(13) Incremental Monthly Depreciation - Equity (EPIS as of 12/31/2019)	\$ 4
(14) Accumulated Depreciation - Equity (as of 12/31/2019)	\$ 142

IV. Construction Work In Progress

(15) Construction Work In Progress (as of 12/31/2019)	\$ 5,720,547
(16) Cash	\$ 5,541,686
(17) AFUDC Debt	\$ 65,755
(18) AFUDC Equity	\$ 113,106

Notes:

- (1) - (4) Source: As of 7/30/2019, internal Company records. For September 2019, refer to page 5 of 12, Lines (15) to (17) for September 2019 in Attachment Pepco (C)-1, Reconciliation Compliance Filing, April 9, 2019.
- (5) Source: Internal Company records.
- (6) Source: Internal Company records.
- (7) Source: Refer to page 6 of 12, in Attachment Pepco (C)-1, Reconciliation Compliance Filing, April 9, 2019.
- (8) Calculation: Line (6) + Line (7).
- (9) Calculation: Line (5) + [Line (6) X 5] + [Line (7) x 4.5].
- (10) Calculation: As of July 31, 2019, [Line (4) / Line (1)] x Line (5).
- (11) Calculation: As of July 31, 2019, [Line (4) / Line (1)] x Line (6).
- (12) Calculation: For September 2019, [Line (4) / Line (1)] x Line (7).
- (13) Calculation: Line (11) + Line (12).
- (14) Calculation: Line (10) + [Line (11) x 5] + [Line (12) x 4.5].
- (15) - (18) Source: Refer to page 5 of 12, Lines (4), (9), and (13) for Total 2019 in Attachment Pepco (C)-1, Reconciliation Compliance Filing, April 9, 2019.

[illegible]

Potomac Electric Power Company - District of Columbia  
Underground Project Charge - Rider "UPC"  
Second Biennial Price  
September 30, 2020 Biennial Filing, Forecasted 2020-2021 Revenue Requirement Calculation

Forecasted Accumulated Depreciation Calculation (2020 - 2021)

	Month	Thru Sep 31, 2019	Jan 20	Feb 20	Mar 20	Apr 20	May 20	Jun 20	Jul 20	Aug 20	Sep 20	Oct 20	Nov 20	Dec 20	Jan 21	Feb 21	Mar 21	Apr 21	May 21	Jun 21	Jul 21	Aug 21	Sep 21	Oct 21	Nov 21	Dec 21	Total
(1)	1000000	\$ 1,000,000								\$ 1,000,000																	\$ 1,000,000

1. Distribution System Underdepreciation - Forecast (2020 - 2021)

100%  
N Capital  
Depreciation Rate

	Month	Thru Sep 31, 2019	Jan 20	Feb 20	Mar 20	Apr 20	May 20	Jun 20	Jul 20	Aug 20	Sep 20	Oct 20	Nov 20	Dec 20	Jan 21	Feb 21	Mar 21	Apr 21	May 21	Jun 21	Jul 21	Aug 21	Sep 21	Oct 21	Nov 21	Dec 21	Total	Accumulated Depreciation
(1)	FFA Capital	\$ 100,000																									\$ 100,000	\$ 100,000
(2)	Jan 20	\$ 100,000																									\$ 100,000	\$ 100,000
(3)	Feb 20	\$ 100,000																									\$ 100,000	\$ 200,000
(4)	Mar 20	\$ 100,000																									\$ 100,000	\$ 300,000
(5)	Apr 20	\$ 100,000																									\$ 100,000	\$ 400,000
(6)	May 20	\$ 100,000																									\$ 100,000	\$ 500,000
(7)	Jun 20	\$ 100,000																									\$ 100,000	\$ 600,000
(8)	Jul 20	\$ 100,000																									\$ 100,000	\$ 700,000
(9)	Aug 20	\$ 100,000																									\$ 100,000	\$ 800,000
(10)	Sep 20	\$ 100,000																									\$ 100,000	\$ 900,000
(11)	Oct 20	\$ 100,000																									\$ 100,000	\$ 1,000,000
(12)	Nov 20	\$ 100,000																									\$ 100,000	\$ 1,100,000
(13)	Dec 20	\$ 100,000																									\$ 100,000	\$ 1,200,000
(14)	2020 Total	\$ 1,000,000																									\$ 1,000,000	\$ 12,000,000
(15)	Jan 21	\$ 100,000																									\$ 100,000	\$ 12,100,000
(16)	Feb 21	\$ 100,000																									\$ 100,000	\$ 12,200,000
(17)	Mar 21	\$ 100,000																									\$ 100,000	\$ 12,300,000
(18)	Apr 21	\$ 100,000																									\$ 100,000	\$ 12,400,000
(19)	May 21	\$ 100,000																									\$ 100,000	\$ 12,500,000
(20)	Jun 21	\$ 100,000																									\$ 100,000	\$ 12,600,000
(21)	Jul 21	\$ 100,000																									\$ 100,000	\$ 12,700,000
(22)	Aug 21	\$ 100,000																									\$ 100,000	\$ 12,800,000
(23)	Sep 21	\$ 100,000																									\$ 100,000	\$ 12,900,000
(24)	Oct 21	\$ 100,000																									\$ 100,000	\$ 13,000,000
(25)	Nov 21	\$ 100,000																									\$ 100,000	\$ 13,100,000
(26)	Dec 21	\$ 100,000																									\$ 100,000	\$ 13,200,000
(27)	2021 Total	\$ 1,000,000																									\$ 1,000,000	\$ 13,200,000

2. Distribution System Underdepreciation - Distribution and Service (2020 - 2021)

100%  
N Capital  
Depreciation Rate

	Month	Thru Sep 31, 2019	Jan 20	Feb 20	Mar 20	Apr 20	May 20	Jun 20	Jul 20	Aug 20	Sep 20	Oct 20	Nov 20	Dec 20	Jan 21	Feb 21	Mar 21	Apr 21	May 21	Jun 21	Jul 21	Aug 21	Sep 21	Oct 21	Nov 21	Dec 21	Total	Accumulated Depreciation
(1)	FFA Capital and Service	\$ 100,000																									\$ 100,000	\$ 100,000
(2)	Jan 20	\$ 100,000																									\$ 100,000	\$ 100,000
(3)	Feb 20	\$ 100,000																									\$ 100,000	\$ 200,000
(4)	Mar 20	\$ 100,000																									\$ 100,000	\$ 300,000
(5)	Apr 20	\$ 100,000																									\$ 100,000	\$ 400,000
(6)	May 20	\$ 100,000																									\$ 100,000	\$ 500,000
(7)	Jun 20	\$ 100,000																									\$ 100,000	\$ 600,000
(8)	Jul 20	\$ 100,000																									\$ 100,000	\$ 700,000
(9)	Aug 20	\$ 100,000																									\$ 100,000	\$ 800,000
(10)	Sep 20	\$ 100,000																									\$ 100,000	\$ 900,000
(11)	Oct 20	\$ 100,000																									\$ 100,000	\$ 1,000,000
(12)	Nov 20	\$ 100,000																									\$ 100,000	\$ 1,100,000
(13)	Dec 20	\$ 100,000																									\$ 100,000	\$ 1,200,000
(14)	2020 Total	\$ 1,000,000																									\$ 1,000,000	\$ 12,000,000
(15)	Jan 21	\$ 100,000																									\$ 100,000	\$ 12,100,000
(16)	Feb 21	\$ 100,000																									\$ 100,000	\$ 12,200,000
(17)	Mar 21	\$ 100,000																									\$ 100,000	\$ 12,300,000
(18)	Apr 21	\$ 100,000																									\$ 100,000	\$ 12,400,000
(19)	May 21	\$ 100,000																									\$ 100,000	\$ 12,500,000
(20)	Jun 21	\$ 100,000																									\$ 100,000	\$ 12,600,000
(21)	Jul 21	\$ 100,000																									\$ 100,000	\$ 12,700,000
(22)	Aug 21	\$ 100,000																									\$ 100,000	\$ 12,800,000
(23)	Sep 21	\$ 100,000																									\$ 100,000	\$ 12,900,000
(24)	Oct 21	\$ 100,000																									\$ 100,000	\$ 13,000,000
(25)	Nov 21	\$ 100,000																									\$ 100,000	\$ 13,100,000
(26)	Dec 21	\$ 100,000																									\$ 100,000	\$ 13,200,000
(27)	2021 Total	\$ 1,000,000																									\$ 1,000,000	\$ 13,200,000

Month	Thru Dec 31,
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#### 1. Distribution Feeder Undergrounding - Conduit (28% of CWS)

(4) Declaration Date	2/27/20
----------------------	---------

Accumulated Depreciation	
\$	54
\$	56
\$	57
\$	59
\$	61
\$	62
\$	64
\$	66
\$	76
\$	92
\$	110
\$	127
\$	145
\$	79

£	162
£	170
£	187
£	218
£	232
£	249
£	266
£	284
£	301
£	319
£	336
£	354
£	349

(19)	% Conductors and Devices	62%
(20)	Depreciation Rate	2.18%

Accumulated Depreciation	
€	88
€	91
€	93
€	96
€	96
€	101
€	104
€	107
€	123
€	153
€	189
€	213
€	243
€	180
€	278
€	309
€	332
€	362
€	392
€	422
€	450
€	481
€	512
€	542
€	571
€	601
€	622

Potomac Electric Power Company - District of Columbia  
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Second Biennial Plan  
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Tax Depreciation (2020 - 2021)

	MACRS Federal Tax Depreciation - 20 Year Property Class	Rate
(1)	Year 1	3.750%
(2)	Year 2	7.219%
(3)	Year 3	6.677%
(4)	Year 4	6.177%
(5)	Year 5	5.713%
(6)	Year 6	5.285%
(7)	Year 7	4.888%
(8)	Year 8	4.522%
(9)	Year 9	4.462%
(10)	Year 10	4.461%
(11)	Year 11	4.462%
(12)	Year 12	4.461%
(13)	Year 13	4.462%
(14)	Year 14	4.461%
(15)	Year 15	4.462%
(16)	Year 16	4.461%
(17)	Year 17	4.462%
(18)	Year 18	4.461%
(19)	Year 19	4.462%
(20)	Year 20	4.461%
(21)	Year 21	2.231%

	Plant Closings	2016	2017	2018	2019	2020	2021	Total
		\$ 98,697	\$ -	\$ -	\$ 30,061	\$ 6,886,807	\$ -	
(22)	2016	3,701						3,701
(23)	2017	7,125	-					7,125
(24)	2018	6,590	-	-				6,590
(25)	2019	6,097	-	-	1,127			7,224
(26)	2020	5,639	-	-	2,170	258,255		266,064
(27)	2021	5,216	-	-	2,007	497,159	-	504,382
(28)	2022	4,824	-	-	1,857	459,832	-	466,513
(29)	2023	4,463	-	-	1,717	425,398	-	431,578
(30)	2024	4,404	-	-	1,589	393,443	-	399,436
(31)	2025	4,403	-	-	1,469	363,968	-	369,840
(32)	2026	4,404	-	-	1,359	336,627	-	342,390
(33)	2027	4,403	-	-	1,341	311,421	-	317,166
(34)	2028	4,404	-	-	1,341	307,289	-	313,034
(35)	2029	4,403	-	-	1,341	307,220	-	312,965
(36)	2030	4,404	-	-	1,341	307,289	-	313,034
(37)	2031	4,403	-	-	1,341	307,220	-	312,965
(38)	2032	4,404	-	-	1,341	307,289	-	313,034
(39)	2033	4,403	-	-	1,341	307,220	-	312,965
(40)	2034	4,404	-	-	1,341	307,289	-	313,034
(41)	2035	4,403	-	-	1,341	307,220	-	312,965
(42)	2036	2,202	-	-	1,341	307,289	-	310,832
(43)	2037		-	-	1,341	307,220	-	308,562
(44)	2038			-	1,341	307,289	-	308,630
(45)	2039				671	307,220	-	307,891
(46)	2040					153,645	-	153,645
(47)	2041						-	-

Potomac Electric Power Company - District of Columbia  
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**Weighted Average Cost of Capital**

	Rate	Weight	Weighted Rate
(1) Long-Term Debt	5.340%	49.560%	2.65%
(2) Common Equity	9.525%	50.440%	4.80%
(3) <b>Weighted Average Cost of Capital</b>			<b>7.45%</b>

Source: Page 7 of Order No. 19433 in Formal Case 1150.

**Allowance for Funds Used During Construction (AFUDC) Rates**

(4) AFUDC - Debt	2.617%
(5) AFUDC - Equity	4.380%

Source: Internal Company Records.

Potomac Electric Power Company - District of Columbia  
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**Revenue Conversion Factor**

<u>Tax Rates</u>	<u>2020</u>	<u>2021</u>
(1) Federal Income Tax	0.21000	0.21000
(2) D.C. Franchise Tax Rate	0.08250	0.08250
 <u>Conversion Factor</u>		
(3) D.C. Taxable Income	1.00000	1.00000
(4) D.C. Franchise Tax Rate	0.08250	0.08250
(5) Federal Taxable Income	0.91750	0.91750
(6) Federal Income Tax	0.19268	0.19268
(7) Total Additional Taxes	0.27518	0.27518
(8) Increase in Earnings (1 - Additional Taxes)	0.72483	0.72483
(9) Revenue Conversion Factor	<b>1.379643</b>	<b>1.379643</b>

Potomac Electric Power Company - District of Columbia  
Underground Project Charge - Rider "UPC"  
Second Biennial Plan  
September 30, 2019 Biennial Filing: Forecasted 2020-2021 Revenue Requirement Calculation

I. Forecasted Billing Determinants (2020) (MWh)

	Month-Year	R	MMA	T	GSND	GS LV	GS 3A	MGT-LV / GT-LV	GT 3A	GT 3B	RT	SL/TS	TN	Total
(1)	Jan-20	201,080	22,200	2,040	18,627	41,509	98	392,786	186,251	16,290	26,270	8,573	218	915,941
(2)	Feb-20	182,913	22,613	1,816	16,580	36,948	87	349,629	165,787	14,500	24,613	8,541	194	824,221
(3)	Mar-20	158,481	19,643	1,954	17,845	39,766	94	376,299	178,434	15,606	20,928	7,592	208	836,851
(4)	Apr-20	135,085	18,826	1,933	17,647	39,326	93	372,134	176,459	15,434	31,161	6,948	206	815,251
(5)	May-20	121,116	20,591	2,018	18,426	41,062	97	388,556	184,246	16,115	26,164	6,332	215	824,937
(6)	Jun-20	179,042	26,012	2,196	20,051	44,684	105	422,828	200,497	17,536	33,036	5,825	234	952,046
(7)	Jul-20	233,485	31,493	2,577	23,535	52,446	123	496,281	235,327	20,582	32,927	6,095	275	1,135,145
(8)	Aug-20	211,267	34,447	2,353	21,484	47,877	113	453,043	214,824	18,789	25,354	6,579	251	1,036,380
(9)	Sep-20	181,579	31,862	2,099	19,169	42,718	101	404,233	191,679	16,765	31,793	7,309	224	929,531
(10)	Oct-20	138,495	24,143	2,003	18,289	40,757	96	385,669	182,877	15,995	25,605	8,804	214	842,946
(11)	Nov-20	140,984	18,455	1,856	16,947	37,766	89	357,373	169,459	14,821	24,115	8,735	198	790,799
(12)	Dec-20	164,439	19,598	1,919	17,527	39,058	92	369,595	175,255	15,328	30,201	8,728	205	841,944
(13)	Total	2,047,966	289,883	24,763	226,128	503,916	1,186	4,768,425	2,261,094	197,763	332,166	90,061	2,641	10,745,992

II. Forecasted Billing Determinants (2020) (kWh)

	Month-Year	R	MMA	T	GSND	GS LV	GS 3A	MGT-LV / GT-LV	GT 3A	GT 3B	RT	SL/TS	TN	Total
(14)	Jan-20	201,079,853	22,199,720	2,039,796	18,626,642	41,508,647	97,697	392,785,543	186,251,232	16,290,144	26,270,353	8,573,421	217,507	915,940,554
(15)	Feb-20	182,913,222	22,613,270	1,815,676	16,580,065	36,947,942	86,963	349,628,776	165,787,136	14,500,287	24,612,791	8,541,285	193,608	824,221,021
(16)	Mar-20	158,481,201	19,643,250	1,954,181	17,844,833	39,766,421	93,596	376,299,308	178,433,781	15,606,404	20,927,597	7,592,406	208,377	836,851,355
(17)	Apr-20	135,085,398	18,826,030	1,932,550	17,647,310	39,326,249	92,560	372,134,078	176,458,710	15,433,658	31,160,919	6,947,566	206,071	815,251,099
(18)	May-20	121,116,424	20,591,140	2,017,830	18,426,055	41,061,649	96,645	388,555,713	184,245,529	16,114,718	26,163,706	6,332,357	215,164	824,936,930
(19)	Jun-20	179,041,750	26,012,040	2,195,814	20,051,332	44,683,506	105,169	422,828,410	200,496,972	17,536,123	33,036,371	5,824,513	234,143	952,046,143
(20)	Jul-20	233,484,517	31,493,290	2,577,262	23,534,574	52,445,756	123,439	496,280,564	235,326,549	20,582,432	32,926,537	6,094,889	274,817	1,135,144,625
(21)	Aug-20	211,266,514	34,446,700	2,352,724	21,484,181	47,876,546	112,685	453,043,321	214,824,293	18,789,237	25,353,568	6,578,942	250,875	1,036,379,587
(22)	Sep-20	181,578,992	31,861,930	2,099,243	19,169,487	42,718,352	100,544	404,232,670	191,679,236	16,764,895	31,793,290	7,308,722	223,846	929,531,206
(23)	Oct-20	138,495,346	24,142,910	2,002,837	18,289,142	40,756,544	95,927	385,668,591	182,876,512	15,994,980	25,605,169	8,804,039	213,566	842,945,563
(24)	Nov-20	140,983,736	18,455,130	1,855,895	16,947,326	37,766,365	88,889	357,373,300	169,459,438	14,821,478	24,114,555	8,735,223	197,897	790,799,230
(25)	Dec-20	164,439,102	19,597,630	1,919,364	17,526,898	39,057,917	91,929	369,594,920	175,254,691	15,328,350	30,200,840	8,727,976	204,665	841,944,283
(26)	Total	2,047,966,056	289,883,040	24,763,172	226,127,846	503,915,894	1,186,042	4,768,425,194	2,261,094,079	197,762,704	332,165,696	90,061,339	2,640,536	10,745,991,596

Potomac Electric Power Company - District of Columbia  
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Second Biennial Plan  
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I. Forecasted Billing Determinants (2021) (MWh)

	Month-Year	R	MMA	T	GSND	GS LV	GS 3A	MGT-LV / GT-LV	GT 3A	GT 3B	RT	SL/TS	TN	Total
(1)	Jan-21	201,701	22,392	2,026	18,502	41,230	97	390,147	185,000	16,181	26,286	8,644	216	912,422
(2)	Feb-21	183,993	22,795	1,797	16,410	36,570	86	346,052	164,091	14,352	24,613	8,597	192	819,549
(3)	Mar-21	159,221	19,804	1,931	17,634	39,297	92	371,855	176,326	15,422	20,954	7,636	206	830,379
(4)	Apr-21	134,616	19,032	1,905	17,398	38,771	91	366,876	173,965	15,216	31,150	6,982	203	806,205
(5)	May-21	122,734	20,884	1,991	18,177	40,506	95	383,294	181,750	15,896	26,212	6,359	212	818,111
(6)	Jun-21	182,248	26,010	2,168	19,800	44,122	104	417,519	197,979	17,316	33,098	5,845	231	946,439
(7)	Jul-21	228,326	31,333	2,544	23,227	51,760	122	489,791	232,249	20,313	32,941	6,110	271	1,118,988
(8)	Aug-21	216,024	34,295	2,315	21,139	47,106	111	445,756	211,369	18,487	25,349	6,591	247	1,028,789
(9)	Sep-21	185,578	31,712	2,058	18,797	41,888	99	396,377	187,954	16,439	31,770	7,318	219	920,209
(10)	Oct-21	140,774	23,967	1,964	17,933	39,963	94	378,160	179,316	15,684	25,621	8,811	209	832,497
(11)	Nov-21	143,011	18,241	1,849	16,885	37,628	89	356,068	168,841	14,767	24,155	8,740	197	790,472
(12)	Dec-21	167,072	19,353	1,878	17,151	38,220	90	361,664	171,494	14,999	30,235	8,732	200	831,088
(13)	Total	2,065,298	289,818	24,426	223,052	497,061	1,170	4,703,559	2,230,336	195,072	332,384	90,365	2,605	10,655,146

II. Forecasted Billing Determinants (2021) (kWh)

	Month-Year	R	MMA	T	GSND	GS LV	GS 3A	MGT-LV / GT-LV	GT 3A	GT 3B	RT	SL/TS	TN	Total
(14)	Jan-21	201,701,047	22,392,110	2,026,093	18,501,511	41,229,798	97,041	390,146,863	185,000,021	16,180,709	26,286,008	8,644,354	216,045	912,421,599
(15)	Feb-21	183,993,329	22,795,030	1,797,101	16,410,444	36,569,948	86,073	346,051,914	164,091,058	14,351,942	24,613,249	8,597,308	191,628	819,549,024
(16)	Mar-21	159,220,527	19,803,870	1,931,102	17,634,088	39,296,784	92,491	371,855,256	176,326,499	15,422,094	20,954,230	7,636,384	205,916	830,379,241
(17)	Apr-21	134,616,196	19,032,440	1,905,243	17,397,957	38,770,578	91,252	366,875,908	173,965,389	15,215,583	31,149,605	6,981,657	203,159	806,204,968
(18)	May-21	122,734,480	20,884,290	1,990,505	18,176,529	40,505,590	95,336	383,293,873	181,750,467	15,896,492	26,212,097	6,358,709	212,251	818,110,619
(19)	Jun-21	182,247,722	26,009,545	2,168,240	19,799,539	44,122,396	103,849	417,518,768	197,979,244	17,315,914	33,097,850	5,844,777	231,203	946,439,045
(20)	Jul-21	228,326,245	31,332,900	2,543,562	23,226,838	51,759,980	121,825	489,791,244	232,249,440	20,313,298	32,940,571	6,110,475	271,224	1,118,987,602
(21)	Aug-21	216,023,974	34,295,220	2,314,882	21,138,618	47,106,474	110,872	445,756,328	211,368,943	18,487,021	25,348,612	6,590,885	246,839	1,028,788,669
(22)	Sep-21	185,577,960	31,711,900	2,058,445	18,796,939	41,888,146	98,590	396,376,639	187,954,059	16,439,078	31,769,786	7,317,909	219,495	920,208,947
(23)	Oct-21	140,774,408	23,966,840	1,963,844	17,933,074	39,963,061	94,059	378,160,062	179,316,114	15,683,575	25,621,386	8,811,006	209,408	832,496,836
(24)	Nov-21	143,010,627	18,241,400	1,849,116	16,885,427	37,628,427	88,564	356,068,029	168,840,504	14,767,344	24,154,982	8,740,273	197,174	790,471,868
(25)	Dec-21	167,071,792	19,352,740	1,878,178	17,150,808	38,219,815	89,956	361,664,184	171,494,091	14,999,436	30,235,214	8,731,531	200,273	831,088,018
(26)	Total	2,065,298,307	289,818,285	24,426,312	223,051,770	497,060,995	1,169,908	4,703,559,070	2,230,335,830	195,072,487	332,383,588	90,365,268	2,604,616	10,655,146,435

**Pepco (E)-2**

Potomac Electric Power Company - District of Columbia  
Underground Rider  
Second Biennial Plan  
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Allocation of Forecasted 2020 and 2021 Revenue Requirements by Class and Calculation of the Underground Rider by Class

	Revenue Recovery Method	Total	Residential	MMA	GS-ND/T	GS-D-LV	GS-3A	MGT-LV / GT-LV	GT-3A	GT-3B	RT	SL/TS/OL LED	TN
(1)	Total Authorized Base Revenue Requirement	\$ 396,697,247	\$ 76,740,338	\$ 10,804,681	\$ 14,589,672	\$ 31,763,556	\$ 68,336	\$ 202,004,191	\$ 52,040,852	\$ 421,572	\$ 6,739,346	\$ 1,450,638	\$ 74,065
(2)	Authorized Energy Charge Recovery (Net of EDIT Credit)	\$ 108,715,835	\$ 27,357,286	\$ 3,013,724	\$ 8,847,074	\$ 14,435,913	\$ 25,182	\$ 44,185,203	\$ 10,157,054	\$ -	\$ -	\$ 676,422	\$ 17,977
(3)	Authorized Demand Charge Recovery (Net of EDIT Credit)	\$ 194,689,507	\$ -	\$ -	\$ -	\$ 15,175,063	\$ 36,000	\$ 137,530,166	\$ 41,531,786	\$ 416,492	\$ -	\$ -	\$ -
(4)	Other (Net of EDIT Credit)	\$ 7,507,677	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,739,346	\$ 768,331	\$ -
(5)	Total Applicable Revenues	\$ 310,913,019	\$ 27,357,286	\$ 3,013,724	\$ 8,847,074	\$ 29,610,976	\$ 61,182	\$ 181,715,369	\$ 51,688,840	\$ 416,492	\$ 6,739,346	\$ 1,444,753	\$ 17,977
(6)	Percentage Share of Total Energy and Demand Charge Recovery	100.00%	8.80%	0.97%	2.85%	9.52%	0.02%	58.45%	16.62%	0.13%	2.17%	0.46%	0.01%
(7)	Annual Revenue Requirement (2020)	\$ 30,000,000.00											
(8)	Annual Revenue Requirement by Class (2020)	\$ 30,000,000.00	\$ 2,639,705	\$ 290,794	\$ 853,654	\$ 2,857,163	\$ 5,903	\$ 17,533,718	\$ 4,987,457	\$ 40,187	\$ 650,280	\$ 139,404	\$ 1,735
(9)	Forecasted Sales by Class (kWh) (2020)		2,047,966,056	289,883,040	250,891,017	503,915,894	1,186,042	4,768,425,194	2,261,094,079	197,762,704	332,165,696	90,061,339	2,640,536
(10)	Underground Rider Rate (\$/kWh) by Class (2020)		\$ 0.00129	\$ 0.00100	\$ 0.00340	\$ 0.00567	\$ 0.00498	\$ 0.00368	\$ 0.00221	\$ 0.00020	\$ 0.00196	\$ 0.00155	\$ 0.00066
(11)	Percentage Increase in Distribution Revenue	7.56%	3.44%	2.69%	5.85%	9.00%	8.64%	8.68%	9.58%	9.53%	9.65%	9.61%	2.34%
(12)	Annual Revenue Requirement (2021)	\$ 30,000,000.00											
(13)	Annual Revenue Requirement by Class (2021)	\$ 30,000,000.00	\$ 2,639,705	\$ 290,794	\$ 853,654	\$ 2,857,163	\$ 5,903	\$ 17,533,718	\$ 4,987,457	\$ 40,187	\$ 650,280	\$ 139,404	\$ 1,735
(14)	Forecasted Sales by Class (kWh) (2021)		2,065,298,307	289,818,285	247,478,082	497,060,995	1,169,908	4,703,559,070	2,230,335,830	195,072,487	332,383,588	90,365,268	2,604,616
(15)	Underground Rider Rate (\$/kWh) by Class (2021)		\$ 0.00128	\$ 0.00100	\$ 0.00345	\$ 0.00575	\$ 0.00505	\$ 0.00373	\$ 0.00224	\$ 0.00021	\$ 0.00196	\$ 0.00154	\$ 0.00067
(16)	Percentage Increase in Distribution Revenue	7.56%	3.44%	2.69%	5.85%	9.00%	8.64%	8.68%	9.58%	9.53%	9.65%	9.61%	2.34%

Notes:

- (1) Source: Formal Cases 1150 and 1151 Pepco Exhibit 4 Pages 13-26 of 216.
- (2) Source: Formal Cases 1150 and 1151 Pepco Exhibit 4 Pages 13-26 of 216.
- (3) Source: Formal Cases 1150 and 1151 Pepco Exhibit 4 Pages 13-26 of 216.
- (4) Source: Formal Cases 1150 and 1151 Pepco Exhibit 4 Pages 13-26 of 216.
- (5) Calculation: Line (2) + Line (3) + Line (4)
- (6) Calculation: For each class, Line (5) divided by Total Applicable Revenues.
- (7) Source: Second Biennial Plan Annual Underground Rider Revenue Requirement.
- (8) Calculation: For each class, Line (6) multiplied by Line (7).
- (9) Source: Refer to Line (26) of "Forecasted Billing Determinants" on Page 2 of 3.
- (10) Calculation: For each class, Line (8) divided by Line (9), rounded to 5 decimal points.
- (11) Calculation: For each class, Line (8) divided by Line (1).
- (12) Source: Second Biennial Plan Annual Underground Rider Revenue Requirement.
- (13) Calculation: For each class, Line (6) multiplied by Line (12).
- (14) Source: Refer to Line (26) of "Forecasted Billing Determinants" on Page 3 of 3.
- (15) Calculation: Line (13) / Line (14).
- (16) Calculation: Line (13) / Line (1).

Potomac Electric Power Company - District of Columbia  
Underground Rider  
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I. Forecasted Billing Determinants (2020) (MWh)

	Month-Year	R	MMA	T	GSND	GS LV	GS 3A	MGT-LV / GT-LV	GT 3A	GT 3B	RT	SL/TS	TN	Total
(1)	Jan-20	201,080	22,200	2,040	18,627	41,509	98	392,786	186,251	16,290	26,270	8,573	218	915,941
(2)	Feb-20	182,913	22,613	1,816	16,580	36,948	87	349,629	165,787	14,500	24,613	8,541	194	824,221
(3)	Mar-20	158,481	19,643	1,954	17,845	39,766	94	376,299	178,434	15,606	20,928	7,592	208	836,851
(4)	Apr-20	135,085	18,826	1,933	17,647	39,326	93	372,134	176,459	15,434	31,161	6,948	206	815,251
(5)	May-20	121,116	20,591	2,018	18,426	41,062	97	388,556	184,246	16,115	26,164	6,332	215	824,937
(6)	Jun-20	179,042	26,012	2,196	20,051	44,684	105	422,828	200,497	17,536	33,036	5,825	234	952,046
(7)	Jul-20	233,485	31,493	2,577	23,535	52,446	123	496,281	235,327	20,582	32,927	6,095	275	1,135,145
(8)	Aug-20	211,267	34,447	2,353	21,484	47,877	113	453,043	214,824	18,789	25,354	6,579	251	1,036,380
(9)	Sep-20	181,579	31,862	2,099	19,169	42,718	101	404,233	191,679	16,765	31,793	7,309	224	929,531
(10)	Oct-20	138,495	24,143	2,003	18,289	40,757	96	385,669	182,877	15,995	25,605	8,804	214	842,946
(11)	Nov-20	140,984	18,455	1,856	16,947	37,766	89	357,373	169,459	14,821	24,115	8,735	198	790,799
(12)	Dec-20	164,439	19,598	1,919	17,527	39,058	92	369,595	175,255	15,328	30,201	8,728	205	841,944
(13)	Total	2,047,966	289,883	24,763	226,128	503,916	1,186	4,768,425	2,261,094	197,763	332,166	90,061	2,641	10,745,992

II. Forecasted Billing Determinants (2020) (kWh)

	Month-Year	R	MMA	T	GSND	GS LV	GS 3A	MGT-LV / GT-LV	GT 3A	GT 3B	RT	SL/TS	TN	Total
(14)	Jan-20	201,079,853	22,199,720	2,039,796	18,626,642	41,508,647	97,697	392,785,543	186,251,232	16,290,144	26,270,353	8,573,421	217,507	915,940,554
(15)	Feb-20	182,913,222	22,613,270	1,815,676	16,580,065	36,947,942	86,963	349,628,776	165,787,136	14,500,287	24,612,791	8,541,285	193,608	824,221,021
(16)	Mar-20	158,481,201	19,643,250	1,954,181	17,844,833	39,766,421	93,596	376,299,308	178,433,781	15,606,404	20,927,597	7,592,406	208,377	836,851,355
(17)	Apr-20	135,085,398	18,826,030	1,932,550	17,647,310	39,326,249	92,560	372,134,078	176,458,710	15,433,658	31,160,919	6,947,566	206,071	815,251,099
(18)	May-20	121,116,424	20,591,140	2,017,830	18,426,055	41,061,649	96,645	388,555,713	184,245,529	16,114,718	26,163,706	6,332,357	215,164	824,936,930
(19)	Jun-20	179,041,750	26,012,040	2,195,814	20,051,332	44,683,506	105,169	422,828,410	200,496,972	17,536,123	33,036,371	5,824,513	234,143	952,046,143
(20)	Jul-20	233,484,517	31,493,290	2,577,262	23,534,574	52,445,756	123,439	496,280,564	235,326,549	20,582,432	32,926,537	6,094,889	274,817	1,135,144,625
(21)	Aug-20	211,266,514	34,446,700	2,352,724	21,484,181	47,876,546	112,685	453,043,321	214,824,293	18,789,237	25,353,568	6,578,942	250,875	1,036,379,587
(22)	Sep-20	181,578,992	31,861,930	2,099,243	19,169,487	42,718,352	100,544	404,232,670	191,679,236	16,764,895	31,793,290	7,308,722	223,846	929,531,206
(23)	Oct-20	138,495,346	24,142,910	2,002,837	18,289,142	40,756,544	95,927	385,668,591	182,876,512	15,994,980	25,605,169	8,804,039	213,566	842,945,563
(24)	Nov-20	140,983,736	18,455,130	1,855,895	16,947,326	37,766,365	88,889	357,373,300	169,459,438	14,821,478	24,114,555	8,735,223	197,897	790,799,230
(25)	Dec-20	164,439,102	19,597,630	1,919,364	17,526,898	39,057,917	91,929	369,594,920	175,254,691	15,328,350	30,200,840	8,727,976	204,665	841,944,283
(26)	Total	2,047,966,056	289,883,040	24,763,172	226,127,846	503,915,894	1,186,042	4,768,425,194	2,261,094,079	197,762,704	332,165,696	90,061,339	2,640,536	10,745,991,596

Potomac Electric Power Company - District of Columbia  
Underground Rider  
Second Biennial Plan  
September 30, 2019 Biennial Filing: Forecasted 2020-2021 Revenue Requirement Calculation

I. Forecasted Billing Determinants (2021) (MWh)

	Month-Year	R	MMA	T	GSND	GS LV	GS 3A	MGT-LV / GT-LV	GT 3A	GT 3B	RT	SL/TS	TN	Total
(1)	Jan-21	201,701	22,392	2,026	18,502	41,230	97	390,147	185,000	16,181	26,286	8,644	216	912,422
(2)	Feb-21	183,993	22,795	1,797	16,410	36,570	86	346,052	164,091	14,352	24,613	8,597	192	819,549
(3)	Mar-21	159,221	19,804	1,931	17,634	39,297	92	371,855	176,326	15,422	20,954	7,636	206	830,379
(4)	Apr-21	134,616	19,032	1,905	17,398	38,771	91	366,876	173,965	15,216	31,150	6,982	203	806,205
(5)	May-21	122,734	20,884	1,991	18,177	40,506	95	383,294	181,750	15,896	26,212	6,359	212	818,111
(6)	Jun-21	182,248	26,010	2,168	19,800	44,122	104	417,519	197,979	17,316	33,098	5,845	231	946,439
(7)	Jul-21	228,326	31,333	2,544	23,227	51,760	122	489,791	232,249	20,313	32,941	6,110	271	1,118,988
(8)	Aug-21	216,024	34,295	2,315	21,139	47,106	111	445,756	211,369	18,487	25,349	6,591	247	1,028,789
(9)	Sep-21	185,578	31,712	2,058	18,797	41,888	99	396,377	187,954	16,439	31,770	7,318	219	920,209
(10)	Oct-21	140,774	23,967	1,964	17,933	39,963	94	378,160	179,316	15,684	25,621	8,811	209	832,497
(11)	Nov-21	143,011	18,241	1,849	16,885	37,628	89	356,068	168,841	14,767	24,155	8,740	197	790,472
(12)	Dec-21	167,072	19,353	1,878	17,151	38,220	90	361,664	171,494	14,999	30,235	8,732	200	831,088
(13)	Total	2,065,298	289,818	24,426	223,052	497,061	1,170	4,703,559	2,230,336	195,072	332,384	90,365	2,605	10,655,146

II. Forecasted Billing Determinants (2021) (kWh)

	Month-Year	R	MMA	T	GSND	GS LV	GS 3A	MGT-LV / GT-LV	GT 3A	GT 3B	RT	SL/TS	TN	Total
(14)	Jan-21	201,701,047	22,392,110	2,026,093	18,501,511	41,229,798	97,041	390,146,863	185,000,021	16,180,709	26,286,008	8,644,354	216,045	912,421,599
(15)	Feb-21	183,993,329	22,795,030	1,797,101	16,410,444	36,569,948	86,073	346,051,914	164,091,058	14,351,942	24,613,249	8,597,308	191,628	819,549,024
(16)	Mar-21	159,220,527	19,803,870	1,931,102	17,634,088	39,296,784	92,491	371,855,256	176,326,499	15,422,094	20,954,230	7,636,384	205,916	830,379,241
(17)	Apr-21	134,616,196	19,032,440	1,905,243	17,397,957	38,770,578	91,252	366,875,908	173,965,389	15,215,583	31,149,605	6,981,657	203,159	806,204,968
(18)	May-21	122,734,480	20,884,290	1,990,505	18,176,529	40,505,590	95,336	383,293,873	181,750,467	15,896,492	26,212,097	6,358,709	212,251	818,110,619
(19)	Jun-21	182,247,722	26,009,545	2,168,240	19,799,539	44,122,396	103,849	417,518,768	197,979,244	17,315,914	33,097,850	5,844,777	231,203	946,439,045
(20)	Jul-21	228,326,245	31,332,900	2,543,562	23,226,838	51,759,980	121,825	489,791,244	232,249,440	20,313,298	32,940,571	6,110,475	271,224	1,118,987,602
(21)	Aug-21	216,023,974	34,295,220	2,314,882	21,138,618	47,106,474	110,872	445,756,328	211,368,943	18,487,021	25,348,612	6,590,885	246,839	1,028,788,669
(22)	Sep-21	185,577,960	31,711,900	2,058,445	18,796,939	41,888,146	98,590	396,376,639	187,954,059	16,439,078	31,769,786	7,317,909	219,495	920,208,947
(23)	Oct-21	140,774,408	23,966,840	1,963,844	17,933,074	39,963,061	94,059	378,160,062	179,316,114	15,683,575	25,621,386	8,811,006	209,408	832,496,836
(24)	Nov-21	143,010,627	18,241,400	1,849,116	16,885,427	37,628,427	88,564	356,068,029	168,840,504	14,767,344	24,154,982	8,740,273	197,174	790,471,868
(25)	Dec-21	167,071,792	19,352,740	1,878,178	17,150,808	38,219,815	89,956	361,664,184	171,494,091	14,999,436	30,235,214	8,731,531	200,273	831,088,018
(26)	Total	2,065,298,307	289,818,285	24,426,312	223,051,770	497,060,995	1,169,908	4,703,559,070	2,230,335,830	195,072,487	332,383,588	90,365,268	2,604,616	10,655,146,435

**Pepco (E)-3**

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 RIDER UPC RATES  
SCHEDULE "R"  
DISTRICT OF COLUMBIA

KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE					
	\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)	(\$)	(%)
	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	ANNUAL	ANNUAL
0	17.03	17.11	-	-	17.03	17.11	-	-	0.00	0.00	0.00%	0.00%	0.00	0.00%
10	17.32	17.40	1.73203	1.74003	17.32	17.40	1.73206	1.74006	0.00	0.00	0.00%	0.00%	0.00	0.00%
20	17.61	17.69	0.88053	0.88453	17.61	17.69	0.88056	0.88456	0.00	0.00	0.00%	0.00%	0.00	0.00%
30	17.90	17.98	0.59670	0.59936	17.90	17.98	0.59673	0.59939	0.00	0.00	0.00%	0.00%	0.00	0.00%
40	18.85	18.95	0.47115	0.47380	18.85	18.95	0.47118	0.47383	0.00	0.00	0.00%	0.00%	0.00	0.00%
50	19.79	19.92	0.39582	0.39847	19.79	19.92	0.39585	0.39850	0.00	0.00	0.00%	0.00%	0.00	0.00%
100	24.52	24.78	0.24516	0.24780	24.52	24.78	0.24519	0.24783	0.00	0.00	0.00%	0.00%	0.00	0.00%
200	33.97	34.49	0.16983	0.17246	33.97	34.50	0.16986	0.17249	0.01	0.01	0.03%	0.03%	0.01	0.03%
300	43.42	44.21	0.14472	0.14735	43.42	44.21	0.14475	0.14738	0.01	0.01	0.02%	0.02%	0.01	0.02%
400	52.87	53.92	0.13216	0.13480	52.88	53.93	0.13219	0.13483	0.01	0.01	0.02%	0.02%	0.01	0.02%
500	63.69	64.37	0.12737	0.12873	63.70	64.38	0.12740	0.12876	0.02	0.02	0.03%	0.03%	0.02	0.03%
<b>648</b>	<b>79.70</b>	<b>79.83</b>	<b>0.12300</b>	<b>0.12319</b>	<b>79.72</b>	<b>79.85</b>	<b>0.12303</b>	<b>0.12322</b>	<b>0.02</b>	<b>0.02</b>	<b>0.03%</b>	<b>0.03%</b>	<b>0.02</b>	<b>0.03%</b>
700	85.33	85.26	0.12190	0.12180	85.35	85.28	0.12193	0.12183	0.02	0.02	0.02%	0.02%	0.02	0.02%
750	90.74	90.49	0.12099	0.12065	90.76	90.51	0.12102	0.12068	0.02	0.02	0.02%	0.02%	0.02	0.02%
800	96.15	95.71	0.12019	0.11964	96.18	95.73	0.12022	0.11967	0.02	0.02	0.02%	0.02%	0.02	0.02%
850	101.56	100.93	0.11949	0.11875	101.59	100.96	0.11952	0.11878	0.03	0.03	0.03%	0.03%	0.03	0.03%
900	106.97	106.16	0.11886	0.11795	107.00	106.18	0.11889	0.11798	0.03	0.03	0.03%	0.03%	0.03	0.03%
950	112.39	111.38	0.11830	0.11724	112.41	111.41	0.11833	0.11727	0.03	0.03	0.03%	0.03%	0.03	0.03%
1,000	117.80	116.61	0.11780	0.11661	117.83	116.64	0.11783	0.11664	0.03	0.03	0.03%	0.03%	0.03	0.03%
1,250	144.85	142.73	0.11588	0.11418	144.89	142.76	0.11591	0.11421	0.04	0.04	0.03%	0.03%	0.04	0.03%
1,500	171.91	168.85	0.11460	0.11256	171.95	168.89	0.11463	0.11259	0.04	0.05	0.02%	0.03%	0.05	0.03%
1,750	198.96	194.96	0.11369	0.11141	199.01	195.02	0.11372	0.11144	0.05	0.05	0.03%	0.03%	0.05	0.03%
2,000	226.02	221.08	0.11301	0.11054	226.08	221.14	0.11304	0.11057	0.06	0.06	0.03%	0.03%	0.06	0.03%
2,250	253.07	247.20	0.11248	0.10987	253.14	247.27	0.11251	0.10990	0.07	0.07	0.03%	0.03%	0.07	0.03%
2,500	280.12	273.32	0.11205	0.10933	280.20	273.40	0.11208	0.10936	0.07	0.07	0.02%	0.03%	0.07	0.03%
3,000	334.23	325.56	0.11141	0.10852	334.32	325.65	0.11144	0.10855	0.09	0.09	0.03%	0.03%	0.09	0.03%
3,500	388.34	377.80	0.11096	0.10794	388.45	377.91	0.11099	0.10797	0.11	0.11	0.03%	0.03%	0.11	0.03%
4,000	442.45	430.04	0.11061	0.10751	442.57	430.16	0.11064	0.10754	0.12	0.12	0.03%	0.03%	0.12	0.03%
5,000	550.67	534.52	0.11013	0.10690	550.82	534.67	0.11016	0.10693	0.15	0.15	0.03%	0.03%	0.15	0.03%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 RIDER UPC RATES  
SCHEDULE "MMA"  
DISTRICT OF COLUMBIA

KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE					
	\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)	(\$)	(%)
	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	ANNUAL	ANNUAL
0	13.57	13.99	-	-	13.57	13.99	-	-	0.00	0.00	0.00%	0.00%	0.00	0.00%
100	20.44	21.82	0.20436	0.21821	20.44	21.82	0.20439	0.21824	0.00	0.00	0.00%	0.00%	0.00	0.00%
200	29.04	31.80	0.14520	0.15901	29.05	31.81	0.14523	0.15904	0.01	0.01	0.03%	0.03%	0.01	0.03%
300	37.64	41.78	0.12547	0.13928	37.65	41.79	0.12550	0.13931	0.01	0.01	0.03%	0.02%	0.01	0.02%
400	46.25	51.76	0.11561	0.12941	46.26	51.78	0.11564	0.12944	0.01	0.01	0.02%	0.02%	0.01	0.02%
500	56.10	62.41	0.11220	0.12483	56.11	62.43	0.11223	0.12486	0.01	0.01	0.02%	0.02%	0.01	0.02%
1000	105.36	115.66	0.10536	0.11566	105.39	115.69	0.10539	0.11569	0.03	0.03	0.03%	0.03%	0.03	0.03%
2000	203.89	222.15	0.10195	0.11107	203.95	222.21	0.10198	0.11110	0.06	0.06	0.03%	0.03%	0.06	0.03%
3000	302.42	328.63	0.10081	0.10954	302.51	328.72	0.10084	0.10957	0.09	0.09	0.03%	0.03%	0.09	0.03%
4000	400.95	435.12	0.10024	0.10878	401.07	435.24	0.10027	0.10881	0.12	0.12	0.03%	0.03%	0.12	0.03%
5000	499.48	541.61	0.09990	0.10832	499.63	541.76	0.09993	0.10835	0.15	0.15	0.03%	0.03%	0.15	0.03%
6000	598.01	648.10	0.09967	0.10802	598.19	648.28	0.09970	0.10805	0.18	0.18	0.03%	0.03%	0.18	0.03%
7000	696.53	754.59	0.09950	0.10780	696.74	754.80	0.09953	0.10783	0.21	0.21	0.03%	0.03%	0.21	0.03%
7500	745.80	807.83	0.09944	0.10771	746.02	808.06	0.09947	0.10774	0.23	0.23	0.03%	0.03%	0.23	0.03%
8000	795.06	861.08	0.09938	0.10763	795.30	861.32	0.09941	0.10766	0.24	0.24	0.03%	0.03%	0.24	0.03%
8500	844.33	914.32	0.09933	0.10757	844.58	914.58	0.09936	0.10760	0.26	0.25	0.03%	0.03%	0.25	0.03%
9000	893.59	967.57	0.09929	0.10751	893.86	967.84	0.09932	0.10754	0.27	0.27	0.03%	0.03%	0.27	0.03%
9500	942.86	1,020.81	0.09925	0.10745	943.14	1,021.10	0.09928	0.10748	0.29	0.29	0.03%	0.03%	0.29	0.03%
10000	992.12	1,074.06	0.09921	0.10741	992.42	1,074.36	0.09924	0.10744	0.30	0.30	0.03%	0.03%	0.30	0.03%
12500	1,238.44	1,340.28	0.09908	0.10722	1,238.82	1,340.65	0.09911	0.10725	0.38	0.38	0.03%	0.03%	0.38	0.03%
15000	1,484.76	1,606.50	0.09898	0.10710	1,485.21	1,606.95	0.09901	0.10713	0.45	0.45	0.03%	0.03%	0.45	0.03%
17500	1,731.09	1,872.72	0.09892	0.10701	1,731.61	1,873.25	0.09895	0.10704	0.53	0.53	0.03%	0.03%	0.53	0.03%
20000	1,977.41	2,138.94	0.09887	0.10695	1,978.01	2,139.54	0.09890	0.10698	0.60	0.60	0.03%	0.03%	0.60	0.03%
22500	2,223.73	2,405.16	0.09883	0.10690	2,224.40	2,405.84	0.09886	0.10693	0.67	0.67	0.03%	0.03%	0.67	0.03%
25000	2,470.05	2,671.39	0.09880	0.10686	2,470.80	2,672.14	0.09883	0.10689	0.75	0.75	0.03%	0.03%	0.75	0.03%
30000	2,962.69	3,203.83	0.09876	0.10679	2,963.59	3,204.73	0.09879	0.10682	0.90	0.90	0.03%	0.03%	0.90	0.03%
35000	3,455.34	3,736.27	0.09872	0.10675	3,456.39	3,737.32	0.09875	0.10678	1.05	1.05	0.03%	0.03%	1.05	0.03%
40000	3,947.98	4,268.72	0.09870	0.10672	3,949.18	4,269.92	0.09873	0.10675	1.20	1.20	0.03%	0.03%	1.20	0.03%
50000	4,933.27	5,333.60	0.09867	0.10667	4,934.77	5,335.10	0.09870	0.10670	1.50	1.50	0.03%	0.03%	1.50	0.03%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY

EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 RIDER UPC RATES

SCHEDULE "GS ND"

DISTRICT OF COLUMBIA

KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE					
	\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)	(\$)	(%)
	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	ANNUAL	ANNUAL
0	27.42	27.42	-	-	27.42	27.42	-	-	0.00	0.00	0.00%	0.00%	0.00	0.00%
10	28.63	28.57	2.86336	2.85674	28.63	28.57	2.86342	2.85680	0.00	0.00	0.00%	0.00%	0.00	0.00%
20	29.85	29.71	1.49236	1.48574	29.85	29.72	1.49242	1.48580	0.00	0.00	0.00%	0.00%	0.00	0.00%
30	31.06	30.86	1.03536	1.02874	31.06	30.86	1.03542	1.02880	0.00	0.00	0.00%	0.00%	0.00	0.00%
40	32.27	32.01	0.80686	0.80024	32.28	32.01	0.80692	0.80030	0.00	0.00	0.00%	0.00%	0.00	0.00%
50	33.49	33.16	0.66976	0.66314	33.49	33.16	0.66982	0.66320	0.00	0.00	0.00%	0.00%	0.00	0.00%
100	39.56	38.89	0.39556	0.38894	39.56	38.90	0.39562	0.38900	0.01	0.01	0.03%	0.03%	0.01	0.03%
150	45.62	44.63	0.30416	0.29754	45.63	44.64	0.30422	0.29760	0.01	0.01	0.02%	0.02%	0.01	0.02%
200	51.69	50.37	0.25846	0.25184	51.70	50.38	0.25852	0.25190	0.01	0.01	0.02%	0.02%	0.01	0.02%
250	57.76	56.11	0.23104	0.22442	57.78	56.12	0.23110	0.22448	0.02	0.02	0.03%	0.04%	0.02	0.04%
300	63.83	61.84	0.21276	0.20614	63.85	61.86	0.21282	0.20620	0.02	0.02	0.03%	0.03%	0.02	0.03%
400	75.96	73.32	0.18991	0.18329	75.99	73.34	0.18997	0.18335	0.02	0.02	0.03%	0.03%	0.02	0.03%
500	88.10	84.79	0.17620	0.16958	88.13	84.82	0.17626	0.16964	0.03	0.03	0.03%	0.04%	0.03	0.03%
600	100.24	96.26	0.16706	0.16044	100.27	96.30	0.16712	0.16050	0.04	0.04	0.04%	0.04%	0.04	0.04%
700	112.37	107.74	0.16053	0.15391	112.41	107.78	0.16059	0.15397	0.04	0.04	0.04%	0.04%	0.04	0.04%
800	124.51	119.21	0.15564	0.14902	124.56	119.26	0.15570	0.14908	0.05	0.05	0.04%	0.04%	0.05	0.04%
900	136.64	130.69	0.15183	0.14521	136.70	130.74	0.15189	0.14527	0.05	0.05	0.04%	0.04%	0.05	0.04%
1,000	148.78	142.16	0.14878	0.14216	148.84	142.22	0.14884	0.14222	0.06	0.06	0.04%	0.04%	0.06	0.04%
1,250	179.12	170.85	0.14330	0.13668	179.20	170.92	0.14336	0.13674	0.07	0.08	0.04%	0.05%	0.08	0.04%
1,500	209.46	199.53	0.13964	0.13302	209.55	199.62	0.13970	0.13308	0.09	0.09	0.04%	0.05%	0.09	0.04%
1,750	239.80	228.22	0.13703	0.13041	239.91	228.32	0.13709	0.13047	0.10	0.11	0.04%	0.05%	0.11	0.05%
2,000	270.14	256.90	0.13507	0.12845	270.26	257.02	0.13513	0.12851	0.12	0.12	0.04%	0.05%	0.12	0.05%
2,500	330.82	314.27	0.13233	0.12571	330.97	314.42	0.13239	0.12577	0.15	0.15	0.05%	0.05%	0.15	0.05%
3,000	391.50	371.64	0.13050	0.12388	391.68	371.82	0.13056	0.12394	0.18	0.18	0.05%	0.05%	0.18	0.05%
3,500	452.18	429.01	0.12919	0.12257	452.39	429.22	0.12925	0.12263	0.21	0.21	0.05%	0.05%	0.21	0.05%
4,000	512.86	486.38	0.12822	0.12160	513.10	486.62	0.12828	0.12166	0.24	0.24	0.05%	0.05%	0.24	0.05%
5,000	634.22	601.12	0.12684	0.12022	634.52	601.42	0.12690	0.12028	0.30	0.30	0.05%	0.05%	0.30	0.05%
6,000	755.58	715.86	0.12593	0.11931	755.94	716.22	0.12599	0.11937	0.36	0.36	0.05%	0.05%	0.36	0.05%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in .

POTOMAC ELECTRIC POWER COMPANY

EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 RIDER UPC RATES

SCHEDULE "GS D LV"  
DISTRICT OF COLUMBIA

KW	Hours	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
			\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
			SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
10	100	1000	220.67	227.59	0.22067	0.22759	220.83	227.75	0.22083	0.22775	0.16	0.16	0.07%	0.07%
	200	2000	331.08	344.92	0.16554	0.17246	331.40	345.24	0.16570	0.17262	0.32	0.32	0.10%	0.09%
	300	3000	441.48	462.24	0.14716	0.15408	441.96	462.72	0.14732	0.15424	0.48	0.48	0.11%	0.10%
	400	4000	551.88	579.56	0.13797	0.14489	552.52	580.20	0.13813	0.14505	0.64	0.64	0.12%	0.11%
	500	5000	662.29	696.89	0.13246	0.13938	663.09	697.69	0.13262	0.13954	0.80	0.80	0.12%	0.11%
	600	6000	772.69	814.21	0.12878	0.13570	773.65	815.17	0.12894	0.13586	0.96	0.96	0.12%	0.12%
25	100	2,500	498.93	516.23	0.19957	0.20649	499.33	516.63	0.19973	0.20665	0.40	0.40	0.08%	0.08%
	200	5,000	774.94	809.54	0.15499	0.16191	775.74	810.34	0.15515	0.16207	0.80	0.80	0.10%	0.10%
	300	7,500	1,050.94	1,102.84	0.14013	0.14705	1,052.14	1,104.04	0.14029	0.14721	1.20	1.20	0.11%	0.11%
	400	10,000	1,326.95	1,396.15	0.13270	0.13962	1,328.55	1,397.75	0.13286	0.13978	1.60	1.60	0.12%	0.11%
	500	12,500	1,602.96	1,689.46	0.12824	0.13516	1,604.96	1,691.46	0.12840	0.13532	2.00	2.00	0.12%	0.12%
	600	15,000	1,878.97	1,982.77	0.12526	0.13218	1,881.37	1,985.17	0.12542	0.13234	2.40	2.40	0.13%	0.12%
50	100	5,000	962.69	997.29	0.19254	0.19946	963.49	998.09	0.19270	0.19962	0.80	0.80	0.08%	0.08%
	200	10,000	1,514.70	1,583.90	0.15147	0.15839	1,516.30	1,585.50	0.15163	0.15855	1.60	1.60	0.11%	0.10%
	300	15,000	2,066.72	2,170.52	0.13778	0.14470	2,069.12	2,172.92	0.13794	0.14486	2.40	2.40	0.12%	0.11%
	400	20,000	2,618.73	2,757.13	0.13094	0.13786	2,621.93	2,760.33	0.13110	0.13802	3.20	3.20	0.12%	0.12%
	500	25,000	3,170.75	3,343.75	0.12683	0.13375	3,174.75	3,347.75	0.12699	0.13391	4.00	4.00	0.13%	0.12%
	600	30,000	3,722.77	3,930.37	0.12409	0.13101	3,727.57	3,935.17	0.12425	0.13117	4.80	4.80	0.13%	0.12%
75	100	7,500	1,426.44	1,478.34	0.19019	0.19711	1,427.64	1,479.54	0.19035	0.19727	1.20	1.20	0.08%	0.08%
	200	15,000	2,254.47	2,358.27	0.15030	0.15722	2,256.87	2,360.67	0.15046	0.15738	2.40	2.40	0.11%	0.10%
	300	22,500	3,082.49	3,238.19	0.13700	0.14392	3,086.09	3,241.79	0.13716	0.14408	3.60	3.60	0.12%	0.11%
	400	30,000	3,910.52	4,118.12	0.13035	0.13727	3,915.32	4,122.92	0.13051	0.13743	4.80	4.80	0.12%	0.12%
	500	37,500	4,738.54	4,998.04	0.12636	0.13328	4,744.54	5,004.04	0.12652	0.13344	6.00	6.00	0.13%	0.12%
	600	45,000	5,566.56	5,877.96	0.12370	0.13062	5,573.76	5,885.16	0.12386	0.13078	7.20	7.20	0.13%	0.12%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 RIDER UPC RATES - DELIVERY ONLY  
SCHEDULE "MGT LV "  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 25 KW													
200	5,000	859.51	859.51	0.17190	0.17190	859.91	859.91	0.17198	0.17198	0.40	0.40	0.05%	0.05%
300	7,500	922.75	922.75	0.12303	0.12303	923.35	923.35	0.12311	0.12311	0.60	0.60	0.07%	0.07%
400	10,000	986.00	986.00	0.09860	0.09860	986.80	986.80	0.09868	0.09868	0.80	0.80	0.08%	0.08%
500	12,500	1,049.25	1,049.25	0.08394	0.08394	1,050.25	1,050.25	0.08402	0.08402	1.00	1.00	0.10%	0.10%
600	15,000	1,112.50	1,112.50	0.07417	0.07417	1,113.70	1,113.70	0.07425	0.07425	1.20	1.20	0.11%	0.11%
50 KW													
200	10,000	1,262.25	1,262.25	0.12623	0.12623	1,263.05	1,263.05	0.12631	0.12631	0.80	0.80	0.06%	0.06%
300	15,000	1,388.75	1,388.75	0.09258	0.09258	1,389.95	1,389.95	0.09266	0.09266	1.20	1.20	0.09%	0.09%
400	20,000	1,515.24	1,515.24	0.07576	0.07576	1,516.84	1,516.84	0.07584	0.07584	1.60	1.60	0.11%	0.11%
500	25,000	1,641.74	1,641.74	0.06567	0.06567	1,643.74	1,643.74	0.06575	0.06575	2.00	2.00	0.12%	0.12%
600	30,000	1,768.24	1,768.24	0.05894	0.05894	1,770.64	1,770.64	0.05902	0.05902	2.40	2.40	0.14%	0.14%
75 KW													
200	15,000	1,665.00	1,665.00	0.11100	0.11100	1,666.20	1,666.20	0.11108	0.11108	1.20	1.20	0.07%	0.07%
300	22,500	1,854.74	1,854.74	0.08243	0.08243	1,856.54	1,856.54	0.08251	0.08251	1.80	1.80	0.10%	0.10%
400	30,000	2,044.49	2,044.49	0.06815	0.06815	2,046.89	2,046.89	0.06823	0.06823	2.40	2.40	0.12%	0.12%
500	37,500	2,234.23	2,234.23	0.05958	0.05958	2,237.23	2,237.23	0.05966	0.05966	3.00	3.00	0.13%	0.13%
600	45,000	2,423.97	2,423.97	0.05387	0.05387	2,427.57	2,427.57	0.05395	0.05395	3.60	3.60	0.15%	0.15%
100 KW													
200	20,000	2,067.74	2,067.74	0.10339	0.10339	2,069.34	2,069.34	0.10347	0.10347	1.60	1.60	0.08%	0.08%
300	30,000	2,320.74	2,320.74	0.07736	0.07736	2,323.14	2,323.14	0.07744	0.07744	2.40	2.40	0.10%	0.10%
400	40,000	2,573.73	2,573.73	0.06434	0.06434	2,576.93	2,576.93	0.06442	0.06442	3.20	3.20	0.12%	0.12%
500	50,000	2,826.72	2,826.72	0.05653	0.05653	2,830.72	2,830.72	0.05661	0.05661	4.00	4.00	0.14%	0.14%
600	60,000	3,079.71	3,079.71	0.05133	0.05133	3,084.51	3,084.51	0.05141	0.05141	4.80	4.80	0.16%	0.16%

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
400	HOURS USE =	30%	26%	44%
500	HOURS USE =	27%	25%	48%
600	HOURS USE =	25%	24%	51%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 RIDER UPC RATES - DELIVERY ONLY  
SCHEDULE "MGT LV "  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
<b>MAXIMUM AND ON PEAK DEMAND = 200 KW</b>													
200	40,000	3,678.73	3,678.73	0.09197	0.09197	3,681.93	3,681.93	0.09205	0.09205	3.20	3.20	0.09%	0.09%
300	60,000	4,184.71	4,184.71	0.06975	0.06975	4,189.51	4,189.51	0.06983	0.06983	4.80	4.80	0.11%	0.11%
400	80,000	4,690.70	4,690.70	0.05863	0.05863	4,697.10	4,697.10	0.05871	0.05871	6.40	6.40	0.14%	0.14%
500	100,000	5,196.68	5,196.68	0.05197	0.05197	5,204.68	5,204.68	0.05205	0.05205	8.00	8.00	0.15%	0.15%
600	120,000	5,702.66	5,702.66	0.04752	0.04752	5,712.26	5,712.26	0.04760	0.04760	9.60	9.60	0.17%	0.17%
<b>400 KW</b>													
200	80,000	6,900.70	6,900.70	0.08626	0.08626	6,907.10	6,907.10	0.08634	0.08634	6.40	6.40	0.09%	0.09%
300	120,000	7,912.66	7,912.66	0.06594	0.06594	7,922.26	7,922.26	0.06602	0.06602	9.60	9.60	0.12%	0.12%
400	160,000	8,924.63	8,924.63	0.05578	0.05578	8,937.43	8,937.43	0.05586	0.05586	12.80	12.80	0.14%	0.14%
500	200,000	9,936.60	9,936.60	0.04968	0.04968	9,952.60	9,952.60	0.04976	0.04976	16.00	16.00	0.16%	0.16%
600	240,000	10,948.57	10,948.57	0.04562	0.04562	10,967.77	10,967.77	0.04570	0.04570	19.20	19.20	0.18%	0.18%
<b>600 KW</b>													
200	120,000	10,122.66	10,122.66	0.08436	0.08436	10,132.26	10,132.26	0.08444	0.08444	9.60	9.60	0.09%	0.09%
300	180,000	11,640.62	11,640.62	0.06467	0.06467	11,655.02	11,655.02	0.06475	0.06475	14.40	14.40	0.12%	0.12%
400	240,000	13,158.57	13,158.57	0.05483	0.05483	13,177.77	13,177.77	0.05491	0.05491	19.20	19.20	0.15%	0.15%
500	300,000	14,676.52	14,676.52	0.04892	0.04892	14,700.52	14,700.52	0.04900	0.04900	24.00	24.00	0.16%	0.16%
600	360,000	16,194.47	16,194.47	0.04498	0.04498	16,223.27	16,223.27	0.04506	0.04506	28.80	28.80	0.18%	0.18%
<b>800 KW</b>													
200	160,000	13,344.63	13,344.63	0.08340	0.08340	13,357.43	13,357.43	0.08348	0.08348	12.80	12.80	0.10%	0.10%
300	240,000	15,368.57	15,368.57	0.06404	0.06404	15,387.77	15,387.77	0.06412	0.06412	19.20	19.20	0.12%	0.12%
400	320,000	17,392.50	17,392.50	0.05435	0.05435	17,418.10	17,418.10	0.05443	0.05443	25.60	25.60	0.15%	0.15%
500	400,000	19,416.44	19,416.44	0.04854	0.04854	19,448.44	19,448.44	0.04862	0.04862	32.00	32.00	0.16%	0.16%
600	480,000	21,440.38	21,440.38	0.04467	0.04467	21,478.78	21,478.78	0.04475	0.04475	38.40	38.40	0.18%	0.18%

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
400	HOURS USE =	30%	26%	44%
500	HOURS USE =	27%	25%	48%
600	HOURS USE =	25%	24%	51%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY

EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 RIDER UPC RATES - DELIVERY ONLY

SCHEDULE "GT LV"  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 100 KW													
200	20,000	2,067.74	2,067.74	0.10339	0.10339	2,069.34	2,069.34	0.10347	0.10347	1.60	1.60	0.08%	0.08%
300	30,000	2,320.74	2,320.74	0.07736	0.07736	2,323.14	2,323.14	0.07744	0.07744	2.40	2.40	0.10%	0.10%
400	40,000	2,573.73	2,573.73	0.06434	0.06434	2,576.93	2,576.93	0.06442	0.06442	3.20	3.20	0.12%	0.12%
500	50,000	2,826.72	2,826.72	0.05653	0.05653	2,830.72	2,830.72	0.05661	0.05661	4.00	4.00	0.14%	0.14%
600	60,000	3,079.71	3,079.71	0.05133	0.05133	3,084.51	3,084.51	0.05141	0.05141	4.80	4.80	0.16%	0.16%
300 KW													
200	60,000	5,289.71	5,289.71	0.08816	0.08816	5,294.51	5,294.51	0.08824	0.08824	4.80	4.80	0.09%	0.09%
300	90,000	6,048.69	6,048.69	0.06721	0.06721	6,055.89	6,055.89	0.06729	0.06729	7.20	7.20	0.12%	0.12%
400	120,000	6,807.66	6,807.66	0.05673	0.05673	6,817.26	6,817.26	0.05681	0.05681	9.60	9.60	0.14%	0.14%
500	150,000	7,566.64	7,566.64	0.05044	0.05044	7,578.64	7,578.64	0.05052	0.05052	12.00	12.00	0.16%	0.16%
600	180,000	8,325.62	8,325.62	0.04625	0.04625	8,340.02	8,340.02	0.04633	0.04633	14.40	14.40	0.17%	0.17%
500 KW													
200	100,000	8,511.68	8,511.68	0.08512	0.08512	8,519.68	8,519.68	0.08520	0.08520	8.00	8.00	0.09%	0.09%
300	150,000	9,776.64	9,776.64	0.06518	0.06518	9,788.64	9,788.64	0.06526	0.06526	12.00	12.00	0.12%	0.12%
400	200,000	11,041.60	11,041.60	0.05521	0.05521	11,057.60	11,057.60	0.05529	0.05529	16.00	16.00	0.14%	0.14%
500	250,000	12,306.56	12,306.56	0.04923	0.04923	12,326.56	12,326.56	0.04931	0.04931	20.00	20.00	0.16%	0.16%
600	300,000	13,571.52	13,571.52	0.04524	0.04524	13,595.52	13,595.52	0.04532	0.04532	24.00	24.00	0.18%	0.18%
1,000 KW													
200	200,000	16,566.60	16,566.60	0.08283	0.08283	16,582.60	16,582.60	0.08291	0.08291	16.00	16.00	0.10%	0.10%
300	300,000	19,096.52	19,096.52	0.06366	0.06366	19,120.52	19,120.52	0.06374	0.06374	24.00	24.00	0.13%	0.13%
400	400,000	21,626.44	21,626.44	0.05407	0.05407	21,658.44	21,658.44	0.05415	0.05415	32.00	32.00	0.15%	0.15%
500	500,000	24,156.36	24,156.36	0.04831	0.04831	24,196.36	24,196.36	0.04839	0.04839	40.00	40.00	0.17%	0.17%
600	600,000	26,686.28	26,686.28	0.04448	0.04448	26,734.28	26,734.28	0.04456	0.04456	48.00	48.00	0.18%	0.18%

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
400	HOURS USE =	30%	26%	44%
500	HOURS USE =	27%	25%	48%
600	HOURS USE =	25%	24%	51%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 RIDER UPC RATES - DELIVERY ONLY  
SCHEDULE "GT LV"  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
<b>MAXIMUM AND ON PEAK DEMAND = 2,000 KW</b>													
200	400,000	32,676.44	32,676.44	0.08169	0.08169	32,708.44	32,708.44	0.08177	0.08177	32.00	32.00	0.10%	0.10%
300	600,000	37,736.28	37,736.28	0.06289	0.06289	37,784.28	37,784.28	0.06297	0.06297	48.00	48.00	0.13%	0.13%
400	800,000	42,796.12	42,796.12	0.05350	0.05350	42,860.12	42,860.12	0.05358	0.05358	64.00	64.00	0.15%	0.15%
500	1,000,000	47,855.96	47,855.96	0.04786	0.04786	47,935.96	47,935.96	0.04794	0.04794	80.00	80.00	0.17%	0.17%
600	1,200,000	52,915.80	52,915.80	0.04410	0.04410	53,011.80	53,011.80	0.04418	0.04418	96.00	96.00	0.18%	0.18%
<b>4,000 KW</b>													
200	800,000	64,896.12	64,896.12	0.08112	0.08112	64,960.12	64,960.12	0.08120	0.08120	64.00	64.00	0.10%	0.10%
300	1,200,000	75,015.80	75,015.80	0.06251	0.06251	75,111.80	75,111.80	0.06259	0.06259	96.00	96.00	0.13%	0.13%
400	1,600,000	85,135.48	85,135.48	0.05321	0.05321	85,263.48	85,263.48	0.05329	0.05329	128.00	128.00	0.15%	0.15%
500	2,000,000	95,255.16	95,255.16	0.04763	0.04763	95,415.16	95,415.16	0.04771	0.04771	160.00	160.00	0.17%	0.17%
600	2,400,000	105,374.84	105,374.84	0.04391	0.04391	105,566.84	105,566.84	0.04399	0.04399	192.00	192.00	0.18%	0.18%
<b>6,000 KW</b>													
200	1,200,000	97,115.80	97,115.80	0.08093	0.08093	97,211.80	97,211.80	0.08101	0.08101	96.00	96.00	0.10%	0.10%
300	1,800,000	112,295.32	112,295.32	0.06239	0.06239	112,439.32	112,439.32	0.06247	0.06247	144.00	144.00	0.13%	0.13%
400	2,400,000	127,474.84	127,474.84	0.05311	0.05311	127,666.84	127,666.84	0.05319	0.05319	192.00	192.00	0.15%	0.15%
500	3,000,000	142,654.36	142,654.36	0.04755	0.04755	142,894.36	142,894.36	0.04763	0.04763	240.00	240.00	0.17%	0.17%
600	3,600,000	157,833.88	157,833.88	0.04384	0.04384	158,121.88	158,121.88	0.04392	0.04392	288.00	288.00	0.18%	0.18%
<b>8,000 KW</b>													
200	1,600,000	129,335.48	129,335.48	0.08083	0.08083	129,463.48	129,463.48	0.08091	0.08091	128.00	128.00	0.10%	0.10%
300	2,400,000	149,574.84	149,574.84	0.06232	0.06232	149,766.84	149,766.84	0.06240	0.06240	192.00	192.00	0.13%	0.13%
400	3,200,000	169,814.20	169,814.20	0.05307	0.05307	170,070.20	170,070.20	0.05315	0.05315	256.00	256.00	0.15%	0.15%
500	4,000,000	190,053.56	190,053.56	0.04751	0.04751	190,373.56	190,373.56	0.04759	0.04759	320.00	320.00	0.17%	0.17%
600	4,800,000	210,292.92	210,292.92	0.04381	0.04381	210,676.92	210,676.92	0.04389	0.04389	384.00	384.00	0.18%	0.18%

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
400	HOURS USE =	30%	26%	44%
500	HOURS USE =	27%	25%	48%
600	HOURS USE =	25%	24%	51%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY

EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 RIDER UPC RATES - DELIVERY ONLY

SCHEDULE "GT 3A"

DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 1,000 KW													
200	200,000	12,231.48	12,229.48	0.06116	0.06115	12,243.48	12,241.48	0.06122	0.06121	12.00	12.00	0.10%	0.10%
300	300,000	14,128.40	14,125.40	0.04709	0.04708	14,146.40	14,143.40	0.04715	0.04714	18.00	18.00	0.13%	0.13%
400	400,000	16,025.32	16,021.32	0.04006	0.04005	16,049.32	16,045.32	0.04012	0.04011	24.00	24.00	0.15%	0.15%
500	500,000	17,922.24	17,917.24	0.03584	0.03583	17,952.24	17,947.24	0.03590	0.03589	30.00	30.00	0.17%	0.17%
600	600,000	19,819.16	19,813.16	0.03303	0.03302	19,855.16	19,849.16	0.03309	0.03308	36.00	36.00	0.18%	0.18%
2,000 KW													
200	400,000	24,275.32	24,271.32	0.06069	0.06068	24,299.32	24,295.32	0.06075	0.06074	24.00	24.00	0.10%	0.10%
300	600,000	28,069.16	28,063.16	0.04678	0.04677	28,105.16	28,099.16	0.04684	0.04683	36.00	36.00	0.13%	0.13%
400	800,000	31,863.00	31,855.00	0.03983	0.03982	31,911.00	31,903.00	0.03989	0.03988	48.00	48.00	0.15%	0.15%
500	1,000,000	35,656.84	35,646.84	0.03566	0.03565	35,716.84	35,706.84	0.03572	0.03571	60.00	60.00	0.17%	0.17%
600	1,200,000	39,450.68	39,438.68	0.03288	0.03287	39,522.68	39,510.68	0.03294	0.03293	72.00	72.00	0.18%	0.18%
5,000 KW													
200	1,000,000	60,406.84	60,396.84	0.06041	0.06040	60,466.84	60,456.84	0.06047	0.06046	60.00	60.00	0.10%	0.10%
300	1,500,000	69,891.44	69,876.44	0.04659	0.04658	69,981.44	69,966.44	0.04665	0.04664	90.00	90.00	0.13%	0.13%
400	2,000,000	79,376.04	79,356.04	0.03969	0.03968	79,496.04	79,476.04	0.03975	0.03974	120.00	120.00	0.15%	0.15%
500	2,500,000	88,860.64	88,835.64	0.03554	0.03553	89,010.64	88,985.64	0.03560	0.03559	150.00	150.00	0.17%	0.17%
600	3,000,000	98,345.24	98,315.24	0.03278	0.03277	98,525.24	98,495.24	0.03284	0.03283	180.00	180.00	0.18%	0.18%
7,500 KW													
200	1,500,000	90,516.44	90,501.44	0.06034	0.06033	90,606.44	90,591.44	0.06040	0.06039	90.00	90.00	0.10%	0.10%
300	2,250,000	104,743.34	104,720.84	0.04655	0.04654	104,878.34	104,855.84	0.04661	0.04660	135.00	135.00	0.13%	0.13%
400	3,000,000	118,970.24	118,940.24	0.03966	0.03965	119,150.24	119,120.24	0.03972	0.03971	180.00	180.00	0.15%	0.15%
500	3,750,000	133,197.14	133,159.64	0.03552	0.03551	133,422.14	133,384.64	0.03558	0.03557	225.00	225.00	0.17%	0.17%
600	4,500,000	147,424.04	147,379.04	0.03276	0.03275	147,694.04	147,649.04	0.03282	0.03281	270.00	270.00	0.18%	0.18%
KWH DISTRIBUTION													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 RIDER UPC RATES - DELIVERY ONLY  
SCHEDULE "GT 3A"  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 10,000 KW													
200	2,000,000	120,626.04	120,606.04	0.06031	0.06030	120,746.04	120,726.04	0.06037	0.06036	120.00	120.00	0.10%	0.10%
300	3,000,000	139,595.24	139,565.24	0.04653	0.04652	139,775.24	139,745.24	0.04659	0.04658	180.00	180.00	0.13%	0.13%
400	4,000,000	158,564.44	158,524.44	0.03964	0.03963	158,804.44	158,764.44	0.03970	0.03969	240.00	240.00	0.15%	0.15%
500	5,000,000	177,533.64	177,483.64	0.03551	0.03550	177,833.64	177,783.64	0.03557	0.03556	300.00	300.00	0.17%	0.17%
600	6,000,000	196,502.84	196,442.84	0.03275	0.03274	196,862.84	196,802.84	0.03281	0.03280	360.00	360.00	0.18%	0.18%
20,000 KW													
200	4,000,000	241,064.44	241,024.44	0.06027	0.06026	241,304.44	241,264.44	0.06033	0.06032	240.00	240.00	0.10%	0.10%
300	6,000,000	279,002.84	278,942.84	0.04650	0.04649	279,362.84	279,302.84	0.04656	0.04655	360.00	360.00	0.13%	0.13%
400	8,000,000	316,941.24	316,861.24	0.03962	0.03961	317,421.24	317,341.24	0.03968	0.03967	480.00	480.00	0.15%	0.15%
500	10,000,000	354,879.64	354,779.64	0.03549	0.03548	355,479.64	355,379.64	0.03555	0.03554	600.00	600.00	0.17%	0.17%
600	12,000,000	392,818.04	392,698.04	0.03273	0.03272	393,538.04	393,418.04	0.03279	0.03278	720.00	720.00	0.18%	0.18%
30,000 KW													
200	6,000,000	361,502.84	361,442.84	0.06025	0.06024	361,862.84	361,802.84	0.06031	0.06030	360.00	360.00	0.10%	0.10%
300	9,000,000	418,410.44	418,320.44	0.04649	0.04648	418,950.44	418,860.44	0.04655	0.04654	540.00	540.00	0.13%	0.13%
400	12,000,000	475,318.04	475,198.04	0.03961	0.03960	476,038.04	475,918.04	0.03967	0.03966	720.00	720.00	0.15%	0.15%
500	15,000,000	532,225.64	532,075.64	0.03548	0.03547	533,125.64	532,975.64	0.03554	0.03553	900.00	900.00	0.17%	0.17%
600	18,000,000	589,133.24	588,953.24	0.03273	0.03272	590,213.24	590,033.24	0.03279	0.03278	1,080.00	1,080.00	0.18%	0.18%
40,000 KW													
200	8,000,000	481,941.24	481,861.24	0.06024	0.06023	482,421.24	482,341.24	0.06030	0.06029	480.00	480.00	0.10%	0.10%
300	12,000,000	557,818.04	557,698.04	0.04648	0.04647	558,538.04	558,418.04	0.04654	0.04653	720.00	720.00	0.13%	0.13%
400	16,000,000	633,694.84	633,534.84	0.03961	0.03960	634,654.84	634,494.84	0.03967	0.03966	960.00	960.00	0.15%	0.15%
500	20,000,000	709,571.64	709,371.64	0.03548	0.03547	710,771.64	710,571.64	0.03554	0.03553	1,200.00	1,200.00	0.17%	0.17%
600	24,000,000	785,448.44	785,208.44	0.03273	0.03272	786,888.44	786,648.44	0.03279	0.03278	1,440.00	1,440.00	0.18%	0.18%
KWH DISTRIBUTION													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 RIDER UPC RATES - DELIVERY ONLY  
SCHEDULE "GT 3B"  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 10,000 KW													
200	2,000,000	37,701.78	38,501.78	0.01885	0.01925	37,721.78	38,521.78	0.01886	0.01926	20.00	20.00	0.05%	0.05%
300	3,000,000	50,440.98	51,240.98	0.01681	0.01708	50,470.98	51,270.98	0.01682	0.01709	30.00	30.00	0.06%	0.06%
400	4,000,000	63,180.18	63,980.18	0.01580	0.01600	63,220.18	64,020.18	0.01581	0.01601	40.00	40.00	0.06%	0.06%
500	5,000,000	75,919.38	76,719.38	0.01518	0.01534	75,969.38	76,769.38	0.01519	0.01535	50.00	50.00	0.07%	0.07%
600	6,000,000	88,658.58	89,458.58	0.01478	0.01491	88,718.58	89,518.58	0.01479	0.01492	60.00	60.00	0.07%	0.07%
20,000 KW													
200	4,000,000	74,980.18	76,580.18	0.01875	0.01915	75,020.18	76,620.18	0.01876	0.01916	40.00	40.00	0.05%	0.05%
300	6,000,000	100,458.58	102,058.58	0.01674	0.01701	100,518.58	102,118.58	0.01675	0.01702	60.00	60.00	0.06%	0.06%
400	8,000,000	125,936.98	127,536.98	0.01574	0.01594	126,016.98	127,616.98	0.01575	0.01595	80.00	80.00	0.06%	0.06%
500	10,000,000	151,415.38	153,015.38	0.01514	0.01530	151,515.38	153,115.38	0.01515	0.01531	100.00	100.00	0.07%	0.07%
600	12,000,000	176,893.78	178,493.78	0.01474	0.01487	177,013.78	178,613.78	0.01475	0.01488	120.00	120.00	0.07%	0.07%
30,000 KW													
200	6,000,000	112,258.58	114,658.58	0.01871	0.01911	112,318.58	114,718.58	0.01872	0.01912	60.00	60.00	0.05%	0.05%
300	9,000,000	150,476.18	152,876.18	0.01672	0.01699	150,566.18	152,966.18	0.01673	0.01700	90.00	90.00	0.06%	0.06%
400	12,000,000	188,693.78	191,093.78	0.01572	0.01592	188,813.78	191,213.78	0.01573	0.01593	120.00	120.00	0.06%	0.06%
500	15,000,000	226,911.38	229,311.38	0.01513	0.01529	227,061.38	229,461.38	0.01514	0.01530	150.00	150.00	0.07%	0.07%
600	18,000,000	265,128.98	267,528.98	0.01473	0.01486	265,308.98	267,708.98	0.01474	0.01487	180.00	180.00	0.07%	0.07%
40,000 KW													
200	8,000,000	149,536.98	152,736.98	0.01869	0.01909	149,616.98	152,816.98	0.01870	0.01910	80.00	80.00	0.05%	0.05%
300	12,000,000	200,493.78	203,693.78	0.01671	0.01697	200,613.78	203,813.78	0.01672	0.01698	120.00	120.00	0.06%	0.06%
400	16,000,000	251,450.58	254,650.58	0.01572	0.01592	251,610.58	254,810.58	0.01573	0.01593	160.00	160.00	0.06%	0.06%
500	20,000,000	302,407.38	305,607.38	0.01512	0.01528	302,607.38	305,807.38	0.01513	0.01529	200.00	200.00	0.07%	0.07%
600	24,000,000	353,364.18	356,564.18	0.01472	0.01486	353,604.18	356,804.18	0.01473	0.01487	240.00	240.00	0.07%	0.07%
KWH DISTRIBUTION													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 RIDER UPC RATES  
SCHEDULE "R"  
DISTRICT OF COLUMBIA

KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE					
	\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)	(\$)	(%)
	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	ANNUAL	ANNUAL
0	17.03	17.11	-	-	17.03	17.11	-	-	0.00	0.00	0.00%	0.00%	0.00	0.00%
10	17.32	17.40	1.73203	1.74003	17.32	17.40	1.73210	1.74010	0.00	0.00	0.00%	0.00%	0.00	0.00%
20	17.61	17.69	0.88053	0.88453	17.61	17.69	0.88060	0.88460	0.00	0.00	0.00%	0.00%	0.00	0.00%
30	17.90	17.98	0.59670	0.59936	17.90	17.98	0.59677	0.59943	0.00	0.00	0.00%	0.00%	0.00	0.00%
40	18.85	18.95	0.47115	0.47380	18.85	18.95	0.47122	0.47387	0.00	0.00	0.00%	0.00%	0.00	0.00%
50	19.79	19.92	0.39582	0.39847	19.79	19.93	0.39589	0.39854	0.00	0.00	0.00%	0.00%	0.00	0.00%
100	24.52	24.78	0.24516	0.24780	24.52	24.79	0.24523	0.24787	0.01	0.01	0.04%	0.04%	0.01	0.04%
200	33.97	34.49	0.16983	0.17246	33.98	34.51	0.16990	0.17253	0.01	0.01	0.03%	0.03%	0.01	0.03%
300	43.42	44.21	0.14472	0.14735	43.44	44.23	0.14479	0.14742	0.02	0.02	0.05%	0.05%	0.02	0.05%
400	52.87	53.92	0.13216	0.13480	52.89	53.95	0.13223	0.13487	0.03	0.03	0.06%	0.06%	0.03	0.06%
500	63.69	64.37	0.12737	0.12873	63.72	64.40	0.12744	0.12880	0.03	0.04	0.05%	0.06%	0.04	0.06%
<b>648</b>	<b>79.70</b>	<b>79.83</b>	<b>0.12300</b>	<b>0.12319</b>	<b>79.75</b>	<b>79.87</b>	<b>0.12307</b>	<b>0.12326</b>	<b>0.05</b>	<b>0.05</b>	<b>0.06%</b>	<b>0.06%</b>	<b>0.05</b>	<b>0.06%</b>
700	85.33	85.26	0.12190	0.12180	85.38	85.31	0.12197	0.12187	0.05	0.05	0.06%	0.06%	0.05	0.06%
750	90.74	90.49	0.12099	0.12065	90.79	90.54	0.12106	0.12072	0.05	0.05	0.06%	0.06%	0.05	0.06%
800	96.15	95.71	0.12019	0.11964	96.21	95.77	0.12026	0.11971	0.06	0.06	0.06%	0.06%	0.06	0.06%
850	101.56	100.93	0.11949	0.11875	101.62	100.99	0.11956	0.11882	0.06	0.06	0.06%	0.06%	0.06	0.06%
900	106.97	106.16	0.11886	0.11795	107.04	106.22	0.11893	0.11802	0.06	0.06	0.06%	0.06%	0.06	0.06%
950	112.39	111.38	0.11830	0.11724	112.45	111.45	0.11837	0.11731	0.07	0.07	0.06%	0.06%	0.07	0.06%
1,000	117.80	116.61	0.11780	0.11661	117.87	116.68	0.11787	0.11668	0.07	0.07	0.06%	0.06%	0.07	0.06%
1,250	144.85	142.73	0.11588	0.11418	144.94	142.81	0.11595	0.11425	0.09	0.09	0.06%	0.06%	0.09	0.06%
1,500	171.91	168.85	0.11460	0.11256	172.01	168.95	0.11467	0.11263	0.10	0.11	0.06%	0.07%	0.11	0.06%
1,750	198.96	194.96	0.11369	0.11141	199.08	195.09	0.11376	0.11148	0.12	0.12	0.06%	0.06%	0.12	0.06%
2,000	226.02	221.08	0.11301	0.11054	226.16	221.22	0.11308	0.11061	0.14	0.14	0.06%	0.06%	0.14	0.06%
2,250	253.07	247.20	0.11248	0.10987	253.23	247.36	0.11255	0.10994	0.16	0.16	0.06%	0.06%	0.16	0.06%
2,500	280.12	273.32	0.11205	0.10933	280.30	273.50	0.11212	0.10940	0.18	0.18	0.06%	0.07%	0.18	0.07%
3,000	334.23	325.56	0.11141	0.10852	334.44	325.77	0.11148	0.10859	0.21	0.21	0.06%	0.06%	0.21	0.06%
3,500	388.34	377.80	0.11096	0.10794	388.59	378.05	0.11103	0.10801	0.25	0.25	0.06%	0.07%	0.25	0.07%
4,000	442.45	430.04	0.11061	0.10751	442.73	430.32	0.11068	0.10758	0.28	0.28	0.06%	0.07%	0.28	0.06%
5,000	550.67	534.52	0.11013	0.10690	551.02	534.87	0.11020	0.10697	0.35	0.35	0.06%	0.07%	0.35	0.06%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 RIDER UPC RATES  
SCHEDULE "MMA"  
DISTRICT OF COLUMBIA

KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE					
	\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)	(\$)	(%)
	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	ANNUAL	ANNUAL
0	13.57	13.99	-	-	13.57	13.99	-	-	0.00	0.00	0.00%	0.00%	0.00	0.00%
100	20.44	21.82	0.20436	0.21821	20.44	21.83	0.20442	0.21827	0.01	0.01	0.05%	0.05%	0.01	0.05%
200	29.04	31.80	0.14520	0.15901	29.05	31.81	0.14526	0.15907	0.01	0.01	0.03%	0.03%	0.01	0.03%
300	37.64	41.78	0.12547	0.13928	37.66	41.80	0.12553	0.13934	0.02	0.02	0.05%	0.05%	0.02	0.05%
400	46.25	51.76	0.11561	0.12941	46.27	51.79	0.11567	0.12947	0.02	0.02	0.04%	0.04%	0.02	0.04%
500	56.10	62.41	0.11220	0.12483	56.13	62.44	0.11226	0.12489	0.03	0.03	0.05%	0.05%	0.03	0.05%
1000	105.36	115.66	0.10536	0.11566	105.42	115.72	0.10542	0.11572	0.06	0.06	0.06%	0.05%	0.06	0.05%
2000	203.89	222.15	0.10195	0.11107	204.01	222.27	0.10201	0.11113	0.12	0.12	0.06%	0.05%	0.12	0.06%
3000	302.42	328.63	0.10081	0.10954	302.60	328.81	0.10087	0.10960	0.18	0.18	0.06%	0.05%	0.18	0.06%
4000	400.95	435.12	0.10024	0.10878	401.19	435.36	0.10030	0.10884	0.24	0.24	0.06%	0.06%	0.24	0.06%
5000	499.48	541.61	0.09990	0.10832	499.78	541.91	0.09996	0.10838	0.30	0.30	0.06%	0.06%	0.30	0.06%
6000	598.01	648.10	0.09967	0.10802	598.37	648.46	0.09973	0.10808	0.36	0.36	0.06%	0.06%	0.36	0.06%
7000	696.53	754.59	0.09950	0.10780	696.95	755.01	0.09956	0.10786	0.42	0.42	0.06%	0.06%	0.42	0.06%
7500	745.80	807.83	0.09944	0.10771	746.25	808.28	0.09950	0.10777	0.45	0.45	0.06%	0.06%	0.45	0.06%
8000	795.06	861.08	0.09938	0.10763	795.54	861.56	0.09944	0.10769	0.48	0.48	0.06%	0.06%	0.48	0.06%
8500	844.33	914.32	0.09933	0.10757	844.84	914.83	0.09939	0.10763	0.51	0.51	0.06%	0.06%	0.51	0.06%
9000	893.59	967.57	0.09929	0.10751	894.13	968.11	0.09935	0.10757	0.54	0.54	0.06%	0.06%	0.54	0.06%
9500	942.86	1,020.81	0.09925	0.10745	943.43	1,021.38	0.09931	0.10751	0.57	0.57	0.06%	0.06%	0.57	0.06%
10000	992.12	1,074.06	0.09921	0.10741	992.72	1,074.66	0.09927	0.10747	0.60	0.60	0.06%	0.06%	0.60	0.06%
12500	1,238.44	1,340.28	0.09908	0.10722	1,239.19	1,341.03	0.09914	0.10728	0.75	0.75	0.06%	0.06%	0.75	0.06%
15000	1,484.76	1,606.50	0.09898	0.10710	1,485.66	1,607.40	0.09904	0.10716	0.90	0.90	0.06%	0.06%	0.90	0.06%
17500	1,731.09	1,872.72	0.09892	0.10701	1,732.14	1,873.77	0.09898	0.10707	1.05	1.05	0.06%	0.06%	1.05	0.06%
20000	1,977.41	2,138.94	0.09887	0.10695	1,978.61	2,140.14	0.09893	0.10701	1.20	1.20	0.06%	0.06%	1.20	0.06%
22500	2,223.73	2,405.16	0.09883	0.10690	2,225.08	2,406.51	0.09889	0.10696	1.35	1.35	0.06%	0.06%	1.35	0.06%
25000	2,470.05	2,671.39	0.09880	0.10686	2,471.55	2,672.89	0.09886	0.10692	1.50	1.50	0.06%	0.06%	1.50	0.06%
30000	2,962.69	3,203.83	0.09876	0.10679	2,964.49	3,205.63	0.09882	0.10685	1.80	1.80	0.06%	0.06%	1.80	0.06%
35000	3,455.34	3,736.27	0.09872	0.10675	3,457.44	3,738.37	0.09878	0.10681	2.10	2.10	0.06%	0.06%	2.10	0.06%
40000	3,947.98	4,268.72	0.09870	0.10672	3,950.38	4,271.12	0.09876	0.10678	2.40	2.40	0.06%	0.06%	2.40	0.06%
50000	4,933.27	5,333.60	0.09867	0.10667	4,936.27	5,336.60	0.09873	0.10673	3.00	3.00	0.06%	0.06%	3.00	0.06%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY

EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 RIDER UPC RATES

SCHEDULE "GS ND"

DISTRICT OF COLUMBIA

KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE					
	\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)	(\$)	(%)
	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	ANNUAL	ANNUAL
0	27.42	27.42	-	-	27.42	27.42	-	-	0.00	0.00	0.00%	0.00%	0.00	0.00%
10	28.63	28.57	2.86336	2.85674	28.64	28.57	2.86352	2.85690	0.00	0.00	0.00%	0.00%	0.00	0.00%
20	29.85	29.71	1.49236	1.48574	29.85	29.72	1.49252	1.48590	0.00	0.00	0.00%	0.00%	0.00	0.00%
30	31.06	30.86	1.03536	1.02874	31.07	30.87	1.03552	1.02890	0.00	0.00	0.00%	0.00%	0.00	0.00%
40	32.27	32.01	0.80686	0.80024	32.28	32.02	0.80702	0.80040	0.01	0.01	0.03%	0.03%	0.01	0.03%
50	33.49	33.16	0.66976	0.66314	33.50	33.17	0.66992	0.66330	0.01	0.01	0.03%	0.03%	0.01	0.03%
100	39.56	38.89	0.39556	0.38894	39.57	38.91	0.39572	0.38910	0.02	0.02	0.05%	0.05%	0.02	0.05%
150	45.62	44.63	0.30416	0.29754	45.65	44.66	0.30432	0.29770	0.02	0.02	0.04%	0.04%	0.02	0.04%
200	51.69	50.37	0.25846	0.25184	51.72	50.40	0.25862	0.25200	0.03	0.03	0.06%	0.06%	0.03	0.06%
250	57.76	56.11	0.23104	0.22442	57.80	56.15	0.23120	0.22458	0.04	0.04	0.07%	0.07%	0.04	0.07%
300	63.83	61.84	0.21276	0.20614	63.88	61.89	0.21292	0.20630	0.05	0.05	0.08%	0.08%	0.05	0.08%
400	75.96	73.32	0.18991	0.18329	76.03	73.38	0.19007	0.18345	0.06	0.06	0.08%	0.08%	0.06	0.08%
500	88.10	84.79	0.17620	0.16958	88.18	84.87	0.17636	0.16974	0.08	0.08	0.09%	0.09%	0.08	0.09%
600	100.24	96.26	0.16706	0.16044	100.33	96.36	0.16722	0.16060	0.10	0.10	0.10%	0.10%	0.10	0.10%
700	112.37	107.74	0.16053	0.15391	112.48	107.85	0.16069	0.15407	0.11	0.11	0.10%	0.10%	0.11	0.10%
800	124.51	119.21	0.15564	0.14902	124.64	119.34	0.15580	0.14918	0.13	0.13	0.10%	0.11%	0.13	0.11%
900	136.64	130.69	0.15183	0.14521	136.79	130.83	0.15199	0.14537	0.14	0.14	0.10%	0.11%	0.14	0.11%
1,000	148.78	142.16	0.14878	0.14216	148.94	142.32	0.14894	0.14232	0.16	0.16	0.11%	0.11%	0.16	0.11%
1,250	179.12	170.85	0.14330	0.13668	179.32	171.05	0.14346	0.13684	0.20	0.20	0.11%	0.12%	0.20	0.11%
1,500	209.46	199.53	0.13964	0.13302	209.70	199.77	0.13980	0.13318	0.24	0.24	0.11%	0.12%	0.24	0.12%
1,750	239.80	228.22	0.13703	0.13041	240.08	228.50	0.13719	0.13057	0.28	0.28	0.12%	0.12%	0.28	0.12%
2,000	270.14	256.90	0.13507	0.12845	270.46	257.22	0.13523	0.12861	0.32	0.32	0.12%	0.12%	0.32	0.12%
2,500	330.82	314.27	0.13233	0.12571	331.22	314.67	0.13249	0.12587	0.40	0.40	0.12%	0.13%	0.40	0.12%
3,000	391.50	371.64	0.13050	0.12388	391.98	372.12	0.13066	0.12404	0.48	0.48	0.12%	0.13%	0.48	0.13%
3,500	452.18	429.01	0.12919	0.12257	452.74	429.57	0.12935	0.12273	0.56	0.56	0.12%	0.13%	0.56	0.13%
4,000	512.86	486.38	0.12822	0.12160	513.50	487.02	0.12838	0.12176	0.64	0.64	0.12%	0.13%	0.64	0.13%
5,000	634.22	601.12	0.12684	0.12022	635.02	601.92	0.12700	0.12038	0.80	0.80	0.13%	0.13%	0.80	0.13%
6,000	755.58	715.86	0.12593	0.11931	756.54	716.82	0.12609	0.11947	0.96	0.96	0.13%	0.13%	0.96	0.13%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in .

POTOMAC ELECTRIC POWER COMPANY

EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 RIDER UPC RATES

SCHEDULE "GS D LV"  
DISTRICT OF COLUMBIA

KW	Hours	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
			\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
			SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
10	100	1000	220.67	227.59	0.22067	0.22759	220.99	227.91	0.22099	0.22791	0.32	0.32	0.15%	0.14%
	200	2000	331.08	344.92	0.16554	0.17246	331.72	345.56	0.16586	0.17278	0.64	0.64	0.19%	0.19%
	300	3000	441.48	462.24	0.14716	0.15408	442.44	463.20	0.14748	0.15440	0.96	0.96	0.22%	0.21%
	400	4000	551.88	579.56	0.13797	0.14489	553.16	580.84	0.13829	0.14521	1.28	1.28	0.23%	0.22%
	500	5000	662.29	696.89	0.13246	0.13938	663.89	698.49	0.13278	0.13970	1.60	1.60	0.24%	0.23%
	600	6000	772.69	814.21	0.12878	0.13570	774.61	816.13	0.12910	0.13602	1.92	1.92	0.25%	0.24%
25	100	2,500	498.93	516.23	0.19957	0.20649	499.73	517.03	0.19989	0.20681	0.80	0.80	0.16%	0.15%
	200	5,000	774.94	809.54	0.15499	0.16191	776.54	811.14	0.15531	0.16223	1.60	1.60	0.21%	0.20%
	300	7,500	1,050.94	1,102.84	0.14013	0.14705	1,053.34	1,105.24	0.14045	0.14737	2.40	2.40	0.23%	0.22%
	400	10,000	1,326.95	1,396.15	0.13270	0.13962	1,330.15	1,399.35	0.13302	0.13994	3.20	3.20	0.24%	0.23%
	500	12,500	1,602.96	1,689.46	0.12824	0.13516	1,606.96	1,693.46	0.12856	0.13548	4.00	4.00	0.25%	0.24%
	600	15,000	1,878.97	1,982.77	0.12526	0.13218	1,883.77	1,987.57	0.12558	0.13250	4.80	4.80	0.26%	0.24%
50	100	5,000	962.69	997.29	0.19254	0.19946	964.29	998.89	0.19286	0.19978	1.60	1.60	0.17%	0.16%
	200	10,000	1,514.70	1,583.90	0.15147	0.15839	1,517.90	1,587.10	0.15179	0.15871	3.20	3.20	0.21%	0.20%
	300	15,000	2,066.72	2,170.52	0.13778	0.14470	2,071.52	2,175.32	0.13810	0.14502	4.80	4.80	0.23%	0.22%
	400	20,000	2,618.73	2,757.13	0.13094	0.13786	2,625.13	2,763.53	0.13126	0.13818	6.40	6.40	0.24%	0.23%
	500	25,000	3,170.75	3,343.75	0.12683	0.13375	3,178.75	3,351.75	0.12715	0.13407	8.00	8.00	0.25%	0.24%
	600	30,000	3,722.77	3,930.37	0.12409	0.13101	3,732.37	3,939.97	0.12441	0.13133	9.60	9.60	0.26%	0.24%
75	100	7,500	1,426.44	1,478.34	0.19019	0.19711	1,428.84	1,480.74	0.19051	0.19743	2.40	2.40	0.17%	0.16%
	200	15,000	2,254.47	2,358.27	0.15030	0.15722	2,259.27	2,363.07	0.15062	0.15754	4.80	4.80	0.21%	0.20%
	300	22,500	3,082.49	3,238.19	0.13700	0.14392	3,089.69	3,245.39	0.13732	0.14424	7.20	7.20	0.23%	0.22%
	400	30,000	3,910.52	4,118.12	0.13035	0.13727	3,920.12	4,127.72	0.13067	0.13759	9.60	9.60	0.25%	0.23%
	500	37,500	4,738.54	4,998.04	0.12636	0.13328	4,750.54	5,010.04	0.12668	0.13360	12.00	12.00	0.25%	0.24%
	600	45,000	5,566.56	5,877.96	0.12370	0.13062	5,580.96	5,892.36	0.12402	0.13094	14.40	14.40	0.26%	0.24%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 RIDER UPC RATES - DELIVERY ONLY  
SCHEDULE "MGT LV "  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 25 KW													
200	5,000	859.51	859.51	0.17190	0.17190	860.46	860.46	0.17209	0.17209	0.95	0.95	0.11%	0.11%
300	7,500	922.75	922.75	0.12303	0.12303	924.18	924.18	0.12322	0.12322	1.42	1.42	0.15%	0.15%
400	10,000	986.00	986.00	0.09860	0.09860	987.90	987.90	0.09879	0.09879	1.90	1.90	0.19%	0.19%
500	12,500	1,049.25	1,049.25	0.08394	0.08394	1,051.63	1,051.63	0.08413	0.08413	2.38	2.38	0.23%	0.23%
600	15,000	1,112.50	1,112.50	0.07417	0.07417	1,115.35	1,115.35	0.07436	0.07436	2.85	2.85	0.26%	0.26%
50 KW													
200	10,000	1,262.25	1,262.25	0.12623	0.12623	1,264.15	1,264.15	0.12642	0.12642	1.90	1.90	0.15%	0.15%
300	15,000	1,388.75	1,388.75	0.09258	0.09258	1,391.60	1,391.60	0.09277	0.09277	2.85	2.85	0.21%	0.21%
400	20,000	1,515.24	1,515.24	0.07576	0.07576	1,519.04	1,519.04	0.07595	0.07595	3.80	3.80	0.25%	0.25%
500	25,000	1,641.74	1,641.74	0.06567	0.06567	1,646.49	1,646.49	0.06586	0.06586	4.75	4.75	0.29%	0.29%
600	30,000	1,768.24	1,768.24	0.05894	0.05894	1,773.94	1,773.94	0.05913	0.05913	5.70	5.70	0.32%	0.32%
75 KW													
200	15,000	1,665.00	1,665.00	0.11100	0.11100	1,667.85	1,667.85	0.11119	0.11119	2.85	2.85	0.17%	0.17%
300	22,500	1,854.74	1,854.74	0.08243	0.08243	1,859.02	1,859.02	0.08262	0.08262	4.28	4.28	0.23%	0.23%
400	30,000	2,044.49	2,044.49	0.06815	0.06815	2,050.19	2,050.19	0.06834	0.06834	5.70	5.70	0.28%	0.28%
500	37,500	2,234.23	2,234.23	0.05958	0.05958	2,241.36	2,241.36	0.05977	0.05977	7.13	7.13	0.32%	0.32%
600	45,000	2,423.97	2,423.97	0.05387	0.05387	2,432.52	2,432.52	0.05406	0.05406	8.55	8.55	0.35%	0.35%
100 KW													
200	20,000	2,067.74	2,067.74	0.10339	0.10339	2,071.54	2,071.54	0.10358	0.10358	3.80	3.80	0.18%	0.18%
300	30,000	2,320.74	2,320.74	0.07736	0.07736	2,326.44	2,326.44	0.07755	0.07755	5.70	5.70	0.25%	0.25%
400	40,000	2,573.73	2,573.73	0.06434	0.06434	2,581.33	2,581.33	0.06453	0.06453	7.60	7.60	0.30%	0.30%
500	50,000	2,826.72	2,826.72	0.05653	0.05653	2,836.22	2,836.22	0.05672	0.05672	9.50	9.50	0.34%	0.34%
600	60,000	3,079.71	3,079.71	0.05133	0.05133	3,091.11	3,091.11	0.05152	0.05152	11.40	11.40	0.37%	0.37%
KWH DISTRIBUTION													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 RIDER UPC RATES - DELIVERY ONLY  
SCHEDULE "MGT LV "  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
<b>MAXIMUM AND ON PEAK DEMAND = 200 KW</b>													
200	40,000	3,678.73	3,678.73	0.09197	0.09197	3,686.33	3,686.33	0.09216	0.09216	7.60	7.60	0.21%	0.21%
300	60,000	4,184.71	4,184.71	0.06975	0.06975	4,196.11	4,196.11	0.06994	0.06994	11.40	11.40	0.27%	0.27%
400	80,000	4,690.70	4,690.70	0.05863	0.05863	4,705.90	4,705.90	0.05882	0.05882	15.20	15.20	0.32%	0.32%
500	100,000	5,196.68	5,196.68	0.05197	0.05197	5,215.68	5,215.68	0.05216	0.05216	19.00	19.00	0.37%	0.37%
600	120,000	5,702.66	5,702.66	0.04752	0.04752	5,725.46	5,725.46	0.04771	0.04771	22.80	22.80	0.40%	0.40%
<b>400 KW</b>													
200	80,000	6,900.70	6,900.70	0.08626	0.08626	6,915.90	6,915.90	0.08645	0.08645	15.20	15.20	0.22%	0.22%
300	120,000	7,912.66	7,912.66	0.06594	0.06594	7,935.46	7,935.46	0.06613	0.06613	22.80	22.80	0.29%	0.29%
400	160,000	8,924.63	8,924.63	0.05578	0.05578	8,955.03	8,955.03	0.05597	0.05597	30.40	30.40	0.34%	0.34%
500	200,000	9,936.60	9,936.60	0.04968	0.04968	9,974.60	9,974.60	0.04987	0.04987	38.00	38.00	0.38%	0.38%
600	240,000	10,948.57	10,948.57	0.04562	0.04562	10,994.17	10,994.17	0.04581	0.04581	45.60	45.60	0.42%	0.42%
<b>600 KW</b>													
200	120,000	10,122.66	10,122.66	0.08436	0.08436	10,145.46	10,145.46	0.08455	0.08455	22.80	22.80	0.23%	0.23%
300	180,000	11,640.62	11,640.62	0.06467	0.06467	11,674.82	11,674.82	0.06486	0.06486	34.20	34.20	0.29%	0.29%
400	240,000	13,158.57	13,158.57	0.05483	0.05483	13,204.17	13,204.17	0.05502	0.05502	45.60	45.60	0.35%	0.35%
500	300,000	14,676.52	14,676.52	0.04892	0.04892	14,733.52	14,733.52	0.04911	0.04911	57.00	57.00	0.39%	0.39%
600	360,000	16,194.47	16,194.47	0.04498	0.04498	16,262.87	16,262.87	0.04517	0.04517	68.40	68.40	0.42%	0.42%
<b>800 KW</b>													
200	160,000	13,344.63	13,344.63	0.08340	0.08340	13,375.03	13,375.03	0.08359	0.08359	30.40	30.40	0.23%	0.23%
300	240,000	15,368.57	15,368.57	0.06404	0.06404	15,414.17	15,414.17	0.06423	0.06423	45.60	45.60	0.30%	0.30%
400	320,000	17,392.50	17,392.50	0.05435	0.05435	17,453.30	17,453.30	0.05454	0.05454	60.80	60.80	0.35%	0.35%
500	400,000	19,416.44	19,416.44	0.04854	0.04854	19,492.44	19,492.44	0.04873	0.04873	76.00	76.00	0.39%	0.39%
600	480,000	21,440.38	21,440.38	0.04467	0.04467	21,531.58	21,531.58	0.04486	0.04486	91.20	91.20	0.43%	0.43%

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
400	HOURS USE =	30%	26%	44%
500	HOURS USE =	27%	25%	48%
600	HOURS USE =	25%	24%	51%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY

EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 RIDER UPC RATES - DELIVERY ONLY

SCHEDULE "GT LV"  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 100 KW													
200	20,000	2,067.74	2,067.74	0.10339	0.10339	2,071.54	2,071.54	0.10358	0.10358	3.80	3.80	0.18%	0.18%
300	30,000	2,320.74	2,320.74	0.07736	0.07736	2,326.44	2,326.44	0.07755	0.07755	5.70	5.70	0.25%	0.25%
400	40,000	2,573.73	2,573.73	0.06434	0.06434	2,581.33	2,581.33	0.06453	0.06453	7.60	7.60	0.30%	0.30%
500	50,000	2,826.72	2,826.72	0.05653	0.05653	2,836.22	2,836.22	0.05672	0.05672	9.50	9.50	0.34%	0.34%
600	60,000	3,079.71	3,079.71	0.05133	0.05133	3,091.11	3,091.11	0.05152	0.05152	11.40	11.40	0.37%	0.37%
300 KW													
200	60,000	5,289.71	5,289.71	0.08816	0.08816	5,301.11	5,301.11	0.08835	0.08835	11.40	11.40	0.22%	0.22%
300	90,000	6,048.69	6,048.69	0.06721	0.06721	6,065.79	6,065.79	0.06740	0.06740	17.10	17.10	0.28%	0.28%
400	120,000	6,807.66	6,807.66	0.05673	0.05673	6,830.46	6,830.46	0.05692	0.05692	22.80	22.80	0.33%	0.33%
500	150,000	7,566.64	7,566.64	0.05044	0.05044	7,595.14	7,595.14	0.05063	0.05063	28.50	28.50	0.38%	0.38%
600	180,000	8,325.62	8,325.62	0.04625	0.04625	8,359.82	8,359.82	0.04644	0.04644	34.20	34.20	0.41%	0.41%
500 KW													
200	100,000	8,511.68	8,511.68	0.08512	0.08512	8,530.68	8,530.68	0.08531	0.08531	19.00	19.00	0.22%	0.22%
300	150,000	9,776.64	9,776.64	0.06518	0.06518	9,805.14	9,805.14	0.06537	0.06537	28.50	28.50	0.29%	0.29%
400	200,000	11,041.60	11,041.60	0.05521	0.05521	11,079.60	11,079.60	0.05540	0.05540	38.00	38.00	0.34%	0.34%
500	250,000	12,306.56	12,306.56	0.04923	0.04923	12,354.06	12,354.06	0.04942	0.04942	47.50	47.50	0.39%	0.39%
600	300,000	13,571.52	13,571.52	0.04524	0.04524	13,628.52	13,628.52	0.04543	0.04543	57.00	57.00	0.42%	0.42%
1,000 KW													
200	200,000	16,566.60	16,566.60	0.08283	0.08283	16,604.60	16,604.60	0.08302	0.08302	38.00	38.00	0.23%	0.23%
300	300,000	19,096.52	19,096.52	0.06366	0.06366	19,153.52	19,153.52	0.06385	0.06385	57.00	57.00	0.30%	0.30%
400	400,000	21,626.44	21,626.44	0.05407	0.05407	21,702.44	21,702.44	0.05426	0.05426	76.00	76.00	0.35%	0.35%
500	500,000	24,156.36	24,156.36	0.04831	0.04831	24,251.36	24,251.36	0.04850	0.04850	95.00	95.00	0.39%	0.39%
600	600,000	26,686.28	26,686.28	0.04448	0.04448	26,800.28	26,800.28	0.04467	0.04467	114.00	114.00	0.43%	0.43%

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
400	HOURS USE =	30%	26%	44%
500	HOURS USE =	27%	25%	48%
600	HOURS USE =	25%	24%	51%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 RIDER UPC RATES - DELIVERY ONLY  
SCHEDULE "GT LV"  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
<b>MAXIMUM AND ON PEAK DEMAND = 2,000 KW</b>													
200	400,000	32,676.44	32,676.44	0.08169	0.08169	32,752.44	32,752.44	0.08188	0.08188	76.00	76.00	0.23%	0.23%
300	600,000	37,736.28	37,736.28	0.06289	0.06289	37,850.28	37,850.28	0.06308	0.06308	114.00	114.00	0.30%	0.30%
400	800,000	42,796.12	42,796.12	0.05350	0.05350	42,948.12	42,948.12	0.05369	0.05369	152.00	152.00	0.36%	0.36%
500	1,000,000	47,855.96	47,855.96	0.04786	0.04786	48,045.96	48,045.96	0.04805	0.04805	190.00	190.00	0.40%	0.40%
600	1,200,000	52,915.80	52,915.80	0.04410	0.04410	53,143.80	53,143.80	0.04429	0.04429	228.00	228.00	0.43%	0.43%
<b>4,000 KW</b>													
200	800,000	64,896.12	64,896.12	0.08112	0.08112	65,048.12	65,048.12	0.08131	0.08131	152.00	152.00	0.23%	0.23%
300	1,200,000	75,015.80	75,015.80	0.06251	0.06251	75,243.80	75,243.80	0.06270	0.06270	228.00	228.00	0.30%	0.30%
400	1,600,000	85,135.48	85,135.48	0.05321	0.05321	85,439.48	85,439.48	0.05340	0.05340	304.00	304.00	0.36%	0.36%
500	2,000,000	95,255.16	95,255.16	0.04763	0.04763	95,635.16	95,635.16	0.04782	0.04782	380.00	380.00	0.40%	0.40%
600	2,400,000	105,374.84	105,374.84	0.04391	0.04391	105,830.84	105,830.84	0.04410	0.04410	456.00	456.00	0.43%	0.43%
<b>6,000 KW</b>													
200	1,200,000	97,115.80	97,115.80	0.08093	0.08093	97,343.80	97,343.80	0.08112	0.08112	228.00	228.00	0.23%	0.23%
300	1,800,000	112,295.32	112,295.32	0.06239	0.06239	112,637.32	112,637.32	0.06258	0.06258	342.00	342.00	0.30%	0.30%
400	2,400,000	127,474.84	127,474.84	0.05311	0.05311	127,930.84	127,930.84	0.05330	0.05330	456.00	456.00	0.36%	0.36%
500	3,000,000	142,654.36	142,654.36	0.04755	0.04755	143,224.36	143,224.36	0.04774	0.04774	570.00	570.00	0.40%	0.40%
600	3,600,000	157,833.88	157,833.88	0.04384	0.04384	158,517.88	158,517.88	0.04403	0.04403	684.00	684.00	0.43%	0.43%
<b>8,000 KW</b>													
200	1,600,000	129,335.48	129,335.48	0.08083	0.08083	129,639.48	129,639.48	0.08102	0.08102	304.00	304.00	0.24%	0.24%
300	2,400,000	149,574.84	149,574.84	0.06232	0.06232	150,030.84	150,030.84	0.06251	0.06251	456.00	456.00	0.30%	0.30%
400	3,200,000	169,814.20	169,814.20	0.05307	0.05307	170,422.20	170,422.20	0.05326	0.05326	608.00	608.00	0.36%	0.36%
500	4,000,000	190,053.56	190,053.56	0.04751	0.04751	190,813.56	190,813.56	0.04770	0.04770	760.00	760.00	0.40%	0.40%
600	4,800,000	210,292.92	210,292.92	0.04381	0.04381	211,204.92	211,204.92	0.04400	0.04400	912.00	912.00	0.43%	0.43%

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
400	HOURS USE =	30%	26%	44%
500	HOURS USE =	27%	25%	48%
600	HOURS USE =	25%	24%	51%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY

EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 RIDER UPC RATES - DELIVERY ONLY

SCHEDULE "GT 3A"

DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 1,000 KW													
200	200,000	12,231.48	12,229.48	0.06116	0.06115	12,255.48	12,253.48	0.06128	0.06127	24.00	24.00	0.20%	0.20%
300	300,000	14,128.40	14,125.40	0.04709	0.04708	14,164.40	14,161.40	0.04721	0.04720	36.00	36.00	0.25%	0.25%
400	400,000	16,025.32	16,021.32	0.04006	0.04005	16,073.32	16,069.32	0.04018	0.04017	48.00	48.00	0.30%	0.30%
500	500,000	17,922.24	17,917.24	0.03584	0.03583	17,982.24	17,977.24	0.03596	0.03595	60.00	60.00	0.33%	0.33%
600	600,000	19,819.16	19,813.16	0.03303	0.03302	19,891.16	19,885.16	0.03315	0.03314	72.00	72.00	0.36%	0.36%
2,000 KW													
200	400,000	24,275.32	24,271.32	0.06069	0.06068	24,323.32	24,319.32	0.06081	0.06080	48.00	48.00	0.20%	0.20%
300	600,000	28,069.16	28,063.16	0.04678	0.04677	28,141.16	28,135.16	0.04690	0.04689	72.00	72.00	0.26%	0.26%
400	800,000	31,863.00	31,855.00	0.03983	0.03982	31,959.00	31,951.00	0.03995	0.03994	96.00	96.00	0.30%	0.30%
500	1,000,000	35,656.84	35,646.84	0.03566	0.03565	35,776.84	35,766.84	0.03578	0.03577	120.00	120.00	0.34%	0.34%
600	1,200,000	39,450.68	39,438.68	0.03288	0.03287	39,594.68	39,582.68	0.03300	0.03299	144.00	144.00	0.37%	0.37%
5,000 KW													
200	1,000,000	60,406.84	60,396.84	0.06041	0.06040	60,526.84	60,516.84	0.06053	0.06052	120.00	120.00	0.20%	0.20%
300	1,500,000	69,891.44	69,876.44	0.04659	0.04658	70,071.44	70,056.44	0.04671	0.04670	180.00	180.00	0.26%	0.26%
400	2,000,000	79,376.04	79,356.04	0.03969	0.03968	79,616.04	79,596.04	0.03981	0.03980	240.00	240.00	0.30%	0.30%
500	2,500,000	88,860.64	88,835.64	0.03554	0.03553	89,160.64	89,135.64	0.03566	0.03565	300.00	300.00	0.34%	0.34%
600	3,000,000	98,345.24	98,315.24	0.03278	0.03277	98,705.24	98,675.24	0.03290	0.03289	360.00	360.00	0.37%	0.37%
7,500 KW													
200	1,500,000	90,516.44	90,501.44	0.06034	0.06033	90,696.44	90,681.44	0.06046	0.06045	180.00	180.00	0.20%	0.20%
300	2,250,000	104,743.34	104,720.84	0.04655	0.04654	105,013.34	104,990.84	0.04667	0.04666	270.00	270.00	0.26%	0.26%
400	3,000,000	118,970.24	118,940.24	0.03966	0.03965	119,330.24	119,300.24	0.03978	0.03977	360.00	360.00	0.30%	0.30%
500	3,750,000	133,197.14	133,159.64	0.03552	0.03551	133,647.14	133,609.64	0.03564	0.03563	450.00	450.00	0.34%	0.34%
600	4,500,000	147,424.04	147,379.04	0.03276	0.03275	147,964.04	147,919.04	0.03288	0.03287	540.00	540.00	0.37%	0.37%
KWH DISTRIBUTION													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 RIDER UPC RATES - DELIVERY ONLY  
SCHEDULE "GT 3A"  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 10,000 KW													
200	2,000,000	120,626.04	120,606.04	0.06031	0.06030	120,866.04	120,846.04	0.06043	0.06042	240.00	240.00	0.20%	0.20%
300	3,000,000	139,595.24	139,565.24	0.04653	0.04652	139,955.24	139,925.24	0.04665	0.04664	360.00	360.00	0.26%	0.26%
400	4,000,000	158,564.44	158,524.44	0.03964	0.03963	159,044.44	159,004.44	0.03976	0.03975	480.00	480.00	0.30%	0.30%
500	5,000,000	177,533.64	177,483.64	0.03551	0.03550	178,133.64	178,083.64	0.03563	0.03562	600.00	600.00	0.34%	0.34%
600	6,000,000	196,502.84	196,442.84	0.03275	0.03274	197,222.84	197,162.84	0.03287	0.03286	720.00	720.00	0.37%	0.37%
20,000 KW													
200	4,000,000	241,064.44	241,024.44	0.06027	0.06026	241,544.44	241,504.44	0.06039	0.06038	480.00	480.00	0.20%	0.20%
300	6,000,000	279,002.84	278,942.84	0.04650	0.04649	279,722.84	279,662.84	0.04662	0.04661	720.00	720.00	0.26%	0.26%
400	8,000,000	316,941.24	316,861.24	0.03962	0.03961	317,901.24	317,821.24	0.03974	0.03973	960.00	960.00	0.30%	0.30%
500	10,000,000	354,879.64	354,779.64	0.03549	0.03548	356,079.64	355,979.64	0.03561	0.03560	1,200.00	1,200.00	0.34%	0.34%
600	12,000,000	392,818.04	392,698.04	0.03273	0.03272	394,258.04	394,138.04	0.03285	0.03284	1,440.00	1,440.00	0.37%	0.37%
30,000 KW													
200	6,000,000	361,502.84	361,442.84	0.06025	0.06024	362,222.84	362,162.84	0.06037	0.06036	720.00	720.00	0.20%	0.20%
300	9,000,000	418,410.44	418,320.44	0.04649	0.04648	419,490.44	419,400.44	0.04661	0.04660	1,080.00	1,080.00	0.26%	0.26%
400	12,000,000	475,318.04	475,198.04	0.03961	0.03960	476,758.04	476,638.04	0.03973	0.03972	1,440.00	1,440.00	0.30%	0.30%
500	15,000,000	532,225.64	532,075.64	0.03548	0.03547	534,025.64	533,875.64	0.03560	0.03559	1,800.00	1,800.00	0.34%	0.34%
600	18,000,000	589,133.24	588,953.24	0.03273	0.03272	591,293.24	591,113.24	0.03285	0.03284	2,160.00	2,160.00	0.37%	0.37%
40,000 KW													
200	8,000,000	481,941.24	481,861.24	0.06024	0.06023	482,901.24	482,821.24	0.06036	0.06035	960.00	960.00	0.20%	0.20%
300	12,000,000	557,818.04	557,698.04	0.04648	0.04647	559,258.04	559,138.04	0.04660	0.04659	1,440.00	1,440.00	0.26%	0.26%
400	16,000,000	633,694.84	633,534.84	0.03961	0.03960	635,614.84	635,454.84	0.03973	0.03972	1,920.00	1,920.00	0.30%	0.30%
500	20,000,000	709,571.64	709,371.64	0.03548	0.03547	711,971.64	711,771.64	0.03560	0.03559	2,400.00	2,400.00	0.34%	0.34%
600	24,000,000	785,448.44	785,208.44	0.03273	0.03272	788,328.44	788,088.44	0.03285	0.03284	2,880.00	2,880.00	0.37%	0.37%
KWH DISTRIBUTION													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 RIDER UPC RATES - DELIVERY ONLY  
SCHEDULE "GT 3B"  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 10,000 KW													
200	2,000,000	37,701.78	38,501.78	0.01885	0.01925	37,721.78	38,521.78	0.01886	0.01926	20.00	20.00	0.05%	0.05%
300	3,000,000	50,440.98	51,240.98	0.01681	0.01708	50,470.98	51,270.98	0.01682	0.01709	30.00	30.00	0.06%	0.06%
400	4,000,000	63,180.18	63,980.18	0.01580	0.01600	63,220.18	64,020.18	0.01581	0.01601	40.00	40.00	0.06%	0.06%
500	5,000,000	75,919.38	76,719.38	0.01518	0.01534	75,969.38	76,769.38	0.01519	0.01535	50.00	50.00	0.07%	0.07%
600	6,000,000	88,658.58	89,458.58	0.01478	0.01491	88,718.58	89,518.58	0.01479	0.01492	60.00	60.00	0.07%	0.07%
20,000 KW													
200	4,000,000	74,980.18	76,580.18	0.01875	0.01915	75,020.18	76,620.18	0.01876	0.01916	40.00	40.00	0.05%	0.05%
300	6,000,000	100,458.58	102,058.58	0.01674	0.01701	100,518.58	102,118.58	0.01675	0.01702	60.00	60.00	0.06%	0.06%
400	8,000,000	125,936.98	127,536.98	0.01574	0.01594	126,016.98	127,616.98	0.01575	0.01595	80.00	80.00	0.06%	0.06%
500	10,000,000	151,415.38	153,015.38	0.01514	0.01530	151,515.38	153,115.38	0.01515	0.01531	100.00	100.00	0.07%	0.07%
600	12,000,000	176,893.78	178,493.78	0.01474	0.01487	177,013.78	178,613.78	0.01475	0.01488	120.00	120.00	0.07%	0.07%
30,000 KW													
200	6,000,000	112,258.58	114,658.58	0.01871	0.01911	112,318.58	114,718.58	0.01872	0.01912	60.00	60.00	0.05%	0.05%
300	9,000,000	150,476.18	152,876.18	0.01672	0.01699	150,566.18	152,966.18	0.01673	0.01700	90.00	90.00	0.06%	0.06%
400	12,000,000	188,693.78	191,093.78	0.01572	0.01592	188,813.78	191,213.78	0.01573	0.01593	120.00	120.00	0.06%	0.06%
500	15,000,000	226,911.38	229,311.38	0.01513	0.01529	227,061.38	229,461.38	0.01514	0.01530	150.00	150.00	0.07%	0.07%
600	18,000,000	265,128.98	267,528.98	0.01473	0.01486	265,308.98	267,708.98	0.01474	0.01487	180.00	180.00	0.07%	0.07%
40,000 KW													
200	8,000,000	149,536.98	152,736.98	0.01869	0.01909	149,616.98	152,816.98	0.01870	0.01910	80.00	80.00	0.05%	0.05%
300	12,000,000	200,493.78	203,693.78	0.01671	0.01697	200,613.78	203,813.78	0.01672	0.01698	120.00	120.00	0.06%	0.06%
400	16,000,000	251,450.58	254,650.58	0.01572	0.01592	251,610.58	254,810.58	0.01573	0.01593	160.00	160.00	0.06%	0.06%
500	20,000,000	302,407.38	305,607.38	0.01512	0.01528	302,607.38	305,807.38	0.01513	0.01529	200.00	200.00	0.07%	0.07%
600	24,000,000	353,364.18	356,564.18	0.01472	0.01486	353,604.18	356,804.18	0.01473	0.01487	240.00	240.00	0.07%	0.07%
KWH DISTRIBUTION													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**Pepco (E)-4**

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 UNDERGROUND RIDER RATES  
SCHEDULE "R"  
DISTRICT OF COLUMBIA

KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE					
	\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)	(\$)	(%)
	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	ANNUAL	ANNUAL
0	17.03	17.11	-	-	17.03	17.11	-	-	0.00	0.00	0.00%	0.00%	0.00	0.00%
10	17.32	17.40	1.73203	1.74003	17.32	17.40	1.73194	1.73994	0.00	0.00	0.00%	0.00%	0.00	0.00%
20	17.61	17.69	0.88053	0.88453	17.61	17.69	0.88044	0.88444	0.00	0.00	0.00%	0.00%	0.00	0.00%
30	17.90	17.98	0.59670	0.59936	17.90	17.98	0.59661	0.59927	0.00	0.00	0.00%	0.00%	0.00	0.00%
40	18.85	18.95	0.47115	0.47380	18.84	18.95	0.47106	0.47371	0.00	0.00	0.00%	0.00%	0.00	0.00%
50	19.79	19.92	0.39582	0.39847	19.79	19.92	0.39573	0.39838	0.00	0.00	0.00%	0.00%	0.00	0.00%
100	24.52	24.78	0.24516	0.24780	24.51	24.77	0.24507	0.24771	-0.01	-0.01	-0.04%	-0.04%	-0.01	-0.04%
200	33.97	34.49	0.16983	0.17246	33.95	34.47	0.16974	0.17237	-0.02	-0.02	-0.06%	-0.06%	-0.02	-0.06%
300	43.42	44.21	0.14472	0.14735	43.39	44.18	0.14463	0.14726	-0.03	-0.03	-0.07%	-0.07%	-0.03	-0.07%
400	52.87	53.92	0.13216	0.13480	52.83	53.88	0.13207	0.13471	-0.04	-0.04	-0.08%	-0.07%	-0.04	-0.07%
500	63.69	64.37	0.12737	0.12873	63.64	64.32	0.12728	0.12864	-0.05	-0.04	-0.08%	-0.06%	-0.04	-0.07%
<b>648</b>	<b>79.70</b>	<b>79.83</b>	<b>0.12300</b>	<b>0.12319</b>	<b>79.65</b>	<b>79.77</b>	<b>0.12291</b>	<b>0.12310</b>	<b>-0.06</b>	<b>-0.06</b>	<b>-0.08%</b>	<b>-0.08%</b>	<b>-0.06</b>	<b>-0.08%</b>
700	85.33	85.26	0.12190	0.12180	85.27	85.20	0.12181	0.12171	-0.06	-0.06	-0.07%	-0.07%	-0.06	-0.07%
750	90.74	90.49	0.12099	0.12065	90.67	90.42	0.12090	0.12056	-0.07	-0.07	-0.08%	-0.08%	-0.07	-0.08%
800	96.15	95.71	0.12019	0.11964	96.08	95.64	0.12010	0.11955	-0.07	-0.07	-0.07%	-0.07%	-0.07	-0.07%
850	101.56	100.93	0.11949	0.11875	101.49	100.86	0.11940	0.11866	-0.08	-0.08	-0.08%	-0.08%	-0.08	-0.08%
900	106.97	106.16	0.11886	0.11795	106.89	106.08	0.11877	0.11786	-0.08	-0.08	-0.07%	-0.08%	-0.08	-0.08%
950	112.39	111.38	0.11830	0.11724	112.30	111.30	0.11821	0.11715	-0.09	-0.09	-0.08%	-0.08%	-0.09	-0.08%
1,000	117.80	116.61	0.11780	0.11661	117.71	116.52	0.11771	0.11652	-0.09	-0.09	-0.08%	-0.08%	-0.09	-0.08%
1,250	144.85	142.73	0.11588	0.11418	144.74	142.61	0.11579	0.11409	-0.11	-0.11	-0.08%	-0.08%	-0.11	-0.08%
1,500	171.91	168.85	0.11460	0.11256	171.77	168.71	0.11451	0.11247	-0.14	-0.13	-0.08%	-0.08%	-0.13	-0.08%
1,750	198.96	194.96	0.11369	0.11141	198.80	194.81	0.11360	0.11132	-0.16	-0.16	-0.08%	-0.08%	-0.16	-0.08%
2,000	226.02	221.08	0.11301	0.11054	225.84	220.90	0.11292	0.11045	-0.18	-0.18	-0.08%	-0.08%	-0.18	-0.08%
2,250	253.07	247.20	0.11248	0.10987	252.87	247.00	0.11239	0.10978	-0.20	-0.20	-0.08%	-0.08%	-0.20	-0.08%
2,500	280.12	273.32	0.11205	0.10933	279.90	273.10	0.11196	0.10924	-0.23	-0.22	-0.08%	-0.08%	-0.22	-0.08%
3,000	334.23	325.56	0.11141	0.10852	333.96	325.29	0.11132	0.10843	-0.27	-0.27	-0.08%	-0.08%	-0.27	-0.08%
3,500	388.34	377.80	0.11096	0.10794	388.03	377.49	0.11087	0.10785	-0.31	-0.31	-0.08%	-0.08%	-0.31	-0.08%
4,000	442.45	430.04	0.11061	0.10751	442.09	429.68	0.11052	0.10742	-0.36	-0.36	-0.08%	-0.08%	-0.36	-0.08%
5,000	550.67	534.52	0.11013	0.10690	550.22	534.07	0.11004	0.10681	-0.45	-0.45	-0.08%	-0.08%	-0.45	-0.08%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 UNDERGROUND RIDER RATES  
SCHEDULE "MMA"  
DISTRICT OF COLUMBIA

KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE					
	\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)	(\$)	(%)
	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	ANNUAL	ANNUAL
0	13.57	13.99	-	-	13.57	13.99	-	-	0.00	0.00	0.00%	0.00%	0.00	0.00%
100	20.44	21.82	0.20436	0.21821	20.42	21.81	0.20421	0.21806	-0.02	-0.02	-0.10%	-0.09%	-0.02	-0.09%
200	29.04	31.80	0.14520	0.15901	29.01	31.77	0.14505	0.15886	-0.03	-0.03	-0.10%	-0.09%	-0.03	-0.10%
300	37.64	41.78	0.12547	0.13928	37.60	41.74	0.12532	0.13913	-0.05	-0.05	-0.13%	-0.12%	-0.05	-0.12%
400	46.25	51.76	0.11561	0.12941	46.19	51.70	0.11546	0.12926	-0.06	-0.06	-0.13%	-0.12%	-0.06	-0.12%
500	56.10	62.41	0.11220	0.12483	56.02	62.34	0.11205	0.12468	-0.08	-0.08	-0.14%	-0.13%	-0.08	-0.13%
1000	105.36	115.66	0.10536	0.11566	105.21	115.51	0.10521	0.11551	-0.15	-0.15	-0.14%	-0.13%	-0.15	-0.13%
2000	203.89	222.15	0.10195	0.11107	203.59	221.85	0.10180	0.11092	-0.30	-0.30	-0.15%	-0.14%	-0.30	-0.14%
3000	302.42	328.63	0.10081	0.10954	301.97	328.18	0.10066	0.10939	-0.45	-0.45	-0.15%	-0.14%	-0.45	-0.14%
4000	400.95	435.12	0.10024	0.10878	400.35	434.52	0.10009	0.10863	-0.60	-0.60	-0.15%	-0.14%	-0.60	-0.14%
5000	499.48	541.61	0.09990	0.10832	498.73	540.86	0.09975	0.10817	-0.75	-0.75	-0.15%	-0.14%	-0.75	-0.14%
6000	598.01	648.10	0.09967	0.10802	597.11	647.20	0.09952	0.10787	-0.90	-0.90	-0.15%	-0.14%	-0.90	-0.14%
7000	696.53	754.59	0.09950	0.10780	695.48	753.54	0.09935	0.10765	-1.05	-1.05	-0.15%	-0.14%	-1.05	-0.14%
7500	745.80	807.83	0.09944	0.10771	744.67	806.71	0.09929	0.10756	-1.13	-1.13	-0.15%	-0.14%	-1.13	-0.14%
8000	795.06	861.08	0.09938	0.10763	793.86	859.88	0.09923	0.10748	-1.20	-1.20	-0.15%	-0.14%	-1.20	-0.14%
8500	844.33	914.32	0.09933	0.10757	843.05	913.05	0.09918	0.10742	-1.27	-1.28	-0.15%	-0.14%	-1.28	-0.14%
9000	893.59	967.57	0.09929	0.10751	892.24	966.22	0.09914	0.10736	-1.35	-1.35	-0.15%	-0.14%	-1.35	-0.14%
9500	942.86	1,020.81	0.09925	0.10745	941.43	1,019.39	0.09910	0.10730	-1.42	-1.42	-0.15%	-0.14%	-1.42	-0.14%
10000	992.12	1,074.06	0.09921	0.10741	990.62	1,072.56	0.09906	0.10726	-1.50	-1.50	-0.15%	-0.14%	-1.50	-0.14%
12500	1,238.44	1,340.28	0.09908	0.10722	1,236.57	1,338.40	0.09893	0.10707	-1.88	-1.88	-0.15%	-0.14%	-1.88	-0.14%
15000	1,484.76	1,606.50	0.09898	0.10710	1,482.51	1,604.25	0.09883	0.10695	-2.25	-2.25	-0.15%	-0.14%	-2.25	-0.14%
17500	1,731.09	1,872.72	0.09892	0.10701	1,728.46	1,870.10	0.09877	0.10686	-2.63	-2.63	-0.15%	-0.14%	-2.63	-0.15%
20000	1,977.41	2,138.94	0.09887	0.10695	1,974.41	2,135.94	0.09872	0.10680	-3.00	-3.00	-0.15%	-0.14%	-3.00	-0.14%
22500	2,223.73	2,405.16	0.09883	0.10690	2,220.35	2,401.79	0.09868	0.10675	-3.38	-3.38	-0.15%	-0.14%	-3.38	-0.15%
25000	2,470.05	2,671.39	0.09880	0.10686	2,466.30	2,667.64	0.09865	0.10671	-3.75	-3.75	-0.15%	-0.14%	-3.75	-0.14%
30000	2,962.69	3,203.83	0.09876	0.10679	2,958.19	3,199.33	0.09861	0.10664	-4.50	-4.50	-0.15%	-0.14%	-4.50	-0.15%
35000	3,455.34	3,736.27	0.09872	0.10675	3,450.09	3,731.02	0.09857	0.10660	-5.25	-5.25	-0.15%	-0.14%	-5.25	-0.15%
40000	3,947.98	4,268.72	0.09870	0.10672	3,941.98	4,262.72	0.09855	0.10657	-6.00	-6.00	-0.15%	-0.14%	-6.00	-0.15%
50000	4,933.27	5,333.60	0.09867	0.10667	4,925.77	5,326.10	0.09852	0.10652	-7.50	-7.50	-0.15%	-0.14%	-7.50	-0.15%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY

EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 UNDERGROUND RIDER RATES

SCHEDULE "GS ND"

DISTRICT OF COLUMBIA

KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE					
	\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)	(\$)	(%)
	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	ANNUAL	ANNUAL
0	27.42	27.42	-	-	27.42	27.42	-	-	0.00	0.00	0.00%	0.00%	0.00	0.00%
10	28.63	28.57	2.86336	2.85674	28.62	28.56	2.86225	2.85563	-0.01	-0.01	-0.03%	-0.04%	-0.01	-0.03%
20	29.85	29.71	1.49236	1.48574	29.83	29.69	1.49125	1.48463	-0.02	-0.02	-0.07%	-0.07%	-0.02	-0.07%
30	31.06	30.86	1.03536	1.02874	31.03	30.83	1.03425	1.02763	-0.03	-0.03	-0.10%	-0.10%	-0.03	-0.10%
40	32.27	32.01	0.80686	0.80024	32.23	31.97	0.80575	0.79913	-0.04	-0.04	-0.12%	-0.12%	-0.04	-0.12%
50	33.49	33.16	0.66976	0.66314	33.43	33.10	0.66865	0.66203	-0.06	-0.06	-0.18%	-0.18%	-0.06	-0.18%
100	39.56	38.89	0.39556	0.38894	39.45	38.78	0.39445	0.38783	-0.11	-0.11	-0.28%	-0.28%	-0.11	-0.28%
150	45.62	44.63	0.30416	0.29754	45.46	44.46	0.30305	0.29643	-0.17	-0.17	-0.37%	-0.38%	-0.17	-0.38%
200	51.69	50.37	0.25846	0.25184	51.47	50.15	0.25735	0.25073	-0.22	-0.22	-0.43%	-0.44%	-0.22	-0.43%
250	57.76	56.11	0.23104	0.22442	57.48	55.83	0.22993	0.22331	-0.28	-0.28	-0.48%	-0.50%	-0.28	-0.49%
300	63.83	61.84	0.21276	0.20614	63.50	61.51	0.21165	0.20503	-0.33	-0.33	-0.52%	-0.53%	-0.33	-0.53%
400	75.96	73.32	0.18991	0.18329	75.52	72.87	0.18880	0.18218	-0.44	-0.44	-0.58%	-0.60%	-0.44	-0.59%
500	88.10	84.79	0.17620	0.16958	87.55	84.24	0.17509	0.16847	-0.55	-0.55	-0.62%	-0.65%	-0.55	-0.64%
600	100.24	96.26	0.16706	0.16044	99.57	95.60	0.16595	0.15933	-0.67	-0.67	-0.67%	-0.70%	-0.67	-0.68%
700	112.37	107.74	0.16053	0.15391	111.60	106.96	0.15942	0.15280	-0.78	-0.78	-0.69%	-0.72%	-0.78	-0.71%
800	124.51	119.21	0.15564	0.14902	123.62	118.32	0.15453	0.14791	-0.89	-0.89	-0.71%	-0.75%	-0.89	-0.73%
900	136.64	130.69	0.15183	0.14521	135.65	129.69	0.15072	0.14410	-1.00	-1.00	-0.73%	-0.77%	-1.00	-0.75%
1,000	148.78	142.16	0.14878	0.14216	147.67	141.05	0.14767	0.14105	-1.11	-1.11	-0.75%	-0.78%	-1.11	-0.77%
1,250	179.12	170.85	0.14330	0.13668	177.73	169.46	0.14219	0.13557	-1.39	-1.39	-0.78%	-0.81%	-1.39	-0.80%
1,500	209.46	199.53	0.13964	0.13302	207.80	197.87	0.13853	0.13191	-1.67	-1.66	-0.80%	-0.83%	-1.66	-0.82%
1,750	239.80	228.22	0.13703	0.13041	237.86	226.27	0.13592	0.12930	-1.94	-1.94	-0.81%	-0.85%	-1.94	-0.83%
2,000	270.14	256.90	0.13507	0.12845	267.92	254.68	0.13396	0.12734	-2.22	-2.22	-0.82%	-0.86%	-2.22	-0.85%
2,500	330.82	314.27	0.13233	0.12571	328.05	311.50	0.13122	0.12460	-2.77	-2.77	-0.84%	-0.88%	-2.77	-0.86%
3,000	391.50	371.64	0.13050	0.12388	388.17	368.31	0.12939	0.12277	-3.33	-3.33	-0.85%	-0.90%	-3.33	-0.88%
3,500	452.18	429.01	0.12919	0.12257	448.30	425.13	0.12808	0.12146	-3.88	-3.88	-0.86%	-0.90%	-3.88	-0.88%
4,000	512.86	486.38	0.12822	0.12160	508.42	481.94	0.12711	0.12049	-4.44	-4.44	-0.87%	-0.91%	-4.44	-0.89%
5,000	634.22	601.12	0.12684	0.12022	628.67	595.57	0.12573	0.11911	-5.55	-5.55	-0.88%	-0.92%	-5.55	-0.90%
6,000	755.58	715.86	0.12593	0.11931	748.92	709.20	0.12482	0.11820	-6.66	-6.66	-0.88%	-0.93%	-6.66	-0.91%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in .

POTOMAC ELECTRIC POWER COMPANY

EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 UNDERGROUND RIDER RATES

SCHEDULE "GS D LV"  
DISTRICT OF COLUMBIA

KW	Hours	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
			\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
			SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
10	100	1000	220.67	227.59	0.22067	0.22759	221.46	228.38	0.22146	0.22838	0.79	0.79	0.36%	0.35%
	200	2000	331.08	344.92	0.16554	0.17246	332.66	346.50	0.16633	0.17325	1.58	1.58	0.48%	0.46%
	300	3000	441.48	462.24	0.14716	0.15408	443.85	464.61	0.14795	0.15487	2.37	2.37	0.54%	0.51%
	400	4000	551.88	579.56	0.13797	0.14489	555.04	582.72	0.13876	0.14568	3.16	3.16	0.57%	0.55%
	500	5000	662.29	696.89	0.13246	0.13938	666.24	700.84	0.13325	0.14017	3.95	3.95	0.60%	0.57%
	600	6000	772.69	814.21	0.12878	0.13570	777.43	818.95	0.12957	0.13649	4.74	4.74	0.61%	0.58%
25	100	2,500	498.93	516.23	0.19957	0.20649	500.90	518.20	0.20036	0.20728	1.98	1.97	0.40%	0.38%
	200	5,000	774.94	809.54	0.15499	0.16191	778.89	813.49	0.15578	0.16270	3.95	3.95	0.51%	0.49%
	300	7,500	1,050.94	1,102.84	0.14013	0.14705	1,056.87	1,108.77	0.14092	0.14784	5.92	5.93	0.56%	0.54%
	400	10,000	1,326.95	1,396.15	0.13270	0.13962	1,334.85	1,404.05	0.13349	0.14041	7.90	7.90	0.60%	0.57%
	500	12,500	1,602.96	1,689.46	0.12824	0.13516	1,612.84	1,699.34	0.12903	0.13595	9.88	9.88	0.62%	0.58%
	600	15,000	1,878.97	1,982.77	0.12526	0.13218	1,890.82	1,994.62	0.12605	0.13297	11.85	11.85	0.63%	0.60%
50	100	5,000	962.69	997.29	0.19254	0.19946	966.64	1,001.24	0.19333	0.20025	3.95	3.95	0.41%	0.40%
	200	10,000	1,514.70	1,583.90	0.15147	0.15839	1,522.60	1,591.80	0.15226	0.15918	7.90	7.90	0.52%	0.50%
	300	15,000	2,066.72	2,170.52	0.13778	0.14470	2,078.57	2,182.37	0.13857	0.14549	11.85	11.85	0.57%	0.55%
	400	20,000	2,618.73	2,757.13	0.13094	0.13786	2,634.53	2,772.93	0.13173	0.13865	15.80	15.80	0.60%	0.57%
	500	25,000	3,170.75	3,343.75	0.12683	0.13375	3,190.50	3,363.50	0.12762	0.13454	19.75	19.75	0.62%	0.59%
	600	30,000	3,722.77	3,930.37	0.12409	0.13101	3,746.47	3,954.07	0.12488	0.13180	23.70	23.70	0.64%	0.60%
75	100	7,500	1,426.44	1,478.34	0.19019	0.19711	1,432.37	1,484.27	0.19098	0.19790	5.93	5.93	0.42%	0.40%
	200	15,000	2,254.47	2,358.27	0.15030	0.15722	2,266.32	2,370.12	0.15109	0.15801	11.85	11.85	0.53%	0.50%
	300	22,500	3,082.49	3,238.19	0.13700	0.14392	3,100.27	3,255.97	0.13779	0.14471	17.77	17.77	0.58%	0.55%
	400	30,000	3,910.52	4,118.12	0.13035	0.13727	3,934.22	4,141.82	0.13114	0.13806	23.70	23.70	0.61%	0.58%
	500	37,500	4,738.54	4,998.04	0.12636	0.13328	4,768.17	5,027.67	0.12715	0.13407	29.63	29.63	0.63%	0.59%
	600	45,000	5,566.56	5,877.96	0.12370	0.13062	5,602.11	5,913.51	0.12449	0.13141	35.55	35.55	0.64%	0.60%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 UNDERGROUND RIDER RATES - DELIVERY ONLY  
SCHEDULE "MGT LV "  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 25 KW													
200	5,000	859.51	859.51	0.17190	0.17190	858.41	858.41	0.17168	0.17168	(1.10)	(1.10)	-0.13%	-0.13%
300	7,500	922.75	922.75	0.12303	0.12303	921.10	921.10	0.12281	0.12281	(1.65)	(1.65)	-0.18%	-0.18%
400	10,000	986.00	986.00	0.09860	0.09860	983.80	983.80	0.09838	0.09838	(2.20)	(2.20)	-0.22%	-0.22%
500	12,500	1,049.25	1,049.25	0.08394	0.08394	1,046.50	1,046.50	0.08372	0.08372	(2.75)	(2.75)	-0.26%	-0.26%
600	15,000	1,112.50	1,112.50	0.07417	0.07417	1,109.20	1,109.20	0.07395	0.07395	(3.30)	(3.30)	-0.30%	-0.30%
50 KW													
200	10,000	1,262.25	1,262.25	0.12623	0.12623	1,260.05	1,260.05	0.12601	0.12601	(2.20)	(2.20)	-0.17%	-0.17%
300	15,000	1,388.75	1,388.75	0.09258	0.09258	1,385.45	1,385.45	0.09236	0.09236	(3.30)	(3.30)	-0.24%	-0.24%
400	20,000	1,515.24	1,515.24	0.07576	0.07576	1,510.84	1,510.84	0.07554	0.07554	(4.40)	(4.40)	-0.29%	-0.29%
500	25,000	1,641.74	1,641.74	0.06567	0.06567	1,636.24	1,636.24	0.06545	0.06545	(5.50)	(5.50)	-0.34%	-0.34%
600	30,000	1,768.24	1,768.24	0.05894	0.05894	1,761.64	1,761.64	0.05872	0.05872	(6.60)	(6.60)	-0.37%	-0.37%
75 KW													
200	15,000	1,665.00	1,665.00	0.11100	0.11100	1,661.70	1,661.70	0.11078	0.11078	(3.30)	(3.30)	-0.20%	-0.20%
300	22,500	1,854.74	1,854.74	0.08243	0.08243	1,849.79	1,849.79	0.08221	0.08221	(4.95)	(4.95)	-0.27%	-0.27%
400	30,000	2,044.49	2,044.49	0.06815	0.06815	2,037.89	2,037.89	0.06793	0.06793	(6.60)	(6.60)	-0.32%	-0.32%
500	37,500	2,234.23	2,234.23	0.05958	0.05958	2,225.98	2,225.98	0.05936	0.05936	(8.25)	(8.25)	-0.37%	-0.37%
600	45,000	2,423.97	2,423.97	0.05387	0.05387	2,414.07	2,414.07	0.05365	0.05365	(9.90)	(9.90)	-0.41%	-0.41%
100 KW													
200	20,000	2,067.74	2,067.74	0.10339	0.10339	2,063.34	2,063.34	0.10317	0.10317	(4.40)	(4.40)	-0.21%	-0.21%
300	30,000	2,320.74	2,320.74	0.07736	0.07736	2,314.14	2,314.14	0.07714	0.07714	(6.60)	(6.60)	-0.28%	-0.28%
400	40,000	2,573.73	2,573.73	0.06434	0.06434	2,564.93	2,564.93	0.06412	0.06412	(8.80)	(8.80)	-0.34%	-0.34%
500	50,000	2,826.72	2,826.72	0.05653	0.05653	2,815.72	2,815.72	0.05631	0.05631	(11.00)	(11.00)	-0.39%	-0.39%
600	60,000	3,079.71	3,079.71	0.05133	0.05133	3,066.51	3,066.51	0.05111	0.05111	(13.20)	(13.20)	-0.43%	-0.43%

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
400	HOURS USE =	30%	26%	44%
500	HOURS USE =	27%	25%	48%
600	HOURS USE =	25%	24%	51%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 UNDERGROUND RIDER RATES - DELIVERY ONLY  
SCHEDULE "MGT LV "  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
<b>MAXIMUM AND ON PEAK DEMAND = 200 KW</b>													
200	40,000	3,678.73	3,678.73	0.09197	0.09197	3,669.93	3,669.93	0.09175	0.09175	(8.80)	(8.80)	-0.24%	-0.24%
300	60,000	4,184.71	4,184.71	0.06975	0.06975	4,171.51	4,171.51	0.06953	0.06953	(13.20)	(13.20)	-0.32%	-0.32%
400	80,000	4,690.70	4,690.70	0.05863	0.05863	4,673.10	4,673.10	0.05841	0.05841	(17.60)	(17.60)	-0.38%	-0.38%
500	100,000	5,196.68	5,196.68	0.05197	0.05197	5,174.68	5,174.68	0.05175	0.05175	(22.00)	(22.00)	-0.42%	-0.42%
600	120,000	5,702.66	5,702.66	0.04752	0.04752	5,676.26	5,676.26	0.04730	0.04730	(26.40)	(26.40)	-0.46%	-0.46%
<b>400 KW</b>													
200	80,000	6,900.70	6,900.70	0.08626	0.08626	6,883.10	6,883.10	0.08604	0.08604	(17.60)	(17.60)	-0.26%	-0.26%
300	120,000	7,912.66	7,912.66	0.06594	0.06594	7,886.26	7,886.26	0.06572	0.06572	(26.40)	(26.40)	-0.33%	-0.33%
400	160,000	8,924.63	8,924.63	0.05578	0.05578	8,889.43	8,889.43	0.05556	0.05556	(35.20)	(35.20)	-0.39%	-0.39%
500	200,000	9,936.60	9,936.60	0.04968	0.04968	9,892.60	9,892.60	0.04946	0.04946	(44.00)	(44.00)	-0.44%	-0.44%
600	240,000	10,948.57	10,948.57	0.04562	0.04562	10,895.77	10,895.77	0.04540	0.04540	(52.80)	(52.80)	-0.48%	-0.48%
<b>600 KW</b>													
200	120,000	10,122.66	10,122.66	0.08436	0.08436	10,096.26	10,096.26	0.08414	0.08414	(26.40)	(26.40)	-0.26%	-0.26%
300	180,000	11,640.62	11,640.62	0.06467	0.06467	11,601.02	11,601.02	0.06445	0.06445	(39.60)	(39.60)	-0.34%	-0.34%
400	240,000	13,158.57	13,158.57	0.05483	0.05483	13,105.77	13,105.77	0.05461	0.05461	(52.80)	(52.80)	-0.40%	-0.40%
500	300,000	14,676.52	14,676.52	0.04892	0.04892	14,610.52	14,610.52	0.04870	0.04870	(66.00)	(66.00)	-0.45%	-0.45%
600	360,000	16,194.47	16,194.47	0.04498	0.04498	16,115.27	16,115.27	0.04476	0.04476	(79.20)	(79.20)	-0.49%	-0.49%
<b>800 KW</b>													
200	160,000	13,344.63	13,344.63	0.08340	0.08340	13,309.43	13,309.43	0.08318	0.08318	(35.20)	(35.20)	-0.26%	-0.26%
300	240,000	15,368.57	15,368.57	0.06404	0.06404	15,315.77	15,315.77	0.06382	0.06382	(52.80)	(52.80)	-0.34%	-0.34%
400	320,000	17,392.50	17,392.50	0.05435	0.05435	17,322.10	17,322.10	0.05413	0.05413	(70.40)	(70.40)	-0.40%	-0.40%
500	400,000	19,416.44	19,416.44	0.04854	0.04854	19,328.44	19,328.44	0.04832	0.04832	(88.00)	(88.00)	-0.45%	-0.45%
600	480,000	21,440.38	21,440.38	0.04467	0.04467	21,334.78	21,334.78	0.04445	0.04445	(105.60)	(105.60)	-0.49%	-0.49%

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
400	HOURS USE =	30%	26%	44%
500	HOURS USE =	27%	25%	48%
600	HOURS USE =	25%	24%	51%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY

EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 UNDERGROUND RIDER RATES - DELIVERY ONLY

SCHEDULE "GT LV"  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 100 KW													
200	20,000	2,067.74	2,067.74	0.10339	0.10339	2,063.34	2,063.34	0.10317	0.10317	(4.40)	(4.40)	-0.21%	-0.21%
300	30,000	2,320.74	2,320.74	0.07736	0.07736	2,314.14	2,314.14	0.07714	0.07714	(6.60)	(6.60)	-0.28%	-0.28%
400	40,000	2,573.73	2,573.73	0.06434	0.06434	2,564.93	2,564.93	0.06412	0.06412	(8.80)	(8.80)	-0.34%	-0.34%
500	50,000	2,826.72	2,826.72	0.05653	0.05653	2,815.72	2,815.72	0.05631	0.05631	(11.00)	(11.00)	-0.39%	-0.39%
600	60,000	3,079.71	3,079.71	0.05133	0.05133	3,066.51	3,066.51	0.05111	0.05111	(13.20)	(13.20)	-0.43%	-0.43%
300 KW													
200	60,000	5,289.71	5,289.71	0.08816	0.08816	5,276.51	5,276.51	0.08794	0.08794	(13.20)	(13.20)	-0.25%	-0.25%
300	90,000	6,048.69	6,048.69	0.06721	0.06721	6,028.89	6,028.89	0.06699	0.06699	(19.80)	(19.80)	-0.33%	-0.33%
400	120,000	6,807.66	6,807.66	0.05673	0.05673	6,781.26	6,781.26	0.05651	0.05651	(26.40)	(26.40)	-0.39%	-0.39%
500	150,000	7,566.64	7,566.64	0.05044	0.05044	7,533.64	7,533.64	0.05022	0.05022	(33.00)	(33.00)	-0.44%	-0.44%
600	180,000	8,325.62	8,325.62	0.04625	0.04625	8,286.02	8,286.02	0.04603	0.04603	(39.60)	(39.60)	-0.48%	-0.48%
500 KW													
200	100,000	8,511.68	8,511.68	0.08512	0.08512	8,489.68	8,489.68	0.08490	0.08490	(22.00)	(22.00)	-0.26%	-0.26%
300	150,000	9,776.64	9,776.64	0.06518	0.06518	9,743.64	9,743.64	0.06496	0.06496	(33.00)	(33.00)	-0.34%	-0.34%
400	200,000	11,041.60	11,041.60	0.05521	0.05521	10,997.60	10,997.60	0.05499	0.05499	(44.00)	(44.00)	-0.40%	-0.40%
500	250,000	12,306.56	12,306.56	0.04923	0.04923	12,251.56	12,251.56	0.04901	0.04901	(55.00)	(55.00)	-0.45%	-0.45%
600	300,000	13,571.52	13,571.52	0.04524	0.04524	13,505.52	13,505.52	0.04502	0.04502	(66.00)	(66.00)	-0.49%	-0.49%
1,000 KW													
200	200,000	16,566.60	16,566.60	0.08283	0.08283	16,522.60	16,522.60	0.08261	0.08261	(44.00)	(44.00)	-0.27%	-0.27%
300	300,000	19,096.52	19,096.52	0.06366	0.06366	19,030.52	19,030.52	0.06344	0.06344	(66.00)	(66.00)	-0.35%	-0.35%
400	400,000	21,626.44	21,626.44	0.05407	0.05407	21,538.44	21,538.44	0.05385	0.05385	(88.00)	(88.00)	-0.41%	-0.41%
500	500,000	24,156.36	24,156.36	0.04831	0.04831	24,046.36	24,046.36	0.04809	0.04809	(110.00)	(110.00)	-0.46%	-0.46%
600	600,000	26,686.28	26,686.28	0.04448	0.04448	26,554.28	26,554.28	0.04426	0.04426	(132.00)	(132.00)	-0.49%	-0.49%

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
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Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 UNDERGROUND RIDER RATES - DELIVERY ONLY  
SCHEDULE "GT LV "  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
<b>MAXIMUM AND ON PEAK DEMAND = 2,000 KW</b>													
200	400,000	32,676.44	32,676.44	0.08169	0.08169	32,588.44	32,588.44	0.08147	0.08147	(88.00)	(88.00)	-0.27%	-0.27%
300	600,000	37,736.28	37,736.28	0.06289	0.06289	37,604.28	37,604.28	0.06267	0.06267	(132.00)	(132.00)	-0.35%	-0.35%
400	800,000	42,796.12	42,796.12	0.05350	0.05350	42,620.12	42,620.12	0.05328	0.05328	(176.00)	(176.00)	-0.41%	-0.41%
500	1,000,000	47,855.96	47,855.96	0.04786	0.04786	47,635.96	47,635.96	0.04764	0.04764	(220.00)	(220.00)	-0.46%	-0.46%
600	1,200,000	52,915.80	52,915.80	0.04410	0.04410	52,651.80	52,651.80	0.04388	0.04388	(264.00)	(264.00)	-0.50%	-0.50%
<b>4,000 KW</b>													
200	800,000	64,896.12	64,896.12	0.08112	0.08112	64,720.12	64,720.12	0.08090	0.08090	(176.00)	(176.00)	-0.27%	-0.27%
300	1,200,000	75,015.80	75,015.80	0.06251	0.06251	74,751.80	74,751.80	0.06229	0.06229	(264.00)	(264.00)	-0.35%	-0.35%
400	1,600,000	85,135.48	85,135.48	0.05321	0.05321	84,783.48	84,783.48	0.05299	0.05299	(352.00)	(352.00)	-0.41%	-0.41%
500	2,000,000	95,255.16	95,255.16	0.04763	0.04763	94,815.16	94,815.16	0.04741	0.04741	(440.00)	(440.00)	-0.46%	-0.46%
600	2,400,000	105,374.84	105,374.84	0.04391	0.04391	104,846.84	104,846.84	0.04369	0.04369	(528.00)	(528.00)	-0.50%	-0.50%
<b>6,000 KW</b>													
200	1,200,000	97,115.80	97,115.80	0.08093	0.08093	96,851.80	96,851.80	0.08071	0.08071	(264.00)	(264.00)	-0.27%	-0.27%
300	1,800,000	112,295.32	112,295.32	0.06239	0.06239	111,899.32	111,899.32	0.06217	0.06217	(396.00)	(396.00)	-0.35%	-0.35%
400	2,400,000	127,474.84	127,474.84	0.05311	0.05311	126,946.84	126,946.84	0.05289	0.05289	(528.00)	(528.00)	-0.41%	-0.41%
500	3,000,000	142,654.36	142,654.36	0.04755	0.04755	141,994.36	141,994.36	0.04733	0.04733	(660.00)	(660.00)	-0.46%	-0.46%
600	3,600,000	157,833.88	157,833.88	0.04384	0.04384	157,041.88	157,041.88	0.04362	0.04362	(792.00)	(792.00)	-0.50%	-0.50%
<b>8,000 KW</b>													
200	1,600,000	129,335.48	129,335.48	0.08083	0.08083	128,983.48	128,983.48	0.08061	0.08061	(352.00)	(352.00)	-0.27%	-0.27%
300	2,400,000	149,574.84	149,574.84	0.06232	0.06232	149,046.84	149,046.84	0.06210	0.06210	(528.00)	(528.00)	-0.35%	-0.35%
400	3,200,000	169,814.20	169,814.20	0.05307	0.05307	169,110.20	169,110.20	0.05285	0.05285	(704.00)	(704.00)	-0.41%	-0.41%
500	4,000,000	190,053.56	190,053.56	0.04751	0.04751	189,173.56	189,173.56	0.04729	0.04729	(880.00)	(880.00)	-0.46%	-0.46%
600	4,800,000	210,292.92	210,292.92	0.04381	0.04381	209,236.92	209,236.92	0.04359	0.04359	(1,056.00)	(1,056.00)	-0.50%	-0.50%

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
400	HOURS USE =	30%	26%	44%
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Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY

EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 UNDERGROUND RIDER RATES - DELIVERY ONLY

SCHEDULE "GT 3A"

DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
						MAXIMUM AND ON PEAK DEMAND =							
									1,000 KW				
200	200,000	12,231.48	12,229.48	0.06116	0.06115	12,215.48	12,213.48	0.06108	0.06107	(16.00)	(16.00)	-0.13%	-0.13%
300	300,000	14,128.40	14,125.40	0.04709	0.04708	14,104.40	14,101.40	0.04701	0.04700	(24.00)	(24.00)	-0.17%	-0.17%
400	400,000	16,025.32	16,021.32	0.04006	0.04005	15,993.32	15,989.32	0.03998	0.03997	(32.00)	(32.00)	-0.20%	-0.20%
500	500,000	17,922.24	17,917.24	0.03584	0.03583	17,882.24	17,877.24	0.03576	0.03575	(40.00)	(40.00)	-0.22%	-0.22%
600	600,000	19,819.16	19,813.16	0.03303	0.03302	19,771.16	19,765.16	0.03295	0.03294	(48.00)	(48.00)	-0.24%	-0.24%
									2,000 KW				
200	400,000	24,275.32	24,271.32	0.06069	0.06068	24,243.32	24,239.32	0.06061	0.06060	(32.00)	(32.00)	-0.13%	-0.13%
300	600,000	28,069.16	28,063.16	0.04678	0.04677	28,021.16	28,015.16	0.04670	0.04669	(48.00)	(48.00)	-0.17%	-0.17%
400	800,000	31,863.00	31,855.00	0.03983	0.03982	31,799.00	31,791.00	0.03975	0.03974	(64.00)	(64.00)	-0.20%	-0.20%
500	1,000,000	35,656.84	35,646.84	0.03566	0.03565	35,576.84	35,566.84	0.03558	0.03557	(80.00)	(80.00)	-0.22%	-0.22%
600	1,200,000	39,450.68	39,438.68	0.03288	0.03287	39,354.68	39,342.68	0.03280	0.03279	(96.00)	(96.00)	-0.24%	-0.24%
									5,000 KW				
200	1,000,000	60,406.84	60,396.84	0.06041	0.06040	60,326.84	60,316.84	0.06033	0.06032	(80.00)	(80.00)	-0.13%	-0.13%
300	1,500,000	69,891.44	69,876.44	0.04659	0.04658	69,771.44	69,756.44	0.04651	0.04650	(120.00)	(120.00)	-0.17%	-0.17%
400	2,000,000	79,376.04	79,356.04	0.03969	0.03968	79,216.04	79,196.04	0.03961	0.03960	(160.00)	(160.00)	-0.20%	-0.20%
500	2,500,000	88,860.64	88,835.64	0.03554	0.03553	88,660.64	88,635.64	0.03546	0.03545	(200.00)	(200.00)	-0.23%	-0.23%
600	3,000,000	98,345.24	98,315.24	0.03278	0.03277	98,105.24	98,075.24	0.03270	0.03269	(240.00)	(240.00)	-0.24%	-0.24%
									7,500 KW				
200	1,500,000	90,516.44	90,501.44	0.06034	0.06033	90,396.44	90,381.44	0.06026	0.06025	(120.00)	(120.00)	-0.13%	-0.13%
300	2,250,000	104,743.34	104,720.84	0.04655	0.04654	104,563.34	104,540.84	0.04647	0.04646	(180.00)	(180.00)	-0.17%	-0.17%
400	3,000,000	118,970.24	118,940.24	0.03966	0.03965	118,730.24	118,700.24	0.03958	0.03957	(240.00)	(240.00)	-0.20%	-0.20%
500	3,750,000	133,197.14	133,159.64	0.03552	0.03551	132,897.14	132,859.64	0.03544	0.03543	(300.00)	(300.00)	-0.23%	-0.23%
600	4,500,000	147,424.04	147,379.04	0.03276	0.03275	147,064.04	147,019.04	0.03268	0.03267	(360.00)	(360.00)	-0.24%	-0.24%
KWH DISTRIBUTION													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 UNDERGROUND RIDER RATES - DELIVERY ONLY  
SCHEDULE "GT 3A"  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 10,000 KW													
200	2,000,000	120,626.04	120,606.04	0.06031	0.06030	120,466.04	120,446.04	0.06023	0.06022	(160.00)	(160.00)	-0.13%	-0.13%
300	3,000,000	139,595.24	139,565.24	0.04653	0.04652	139,355.24	139,325.24	0.04645	0.04644	(240.00)	(240.00)	-0.17%	-0.17%
400	4,000,000	158,564.44	158,524.44	0.03964	0.03963	158,244.44	158,204.44	0.03956	0.03955	(320.00)	(320.00)	-0.20%	-0.20%
500	5,000,000	177,533.64	177,483.64	0.03551	0.03550	177,133.64	177,083.64	0.03543	0.03542	(400.00)	(400.00)	-0.23%	-0.23%
600	6,000,000	196,502.84	196,442.84	0.03275	0.03274	196,022.84	195,962.84	0.03267	0.03266	(480.00)	(480.00)	-0.24%	-0.24%
20,000 KW													
200	4,000,000	241,064.44	241,024.44	0.06027	0.06026	240,744.44	240,704.44	0.06019	0.06018	(320.00)	(320.00)	-0.13%	-0.13%
300	6,000,000	279,002.84	278,942.84	0.04650	0.04649	278,522.84	278,462.84	0.04642	0.04641	(480.00)	(480.00)	-0.17%	-0.17%
400	8,000,000	316,941.24	316,861.24	0.03962	0.03961	316,301.24	316,221.24	0.03954	0.03953	(640.00)	(640.00)	-0.20%	-0.20%
500	10,000,000	354,879.64	354,779.64	0.03549	0.03548	354,079.64	353,979.64	0.03541	0.03540	(800.00)	(800.00)	-0.23%	-0.23%
600	12,000,000	392,818.04	392,698.04	0.03273	0.03272	391,858.04	391,738.04	0.03265	0.03264	(960.00)	(960.00)	-0.24%	-0.24%
30,000 KW													
200	6,000,000	361,502.84	361,442.84	0.06025	0.06024	361,022.84	360,962.84	0.06017	0.06016	(480.00)	(480.00)	-0.13%	-0.13%
300	9,000,000	418,410.44	418,320.44	0.04649	0.04648	417,690.44	417,600.44	0.04641	0.04640	(720.00)	(720.00)	-0.17%	-0.17%
400	12,000,000	475,318.04	475,198.04	0.03961	0.03960	474,358.04	474,238.04	0.03953	0.03952	(960.00)	(960.00)	-0.20%	-0.20%
500	15,000,000	532,225.64	532,075.64	0.03548	0.03547	531,025.64	530,875.64	0.03540	0.03539	(1,200.00)	(1,200.00)	-0.23%	-0.23%
600	18,000,000	589,133.24	588,953.24	0.03273	0.03272	587,693.24	587,513.24	0.03265	0.03264	(1,440.00)	(1,440.00)	-0.24%	-0.24%
40,000 KW													
200	8,000,000	481,941.24	481,861.24	0.06024	0.06023	481,301.24	481,221.24	0.06016	0.06015	(640.00)	(640.00)	-0.13%	-0.13%
300	12,000,000	557,818.04	557,698.04	0.04648	0.04647	556,858.04	556,738.04	0.04640	0.04639	(960.00)	(960.00)	-0.17%	-0.17%
400	16,000,000	633,694.84	633,534.84	0.03961	0.03960	632,414.84	632,254.84	0.03953	0.03952	(1,280.00)	(1,280.00)	-0.20%	-0.20%
500	20,000,000	709,571.64	709,371.64	0.03548	0.03547	707,971.64	707,771.64	0.03540	0.03539	(1,600.00)	(1,600.00)	-0.23%	-0.23%
600	24,000,000	785,448.44	785,208.44	0.03273	0.03272	783,528.44	783,288.44	0.03265	0.03264	(1,920.00)	(1,920.00)	-0.24%	-0.24%
KWH DISTRIBUTION													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 UNDERGROUND RIDER RATES - DELIVERY ONLY  
SCHEDULE "GT 3B"  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
						MAXIMUM AND ON PEAK DEMAND =							
									10,000 KW				
200	2,000,000	37,701.78	38,501.78	0.01885	0.01925	37,461.78	38,261.78	0.01873	0.01913	(240.00)	(240.00)	-0.64%	-0.62%
300	3,000,000	50,440.98	51,240.98	0.01681	0.01708	50,080.98	50,880.98	0.01669	0.01696	(360.00)	(360.00)	-0.71%	-0.70%
400	4,000,000	63,180.18	63,980.18	0.01580	0.01600	62,700.18	63,500.18	0.01568	0.01588	(480.00)	(480.00)	-0.76%	-0.75%
500	5,000,000	75,919.38	76,719.38	0.01518	0.01534	75,319.38	76,119.38	0.01506	0.01522	(600.00)	(600.00)	-0.79%	-0.78%
600	6,000,000	88,658.58	89,458.58	0.01478	0.01491	87,938.58	88,738.58	0.01466	0.01479	(720.00)	(720.00)	-0.81%	-0.80%
									20,000 KW				
200	4,000,000	74,980.18	76,580.18	0.01875	0.01915	74,500.18	76,100.18	0.01863	0.01903	(480.00)	(480.00)	-0.64%	-0.63%
300	6,000,000	100,458.58	102,058.58	0.01674	0.01701	99,738.58	101,338.58	0.01662	0.01689	(720.00)	(720.00)	-0.72%	-0.71%
400	8,000,000	125,936.98	127,536.98	0.01574	0.01594	124,976.98	126,576.98	0.01562	0.01582	(960.00)	(960.00)	-0.76%	-0.75%
500	10,000,000	151,415.38	153,015.38	0.01514	0.01530	150,215.38	151,815.38	0.01502	0.01518	(1,200.00)	(1,200.00)	-0.79%	-0.78%
600	12,000,000	176,893.78	178,493.78	0.01474	0.01487	175,453.78	177,053.78	0.01462	0.01475	(1,440.00)	(1,440.00)	-0.81%	-0.81%
									30,000 KW				
200	6,000,000	112,258.58	114,658.58	0.01871	0.01911	111,538.58	113,938.58	0.01859	0.01899	(720.00)	(720.00)	-0.64%	-0.63%
300	9,000,000	150,476.18	152,876.18	0.01672	0.01699	149,396.18	151,796.18	0.01660	0.01687	(1,080.00)	(1,080.00)	-0.72%	-0.71%
400	12,000,000	188,693.78	191,093.78	0.01572	0.01592	187,253.78	189,653.78	0.01560	0.01580	(1,440.00)	(1,440.00)	-0.76%	-0.75%
500	15,000,000	226,911.38	229,311.38	0.01513	0.01529	225,111.38	227,511.38	0.01501	0.01517	(1,800.00)	(1,800.00)	-0.79%	-0.78%
600	18,000,000	265,128.98	267,528.98	0.01473	0.01486	262,968.98	265,368.98	0.01461	0.01474	(2,160.00)	(2,160.00)	-0.81%	-0.81%
									40,000 KW				
200	8,000,000	149,536.98	152,736.98	0.01869	0.01909	148,576.98	151,776.98	0.01857	0.01897	(960.00)	(960.00)	-0.64%	-0.63%
300	12,000,000	200,493.78	203,693.78	0.01671	0.01697	199,053.78	202,253.78	0.01659	0.01685	(1,440.00)	(1,440.00)	-0.72%	-0.71%
400	16,000,000	251,450.58	254,650.58	0.01572	0.01592	249,530.58	252,730.58	0.01560	0.01580	(1,920.00)	(1,920.00)	-0.76%	-0.75%
500	20,000,000	302,407.38	305,607.38	0.01512	0.01528	300,007.38	303,207.38	0.01500	0.01516	(2,400.00)	(2,400.00)	-0.79%	-0.79%
600	24,000,000	353,364.18	356,564.18	0.01472	0.01486	350,484.18	353,684.18	0.01460	0.01474	(2,880.00)	(2,880.00)	-0.82%	-0.81%

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
400	HOURS USE =	30%	26%	44%
500	HOURS USE =	27%	25%	48%
600	HOURS USE =	25%	24%	51%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 UNDERGROUND RIDER RATES  
SCHEDULE "R"  
DISTRICT OF COLUMBIA

KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE					
	\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)	(\$)	(%)
	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	ANNUAL	ANNUAL
0	17.03	17.11	-	-	17.03	17.11	-	-	0.00	0.00	0.00%	0.00%	0.00	0.00%
10	17.32	17.40	1.73203	1.74003	17.32	17.40	1.73193	1.73993	0.00	0.00	0.00%	0.00%	0.00	0.00%
20	17.61	17.69	0.88053	0.88453	17.61	17.69	0.88043	0.88443	0.00	0.00	0.00%	0.00%	0.00	0.00%
30	17.90	17.98	0.59670	0.59936	17.90	17.98	0.59660	0.59926	0.00	0.00	0.00%	0.00%	0.00	0.00%
40	18.85	18.95	0.47115	0.47380	18.84	18.95	0.47105	0.47370	0.00	0.00	0.00%	0.00%	0.00	0.00%
50	19.79	19.92	0.39582	0.39847	19.79	19.92	0.39572	0.39837	0.00	0.00	0.00%	0.00%	0.00	0.00%
100	24.52	24.78	0.24516	0.24780	24.51	24.77	0.24506	0.24770	-0.01	-0.01	-0.04%	-0.04%	-0.01	-0.04%
200	33.97	34.49	0.16983	0.17246	33.95	34.47	0.16973	0.17236	-0.02	-0.02	-0.06%	-0.06%	-0.02	-0.06%
300	43.42	44.21	0.14472	0.14735	43.39	44.18	0.14462	0.14725	-0.03	-0.03	-0.07%	-0.07%	-0.03	-0.07%
400	52.87	53.92	0.13216	0.13480	52.83	53.88	0.13206	0.13470	-0.04	-0.04	-0.08%	-0.07%	-0.04	-0.07%
500	63.69	64.37	0.12737	0.12873	63.64	64.32	0.12727	0.12863	-0.05	-0.05	-0.08%	-0.08%	-0.05	-0.08%
<b>648</b>	<b>79.70</b>	<b>79.83</b>	<b>0.12300</b>	<b>0.12319</b>	<b>79.64</b>	<b>79.76</b>	<b>0.12290</b>	<b>0.12309</b>	<b>-0.06</b>	<b>-0.06</b>	<b>-0.08%</b>	<b>-0.08%</b>	<b>-0.06</b>	<b>-0.08%</b>
700	85.33	85.26	0.12190	0.12180	85.26	85.19	0.12180	0.12170	-0.07	-0.07	-0.08%	-0.08%	-0.07	-0.08%
750	90.74	90.49	0.12099	0.12065	90.67	90.41	0.12089	0.12055	-0.08	-0.07	-0.09%	-0.08%	-0.07	-0.08%
800	96.15	95.71	0.12019	0.11964	96.07	95.63	0.12009	0.11954	-0.08	-0.08	-0.08%	-0.08%	-0.08	-0.08%
850	101.56	100.93	0.11949	0.11875	101.48	100.85	0.11939	0.11865	-0.09	-0.08	-0.09%	-0.08%	-0.08	-0.08%
900	106.97	106.16	0.11886	0.11795	106.88	106.07	0.11876	0.11785	-0.09	-0.09	-0.08%	-0.08%	-0.09	-0.08%
950	112.39	111.38	0.11830	0.11724	112.29	111.29	0.11820	0.11714	-0.09	-0.09	-0.08%	-0.08%	-0.09	-0.08%
1,000	117.80	116.61	0.11780	0.11661	117.70	116.51	0.11770	0.11651	-0.10	-0.10	-0.08%	-0.09%	-0.10	-0.09%
1,250	144.85	142.73	0.11588	0.11418	144.73	142.60	0.11578	0.11408	-0.13	-0.13	-0.09%	-0.09%	-0.13	-0.09%
1,500	171.91	168.85	0.11460	0.11256	171.76	168.70	0.11450	0.11246	-0.15	-0.15	-0.09%	-0.09%	-0.15	-0.09%
1,750	198.96	194.96	0.11369	0.11141	198.79	194.79	0.11359	0.11131	-0.18	-0.18	-0.09%	-0.09%	-0.18	-0.09%
2,000	226.02	221.08	0.11301	0.11054	225.82	220.88	0.11291	0.11044	-0.20	-0.20	-0.09%	-0.09%	-0.20	-0.09%
2,250	253.07	247.20	0.11248	0.10987	252.84	246.98	0.11238	0.10977	-0.23	-0.22	-0.09%	-0.09%	-0.22	-0.09%
2,500	280.12	273.32	0.11205	0.10933	279.87	273.07	0.11195	0.10923	-0.25	-0.25	-0.09%	-0.09%	-0.25	-0.09%
3,000	334.23	325.56	0.11141	0.10852	333.93	325.26	0.11131	0.10842	-0.30	-0.30	-0.09%	-0.09%	-0.30	-0.09%
3,500	388.34	377.80	0.11096	0.10794	387.99	377.45	0.11086	0.10784	-0.35	-0.35	-0.09%	-0.09%	-0.35	-0.09%
4,000	442.45	430.04	0.11061	0.10751	442.05	429.64	0.11051	0.10741	-0.40	-0.40	-0.09%	-0.09%	-0.40	-0.09%
5,000	550.67	534.52	0.11013	0.10690	550.17	534.02	0.11003	0.10680	-0.50	-0.50	-0.09%	-0.09%	-0.50	-0.09%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 UNDERGROUND RIDER RATES  
SCHEDULE "MMA"  
DISTRICT OF COLUMBIA

KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE					
	\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)	(\$)	(%)
	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	ANNUAL	ANNUAL
0	13.57	13.99	-	-	13.57	13.99	-	-	0.00	0.00	0.00%	0.00%	0.00	0.00%
100	20.44	21.82	0.20436	0.21821	20.42	21.81	0.20421	0.21806	-0.02	-0.02	-0.10%	-0.09%	-0.02	-0.09%
200	29.04	31.80	0.14520	0.15901	29.01	31.77	0.14505	0.15886	-0.03	-0.03	-0.10%	-0.09%	-0.03	-0.10%
300	37.64	41.78	0.12547	0.13928	37.60	41.74	0.12532	0.13913	-0.05	-0.05	-0.13%	-0.12%	-0.05	-0.12%
400	46.25	51.76	0.11561	0.12941	46.19	51.70	0.11546	0.12926	-0.06	-0.06	-0.13%	-0.12%	-0.06	-0.12%
500	56.10	62.41	0.11220	0.12483	56.02	62.34	0.11205	0.12468	-0.08	-0.08	-0.14%	-0.13%	-0.08	-0.13%
1000	105.36	115.66	0.10536	0.11566	105.21	115.51	0.10521	0.11551	-0.15	-0.15	-0.14%	-0.13%	-0.15	-0.13%
2000	203.89	222.15	0.10195	0.11107	203.59	221.85	0.10180	0.11092	-0.30	-0.30	-0.15%	-0.14%	-0.30	-0.14%
3000	302.42	328.63	0.10081	0.10954	301.97	328.18	0.10066	0.10939	-0.45	-0.45	-0.15%	-0.14%	-0.45	-0.14%
4000	400.95	435.12	0.10024	0.10878	400.35	434.52	0.10009	0.10863	-0.60	-0.60	-0.15%	-0.14%	-0.60	-0.14%
5000	499.48	541.61	0.09990	0.10832	498.73	540.86	0.09975	0.10817	-0.75	-0.75	-0.15%	-0.14%	-0.75	-0.14%
6000	598.01	648.10	0.09967	0.10802	597.11	647.20	0.09952	0.10787	-0.90	-0.90	-0.15%	-0.14%	-0.90	-0.14%
7000	696.53	754.59	0.09950	0.10780	695.48	753.54	0.09935	0.10765	-1.05	-1.05	-0.15%	-0.14%	-1.05	-0.14%
7500	745.80	807.83	0.09944	0.10771	744.67	806.71	0.09929	0.10756	-1.13	-1.13	-0.15%	-0.14%	-1.13	-0.14%
8000	795.06	861.08	0.09938	0.10763	793.86	859.88	0.09923	0.10748	-1.20	-1.20	-0.15%	-0.14%	-1.20	-0.14%
8500	844.33	914.32	0.09933	0.10757	843.05	913.05	0.09918	0.10742	-1.27	-1.28	-0.15%	-0.14%	-1.28	-0.14%
9000	893.59	967.57	0.09929	0.10751	892.24	966.22	0.09914	0.10736	-1.35	-1.35	-0.15%	-0.14%	-1.35	-0.14%
9500	942.86	1,020.81	0.09925	0.10745	941.43	1,019.39	0.09910	0.10730	-1.42	-1.42	-0.15%	-0.14%	-1.42	-0.14%
10000	992.12	1,074.06	0.09921	0.10741	990.62	1,072.56	0.09906	0.10726	-1.50	-1.50	-0.15%	-0.14%	-1.50	-0.14%
12500	1,238.44	1,340.28	0.09908	0.10722	1,236.57	1,338.40	0.09893	0.10707	-1.88	-1.88	-0.15%	-0.14%	-1.88	-0.14%
15000	1,484.76	1,606.50	0.09898	0.10710	1,482.51	1,604.25	0.09883	0.10695	-2.25	-2.25	-0.15%	-0.14%	-2.25	-0.14%
17500	1,731.09	1,872.72	0.09892	0.10701	1,728.46	1,870.10	0.09877	0.10686	-2.63	-2.63	-0.15%	-0.14%	-2.63	-0.15%
20000	1,977.41	2,138.94	0.09887	0.10695	1,974.41	2,135.94	0.09872	0.10680	-3.00	-3.00	-0.15%	-0.14%	-3.00	-0.14%
22500	2,223.73	2,405.16	0.09883	0.10690	2,220.35	2,401.79	0.09868	0.10675	-3.38	-3.38	-0.15%	-0.14%	-3.38	-0.15%
25000	2,470.05	2,671.39	0.09880	0.10686	2,466.30	2,667.64	0.09865	0.10671	-3.75	-3.75	-0.15%	-0.14%	-3.75	-0.14%
30000	2,962.69	3,203.83	0.09876	0.10679	2,958.19	3,199.33	0.09861	0.10664	-4.50	-4.50	-0.15%	-0.14%	-4.50	-0.15%
35000	3,455.34	3,736.27	0.09872	0.10675	3,450.09	3,731.02	0.09857	0.10660	-5.25	-5.25	-0.15%	-0.14%	-5.25	-0.15%
40000	3,947.98	4,268.72	0.09870	0.10672	3,941.98	4,262.72	0.09855	0.10657	-6.00	-6.00	-0.15%	-0.14%	-6.00	-0.15%
50000	4,933.27	5,333.60	0.09867	0.10667	4,925.77	5,326.10	0.09852	0.10652	-7.50	-7.50	-0.15%	-0.14%	-7.50	-0.15%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY

EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 UNDERGROUND RIDER RATES

SCHEDULE "GS ND"

DISTRICT OF COLUMBIA

KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE					
	\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)	(\$)	(%)
	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	ANNUAL	ANNUAL
0	27.42	27.42	-	-	27.42	27.42	-	-	0.00	0.00	0.00%	0.00%	0.00	0.00%
10	28.63	28.57	2.86336	2.85674	28.62	28.56	2.86230	2.85568	-0.01	-0.01	-0.03%	-0.04%	-0.01	-0.03%
20	29.85	29.71	1.49236	1.48574	29.83	29.69	1.49130	1.48468	-0.02	-0.02	-0.07%	-0.07%	-0.02	-0.07%
30	31.06	30.86	1.03536	1.02874	31.03	30.83	1.03430	1.02768	-0.03	-0.03	-0.10%	-0.10%	-0.03	-0.10%
40	32.27	32.01	0.80686	0.80024	32.23	31.97	0.80580	0.79918	-0.04	-0.04	-0.12%	-0.12%	-0.04	-0.12%
50	33.49	33.16	0.66976	0.66314	33.44	33.10	0.66870	0.66208	-0.05	-0.05	-0.15%	-0.15%	-0.05	-0.15%
100	39.56	38.89	0.39556	0.38894	39.45	38.79	0.39450	0.38788	-0.11	-0.11	-0.28%	-0.28%	-0.11	-0.28%
150	45.62	44.63	0.30416	0.29754	45.47	44.47	0.30310	0.29648	-0.16	-0.16	-0.35%	-0.36%	-0.16	-0.36%
200	51.69	50.37	0.25846	0.25184	51.48	50.16	0.25740	0.25078	-0.21	-0.21	-0.41%	-0.42%	-0.21	-0.41%
250	57.76	56.11	0.23104	0.22442	57.50	55.84	0.22998	0.22336	-0.27	-0.27	-0.47%	-0.48%	-0.27	-0.48%
300	63.83	61.84	0.21276	0.20614	63.51	61.52	0.21170	0.20508	-0.32	-0.32	-0.50%	-0.52%	-0.32	-0.51%
400	75.96	73.32	0.18991	0.18329	75.54	72.89	0.18885	0.18223	-0.42	-0.42	-0.55%	-0.57%	-0.42	-0.56%
500	88.10	84.79	0.17620	0.16958	87.57	84.26	0.17514	0.16852	-0.53	-0.53	-0.60%	-0.63%	-0.53	-0.62%
600	100.24	96.26	0.16706	0.16044	99.60	95.63	0.16600	0.15938	-0.64	-0.64	-0.64%	-0.66%	-0.64	-0.65%
700	112.37	107.74	0.16053	0.15391	111.63	107.00	0.15947	0.15285	-0.74	-0.74	-0.66%	-0.69%	-0.74	-0.67%
800	124.51	119.21	0.15564	0.14902	123.66	118.36	0.15458	0.14796	-0.85	-0.85	-0.68%	-0.71%	-0.85	-0.70%
900	136.64	130.69	0.15183	0.14521	135.69	129.73	0.15077	0.14415	-0.95	-0.95	-0.70%	-0.73%	-0.95	-0.71%
1,000	148.78	142.16	0.14878	0.14216	147.72	141.10	0.14772	0.14110	-1.06	-1.06	-0.71%	-0.75%	-1.06	-0.73%
1,250	179.12	170.85	0.14330	0.13668	177.80	169.52	0.14224	0.13562	-1.32	-1.32	-0.74%	-0.77%	-1.32	-0.76%
1,500	209.46	199.53	0.13964	0.13302	207.87	197.94	0.13858	0.13196	-1.59	-1.59	-0.76%	-0.80%	-1.59	-0.78%
1,750	239.80	228.22	0.13703	0.13041	237.95	226.36	0.13597	0.12935	-1.86	-1.85	-0.78%	-0.81%	-1.85	-0.80%
2,000	270.14	256.90	0.13507	0.12845	268.02	254.78	0.13401	0.12739	-2.12	-2.12	-0.78%	-0.83%	-2.12	-0.81%
2,500	330.82	314.27	0.13233	0.12571	328.17	311.62	0.13127	0.12465	-2.65	-2.65	-0.80%	-0.84%	-2.65	-0.83%
3,000	391.50	371.64	0.13050	0.12388	388.32	368.46	0.12944	0.12282	-3.18	-3.18	-0.81%	-0.86%	-3.18	-0.84%
3,500	452.18	429.01	0.12919	0.12257	448.47	425.30	0.12813	0.12151	-3.71	-3.71	-0.82%	-0.86%	-3.71	-0.85%
4,000	512.86	486.38	0.12822	0.12160	508.62	482.14	0.12716	0.12054	-4.24	-4.24	-0.83%	-0.87%	-4.24	-0.85%
5,000	634.22	601.12	0.12684	0.12022	628.92	595.82	0.12578	0.11916	-5.30	-5.30	-0.84%	-0.88%	-5.30	-0.86%
6,000	755.58	715.86	0.12593	0.11931	749.22	709.50	0.12487	0.11825	-6.36	-6.36	-0.84%	-0.89%	-6.36	-0.87%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in .

POTOMAC ELECTRIC POWER COMPANY

EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 UNDERGROUND RIDER RATES

SCHEDULE "GS D LV"  
DISTRICT OF COLUMBIA

KW	Hours	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
			\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
			SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
10	100	1000	220.67	227.59	0.22067	0.22759	221.54	228.46	0.22154	0.22846	0.87	0.87	0.39%	0.38%
	200	2000	331.08	344.92	0.16554	0.17246	332.82	346.66	0.16641	0.17333	1.74	1.74	0.53%	0.50%
	300	3000	441.48	462.24	0.14716	0.15408	444.09	464.85	0.14803	0.15495	2.61	2.61	0.59%	0.56%
	400	4000	551.88	579.56	0.13797	0.14489	555.36	583.04	0.13884	0.14576	3.48	3.48	0.63%	0.60%
	500	5000	662.29	696.89	0.13246	0.13938	666.64	701.24	0.13333	0.14025	4.35	4.35	0.66%	0.62%
	600	6000	772.69	814.21	0.12878	0.13570	777.91	819.43	0.12965	0.13657	5.22	5.22	0.68%	0.64%
25	100	2,500	498.93	516.23	0.19957	0.20649	501.10	518.40	0.20044	0.20736	2.18	2.17	0.44%	0.42%
	200	5,000	774.94	809.54	0.15499	0.16191	779.29	813.89	0.15586	0.16278	4.35	4.35	0.56%	0.54%
	300	7,500	1,050.94	1,102.84	0.14013	0.14705	1,057.47	1,109.37	0.14100	0.14792	6.53	6.53	0.62%	0.59%
	400	10,000	1,326.95	1,396.15	0.13270	0.13962	1,335.65	1,404.85	0.13357	0.14049	8.70	8.70	0.66%	0.62%
	500	12,500	1,602.96	1,689.46	0.12824	0.13516	1,613.84	1,700.34	0.12911	0.13603	10.88	10.88	0.68%	0.64%
	600	15,000	1,878.97	1,982.77	0.12526	0.13218	1,892.02	1,995.82	0.12613	0.13305	13.05	13.05	0.69%	0.66%
50	100	5,000	962.69	997.29	0.19254	0.19946	967.04	1,001.64	0.19341	0.20033	4.35	4.35	0.45%	0.44%
	200	10,000	1,514.70	1,583.90	0.15147	0.15839	1,523.40	1,592.60	0.15234	0.15926	8.70	8.70	0.57%	0.55%
	300	15,000	2,066.72	2,170.52	0.13778	0.14470	2,079.77	2,183.57	0.13865	0.14557	13.05	13.05	0.63%	0.60%
	400	20,000	2,618.73	2,757.13	0.13094	0.13786	2,636.13	2,774.53	0.13181	0.13873	17.40	17.40	0.66%	0.63%
	500	25,000	3,170.75	3,343.75	0.12683	0.13375	3,192.50	3,365.50	0.12770	0.13462	21.75	21.75	0.69%	0.65%
	600	30,000	3,722.77	3,930.37	0.12409	0.13101	3,748.87	3,956.47	0.12496	0.13188	26.10	26.10	0.70%	0.66%
75	100	7,500	1,426.44	1,478.34	0.19019	0.19711	1,432.97	1,484.87	0.19106	0.19798	6.53	6.53	0.46%	0.44%
	200	15,000	2,254.47	2,358.27	0.15030	0.15722	2,267.52	2,371.32	0.15117	0.15809	13.05	13.05	0.58%	0.55%
	300	22,500	3,082.49	3,238.19	0.13700	0.14392	3,102.07	3,257.77	0.13787	0.14479	19.57	19.57	0.63%	0.60%
	400	30,000	3,910.52	4,118.12	0.13035	0.13727	3,936.62	4,144.22	0.13122	0.13814	26.10	26.10	0.67%	0.63%
	500	37,500	4,738.54	4,998.04	0.12636	0.13328	4,771.17	5,030.67	0.12723	0.13415	32.63	32.63	0.69%	0.65%
	600	45,000	5,566.56	5,877.96	0.12370	0.13062	5,605.71	5,917.11	0.12457	0.13149	39.15	39.15	0.70%	0.67%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 UNDERGROUND RIDER RATES - DELIVERY ONLY  
SCHEDULE "MGT LV "  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 25 KW													
200	5,000	859.51	859.51	0.17190	0.17190	858.66	858.66	0.17173	0.17173	(0.85)	(0.85)	-0.10%	-0.10%
300	7,500	922.75	922.75	0.12303	0.12303	921.48	921.48	0.12286	0.12286	(1.28)	(1.28)	-0.14%	-0.14%
400	10,000	986.00	986.00	0.09860	0.09860	984.30	984.30	0.09843	0.09843	(1.70)	(1.70)	-0.17%	-0.17%
500	12,500	1,049.25	1,049.25	0.08394	0.08394	1,047.13	1,047.13	0.08377	0.08377	(2.13)	(2.13)	-0.20%	-0.20%
600	15,000	1,112.50	1,112.50	0.07417	0.07417	1,109.95	1,109.95	0.07400	0.07400	(2.55)	(2.55)	-0.23%	-0.23%
50 KW													
200	10,000	1,262.25	1,262.25	0.12623	0.12623	1,260.55	1,260.55	0.12606	0.12606	(1.70)	(1.70)	-0.13%	-0.13%
300	15,000	1,388.75	1,388.75	0.09258	0.09258	1,386.20	1,386.20	0.09241	0.09241	(2.55)	(2.55)	-0.18%	-0.18%
400	20,000	1,515.24	1,515.24	0.07576	0.07576	1,511.84	1,511.84	0.07559	0.07559	(3.40)	(3.40)	-0.22%	-0.22%
500	25,000	1,641.74	1,641.74	0.06567	0.06567	1,637.49	1,637.49	0.06550	0.06550	(4.25)	(4.25)	-0.26%	-0.26%
600	30,000	1,768.24	1,768.24	0.05894	0.05894	1,763.14	1,763.14	0.05877	0.05877	(5.10)	(5.10)	-0.29%	-0.29%
75 KW													
200	15,000	1,665.00	1,665.00	0.11100	0.11100	1,662.45	1,662.45	0.11083	0.11083	(2.55)	(2.55)	-0.15%	-0.15%
300	22,500	1,854.74	1,854.74	0.08243	0.08243	1,850.92	1,850.92	0.08226	0.08226	(3.83)	(3.83)	-0.21%	-0.21%
400	30,000	2,044.49	2,044.49	0.06815	0.06815	2,039.39	2,039.39	0.06798	0.06798	(5.10)	(5.10)	-0.25%	-0.25%
500	37,500	2,234.23	2,234.23	0.05958	0.05958	2,227.86	2,227.86	0.05941	0.05941	(6.38)	(6.38)	-0.29%	-0.29%
600	45,000	2,423.97	2,423.97	0.05387	0.05387	2,416.32	2,416.32	0.05370	0.05370	(7.65)	(7.65)	-0.32%	-0.32%
100 KW													
200	20,000	2,067.74	2,067.74	0.10339	0.10339	2,064.34	2,064.34	0.10322	0.10322	(3.40)	(3.40)	-0.16%	-0.16%
300	30,000	2,320.74	2,320.74	0.07736	0.07736	2,315.64	2,315.64	0.07719	0.07719	(5.10)	(5.10)	-0.22%	-0.22%
400	40,000	2,573.73	2,573.73	0.06434	0.06434	2,566.93	2,566.93	0.06417	0.06417	(6.80)	(6.80)	-0.26%	-0.26%
500	50,000	2,826.72	2,826.72	0.05653	0.05653	2,818.22	2,818.22	0.05636	0.05636	(8.50)	(8.50)	-0.30%	-0.30%
600	60,000	3,079.71	3,079.71	0.05133	0.05133	3,069.51	3,069.51	0.05116	0.05116	(10.20)	(10.20)	-0.33%	-0.33%

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
400	HOURS USE =	30%	26%	44%
500	HOURS USE =	27%	25%	48%
600	HOURS USE =	25%	24%	51%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 UNDERGROUND RIDER RATES - DELIVERY ONLY  
SCHEDULE "MGT LV "  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
<b>MAXIMUM AND ON PEAK DEMAND = 200 KW</b>													
200	40,000	3,678.73	3,678.73	0.09197	0.09197	3,671.93	3,671.93	0.09180	0.09180	(6.80)	(6.80)	-0.18%	-0.18%
300	60,000	4,184.71	4,184.71	0.06975	0.06975	4,174.51	4,174.51	0.06958	0.06958	(10.20)	(10.20)	-0.24%	-0.24%
400	80,000	4,690.70	4,690.70	0.05863	0.05863	4,677.10	4,677.10	0.05846	0.05846	(13.60)	(13.60)	-0.29%	-0.29%
500	100,000	5,196.68	5,196.68	0.05197	0.05197	5,179.68	5,179.68	0.05180	0.05180	(17.00)	(17.00)	-0.33%	-0.33%
600	120,000	5,702.66	5,702.66	0.04752	0.04752	5,682.26	5,682.26	0.04735	0.04735	(20.40)	(20.40)	-0.36%	-0.36%
<b>400 KW</b>													
200	80,000	6,900.70	6,900.70	0.08626	0.08626	6,887.10	6,887.10	0.08609	0.08609	(13.60)	(13.60)	-0.20%	-0.20%
300	120,000	7,912.66	7,912.66	0.06594	0.06594	7,892.26	7,892.26	0.06577	0.06577	(20.40)	(20.40)	-0.26%	-0.26%
400	160,000	8,924.63	8,924.63	0.05578	0.05578	8,897.43	8,897.43	0.05561	0.05561	(27.20)	(27.20)	-0.30%	-0.30%
500	200,000	9,936.60	9,936.60	0.04968	0.04968	9,902.60	9,902.60	0.04951	0.04951	(34.00)	(34.00)	-0.34%	-0.34%
600	240,000	10,948.57	10,948.57	0.04562	0.04562	10,907.77	10,907.77	0.04545	0.04545	(40.80)	(40.80)	-0.37%	-0.37%
<b>600 KW</b>													
200	120,000	10,122.66	10,122.66	0.08436	0.08436	10,102.26	10,102.26	0.08419	0.08419	(20.40)	(20.40)	-0.20%	-0.20%
300	180,000	11,640.62	11,640.62	0.06467	0.06467	11,610.02	11,610.02	0.06450	0.06450	(30.60)	(30.60)	-0.26%	-0.26%
400	240,000	13,158.57	13,158.57	0.05483	0.05483	13,117.77	13,117.77	0.05466	0.05466	(40.80)	(40.80)	-0.31%	-0.31%
500	300,000	14,676.52	14,676.52	0.04892	0.04892	14,625.52	14,625.52	0.04875	0.04875	(51.00)	(51.00)	-0.35%	-0.35%
600	360,000	16,194.47	16,194.47	0.04498	0.04498	16,133.27	16,133.27	0.04481	0.04481	(61.20)	(61.20)	-0.38%	-0.38%
<b>800 KW</b>													
200	160,000	13,344.63	13,344.63	0.08340	0.08340	13,317.43	13,317.43	0.08323	0.08323	(27.20)	(27.20)	-0.20%	-0.20%
300	240,000	15,368.57	15,368.57	0.06404	0.06404	15,327.77	15,327.77	0.06387	0.06387	(40.80)	(40.80)	-0.27%	-0.27%
400	320,000	17,392.50	17,392.50	0.05435	0.05435	17,338.10	17,338.10	0.05418	0.05418	(54.40)	(54.40)	-0.31%	-0.31%
500	400,000	19,416.44	19,416.44	0.04854	0.04854	19,348.44	19,348.44	0.04837	0.04837	(68.00)	(68.00)	-0.35%	-0.35%
600	480,000	21,440.38	21,440.38	0.04467	0.04467	21,358.78	21,358.78	0.04450	0.04450	(81.60)	(81.60)	-0.38%	-0.38%

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
400	HOURS USE =	30%	26%	44%
500	HOURS USE =	27%	25%	48%
600	HOURS USE =	25%	24%	51%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY

EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 UNDERGROUND RIDER RATES - DELIVERY ONLY

SCHEDULE "GT LV"  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
						MAXIMUM AND ON PEAK DEMAND =				100 KW			
200	20,000	2,067.74	2,067.74	0.10339	0.10339	2,064.34	2,064.34	0.10322	0.10322	(3.40)	(3.40)	-0.16%	-0.16%
300	30,000	2,320.74	2,320.74	0.07736	0.07736	2,315.64	2,315.64	0.07719	0.07719	(5.10)	(5.10)	-0.22%	-0.22%
400	40,000	2,573.73	2,573.73	0.06434	0.06434	2,566.93	2,566.93	0.06417	0.06417	(6.80)	(6.80)	-0.26%	-0.26%
500	50,000	2,826.72	2,826.72	0.05653	0.05653	2,818.22	2,818.22	0.05636	0.05636	(8.50)	(8.50)	-0.30%	-0.30%
600	60,000	3,079.71	3,079.71	0.05133	0.05133	3,069.51	3,069.51	0.05116	0.05116	(10.20)	(10.20)	-0.33%	-0.33%
										300 KW			
200	60,000	5,289.71	5,289.71	0.08816	0.08816	5,279.51	5,279.51	0.08799	0.08799	(10.20)	(10.20)	-0.19%	-0.19%
300	90,000	6,048.69	6,048.69	0.06721	0.06721	6,033.39	6,033.39	0.06704	0.06704	(15.30)	(15.30)	-0.25%	-0.25%
400	120,000	6,807.66	6,807.66	0.05673	0.05673	6,787.26	6,787.26	0.05656	0.05656	(20.40)	(20.40)	-0.30%	-0.30%
500	150,000	7,566.64	7,566.64	0.05044	0.05044	7,541.14	7,541.14	0.05027	0.05027	(25.50)	(25.50)	-0.34%	-0.34%
600	180,000	8,325.62	8,325.62	0.04625	0.04625	8,295.02	8,295.02	0.04608	0.04608	(30.60)	(30.60)	-0.37%	-0.37%
										500 KW			
200	100,000	8,511.68	8,511.68	0.08512	0.08512	8,494.68	8,494.68	0.08495	0.08495	(17.00)	(17.00)	-0.20%	-0.20%
300	150,000	9,776.64	9,776.64	0.06518	0.06518	9,751.14	9,751.14	0.06501	0.06501	(25.50)	(25.50)	-0.26%	-0.26%
400	200,000	11,041.60	11,041.60	0.05521	0.05521	11,007.60	11,007.60	0.05504	0.05504	(34.00)	(34.00)	-0.31%	-0.31%
500	250,000	12,306.56	12,306.56	0.04923	0.04923	12,264.06	12,264.06	0.04906	0.04906	(42.50)	(42.50)	-0.35%	-0.35%
600	300,000	13,571.52	13,571.52	0.04524	0.04524	13,520.52	13,520.52	0.04507	0.04507	(51.00)	(51.00)	-0.38%	-0.38%
										1,000 KW			
200	200,000	16,566.60	16,566.60	0.08283	0.08283	16,532.60	16,532.60	0.08266	0.08266	(34.00)	(34.00)	-0.21%	-0.21%
300	300,000	19,096.52	19,096.52	0.06366	0.06366	19,045.52	19,045.52	0.06349	0.06349	(51.00)	(51.00)	-0.27%	-0.27%
400	400,000	21,626.44	21,626.44	0.05407	0.05407	21,558.44	21,558.44	0.05390	0.05390	(68.00)	(68.00)	-0.31%	-0.31%
500	500,000	24,156.36	24,156.36	0.04831	0.04831	24,071.36	24,071.36	0.04814	0.04814	(85.00)	(85.00)	-0.35%	-0.35%
600	600,000	26,686.28	26,686.28	0.04448	0.04448	26,584.28	26,584.28	0.04431	0.04431	(102.00)	(102.00)	-0.38%	-0.38%

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
400	HOURS USE =	30%	26%	44%
500	HOURS USE =	27%	25%	48%
600	HOURS USE =	25%	24%	51%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 UNDERGROUND RIDER RATES - DELIVERY ONLY  
SCHEDULE "GT LV "  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
<b>MAXIMUM AND ON PEAK DEMAND = 2,000 KW</b>													
200	400,000	32,676.44	32,676.44	0.08169	0.08169	32,608.44	32,608.44	0.08152	0.08152	(68.00)	(68.00)	-0.21%	-0.21%
300	600,000	37,736.28	37,736.28	0.06289	0.06289	37,634.28	37,634.28	0.06272	0.06272	(102.00)	(102.00)	-0.27%	-0.27%
400	800,000	42,796.12	42,796.12	0.05350	0.05350	42,660.12	42,660.12	0.05333	0.05333	(136.00)	(136.00)	-0.32%	-0.32%
500	1,000,000	47,855.96	47,855.96	0.04786	0.04786	47,685.96	47,685.96	0.04769	0.04769	(170.00)	(170.00)	-0.36%	-0.36%
600	1,200,000	52,915.80	52,915.80	0.04410	0.04410	52,711.80	52,711.80	0.04393	0.04393	(204.00)	(204.00)	-0.39%	-0.39%
<b>4,000 KW</b>													
200	800,000	64,896.12	64,896.12	0.08112	0.08112	64,760.12	64,760.12	0.08095	0.08095	(136.00)	(136.00)	-0.21%	-0.21%
300	1,200,000	75,015.80	75,015.80	0.06251	0.06251	74,811.80	74,811.80	0.06234	0.06234	(204.00)	(204.00)	-0.27%	-0.27%
400	1,600,000	85,135.48	85,135.48	0.05321	0.05321	84,863.48	84,863.48	0.05304	0.05304	(272.00)	(272.00)	-0.32%	-0.32%
500	2,000,000	95,255.16	95,255.16	0.04763	0.04763	94,915.16	94,915.16	0.04746	0.04746	(340.00)	(340.00)	-0.36%	-0.36%
600	2,400,000	105,374.84	105,374.84	0.04391	0.04391	104,966.84	104,966.84	0.04374	0.04374	(408.00)	(408.00)	-0.39%	-0.39%
<b>6,000 KW</b>													
200	1,200,000	97,115.80	97,115.80	0.08093	0.08093	96,911.80	96,911.80	0.08076	0.08076	(204.00)	(204.00)	-0.21%	-0.21%
300	1,800,000	112,295.32	112,295.32	0.06239	0.06239	111,989.32	111,989.32	0.06222	0.06222	(306.00)	(306.00)	-0.27%	-0.27%
400	2,400,000	127,474.84	127,474.84	0.05311	0.05311	127,066.84	127,066.84	0.05294	0.05294	(408.00)	(408.00)	-0.32%	-0.32%
500	3,000,000	142,654.36	142,654.36	0.04755	0.04755	142,144.36	142,144.36	0.04738	0.04738	(510.00)	(510.00)	-0.36%	-0.36%
600	3,600,000	157,833.88	157,833.88	0.04384	0.04384	157,221.88	157,221.88	0.04367	0.04367	(612.00)	(612.00)	-0.39%	-0.39%
<b>8,000 KW</b>													
200	1,600,000	129,335.48	129,335.48	0.08083	0.08083	129,063.48	129,063.48	0.08066	0.08066	(272.00)	(272.00)	-0.21%	-0.21%
300	2,400,000	149,574.84	149,574.84	0.06232	0.06232	149,166.84	149,166.84	0.06215	0.06215	(408.00)	(408.00)	-0.27%	-0.27%
400	3,200,000	169,814.20	169,814.20	0.05307	0.05307	169,270.20	169,270.20	0.05290	0.05290	(544.00)	(544.00)	-0.32%	-0.32%
500	4,000,000	190,053.56	190,053.56	0.04751	0.04751	189,373.56	189,373.56	0.04734	0.04734	(680.00)	(680.00)	-0.36%	-0.36%
600	4,800,000	210,292.92	210,292.92	0.04381	0.04381	209,476.92	209,476.92	0.04364	0.04364	(816.00)	(816.00)	-0.39%	-0.39%

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
400	HOURS USE =	30%	26%	44%
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Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY

EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 UNDERGROUND RIDER RATES - DELIVERY ONLY

SCHEDULE "GT 3A"

DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 1,000 KW													
200	200,000	12,231.48	12,229.48	0.06116	0.06115	12,221.48	12,219.48	0.06111	0.06110	(10.00)	(10.00)	-0.08%	-0.08%
300	300,000	14,128.40	14,125.40	0.04709	0.04708	14,113.40	14,110.40	0.04704	0.04703	(15.00)	(15.00)	-0.11%	-0.11%
400	400,000	16,025.32	16,021.32	0.04006	0.04005	16,005.32	16,001.32	0.04001	0.04000	(20.00)	(20.00)	-0.12%	-0.12%
500	500,000	17,922.24	17,917.24	0.03584	0.03583	17,897.24	17,892.24	0.03579	0.03578	(25.00)	(25.00)	-0.14%	-0.14%
600	600,000	19,819.16	19,813.16	0.03303	0.03302	19,789.16	19,783.16	0.03298	0.03297	(30.00)	(30.00)	-0.15%	-0.15%
2,000 KW													
200	400,000	24,275.32	24,271.32	0.06069	0.06068	24,255.32	24,251.32	0.06064	0.06063	(20.00)	(20.00)	-0.08%	-0.08%
300	600,000	28,069.16	28,063.16	0.04678	0.04677	28,039.16	28,033.16	0.04673	0.04672	(30.00)	(30.00)	-0.11%	-0.11%
400	800,000	31,863.00	31,855.00	0.03983	0.03982	31,823.00	31,815.00	0.03978	0.03977	(40.00)	(40.00)	-0.13%	-0.13%
500	1,000,000	35,656.84	35,646.84	0.03566	0.03565	35,606.84	35,596.84	0.03561	0.03560	(50.00)	(50.00)	-0.14%	-0.14%
600	1,200,000	39,450.68	39,438.68	0.03288	0.03287	39,390.68	39,378.68	0.03283	0.03282	(60.00)	(60.00)	-0.15%	-0.15%
5,000 KW													
200	1,000,000	60,406.84	60,396.84	0.06041	0.06040	60,356.84	60,346.84	0.06036	0.06035	(50.00)	(50.00)	-0.08%	-0.08%
300	1,500,000	69,891.44	69,876.44	0.04659	0.04658	69,816.44	69,801.44	0.04654	0.04653	(75.00)	(75.00)	-0.11%	-0.11%
400	2,000,000	79,376.04	79,356.04	0.03969	0.03968	79,276.04	79,256.04	0.03964	0.03963	(100.00)	(100.00)	-0.13%	-0.13%
500	2,500,000	88,860.64	88,835.64	0.03554	0.03553	88,735.64	88,710.64	0.03549	0.03548	(125.00)	(125.00)	-0.14%	-0.14%
600	3,000,000	98,345.24	98,315.24	0.03278	0.03277	98,195.24	98,165.24	0.03273	0.03272	(150.00)	(150.00)	-0.15%	-0.15%
7,500 KW													
200	1,500,000	90,516.44	90,501.44	0.06034	0.06033	90,441.44	90,426.44	0.06029	0.06028	(75.00)	(75.00)	-0.08%	-0.08%
300	2,250,000	104,743.34	104,720.84	0.04655	0.04654	104,630.84	104,608.34	0.04650	0.04649	(112.50)	(112.50)	-0.11%	-0.11%
400	3,000,000	118,970.24	118,940.24	0.03966	0.03965	118,820.24	118,790.24	0.03961	0.03960	(150.00)	(150.00)	-0.13%	-0.13%
500	3,750,000	133,197.14	133,159.64	0.03552	0.03551	133,009.64	132,972.14	0.03547	0.03546	(187.50)	(187.50)	-0.14%	-0.14%
600	4,500,000	147,424.04	147,379.04	0.03276	0.03275	147,199.04	147,154.04	0.03271	0.03270	(225.00)	(225.00)	-0.15%	-0.15%
KWH DISTRIBUTION													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 UNDERGROUND RIDER RATES - DELIVERY ONLY  
SCHEDULE "GT 3A"  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 10,000 KW													
200	2,000,000	120,626.04	120,606.04	0.06031	0.06030	120,526.04	120,506.04	0.06026	0.06025	(100.00)	(100.00)	-0.08%	-0.08%
300	3,000,000	139,595.24	139,565.24	0.04653	0.04652	139,445.24	139,415.24	0.04648	0.04647	(150.00)	(150.00)	-0.11%	-0.11%
400	4,000,000	158,564.44	158,524.44	0.03964	0.03963	158,364.44	158,324.44	0.03959	0.03958	(200.00)	(200.00)	-0.13%	-0.13%
500	5,000,000	177,533.64	177,483.64	0.03551	0.03550	177,283.64	177,233.64	0.03546	0.03545	(250.00)	(250.00)	-0.14%	-0.14%
600	6,000,000	196,502.84	196,442.84	0.03275	0.03274	196,202.84	196,142.84	0.03270	0.03269	(300.00)	(300.00)	-0.15%	-0.15%
20,000 KW													
200	4,000,000	241,064.44	241,024.44	0.06027	0.06026	240,864.44	240,824.44	0.06022	0.06021	(200.00)	(200.00)	-0.08%	-0.08%
300	6,000,000	279,002.84	278,942.84	0.04650	0.04649	278,702.84	278,642.84	0.04645	0.04644	(300.00)	(300.00)	-0.11%	-0.11%
400	8,000,000	316,941.24	316,861.24	0.03962	0.03961	316,541.24	316,461.24	0.03957	0.03956	(400.00)	(400.00)	-0.13%	-0.13%
500	10,000,000	354,879.64	354,779.64	0.03549	0.03548	354,379.64	354,279.64	0.03544	0.03543	(500.00)	(500.00)	-0.14%	-0.14%
600	12,000,000	392,818.04	392,698.04	0.03273	0.03272	392,218.04	392,098.04	0.03268	0.03267	(600.00)	(600.00)	-0.15%	-0.15%
30,000 KW													
200	6,000,000	361,502.84	361,442.84	0.06025	0.06024	361,202.84	361,142.84	0.06020	0.06019	(300.00)	(300.00)	-0.08%	-0.08%
300	9,000,000	418,410.44	418,320.44	0.04649	0.04648	417,960.44	417,870.44	0.04644	0.04643	(450.00)	(450.00)	-0.11%	-0.11%
400	12,000,000	475,318.04	475,198.04	0.03961	0.03960	474,718.04	474,598.04	0.03956	0.03955	(600.00)	(600.00)	-0.13%	-0.13%
500	15,000,000	532,225.64	532,075.64	0.03548	0.03547	531,475.64	531,325.64	0.03543	0.03542	(750.00)	(750.00)	-0.14%	-0.14%
600	18,000,000	589,133.24	588,953.24	0.03273	0.03272	588,233.24	588,053.24	0.03268	0.03267	(900.00)	(900.00)	-0.15%	-0.15%
40,000 KW													
200	8,000,000	481,941.24	481,861.24	0.06024	0.06023	481,541.24	481,461.24	0.06019	0.06018	(400.00)	(400.00)	-0.08%	-0.08%
300	12,000,000	557,818.04	557,698.04	0.04648	0.04647	557,218.04	557,098.04	0.04643	0.04642	(600.00)	(600.00)	-0.11%	-0.11%
400	16,000,000	633,694.84	633,534.84	0.03961	0.03960	632,894.84	632,734.84	0.03956	0.03955	(800.00)	(800.00)	-0.13%	-0.13%
500	20,000,000	709,571.64	709,371.64	0.03548	0.03547	708,571.64	708,371.64	0.03543	0.03542	(1,000.00)	(1,000.00)	-0.14%	-0.14%
600	24,000,000	785,448.44	785,208.44	0.03273	0.03272	784,248.44	784,008.44	0.03268	0.03267	(1,200.00)	(1,200.00)	-0.15%	-0.15%
KWH DISTRIBUTION													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 UNDERGROUND RIDER RATES - DELIVERY ONLY  
SCHEDULE "GT 3B"  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE				
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)	
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	
						MAXIMUM AND ON PEAK DEMAND =								
									10,000	KW				
200	2,000,000	37,701.78	38,501.78	0.01885	0.01925	37,481.78	38,281.78	0.01874	0.01914	(220.00)	(220.00)	-0.58%	-0.57%	
300	3,000,000	50,440.98	51,240.98	0.01681	0.01708	50,110.98	50,910.98	0.01670	0.01697	(330.00)	(330.00)	-0.65%	-0.64%	
400	4,000,000	63,180.18	63,980.18	0.01580	0.01600	62,740.18	63,540.18	0.01569	0.01589	(440.00)	(440.00)	-0.70%	-0.69%	
500	5,000,000	75,919.38	76,719.38	0.01518	0.01534	75,369.38	76,169.38	0.01507	0.01523	(550.00)	(550.00)	-0.72%	-0.72%	
600	6,000,000	88,658.58	89,458.58	0.01478	0.01491	87,998.58	88,798.58	0.01467	0.01480	(660.00)	(660.00)	-0.74%	-0.74%	
									20,000	KW				
200	4,000,000	74,980.18	76,580.18	0.01875	0.01915	74,540.18	76,140.18	0.01864	0.01904	(440.00)	(440.00)	-0.59%	-0.57%	
300	6,000,000	100,458.58	102,058.58	0.01674	0.01701	99,798.58	101,398.58	0.01663	0.01690	(660.00)	(660.00)	-0.66%	-0.65%	
400	8,000,000	125,936.98	127,536.98	0.01574	0.01594	125,056.98	126,656.98	0.01563	0.01583	(880.00)	(880.00)	-0.70%	-0.69%	
500	10,000,000	151,415.38	153,015.38	0.01514	0.01530	150,315.38	151,915.38	0.01503	0.01519	(1,100.00)	(1,100.00)	-0.73%	-0.72%	
600	12,000,000	176,893.78	178,493.78	0.01474	0.01487	175,573.78	177,173.78	0.01463	0.01476	(1,320.00)	(1,320.00)	-0.75%	-0.74%	
									30,000	KW				
200	6,000,000	112,258.58	114,658.58	0.01871	0.01911	111,598.58	113,998.58	0.01860	0.01900	(660.00)	(660.00)	-0.59%	-0.58%	
300	9,000,000	150,476.18	152,876.18	0.01672	0.01699	149,486.18	151,886.18	0.01661	0.01688	(990.00)	(990.00)	-0.66%	-0.65%	
400	12,000,000	188,693.78	191,093.78	0.01572	0.01592	187,373.78	189,773.78	0.01561	0.01581	(1,320.00)	(1,320.00)	-0.70%	-0.69%	
500	15,000,000	226,911.38	229,311.38	0.01513	0.01529	225,261.38	227,661.38	0.01502	0.01518	(1,650.00)	(1,650.00)	-0.73%	-0.72%	
600	18,000,000	265,128.98	267,528.98	0.01473	0.01486	263,148.98	265,548.98	0.01462	0.01475	(1,980.00)	(1,980.00)	-0.75%	-0.74%	
									40,000	KW				
200	8,000,000	149,536.98	152,736.98	0.01869	0.01909	148,656.98	151,856.98	0.01858	0.01898	(880.00)	(880.00)	-0.59%	-0.58%	
300	12,000,000	200,493.78	203,693.78	0.01671	0.01697	199,173.78	202,373.78	0.01660	0.01686	(1,320.00)	(1,320.00)	-0.66%	-0.65%	
400	16,000,000	251,450.58	254,650.58	0.01572	0.01592	249,690.58	252,890.58	0.01561	0.01581	(1,760.00)	(1,760.00)	-0.70%	-0.69%	
500	20,000,000	302,407.38	305,607.38	0.01512	0.01528	300,207.38	303,407.38	0.01501	0.01517	(2,200.00)	(2,200.00)	-0.73%	-0.72%	
600	24,000,000	353,364.18	356,564.18	0.01472	0.01486	350,724.18	353,924.18	0.01461	0.01475	(2,640.00)	(2,640.00)	-0.75%	-0.74%	
KWH DISTRIBUTION														
		ON PK	INT	OFF PK										
200	HOURS USE =	31%	29%	40%										
300	HOURS USE =	33%	27%	40%										
400	HOURS USE =	30%	26%	44%										
500	HOURS USE =	27%	25%	48%										
600	HOURS USE =	25%	24%	51%										

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**Pepco (E)-5**

CLEAN

**DC**

Electricity--P.S.C. of D.C. No. 1  
One Hundred-Second Revised Page No. R-1

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**RATE SCHEDULES**

**FOR**

**ELECTRIC SERVICE**

**IN THE**

**DISTRICT OF COLUMBIA**



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An Exelon Company

**RATES AND REGULATORY PRACTICES GROUP**

**DC**

Electricity--P.S.C. of D.C. No. 1  
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## UNDERGROUND PROJECT CHARGE – RIDER “UPC”

### AVAILABILITY

The Distribution Charges billed under the Schedules "R", "MMA", "GS ND", "GS LV", "GS 3A", "MGT LV", "T", "GT LV", "GT 3A", "GT 3B", "RT", "SL", "OL LED", "TS", and "TN" shall be subject to the Underground Project Charge as specified in the terms of this Rider UPC. Customers who take serviced under "Rider RAD – Residential Aid Discount" shall not be subject to Rider UPC.

The Underground Project Charge is intended to recover costs associated with work performed by Pepco to place underground certain electric power lines in the District of Columbia to be used by Pepco to provide electric distribution service in the District of Columbia.

Amounts payable with respect to Rider UPC (including any true-up of such amounts as described in "Adjustment to Charge" below) will be shown on customer bills as a separate line item, "Underground Project Charge, Pepco".

### DETERMINATION OF CHARGE

The Underground Project Charge will be based on revenue requirements calculated using projected annual expenditures and other authorized items and adjustments as follows:

1. Return on capital expenditures placed into service during the period at the authorized rate of return.
2. Recovery of capital expenditures placed into service during the period through depreciation expense.
3. Incremental operating and maintenance expenses and other authorized costs and charges.
4. Reconciliation of the deferred balance on an annual basis. (See "Adjustment to Charge")

### MONTHLY CHARGES AND RATES:

Rate Schedule	January 1, 2020	
R	\$0.00005	per kWh
MMA	\$0.00004	per kWh
GS ND	\$0.00013	per kWh
T	\$0.00013	per kWh
GS LV	\$0.00022	per kWh
GS 3A	\$0.00019	per kWh
MGT LV	\$0.00014	per kWh
GT LV	\$0.00014	per kWh
GT 3A	\$0.00009	per kWh
GT 3B	\$0.00001	per kWh
RT	\$0.00008	per kWh
SL/TS/OL LED	\$0.00006	per kWh
TN	\$0.00003	per kWh

### ADJUSTMENT TO CHARGE

The Company will file an update to the Underground Project Charge on or before April 1 of each year that Rider UPC is in effect. The update will include (1) forecasted expenditures for the calendar year in which the update is filed, and (2) a true up of the UPC costs and collections for the prior calendar year. The true-up shall be the difference between actual cost for the prior calendar year (based on actual capital expenditures, plant closings and depreciation expense, incremental operating and other authorizing costs and charges) and actual booked Underground Project Charge revenue. The true-up will be added to (for under-collection), and deducted from (for over-collection), the forecasted revenue requirement for the upcoming year.

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## **DDOT UNDERGROUND ELECTRIC COMPANY INFRASTRUCTURE IMPROVEMENT CHARGE RECOVERY – UNDERGROUND RIDER**

### **APPLICABILITY**

The Distribution Charges billed under the Schedules "R", "MMA", "GS ND", "GS LV", "GS 3A", "MGT LV", "T", "GT LV", "GT 3A", "GT 3B", "RT", "SL", "OL LED", "TS", and "TN" shall be subject to the Underground Rider as specified in the terms of this Underground Rider. Customers who take service under "Rider RAD - Residential Aid Discount" shall not be subject to this Underground Rider.

The Underground Rider is intended to recover DDOT Underground Electric Company Infrastructure Improvement Charges imposed on Pepco to pay costs associated with work performed by the District Department of Transportation ("DDOT") to place underground certain electric power lines in the District of Columbia to be used by Pepco to provide electric distribution service in the District of Columbia.

Amounts payable with respect to the Underground Rider (including any true-up of such amounts as described in "Adjustment to Charge" below) will be included in the distribution energy charge on customer bills. Underground Rider charges for Schedules "RT", "TS", "SL", and "GT 3B" will be shown as a separate line item on customer bills.

### **DETERMINATION OF CHARGE**

Amounts payable with respect to the Underground Rider will be calculated based on the DDOT Underground Electric Company Infrastructure Improvement Charges imposed on Pepco in the applicable year.

### **MONTHLY CHARGES AND RATES:**

Rate Schedule	January 1, 2020	
R	\$0.00129	per kWh
MMA	\$0.00100	per kWh
GS ND	\$0.00340	per kWh
T	\$0.00340	per kWh
GS LV	\$0.00567	per kWh
GS 3A	\$0.00498	per kWh
MGT LV	\$0.00368	per kWh
GT LV	\$0.00368	per kWh
GT 3A	\$0.00221	per kWh
GT 3B	\$0.00020	per kWh
RT	\$0.00196	per kWh
SL/TS/OL LED	\$0.00155	per kWh
TN	\$0.00066	per kWh

### **ADJUSTMENT TO UNDERGROUND RIDER**

The Company will file an update to true-up amounts collected with respect to the Underground Rider not more frequently than twice per calendar year. The true-up shall be the difference between DDOT Underground Electric Company Infrastructure Improvement Charges imposed on Pepco for the period for which the update is filed and actual amounts collected by Pepco through the Underground Rider for the corresponding period. The true-up will be added to (for under-collection) or deducted from (for over-collection) the revenue requirement for the applicable period and will be allocated to each distribution service customer class in the proportion to the customer classes' contribution to the under-collection or over-collection.

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Electricity--P.S.C. of D.C. No. 1  
One Hundred-~~First~~-Second Revised Page No. R-1

**RATE SCHEDULES**

**FOR**

**ELECTRIC SERVICE**

**IN THE**

**DISTRICT OF COLUMBIA**



An Exelon Company

**RATES AND REGULATORY PRACTICES GROUP**

Date of Issue: September ~~18~~30, 2019

Date Effective: Usage on and after  
~~October-January~~ 1, 2020~~19~~

DC

Electricity--P.S.C. of D.C. No. 1  
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## UNDERGROUND PROJECT CHARGE – RIDER “UPC”

### AVAILABILITY

The Distribution Charges billed under the Schedules "R", "MMA", "GS ND", "GS LV", "GS 3A", "MGT LV", "T", "GT LV", "GT 3A", "GT 3B", "RT", "SL", "OL LED", "TS", and "TN" shall be subject to the Underground Project Charge as specified in the terms of this Rider UPC. Customers who take serviced under "Rider RAD – Residential Aid Discount" shall not be subject to Rider UPC.

The Underground Project Charge is intended to recover costs associated with work performed by Pepco to place underground certain electric power lines in the District of Columbia to be used by Pepco to provide electric distribution service in the District of Columbia.

Amounts payable with respect to Rider UPC (including any true-up of such amounts as described in "Adjustment to Charge" below) will be shown on customer bills as a separate line item, "Underground Project Charge, Pepco".

### DETERMINATION OF CHARGE

The Underground Project Charge will be based on revenue requirements calculated using projected annual expenditures and other authorized items and adjustments as follows:

1. Return on capital expenditures placed into service during the period at the authorized rate of return.
2. Recovery of capital expenditures placed into service during the period through depreciation expense.
3. Incremental operating and maintenance expenses and other authorized costs and charges.
4. Reconciliation of the deferred balance on an annual basis. (See "Adjustment to Charge")

### MONTHLY CHARGES AND RATES:

Rate Schedule	<del>April 1,</del> <del>2019</del> <u>January 1,</u> <del>2020</del>	
R	<del>\$0.000020.00005</del>	per kWh
MMA	<del>\$0.000010.00004</del>	per kWh
GS ND	<del>\$0.000070.00013</del>	per kWh
T	<del>\$0.000070.00013</del>	per kWh
GS LV	<del>\$0.000060.00022</del>	per kWh
GS 3A	<del>\$0.000080.00019</del>	per kWh
MGT LV	<del>\$0.000060.00014</del>	per kWh
GT LV	<del>\$0.000060.00014</del>	per kWh
GT 3A	<del>\$0.000030.00009</del>	per kWh
GT 3B	<del>\$0.000000.00001</del>	per kWh
RT	<del>\$0.000030.00008</del>	per kWh
SL/TS/OL LED	<del>\$0.000030.00006</del>	per kWh
TN	<del>\$0.000000.00003</del>	per kWh

### ADJUSTMENT TO CHARGE

The Company will file an update to the Underground Project Charge on or before April 1 of each year that Rider UPC is in effect. The update will include (1) forecasted expenditures for the calendar year in which the update is filed, and (2) a true up of the UPC costs and collections for the prior calendar year. The true-up shall be the difference between actual cost for the prior calendar year (based on actual capital expenditures, plant closings and depreciation expense, incremental operating and other authorizing costs and charges) and actual booked Underground Project Charge revenue. The true-up will be added to (for under-collection), and deducted from (for over-collection), the forecasted revenue requirement for the upcoming year.

Date of Issue: ~~April 1~~ September 30, 2019

Date Effective: Usage on and after  
April 1, 2019 January 1, 2020

DC

Electric--P.S.C. of D.C. No. 1  
~~Third-Fourth~~ Revised Page No. R-54

## DDOT UNDERGROUND ELECTRIC COMPANY INFRASTRUCTURE IMPROVEMENT CHARGE RECOVERY – UNDERGROUND RIDER

### APPLICABILITY

The Distribution Charges billed under the Schedules "R", "MMA", "GS ND", "GS LV", "GS 3A", "MGT LV", "T", "GT LV", "GT 3A", "GT 3B", "RT", "SL", "OL LED", "TS", and "TN" shall be subject to the Underground Rider as specified in the terms of this Underground Rider. Customers who take service under "Rider RAD - Residential Aid Discount" shall not be subject to this Underground Rider.

The Underground Rider is intended to recover DDOT Underground Electric Company Infrastructure Improvement Charges imposed on Pepco to pay costs associated with work performed by the District Department of Transportation ("DDOT") to place underground certain electric power lines in the District of Columbia to be used by Pepco to provide electric distribution service in the District of Columbia.

Amounts payable with respect to the Underground Rider (including any true-up of such amounts as described in "Adjustment to Charge" below) will be included in the distribution energy charge on customer bills. Underground Rider charges for Schedules "RT", "TS", "SL", and "GT 3B" will be shown as a separate line item on customer bills.

### DETERMINATION OF CHARGE

Amounts payable with respect to the Underground Rider will be calculated based on the DDOT Underground Electric Company Infrastructure Improvement Charges imposed on Pepco in the applicable year.

### MONTHLY CHARGES AND RATES:

Rate Schedule	<del>May 1, 2019</del> <u>January 1, 2020</u>	
R	<del>\$0.001380</del> <u>\$0.00129</u>	per kWh
MMA	<del>\$0.001150</del> <u>\$0.00100</u>	per kWh
GS ND	<del>\$0.004540</del> <u>\$0.00340</u>	per kWh
T	<del>\$0.004540</del> <u>\$0.00340</u>	per kWh
GS LV	<del>\$0.004880</del> <u>\$0.00567</u>	per kWh
GS 3A	<del>\$0.006020</del> <u>\$0.00498</u>	per kWh
MGT LV	<del>\$0.003900</del> <u>\$0.00368</u>	per kWh
GT LV	<del>\$0.003900</del> <u>\$0.00368</u>	per kWh
GT 3A	<del>\$0.002290</del> <u>\$0.00221</u>	per kWh
GT 3B	<del>\$0.000320</del> <u>\$0.00020</u>	per kWh
RT	<del>\$0.002170</del> <u>\$0.00196</u>	per kWh
SL/TS/OL LED	<del>\$0.001760</del> <u>\$0.00155</u>	per kWh
TN	<del>\$0.000790</del> <u>\$0.00066</u>	per kWh

### ADJUSTMENT TO UNDERGROUND RIDER

The Company will file an update to true-up amounts collected with respect to the Underground Rider not more frequently than twice per calendar year. The true-up shall be the difference between DDOT Underground Electric Company Infrastructure Improvement Charges imposed on Pepco for the period for which the update is filed and actual amounts collected by Pepco through the Underground Rider for the corresponding period. The true-up will be added to (for under-collection) or deducted from (for over-collection) the revenue requirement for the applicable period and will be allocated to each distribution service customer class in the proportion to the customer classes' contribution to the under-collection or over-collection.

Date of Issue: ~~May 1~~  
September 30, 2019

Date Effective: Usage on and after  
~~May 1, 2019~~  
January 1, 2020

**DISTRICT DEPARTMENT OF TRANSPORTATION**  
**BEFORE THE**  
**DISTRICT OF COLUMBIA PUBLIC SERVICE COMMISSION**  
**DIRECT TESTIMONY OF RONALD WILLIAMS**  
**FORMAL CASE NO. 1145**

1   **Q1. Please state your name, your title, your employer, and the address of your**  
2       **employer.**

3   A1.           My name is Ronald Williams. I am a Professional Engineer and Program  
4           Manager for the District Department of Transportation (DDOT), located at 55 M Street,  
5           SE, Washington, DC 20003. I am testifying on behalf of DDOT.

6   **Q2. Please state your educational and occupational history.**

7   A2.           I earned a Bachelor of Science Degree in Civil Engineering from the University  
8           of Maryland, College Park and a Master of Science Degree in Structural Engineering  
9           from The George Washington University. My employment history is as follows:

10           1974-1986 Civil Engineer Bechtel Power Corporation, Gaithersburg, MD.;

11           1986-1990 Civil Engineer, Washington Metropolitan Area Transit Authority

12           (WMATA);

13           1990-1992 Senior Specialist Engineer, WMATA;

14           1992-1998 Construction Engineer, WMATA;

15           1998-2003 Project Manager, WMATA;

16           2003-2005 Assistant Director of Engineering and Architecture, WMATA;

17           2005-2016 Assistant Chief Engineer, WMATA;

18           June 2016-April 2017 Retired from WMATA; and

19           April 2017-Present Supervisory Civil Engineer, DDOT.

1           My professional experience is in civil engineering design, project management  
2           and construction management. This experience ranges from developing conceptual  
3           design plans, to completing final construction plans, to managing construction  
4           activities both on the public and private sides.

5           In my previous employment, my duties included: (1) reviewing proposals;  
6           (2) performing engineering computations; (3) generating and reviewing reports;  
7           (4) coordinating with utilities to relocate and install new infrastructure; (5) overseeing  
8           quality assurance checks and inspections; (6) coordinating with property owners for  
9           acquiring rights-of-way; (7) presenting designs to DC, Maryland and Virginia State  
10          Historic Preservation Offices; (8) presenting designs to DC Advisory Neighborhood  
11          Commissions, Fine Arts Commission and Maryland National Capitol Park and  
12          Planning Commission; (9) serving as the Contracting Officer Technical Representative  
13          for various general engineering consultant contracts and various section design  
14          engineering contracts; (10) serving as the Contracting Officer Representative for  
15          various construction contracts; and (11) managing the design criteria, standard  
16          specifications, standard drawings and design drawings updates. While employed at  
17          WMATA, I worked on many different types of projects, including construction  
18          adjacent to WMATA facilities and management of the design of the Franconia-  
19          Springfield Metrorail Station. Additionally, I managed many infrastructure projects  
20          within WMATA's operating system.

21          My relevant licenses include Professional Engineer (PE-8912) registered in the  
22          District of Columbia, Professional Engineer (#12781) registered in the state of

1 Maryland, Professional Engineer (#12987) registered in the Commonwealth of  
2 Virginia and Engineer in Training (EIT #2282) in the State of Maryland.

3 **Q3. Have you ever testified before the Public Service Commission of the District of**  
4 **Columbia (Commission)?**

5 A3. Yes, I sponsored testimony in Formal Case No. 1145 supporting the DC PLUG  
6 First Biennial Plan.

7 **Q4. Was your testimony prepared by you or under your direction?**

8 A4. Yes. This testimony was prepared by me or under my direct supervision and  
9 control. The sources for my testimony are DDOT records, public documents, and my  
10 personal knowledge and experience.

11 **Q5. What is the purpose of your testimony?**

12 A5. The purpose of my testimony is to discuss: (a) the DDOT Underground Electric  
13 Company Infrastructure Improvement Costs, including the portion of the DC PLUG  
14 initiative Education Plan to be funded by DDOT; (b) the DDOT Underground Electric  
15 Company Infrastructure Improvement Charges (DDOT Charges); and (c) other  
16 information, such as local business procurement.

17 **Q6. Which provisions of Undergrounding Act<sup>1</sup> does your testimony address?**

18 A6. I am testifying in regard to D.C. Code §34-1313.03(c), §34-1313.08(a)(3)(E),  
19 and §34-1313.08(c)(2), (4), (5) and (10). As demonstrated herein, the DDOT  
20 Underground Electric Company Infrastructure Costs are authorized by the

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<sup>1</sup> The Electric Company Infrastructure Improvement Financing Act of 2014 was subsequently amended, including on May 17, 2017, by Mayor Muriel Bowser who signed (and thereby made effective) the Electric Company Infrastructure Improvement Financing Emergency Amendment Act of 2017 (as amended, Undergrounding Act).

1 Undergrounding Act and are prudent, and the DDOT Charges have been established in  
2 accordance with the Undergrounding Act and are reasonable.

3 **Q7. What are the DDOT Underground Electric Company Infrastructure**  
4 **Improvement Costs and the DDOT Underground Electric Company**  
5 **Infrastructure Improvement Activity?**

6 A7. Pursuant to D.C. Code §34-1311.01(14), DDOT Underground Electric  
7 Company Infrastructure Improvement Costs are:

8 any cost incurred by DDOT, including capitalized costs relating to  
9 an underground electric plant, capitalized costs associated with  
10 design and engineering work, expenses that DDOT incurs for the  
11 development of annual construction plans, contingency for the costs  
12 to complete and place in service the electric plant to be installed in  
13 the applicable biennial Underground Infrastructure Improvement  
14 Projects Plan and other expenses incurred or expected to be incurred  
15 by or for the account of DDOT in undertaking DDOT Underground  
16 Electric Company Infrastructure Improvement Activity, including  
17 preliminary expenses and investments and other costs that  
18 reasonably may be incurred in support of the DDOT Underground  
19 Electric Company Infrastructure Improvement Activity.

20 Pursuant to D.C. Code §34-1311.01(11), the DDOT Underground Electric Company  
21 Infrastructure Improvement Activity is:

22 The civil engineering for and the construction and installation of  
23 DDOT Underground Electric Company Infrastructure  
24 Improvements.

25 **Q8. Where in the Second Biennial Plan did DDOT and Pepco include itemized**  
26 **estimates of the DDOT Underground Electric Company Infrastructure**  
27 **Improvement Costs, as required by D.C. Code §34-131 3.08(c)(2)?**

28 A8. Itemized estimates of the DDOT Underground Electric Company Infrastructure  
29 Improvement Costs can be found in Appendix H, made available in public and

1 confidential versions.<sup>2</sup> DDOT and Pepco are seeking confidential treatment of the cost  
2 information because, based on past experience, a potential contractor's bid is likely to  
3 be more competitive if it does not know in advance what DDOT and Pepco expect a  
4 project to cost.<sup>3</sup>

5 **Q9. How did DDOT develop the itemized estimate of the DDOT Underground Electric**  
6 **Company Infrastructure Improvement Costs?**

7 A9. DDOT developed the civil cost estimates included in the Second Biennial Plan  
8 in a manner consistent with standard DDOT practices for estimating the civil cost of a  
9 DDOT project in the development phase. In this process, DDOT employed the  
10 historical bid-based methodology for items of work normally found in DDOT  
11 contracts. This methodology allowed DDOT to leverage its experience bidding  
12 specific types of DDOT pay items and quantities that will be included in the DC PLUG  
13 initiative to calculate an estimated cost. DDOT maintains a database of contractors'  
14 bid prices in a software application known as AASHTOWare. Next, DDOT used the  
15 cost-based estimating methodology for specific items that can be calculated using  
16 RSMeans Heavy Construction Cost Data (RSMeans), which is also used by DDOT  
17 contractors. RSMeans uses the cost of materials and the cost of labor to determine total  
18 cost. RSMeans also calculates how many crews will be required to perform the work,  
19 based on their estimated daily output. DDOT also used the cost-based estimating

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<sup>2</sup> See Second Biennial Plan at Appendix H.

<sup>3</sup> DDOT and the Potomac Electric Power Company (Pepco) are providing the itemized Electric Company Infrastructure Improvement Costs and DDOT Underground Electric Company Infrastructure Improvement Costs under confidential cover pursuant to 15 D.C.M.R. § 150. Aggregate amounts for DDOT, Pepco and Total Costs appear in Appendices B and C.

1 methodology to verify the accuracy of the civil cost estimates calculated using  
2 historical bid-based cost estimating.

3 In conjunction with the methods described above, DDOT employed its  
4 engineering judgment, experience, and guidelines such as DDOT's Standards and  
5 Specifications for Highways and Structures.<sup>4</sup>

6 **Q10. Are the DDOT Underground Electric Company Infrastructure Improvement**  
7 **Costs included in the Second Biennial Plan prudent?**

8 A10. Yes, the DDOT Underground Electric Company Infrastructure Improvement  
9 Costs included in the Second Biennial Plan are prudent because they include all costs  
10 necessary to perform the projects and work that is included in the DDOT Underground  
11 Electric Company Infrastructure Improvement Activity, these costs will be incurred by  
12 DDOT in a cost-effective manner, and they will be funded by the DDOT Charges.

13 **Q11. What are the DDOT Charges?**

14 A11. D.C. Code §34-1311.01(13) defines the DDOT Charge as "a charge imposed  
15 by the District on the electric company pursuant to a financing order issued by the  
16 Commission, which charge shall be used by the District to pay the DDOT Underground  
17 Electric Company Infrastructure Improvement Costs."

18 **Q12. In the Second Biennial Plan, what is the amount of the DDOT Charges that the**  
19 **District is seeking Commission approval to impose on Pepco?**

20 A12. The DDOT Charges for which the District is seeking approval to impose on  
21 Pepco for the Second Biennial Plan is \$60 million, or \$30 million per year.

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<sup>4</sup> The Commission previously approved DDOT's cost estimate methodology for the DDOT Underground Electric Company Infrastructure Improvement Costs when the Commission approved the First Triennial Plan in Order No. 17697.

1 **Q13. Are the DDOT Charges reasonable?**

2 A13. Yes, the DDOT Charges are reasonable because they allow DDOT to collect  
3 the \$187.5 million dollars authorized under the Undergrounding Act over the life of the  
4 DC PLUG initiative, as contemplated by the Undergrounding Act. Based on current  
5 planning, DDOT and Pepco will be filing a total of three biennial plans (the First  
6 Biennial Plan previously filed with the PSC on July 3, 2017, the Second Biennial Plan  
7 filed with this testimony, and a future filing of a Third Biennial Plan expected to be  
8 filed in 2021) with DDOT Charges of approximately \$60 million per biennial plan (or  
9 \$30 million per year). Consequently, the total collected by the District from Pepco will  
10 be equal to or less than the \$187.5 million authorized pursuant to D.C. Code §34-  
11 1313.01(a)(2)(A). Furthermore, as described in the testimony of Company Witness  
12 McGowan, Pepco will make payment of the DDOT Charges by the 10<sup>th</sup> day of each  
13 month during the Second Biennial Plan, and Pepco will remit a payment equal to 1/24  
14 of the DDOT Charges approved for the Second Biennial Plan and pay it to the DDOT  
15 Underground Electric Company Infrastructure Improvement Fund (DDOT  
16 Improvement Fund), as required by D.C. Code §34-1313.01(a)(2)(B). The DDOT  
17 Improvement Fund will be administered by the Director of DDOT and will be used  
18 solely to pay for DDOT Underground Electric Company Infrastructure Improvement  
19 Costs, in accordance with D.C. Code §34-1313.03(a).

1

2 **Q14. Does DDOT plan to coordinate the DDOT Electric Company Infrastructure**  
3 **Improvements Activity with DDOT roadwork and other projects that involve**  
4 **disruption to and subsequent restoration of road surface or that otherwise impede**  
5 **the flow of traffic along the roadway?**

6 A14. Yes, DDOT is currently analyzing its planned resurfacing and reconstruction  
7 projects in the District of Columbia in an effort to identify opportunities for  
8 coordination with the DC PLUG initiative and potential cost savings. These  
9 opportunity projects derive from coordinating the DC PLUG initiative work with  
10 DDOT reconstruction and planned resurfacing projects. DDOT reconstruction work  
11 includes projects that are in DDOT's current Six-Year Transportation Improvement  
12 Program. The scope of work for these projects typically includes full reconstruction of  
13 the road including, but not limited to, new sidewalks, curbs, gutter, full depth roadway,  
14 inlets, landscape, utilities, street lights and traffic signals. DDOT resurfacing work  
15 includes projects that are in DDOT's Annual Paving Plans. The scope of this work  
16 typically includes milling and paving of the roadway surface only, with some minor  
17 roadway repair work. Any opportunity projects DDOT identifies will contribute to the  
18 up to \$62.5 million contribution from the DDOT Capital Improvement funding.

19 DDOT is looking closely at the areas of the District of Columbia that are served  
20 by one or more of the top-ranked 20-30 feeders (according to Appendix A) to identify  
21 planned resurfacing or reconstruction projects that may coincide with projects to place  
22 those feeders underground.

1           In addition to the ten feeders selected to be placed underground,<sup>5</sup> DDOT and  
2           Pepco may prioritize whole or portions of other feeders to take advantage of these  
3           opportunities, where it is appropriate and cost-effective to do so. DDOT and Pepco  
4           will provide an update of their efforts to coordinate the projects in the Second Biennial  
5           Plan in the annual reports as well as in semi-annual meetings on the Second Biennial  
6           Plan. In addition, Pepco and DDOT will report on the status of coordination efforts in  
7           future Biennial Plans filed with the Commission.

8   **Q15. Where in the Second Biennial Plan did DDOT include a description of the efforts**  
9           **taken to identify District of Columbia residents to be employed by Pepco and**  
10           **DDOT contractors during the construction of the DDOT Underground Electric**  
11           **Company Infrastructure Improvements and the Electric Company Infrastructure**  
12           **Improvements contained in the Second Biennial Plan, as required by D.C. Code**  
13           **§34-1313.08(c)(4)?**

14   A15.           A description of the efforts taken to identify District of Columbia residents to  
15           be employed by Pepco and DDOT contractors during this initiative can be found in the  
16           “Focus on District of Columbia Businesses and Residents” section of the Second  
17           Biennial Plan.

18   **Q16. Please briefly discuss the particular efforts that DDOT has undertaken to identify**  
19           **District of Columbia businesses to be employed during this initiative.**

20   A16.           The DC PLUG team has conducted over 70 one-on-one meetings with Certified  
21           Business Enterprise (CBE) and non-CBE firms interested in receiving their CBE  
22           certification to understand their existing capabilities and discuss their potential

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<sup>5</sup> Appendix B provides information about the ten feeders selected to be placed underground in the Second Biennial Plan.

1 participation in the DC PLUG initiative. The firms typically perform professional  
2 services, construction management, project management, program management,  
3 communications and community outreach. The Joint Applicants have also participated  
4 in “match-making events” with District-based CBE and Small Business Enterprise  
5 firms and attending the District of Columbia’s 2018 Small Business Expo.

6 For additional information and detail regarding the Joint Applicants’ efforts to  
7 engage District of Columbia businesses and residents in the DC PLUG initiative, see  
8 Workforce Engagement Report filed in Formal Case No. 1145.

9 **Q17. Are alternate funding sources available for relocation of the overhead equipment**  
10 **and ancillary facilities that will utilize DDOT Underground Electric Company**  
11 **Infrastructure Improvements, such as contributions in aid of construction, the**  
12 **grant of federal highway or economic development funds or other sources (D.C.**  
13 **Code §34-1313.08(c)(5))?**

14 A17. DDOT is not aware of available alternate funding sources for the relocation of  
15 the overhead equipment and ancillary facilities at this time. Thus, there are no alternate  
16 funding sources described in the Second Biennial Plan. Throughout the course of the  
17 DC PLUG initiative, DDOT, along with Pepco, will seek and utilize, where possible,  
18 alternative funding opportunities.

19 **Q18. Have DDOT and Pepco included in the Second Biennial Plan a utility coordination**  
20 **protocol in accordance with D.C. Code §34-1313.08(c)(10)?**

21 A18. Yes, DDOT and Pepco included in the Second Biennial Plan a Utility  
22 Coordination Protocol that identifies a process to provide notice to and to coordinate  
23 engineering, design and construction work performed pursuant to the Second Biennial

1 Plan with the other utilities in the District of Columbia that may be affected by the  
2 project work. See Appendix O. The Utility Coordination Protocol is based on DDOT's  
3 practice of coordinating construction work in the District of Columbia and is  
4 unchanged since the First Biennial Plan. The Commission approved the Utility  
5 Coordination Protocol submitted with the First Biennial Plan in Order No. 19167.<sup>6</sup>

6 **Q19. Please describe DDOT's and Pepco's efforts to coordinate with other utilities.**

7 A19. DDOT intends to hold monthly utility coordination meetings, with Pepco in  
8 attendance, during the planning, design and construction phases of DC PLUG initiative  
9 work. DDOT will invite District of Columbia Water and Sewer Authority, Washington  
10 Gas Light Company, and Verizon Washington, DC Inc., to participate in the  
11 coordination meetings. Additionally, DDOT and Pepco intend to provide these other  
12 utilities the opportunity to review and provide comments on the engineering designs at  
13 various stages in the design process for each DC PLUG initiative feeder.

14 **Q20. Does the Second Biennial Plan satisfy the requirements of D.C. Code §34-1313.08,**  
15 **as required in D.C. Code §34-1313.10(b)(1)?**

16 A20. Yes, for the reasons discussed above and in the testimonies of Company  
17 Witnesses McGowan, Smith, Lipari, Blazunas and Kozey, DDOT and Pepco have  
18 satisfied the requirements of D.C. Code §34-1313.08.

19 **Q21. Should the Commission approve the Second Biennial Plan as jointly submitted by**  
20 **DDOT and Pepco?**

21 A21. Yes, the Second Biennial Plan should be approved as reasonable and consistent  
22 with the Undergrounding Act.

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<sup>6</sup> *In the Matter of the Applications for Approval of Biennial Underground Infrastructure Improvement Projects Plans and Financing Orders*, Formal Case No. 1145, Order No. 19167 (*rel.* Nov. 9, 2017) at P 189.

1    **Q22. Does this complete your testimony?**

2    A22.            Yes, it does.

## **APPENDIX A: Feeder Ranking (SAIFI, SAIDI, CMI/\$)**

Feeder Ranking (SAIFI, SAIDI, CMI/\$)						
Rank	Feeder	Ward	SAIFI	SAIDI	CMI	CMI/\$
1	15707	7	2.82	1401	4,344,144	0.095
2	14890	4	1.54	1508	2,646,206	0.237
3	14008	5	3.11	994	1,049,107	0.039
4	308	3	2.29	1507	896,685	0.045
5	15705	7	3.96	1012	2,177,854	0.037
6	14767	3	2.43	997	1,040,910	0.020
7	118	7	2.60	787	415,677	0.022
8	14758	8	2.53	444	960,836	0.033
9	14900	4	2.56	641	878,553	0.019
10	15009	4	1.90	540	759,275	0.023
11	15021	4	2.02	466	1,031,671	0.030
12	14014	5	2.72	450	994,477	0.022
13	15166	8	1.67	436	993,405	0.031
14	14007	5	1.55	881	1,431,231	0.027
15	15801	3	1.67	558	1,500,513	0.024
16	144	3	2.00	1477	407,704	0.019
17	467	4	0.76	1297	559,047	0.047
18	75	3	1.84	1058	385,006	0.033
19	14702	7	2.28	603	661,314	0.017
20	14093	5	1.29	513	691,307	0.021
21	368	7	1.33	464	323,287	0.020
22	14766	3	1.31	1084	792,098	0.021
23	394	3	1.58	863	256,325	0.016
24	14717	7	2.63	489	2,120,529	0.026
25	383	7	1.21	411	154,237	0.023
26	15001	4	1.44	712	955,334	0.020
27	15170	7	1.74	449	739,284	0.032
28	15944	4	1.44	1131	807,772	0.013
29	482	4	1.54	686	360,628	0.042
30	14200	5	1.34	339	904,939	0.043
31	15701	6	1.35	364	1,170,036	0.068
32	14896	4	1.18	515	691,242	0.019
33	15199	4	1.80	683	1,360,307	0.017
34	490	4	1.66	700	442,131	0.023
35	15264	4	0.59	604	998,544	0.032
36	385	7	0.61	506	454,078	0.030
37	14136	3	1.47	368	1,188,256	0.129
38	65	3	1.15	627	330,054	0.016
39	14135	4	1.08	524	535,385	0.018
40	165	8	0.75	463	193,486	0.023
41	64	3	1.50	707	204,260	0.009
42	14894	3	0.27	560	401,852	0.502
43	15172	8	1.27	253	387,284	0.016
44	485	4	0.96	499	362,569	0.127
45	15943	2	1.74	863	1,766,101	0.032

46	15171	8	0.93	391	670,026	0.028
47	132	3	0.57	1072	267,996	0.016
48	14009	5	1.15	228	374,744	0.023
49	14015	5	1.56	700	993,891	0.012
50	15014	4	2.04	574	1,091,613	0.014
51	14768	3	0.96	566	828,305	0.018
52	15174	8	1.48	181	433,759	0.015
53	15013	4	0.88	236	782,168	0.020
54	117	4	1.28	451	137,071	0.010
55	15710	7	1.90	435	959,756	0.011
56	15197	4	1.18	244	444,478	0.011
57	14006	5	1.05	137	273,282	0.024
58	348	8	0.90	540	139,429	0.015
59	414	4	0.86	354	170,035	0.015
60	14016	5	1.36	361	221,917	0.007
61	97	7	1.05	222	240,118	0.012
62	333	8	0.93	223	124,128	0.016
63	128	3	0.88	446	239,412	0.010
64	15200	4	0.39	416	599,432	0.018
65	14023	5	1.15	550	531,206	0.013
66	495	7	0.63	279	172,241	0.018
67	15130	7	1.27	190	375,871	0.012
68	15945	3	1.50	224	278,045	0.005
69	133	4	1.00	880	421,612	0.009
70	347	7	0.95	391	323,141	0.015
71	14701	8	1.49	155	249,672	0.010
72	451	7	1.50	205	46,327	0.004
73	14891	4	0.19	436	819,671	0.182
74	14133	3	0.95	370	300,629	0.010
75	15711	7	1.17	467	6,068	0.001
76	15946	0	0.28	250	9,239	0.000
77	14055	7	0.19	213	396,390	0.047
78	15173	7	1.24	150	279,084	0.007
79	386	7	0.52	231	108,400	0.012
80	488	4	1.03	666	565,810	0.017
81	15706	7	0.79	133	303,743	0.012
82	101	3	0.54	512	113,196	0.006
83	152	7	0.36	353	117,410	0.011
84	87	3	0.50	397	143,483	0.009
85	15175	8	0.65	188	350,099	0.019
86	14005	5	1.08	304	117,217	0.005
87	14753	8	1.39	276	231,940	0.006
88	323	8	0.52	154	89,203	0.015
89	372	7	0.51	188	141,451	0.007
90	14809	7	0.79	327	4,578	0.000
91	15709	7	1.07	84	217,938	0.006
92	499	8	0.41	336	81,953	0.011

93	15007	4	0.60	239	67,225	0.013
94	15198	4	0.46	217	362,963	0.010
95	15085	8	1.18	115	202,240	0.005
96	328	7	0.45	156	62,919	0.007
97	15011	4	0.92	146	204,580	0.008
98	15010	4	0.49	124	353,682	0.010
99	205	7	0.98	83	45,466	0.003
100	292	3	0.92	366	49,019	0.002
101	327	7	0.45	193	62,163	0.007
102	15006	4	0.46	147	367,708	0.012
103	365	7	0.36	282	200,177	0.010
104	15008	4	0.65	220	45,806	0.014
105	14150	3	0.48	141	395,588	0.045
106	82	3	0.58	278	171,834	0.007
107	15177	7	0.72	114	238,999	0.007
108	102	3	0.80	172	99,351	0.003
109	14813	7	0.14	263	57,583	0.006
110	181	3	0.60	303	77,279	0.004
111	14752	8	0.67	113	155,854	0.005
112	14261	7	0.88	61	79,960	0.002
113	380	7	0.64	459	288,465	0.006
114	366	7	0.47	126	61,868	0.004
115	15015	4	0.54	70	271,725	0.008
116	329	8	0.64	103	31,148	0.003
117	14158	7	1.53	111	887	0.000
118	494	7	0.64	76	25,398	0.003
119	309	3	0.76	160	83,699	0.005
120	244	7	0.84	371	136,156	0.005
121	14031	7	0.92	84	101,039	0.002
122	14765	3	0.57	84	69,521	0.003
123	14718	8	1.11	178	357	0.000
124	15012	4	0.54	151	492,144	0.006
125	14755	8	0.44	54	193,610	0.007
126	15947	3	0.77	106	7,009	0.001
127	369	7	0.45	100	54,478	0.003
128	14806	7	0.22	43	86,318	0.012
129	15867	3	0.58	74	96,034	0.004
130	367	7	0.43	111	57,541	0.005
131	14146	2	0.54	304	177,000	0.003
132	14145	3	0.40	60	166,647	0.006
133	15165	8	0.27	27	34,730	0.012
134	479	7	0.61	39	30,165	0.002
135	167	7	0.57	97	55,807	0.004
136	120	8	0.40	140	81,827	0.004
137	14132	3	0.74	134	151,766	0.004
138	349	7	0.18	49	28,397	0.004
139	15016	4	0.49	68	134,088	0.003

140	14035	7	0.79	74	82,581	0.002
141	15949	3	0.47	78	14,666	0.001
142	491	4	0.53	263	62,433	0.003
143	388	7	0.50	446	309,643	0.002
144	496	8	0.49	284	164,537	0.002
145	228	6	1.06	335	109,301	0.004
146	15169	8	0.56	41	41	0.000
147	15094	5	0.55	58	115,901	0.002
148	324	8	0.37	62	15,867	0.002
149	52	3	0.32	62	7,303	0.001
150	345	7	0.51	114	40,516	0.003
151	14713	6	0.71	186	593,654	0.008
152	489	4	0.27	25	10,762	0.002
153	183	8	0.21	42	44,982	0.004
154	14017	5	0.31	63	145,178	0.002
155	14812	7	0.26	52	11,173	0.002
156	63	3	0.67	154	19,463	0.000
157	476	4	0.62	64	22,619	0.001
158	14019	5	0.19	19	9,924	0.002
159	14159	7	0.23	16	589	0.000
160	387	7	0.12	15	12,138	0.001
161	413	3	0.57	151	11,786	0.000
162	14022	5	0.12	13	12,895	0.000
163	14021	5	0.45	124	5,083	0.000
164	15950	3	0.14	7	2,718	0.000
165	14716	7	0.22	4	1,678	0.000
166	164	8	0.05	7	1,892	0.000
167	481	4	0.14	7	1,427	0.001
168	60	3	0.06	15	1,872	0.000
169	56	8	0.81	125	9,886	0.000
170	14811	7	0.14	17	76,927	0.001
171	14987	4	0.05	5	11,416	0.000
172	14756	8	0.11	8	8	0.000
173	14715	7	0.27	655	1,424,262	0.001
174	14020	6	0.34	32	1,168	0.000
175	14709	8	0.19	2	25	0.000
176	14058	7	0.12	172	657,441	0.000
177	15458	5	0.02	1	10	0.000
178	15702	6	0.93	115	355,434	0.000
179	119	8	0.04	3	1,347	0.000
180	99	7	0.69	718	313,071	0.018

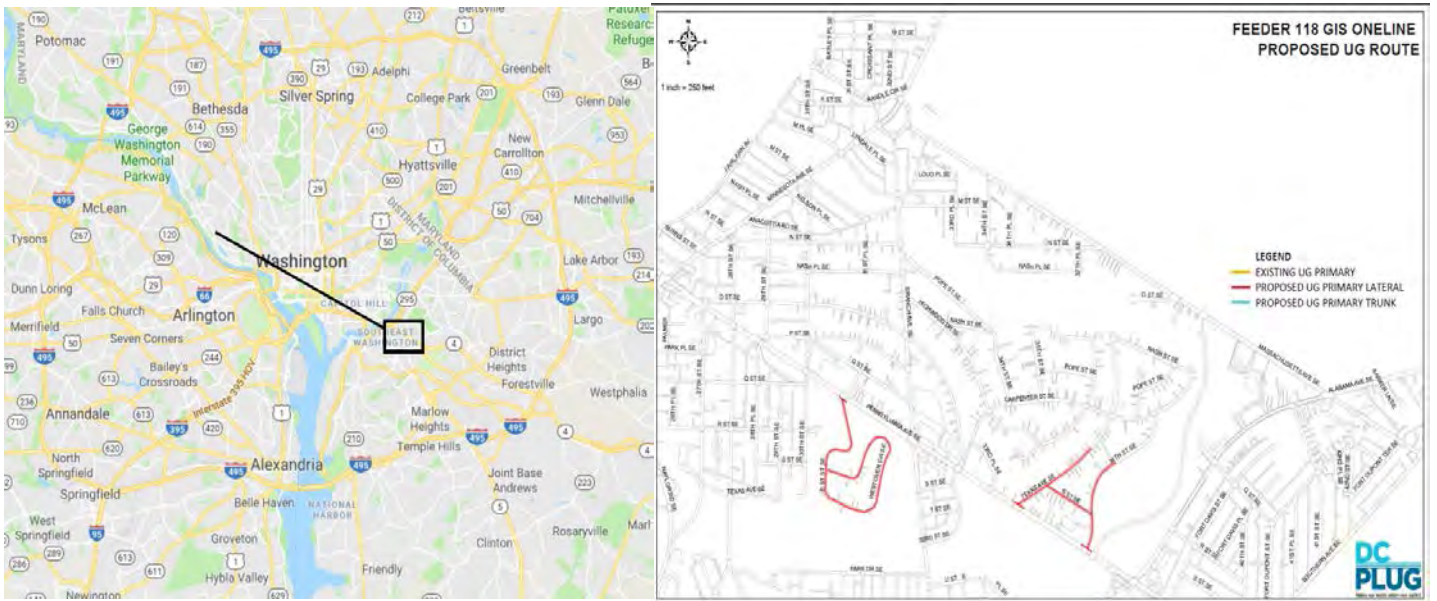
## **APPENDIX B: Feeder Prioritization**

Feeder	Ranking	Ward	# Custs Served	Estimated Total Cost	Estimated Pepco Cost	Estimated DDOT Cost	Parallel Feeders	Intertie Feeders
14008	3	5	1055	\$16,781,941	\$7,985,364	\$8,796,577	14005, 14093, 14016	14093, 14023, 14016, 15701
14767	6	3	1044	\$47,466,441	\$21,110,622	\$26,355,819	14144	15801, 14765, 14132, 14766
118	7	7	528	\$4,326,278	\$1,723,847	\$2,602,431	14031, 244, 14715	347, 244
15021	11	4	2212	\$49,146,159	\$24,203,763	\$24,942,396	15197, 15012, 15015, 15003, 15006, 15752, 15016	15006, 15010, 15011, 15013
15166	13	8	2277	\$20,210,602	\$9,067,845	\$11,142,758	122, 294, 15167, 15169, 15171, 15168, 15175	15175, 14752, 14755, 15165
467	17	3	431	\$11,683,183	\$5,721,363	\$5,961,820	133	128, 476
14702	19	7	1096	\$17,306,684	\$7,974,635	\$9,332,049	14707, 15177, 14719, 15170, 14702, 118, 349, 496, 15176, 347	15176, 14709, 14716, 15173
14093	20	5	1346	\$25,428,130	\$11,695,142	\$13,732,987	14008, 14016, 14005, 14020, 14019, 14023	14022, 14008, 14005, 14014, 14016
15001	26	4	1341	\$47,468,532	\$20,154,233	\$27,314,298	15011, 15015	15015, 15197, 15011
15171	46	8	1711	\$23,937,180	\$11,432,784	\$12,504,396	15173, 15166	15175, 15174, 14255, 15173
Second Biennial Plan Total:			13041	\$263,755,130	\$121,069,598	\$142,685,531		

## **APPENDIX C:     Feeder Description Summary Sheets**

# Feeder 118

Ward	Voltage	Customers on Feeder	Feeder Miles			Neighborhood(s)	Description
			Total	OH	UG		
7	4kV	528	3.75	97%	3%	Twining, Hillcrest, Randle Highlands, Penn Branch, Fort Davis	Feeder 00118 serves customers in vicinity of Pennsylvania Ave, SE between Fairlawn Avenue, SE and Alabama Ave, SE. Approximately 86% of customers are residential and 14% are commercial.



Average Annual Reliability Performance Indices (January 2010 - December 2018) - MSO Inclusive						
Cause	CI	% of Total CI	CMI	% of Total CMI	SAIFI	SAIDI (Minutes)
Animal	0	0.000%	0	0.000%	0.000	0
Other <sup>1</sup>	252	18.303%	23,651	5.690%	0.477	45
Equipment Failure	352	25.592%	46,867	11.275%	0.666	89
Tree	164	11.952%	60,209	14.485%	0.311	114
Weather	607	44.154%	284,949	68.551%	1.150	540
<b>Total</b>	<b>1,375</b>	<b>100%</b>	<b>415,677</b>	<b>100%</b>	<b>2.6</b>	<b>787</b>

<sup>1</sup> Causes include vandalism, motor vehicle, load, foreign contact, employee and other causes

# Feeder 118

## Future Load Projections

	Normal Capacity	Emergency Capacity	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Load (MVA)	2.2	2.5	1.8	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.5	1.4

## Proposed Scope of Work

- Remove existing OH primary wire and transformers
- Install approximately 12 manholes
- Install approximately 8 UG tap holes
- Install approximately 1.6 miles of duct bank in an underground trench
- Install ancillary civil equipment including associated paving milling
- Install approximately 13 transformers
- Install approximately 0 switches
- Install approximately 0 miles of mainline cable
- Install approximately 1.5 miles of lateral cable
- Install ancillary electrical equipment including cable supports, joints and insulators

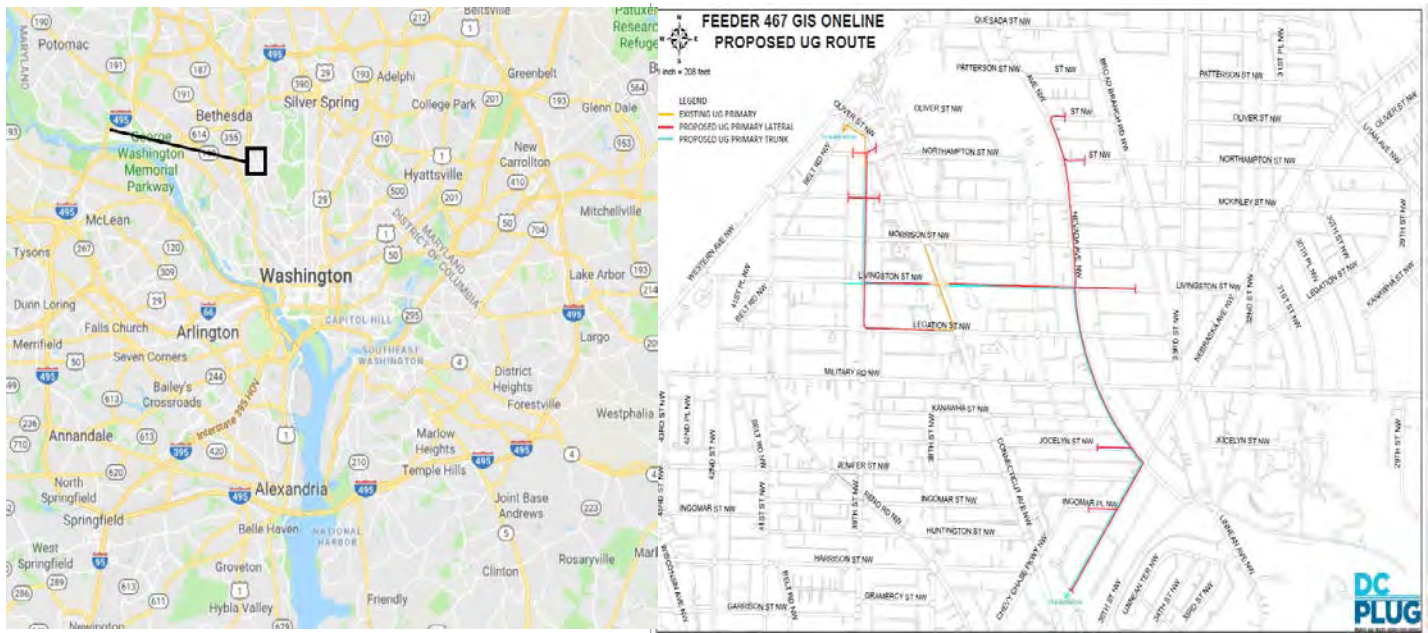
Pepco estimated cost for this feeder <sup>2</sup> :	\$	1,723,847
DDOT estimated cost for this feeder <sup>3</sup> :	\$	2,602,431
<b>Total estimated cost for this feeder:</b>	<b>\$</b>	<b>4,326,278</b>

<sup>2</sup> Estimate includes but is not limited to engineering, overhead, equipment, select materials, electrical construction, and overhead removal

<sup>3</sup> Estimate includes but is not limited to engineering, overhead, select materials, civil construction, construction management, and program management

# Feeder 467

Ward	Voltage	Customers on Feeder	Feeder Miles			Neighborhood(s)	Description
			Total	OH	UG		
3	4kV	431	2.57	83%	17%	Chevy Chase	Feeder 467 serves customers between Broad Branch RD, NW and 39th Street, NW from Oliver Street, NW to Nebraska Ave, NW. Approximately 97% of customers are residential and 3% are commercial.



Average Annual Reliability Performance Indices (January 2010 - December 2018) - MSO Inclusive						
Cause	CI	% of Total CI	CMI	% of Total CMI	SAIFI	SAIDI (Minutes)
Animal	0	0.000%	0	0.000%	0.000	0
Other <sup>1</sup>	35	10.706%	5,143	0.920%	0.081	12
Equipment Failure	50	15.274%	5,370	0.961%	0.115	12
Tree	140	42.925%	153,530	27.463%	0.325	356
Weather	101	31.094%	395,005	70.657%	0.235	916
<b>Total</b>	<b>326</b>	<b>100%</b>	<b>559,047</b>	<b>100%</b>	<b>0.8</b>	<b>1,297</b>

<sup>1</sup> Causes include vandalism, motor vehicle, load, foreign contact, employee and other causes

# Feeder 467

## Future Load Projections

	Normal Capacity	Emergency Capacity	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Load (MVA)	2.1	2.4	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8

## Proposed Scope of Work

- Remove existing OH primary wire and transformers
- Install approximately 41 manholes
- Install approximately 10 UG tap holes
- Install approximately 3.1 miles of duct bank in an underground trench
- Install ancillary civil equipment including associated paving milling
- Install approximately 36 transformers
- Install approximately 4 switches
- Install approximately 1.3 miles of mainline cable
- Install approximately 1.6 miles of lateral cable
- Install ancillary electrical equipment including cable supports, joints and insulators

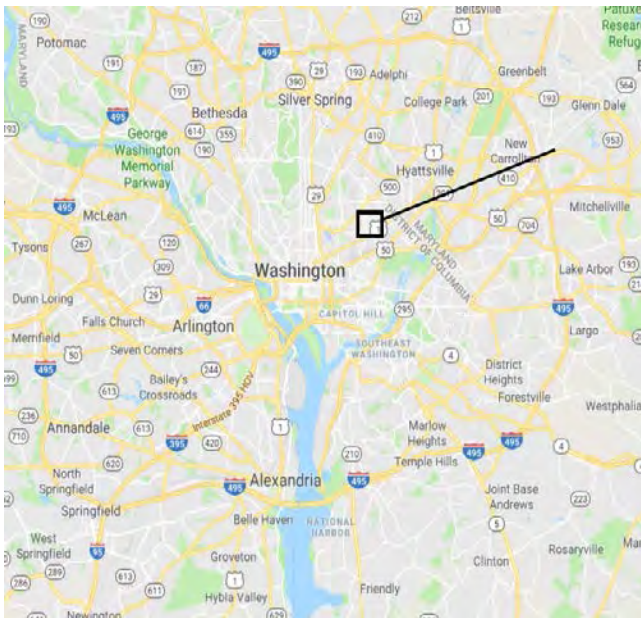
Pepco estimated cost for this feeder <sup>2</sup> :	\$	5,721,363
DDOT estimated cost for this feeder <sup>3</sup> :	\$	5,961,820
<b>Total estimated cost for this feeder:</b>	<b>\$</b>	<b>11,683,183</b>

<sup>2</sup> Estimate includes but is not limited to engineering, overhead, equipment, select materials, electrical construction, and overhead removal

<sup>3</sup> Estimate includes but is not limited to engineering, overhead, select materials, civil construction, construction management, and program management

# Feeder 14008

Ward	Voltage	Customers on Feeder	Feeder Miles			Neighborhood(s)	Description
			Total	OH	UG		
5	13kV	1,055	6.83	63%	37%	Woodridge, Brentwood	Feeder 14008 serves customers between 13th Street, NE and Queens Chapel Rd, NE from Irving Street, NE to Bladensburg Rd, NE. Approximately 89% of customers are residential and 11% are commercial.



Average Annual Reliability Performance Indices (January 2010 - December 2018) - MSO Inclusive						
Cause	CI	% of Total CI	CMI	% of Total CMI	SAIFI	SAIDI (Minutes)
Animal	507	15.447%	50,944	4.856%	0.481	48
Other <sup>1</sup>	849	25.858%	86,082	8.205%	0.805	82
Equipment Failure	764	23.264%	54,985	5.241%	0.724	52
Tree	274	8.338%	495,114	47.194%	0.260	469
Weather	891	27.130%	361,982	34.504%	0.845	343
<b>Total</b>	<b>3,286</b>	<b>100%</b>	<b>1,049,106</b>	<b>100%</b>	<b>3.1</b>	<b>994</b>

<sup>1</sup> Causes include vandalism, motor vehicle, load, foreign contact, employee and other causes

# Feeder 14008

## Future Load Projections

	Normal Capacity	Emergency Capacity	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Load (MVA)	7.5	8.5	6.2	7.2	7.0	6.4	6.3	6.4	6.3	6.3	6.2	6.2

## Proposed Scope of Work

- Remove existing OH primary wire and transformers
- Install approximately 71 manholes
- Install approximately 26 UG tap holes
- Install approximately 3.6 miles of duct bank in an underground trench
- Install ancillary civil equipment including associated paving milling
- Install approximately 57 transformers
- Install approximately 3 switches
- Install approximately 0.7 miles of mainline cable
- Install approximately 2.6 miles of lateral cable
- Install ancillary electrical equipment including cable supports, joints and insulators

Pepco estimated cost for this feeder <sup>2</sup> :	\$	7,985,364
DDOT estimated cost for this feeder <sup>3</sup> :	\$	8,796,577
<b>Total estimated cost for this feeder:</b>	<b>\$</b>	<b>16,781,941</b>

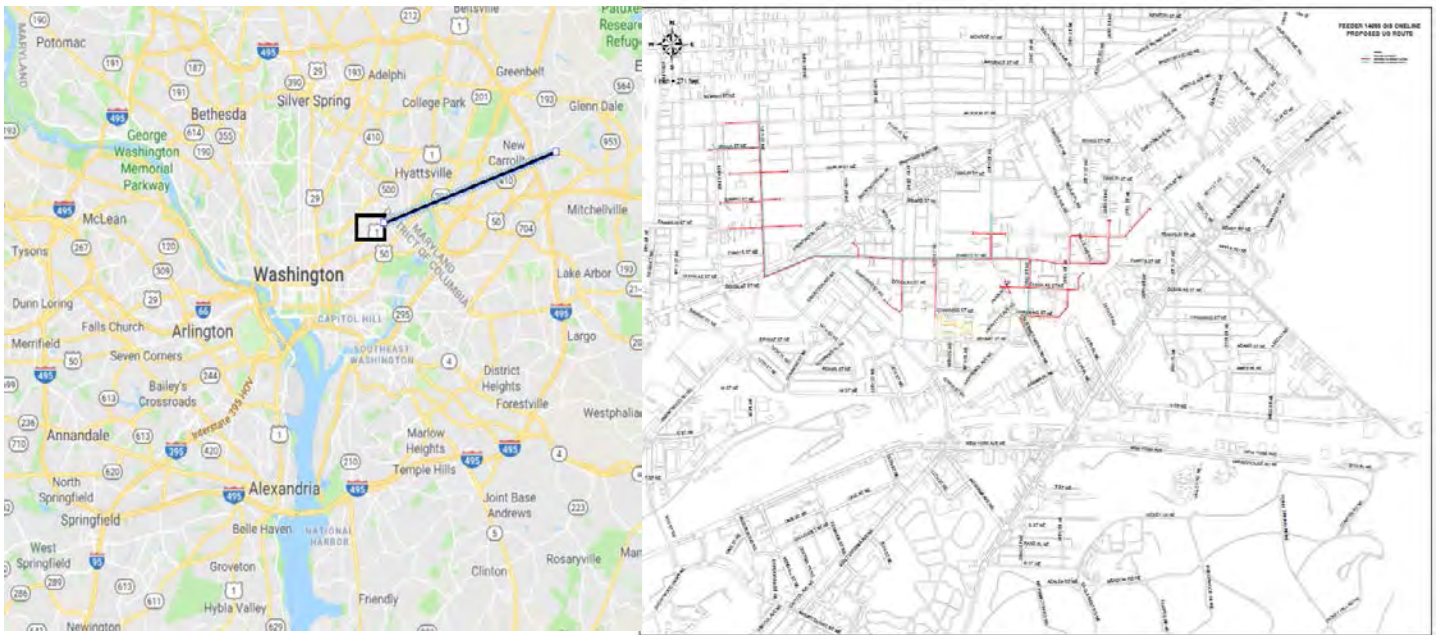
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<sup>2</sup> Estimate includes but is not limited to engineering, overhead, equipment, select materials, electrical construction, and overhead removal

<sup>3</sup> Estimate includes but is not limited to engineering, overhead, select materials, civil construction, construction management, and program management

# Feeder 14093

Ward	Voltage	Customers on Feeder	Feeder Miles			Neighborhood(s)	Description
			Total	OH	UG		
5	13kV	1,346	9.31	78%	22%	Brookland, Brentwood, Woodridge, National Arboretum, Gateway	Feeder 14093 serves customers between 12th Street, NE and 30th Street, SE from Kearny Street, NE to New York Ave, NE. Approximately 91% of customers are residential and 9% are commercial.



Average Annual Reliability Performance Indices (January 2010 - December 2018) - MSO Inclusive						
Cause	CI	% of Total CI	CMI	% of Total CMI	SAIFI	SAIDI (Minutes)
Animal	15	0.851%	1,922	0.278%	0.011	1
Other <sup>1</sup>	251	14.444%	9,964	1.441%	0.186	7
Equipment Failure	400	23.026%	96,156	13.909%	0.297	71
Tree	834	48.035%	492,497	71.241%	0.620	366
Weather	237	13.644%	90,768	13.130%	0.176	67
<b>Total</b>	<b>1,736</b>	<b>100%</b>	<b>691,307</b>	<b>100%</b>	<b>1.3</b>	<b>514</b>

<sup>1</sup> Causes include vandalism, motor vehicle, load, foreign contact, employee and other causes

# Feeder 14093

## Future Load Projections

	Normal Capacity	Emergency Capacity	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Load (MVA)	8.0	9.0	5.7	6.7	6.4	5.7	5.5	5.3	5.1	4.9	4.7	4.5

## Proposed Scope of Work

- Remove existing OH primary wire and transformers
- Install approximately 114 manholes
- Install approximately 27 UG tap holes
- Install approximately 5.9 miles of duct bank in an underground trench
- Install ancillary civil equipment including associated paving milling
- Install approximately 56 transformers
- Install approximately 7 switches
- Install approximately 1.7 miles of mainline cable
- Install approximately 3.7 miles of lateral cable
- Install ancillary electrical equipment including cable supports, joints and insulators

Pepco estimated cost for this feeder <sup>2</sup> :	\$	11,695,142
DDOT estimated cost for this feeder <sup>3</sup> :	\$	13,732,987
<b>Total estimated cost for this feeder:</b>	<b>\$</b>	<b>25,428,130</b>

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<sup>2</sup> Estimate includes but is not limited to engineering, overhead, equipment, select materials, electrical construction, and overhead removal

<sup>3</sup> Estimate includes but is not limited to engineering, overhead, select materials, civil construction, construction management, and program management

# Feeder 14702

Ward	Voltage	Customers on Feeder	Feeder Miles			Neighborhood(s)	Description
			Total	OH	UG		
7	13Kv	1,096	8.50	93%	7%	Fairlawn, Randle Heights, Randle Highlands, Twining, Good Hope, Skyland	Feeder 14702 serves customers between Fairlawn Ave, SE and Branch Ave, SE from Erie Street, SE to K Street, SE. Approximately 91% of customers are residential and 9% are commercial.



Average Annual Reliability Performance Indices (January 2010 - December 2018) - MSO Inclusive						
Cause	CI	% of Total CI	CMI	% of Total CMI	SAIFI	SAIDI (Minutes)
Animal	27	1.063%	6,258	0.946%	0.024	6
Other <sup>1</sup>	658	26.369%	87,806	13.278%	0.601	80
Equipment Failure	614	24.607%	75,940	11.483%	0.561	69
Tree	295	11.796%	63,520	9.605%	0.269	58
Weather	904	36.186%	427,791	64.688%	0.824	390
<b>Total</b>	<b>2,498</b>	<b>100%</b>	<b>661,314</b>	<b>100%</b>	<b>2.3</b>	<b>603</b>

<sup>1</sup> Causes include vandalism, motor vehicle, load, foreign contact, employee and other causes

# Feeder 14702

## Future Load Projections

	Normal Capacity	Emergency Capacity	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Load (MVA)	8.5	11.5	4.8	4.8	4.7	4.7	4.6	4.6	4.5	4.5	4.4	4.4

## Proposed Scope of Work

- Remove existing OH primary wire and transformers
- Install approximately 62 manholes
- Install approximately 37 UG tap holes
- Install approximately 4.5 miles of duct bank in an underground trench
- Install ancillary civil equipment including associated paving milling
- Install approximately 62 transformers
- Install approximately 3 switches
- Install approximately 0.6 miles of mainline cable
- Install approximately 3.5 miles of lateral cable
- Install ancillary electrical equipment including cable supports, joints and insulators

Pepco estimated cost for this feeder <sup>2</sup> :	\$	7,974,635
DDOT estimated cost for this feeder <sup>3</sup> :	\$	9,332,049
<b>Total estimated cost for this feeder:</b>	<b>\$</b>	<b>17,306,684</b>

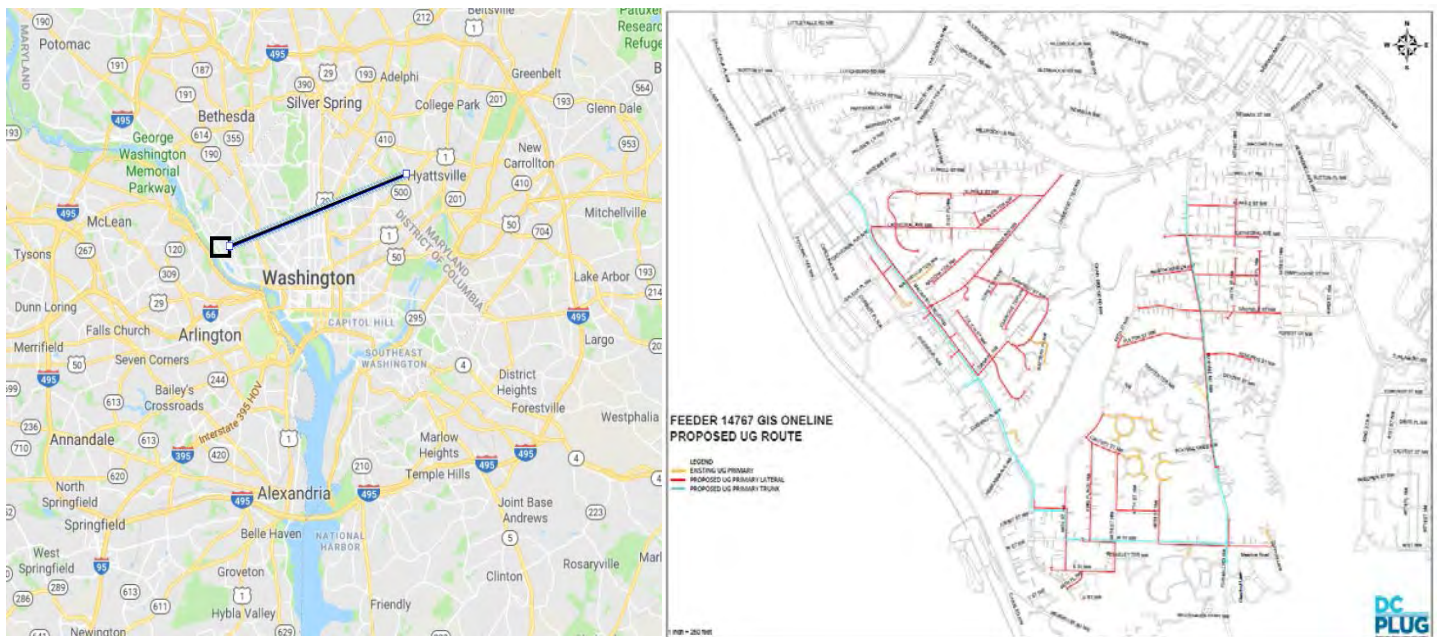
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<sup>2</sup> Estimate includes but is not limited to engineering, overhead, equipment, select materials, electrical construction, and overhead removal

<sup>3</sup> Estimate includes but is not limited to engineering, overhead, select materials, civil construction, construction management, and program management

# Feeder 14767

Ward	Voltage	Customers on Feeder	Feeder Miles			Neighborhood(s)	Description
			Total	OH	UG		
3	13kV	1,044	11.73	77%	23%	Kent, Palisades, Fort Drive, Foxhall Crescents, Berkley, Wesley Heights	Feeder 14767 serves customers between Macarthur Blvd, NW and 44th St, NW from Little Falls Rd, NW to V ST, NW. Approximately 94% of customers are residential and 6% are commercial.



Average Annual Reliability Performance Indices (January 2010 - December 2018) - MSO Inclusive						
Cause	CI	% of Total CI	CMI	% of Total CMI	SAIFI	SAIDI (Minutes)
Animal	63	2.469%	9,378	0.901%	0.060	9
Other <sup>1</sup>	182	7.169%	63,215	6.073%	0.174	61
Equipment Failure	829	32.706%	110,907	10.655%	0.794	106
Tree	1,117	44.085%	412,179	39.598%	1.070	395
Weather	345	13.606%	445,231	42.773%	0.330	426
<b>Total</b>	<b>2,535</b>	<b>100%</b>	<b>1,040,910</b>	<b>100%</b>	<b>2.4</b>	<b>997</b>

<sup>1</sup> Causes include vandalism, motor vehicle, load, foreign contact, employee and other causes

# Feeder 14767

## Future Load Projections

	Normal Capacity	Emergency Capacity	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Load (MVA)	8.5	10.5	7.2	7.3	7.0	7.0	7.0	7.1	7.1	7.1	7.2	7.1

## Proposed Scope of Work

- Remove existing OH primary wire and transformers
- Install approximately 147 manholes
- Install approximately 59 UG tap holes
- Install approximately 13.2 miles of duct bank in an underground trench
- Install ancillary civil equipment including associated paving milling
- Install approximately 135 transformers
- Install approximately 10 switches
- Install approximately 3.6 miles of mainline cable
- Install approximately 8.5 miles of lateral cable
- Install ancillary electrical equipment including cable supports, joints and insulators

Pepco estimated cost for this feeder <sup>2</sup> :	\$	21,110,622
DDOT estimated cost for this feeder <sup>3</sup> :	\$	26,355,819
<b>Total estimated cost for this feeder:</b>	<b>\$</b>	<b>47,466,441</b>

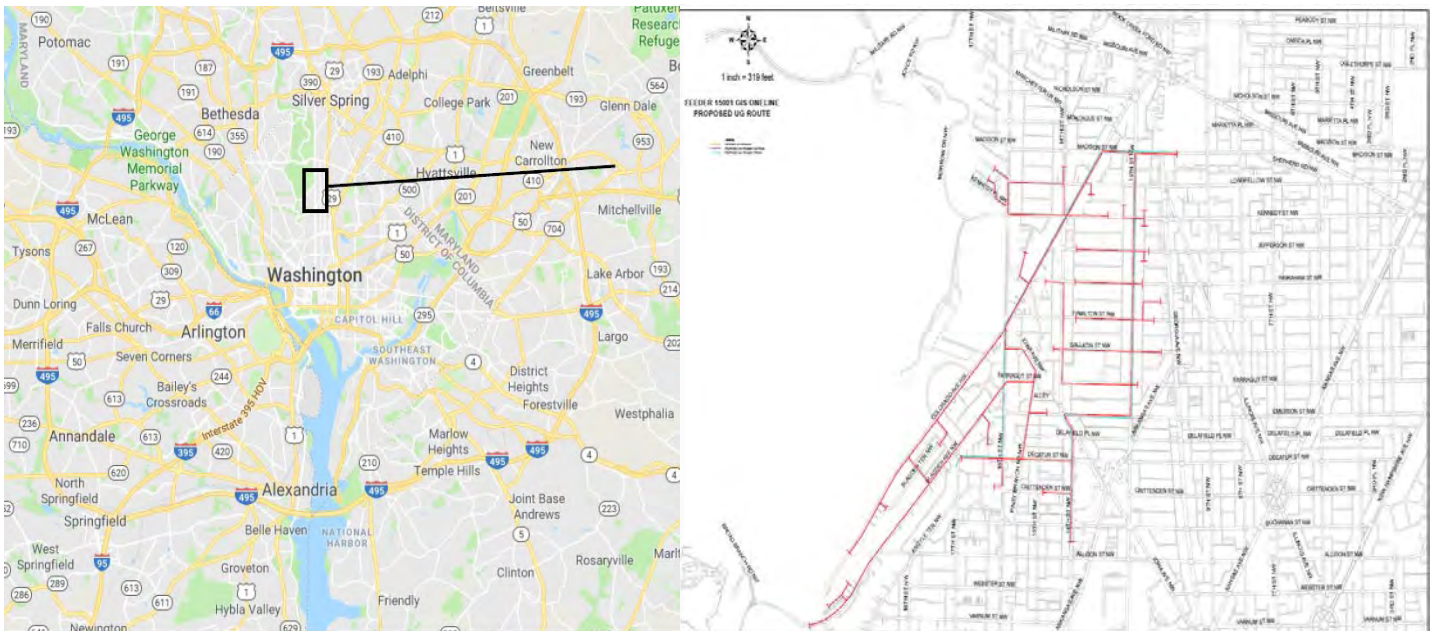
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<sup>2</sup> Estimate includes but is not limited to engineering, overhead, equipment, select materials, electrical construction, and overhead removal

<sup>3</sup> Estimate includes but is not limited to engineering, overhead, select materials, civil construction, construction management, and program management

# Feeder 15001

Ward	Voltage	Customers on Feeder	Feeder Miles			Neighborhood(s)	Description
			Total	OH	UG		
4	13kV	1,341	9.62	76%	24%	16th Street Heights, Crestwood, Rock Creek Park	Feeder 15001 serves customers between Colorado Ave, NW and Georgia Ave, NW from Madison St, NW to Allison St, NW. Approximately 92% of customers are residential and 8% are commercial."



Average Annual Reliability Performance Indices (January 2010 - December 2018) - MSO Inclusive						
	CI	% of Total CI	CMI	% of Total CMI	SAIFI	SAIDI (Minutes)
Animal	84	4.381%	7,062	0.739%	0.063	5
Other <sup>1</sup>	75	3.873%	144,278	15.102%	0.056	108
Equipment Failure	700	36.352%	62,818	6.576%	0.522	47
Tree	311	16.156%	386,820	40.490%	0.232	288
Weather	756	39.290%	354,357	37.092%	0.564	264

Total	1,926	100%	955,334	100%	1.4	712
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<sup>1</sup> Causes include vandalism, motor vehicle, load, foreign contact, employee and other causes

# Feeder 15001

## Future Load Projections

	Normal Capacity	Emergency Capacity	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Load (MVA)	9.0	10.5	6.2	6.2	6.1	6.2	6.1	6.1	6.1	6.2	6.1	6.1

## Proposed Scope of Work

- Remove existing OH primary wire and transformers
- Install approximately 161 manholes
- Install approximately 50 UG tap holes
- Install approximately 14.1 miles of duct bank in an underground trench
- Install ancillary civil equipment including associated paving milling
- Install approximately 126 transformers
- Install approximately 6 switches
- Install approximately 3 miles of mainline cable
- Install approximately 10 miles of lateral cable
- Install ancillary electrical equipment including cable supports, joints and insulators

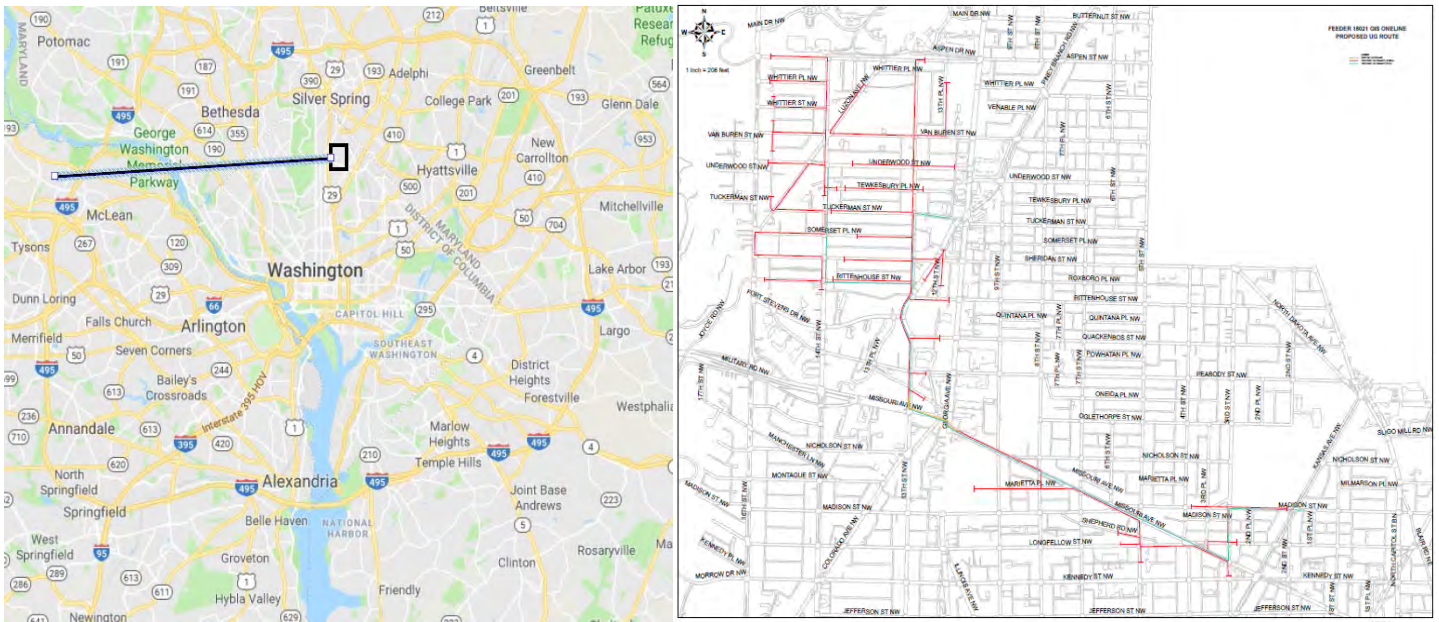
Pepco estimated cost for this feeder <sup>2</sup> :	\$	20,154,233
DDOT estimated cost for this feeder <sup>3</sup> :	\$	27,314,298
<b>Total estimated cost for this feeder:</b>	<b>\$</b>	<b>47,468,532</b>

<sup>2</sup> Estimate includes but is not limited to engineering, overhead, equipment, select materials, electrical construction, and overhead removal

<sup>3</sup> Estimate includes but is not limited to engineering, overhead, select materials, civil construction, construction management, and program management

# Feeder 15021

Ward	Voltage	Customers on Feeder	Feeder Miles			Neighborhood(s)	Description
			Total	OH	UG		
4	13kV	2,212	7.47	93%	7%	Brightwood, Petworth, Chillum	Feeder 14900 serves customers between 16th ST, NW and Kansas Ave NW from Aspen Street, NW to Kennedy Street, NW. Approximately 96% of customers are residential and 4% are commercial."



Average Annual Reliability Performance Indices (January 2010 - December 2018) - MSO Inclusive						
Cause	CI	% of Total CI	CMI	% of Total CMI	SAIFI	SAIDI (Minutes)
Animal	710	15.868%	93,466	9.057%	0.321	42
Other <sup>1</sup>	566	12.655%	62,191	6.026%	0.256	28
Equipment Failure	1,447	32.325%	165,059	15.994%	0.654	75
Tree	1,532	34.232%	594,925	57.649%	0.693	269
Weather	222	4.956%	116,344	11.274%	0.100	53
<b>Total</b>	<b>4,477</b>	<b>100%</b>	<b>1,031,984</b>	<b>100%</b>	<b>2.0</b>	<b>467</b>

<sup>1</sup> Causes include vandalism, motor vehicle, load, foreign contact, employee and other causes

# Feeder 15021

## Future Load Projections

	Normal Capacity	Emergency Capacity	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Load (MVA)	8.5	9.5	6.7	6.7	6.6	6.6	6.7	6.7	6.7	6.7	6.7	6.6

## Proposed Scope of Work

- Remove existing OH primary wire and transformers
- Install approximately 189 manholes
- Install approximately 55 UG tap holes
- Install approximately 11.4 miles of duct bank in an underground trench
- Install ancillary civil equipment including associated paving milling
- Install approximately 224 transformers
- Install approximately 6 switches
- Install approximately 2.7 miles of mainline cable
- Install approximately 7.9 miles of lateral cable
- Install ancillary electrical equipment including cable supports, joints and insulators

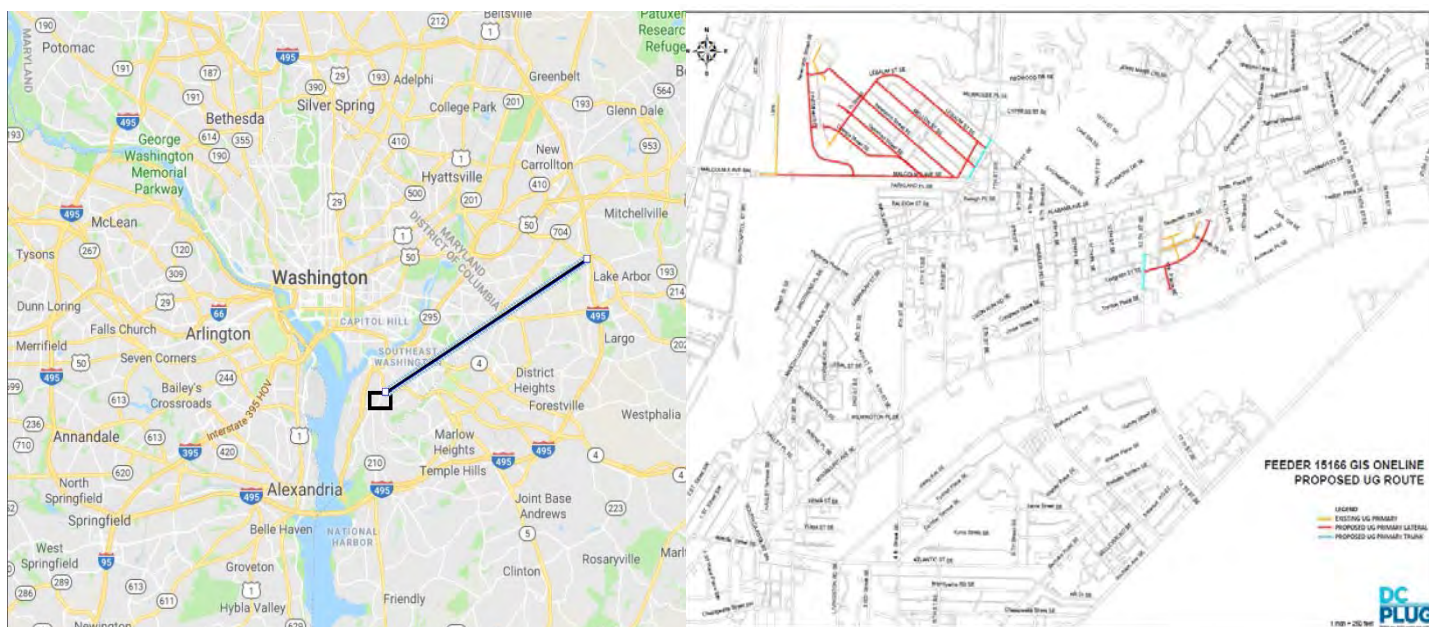
Pepco estimated cost for this feeder <sup>2</sup> :	\$	24,203,763
DDOT estimated cost for this feeder <sup>3</sup> :	\$	24,942,396
<b>Total estimated cost for this feeder:</b>	<b>\$</b>	<b>49,146,159</b>

<sup>2</sup> Estimate includes but is not limited to engineering, overhead, equipment, select materials, electrical construction, and overhead removal

<sup>3</sup> Estimate includes but is not limited to engineering, overhead, select materials, civil construction, construction management, and program management

# Feeder 15166

Ward	Voltage	Customers on Feeder	Feeder Miles			Neighborhood(s)	Description
			Total	OH	UG		
8	13kV	2,277	10.65	72%	28%	Congress Heights, Congress Park, Randall Heights	Feeder 15166 serves customers between South Capital St, SW and Southern Ave, SE from Lebaum St, SE to Chesapeake St, SE. Approximately 92% of customers are residential and 8% are commercial.



Average Annual Reliability Performance Indices (January 2010 - December 2018) - MSO Inclusive						
Cause	CI	% of Total CI	CMI	% of Total CMI	SAIFI	SAIDI (Minutes)
Animal	474	12.447%	32,066	3.228%	0.208	14
Other <sup>1</sup>	957	25.109%	104,263	10.495%	0.420	46
Equipment Failure	1,207	31.691%	98,072	9.872%	0.530	43
Tree	933	24.497%	502,215	50.555%	0.410	221
Weather	240	6.290%	256,790	25.849%	0.105	113
<b>Total</b>	<b>3,811</b>	<b>100%</b>	<b>993,405</b>	<b>100%</b>	<b>1.7</b>	<b>436</b>

<sup>1</sup> Causes include vandalism, motor vehicle, load, foreign contact, employee and other causes

# Feeder 15166

## Future Load Projections

	Normal Capacity	Emergency Capacity	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Load (MVA)	8.0	9.0	6.1	6.1	6.0	6.0	5.9	5.8	5.8	5.7	5.6	5.5

## Proposed Scope of Work

- Remove existing OH primary wire and transformers
- Install approximately 73 manholes
- Install approximately 44 UG tap holes
- Install approximately 5.7 miles of duct bank in an underground trench
- Install ancillary civil equipment including associated paving milling
- Install approximately 57 transformers
- Install approximately 5 switches
- Install approximately 0.3 miles of mainline cable
- Install approximately 5 miles of lateral cable
- Install ancillary electrical equipment including cable supports, joints and insulators

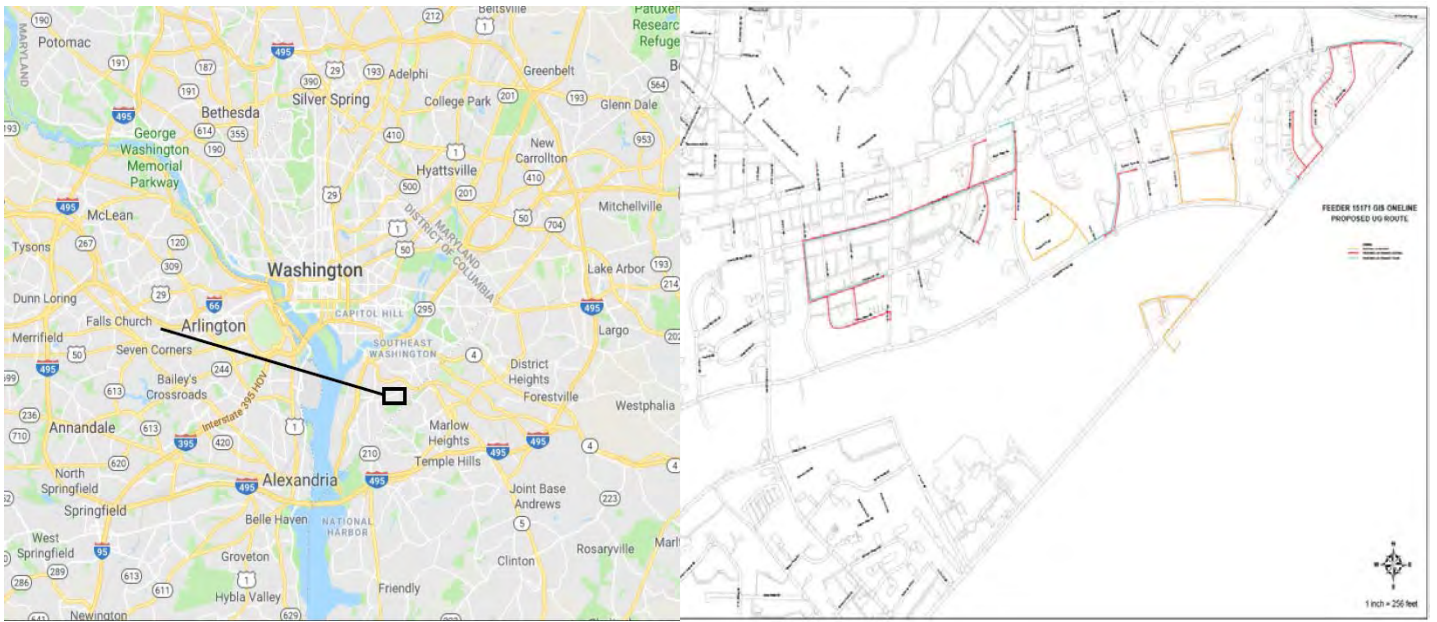
Pepco estimated cost for this feeder <sup>2</sup> :	\$	9,067,845
DDOT estimated cost for this feeder <sup>3</sup> :	\$	11,142,758
<b>Total estimated cost for this feeder:</b>	<b>\$</b>	<b>20,210,602</b>

<sup>2</sup> Estimate includes but is not limited to engineering, overhead, equipment, select materials, electrical construction, and overhead removal

<sup>3</sup> Estimate includes but is not limited to engineering, overhead, select materials, civil construction, construction management, and program management

# Feeder 15171

Ward	Voltage	Customers on Feeder	Feeder Miles			Neighborhood(s)	Description
			Total	OH	UG		
8	13kV	1,711	9.61	58%	42%	Congress Park, Douglass Dwellings, Shipley, Congress Heights	Feeder 15171 serves customers between Fairlawn Ave, SE and Alabama Ave, SE from Massachusetts Ave, SE to Good Hope Rd, SE. Approximately 95% of customers are residential and 5% are commercial.



Average Annual Reliability Performance Indices (January 2010 - December 2018) - MSO Inclusive						
Cause	CI	% of Total CI	CMI	% of Total CMI	SAIFI	SAIDI (Minutes)
Animal	333	20.886%	8,439	1.260%	0.195	5
Other <sup>1</sup>	341	21.373%	166,021	24.778%	0.199	97
Equipment Failure	184	11.557%	29,081	4.340%	0.108	17
Tree	364	22.821%	257,956	38.499%	0.213	151
Weather	374	23.420%	208,529	31.122%	0.218	122
<b>Total</b>	<b>1,597</b>	<b>100%</b>	<b>670,025</b>	<b>100%</b>	<b>0.9</b>	<b>392</b>

<sup>1</sup> Causes include vandalism, motor vehicle, load, foreign contact, employee and other causes

# Feeder 15171

## Future Load Projections

	Normal Capacity	Emergency Capacity	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Load (MVA)	9.0	10.5	5.7	5.8	5.6	5.5	5.5	5.5	5.5	5.5	5.6	5.5

## Proposed Scope of Work

- Remove existing OH primary wire and transformers
- Install approximately 92 manholes
- Install approximately 27 UG tap holes
- Install approximately 4.9 miles of duct bank in an underground trench
- Install ancillary civil equipment including associated paving milling
- Install approximately 59 transformers
- Install approximately 8 switches
- Install approximately 1.9 miles of mainline cable
- Install approximately 2.8 miles of lateral cable
- Install ancillary electrical equipment including cable supports, joints and insulators

Pepco estimated cost for this feeder <sup>2</sup> :	\$	11,432,784
DDOT estimated cost for this feeder <sup>3</sup> :	\$	12,504,396
<b>Total estimated cost for this feeder:</b>	<b>\$</b>	<b>23,937,180</b>

<sup>2</sup> Estimate includes but is not limited to engineering, overhead, equipment, select materials, electrical construction, and overhead removal

<sup>3</sup> Estimate includes but is not limited to engineering, overhead, select materials, civil construction, construction management, and program management

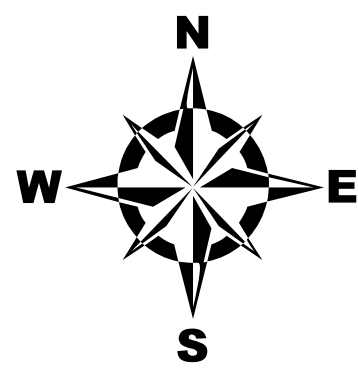
## **APPENDIX D: Feeder Locations and One-Line Drawings**



- LEGEND**
- EXISTING UG PRIMARY
  - PROPOSED UG PRIMARY LATERAL
  - PROPOSED UG PRIMARY TRUNK

## FEEDER 118 AERIAL OVERVIEW

### PROPOSED UG ROUTE



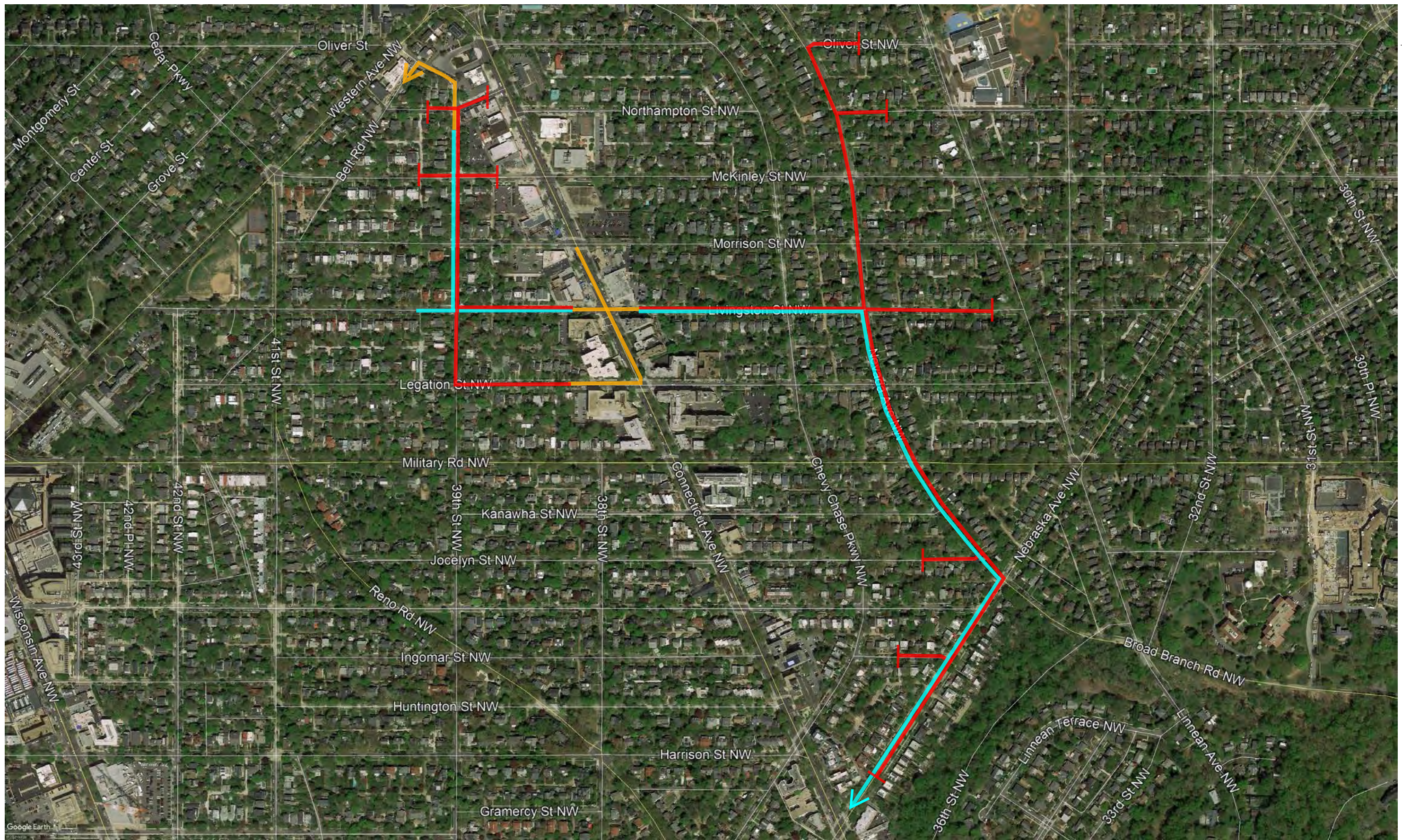
1 inch = 250 feet

# FEEDER 118 GIS ONELINE PROPOSED UG ROUTE

## LEGEND

- EXISTING UG PRIMARY
- PROPOSED UG PRIMARY LATERAL
- PROPOSED UG PRIMARY TRUNK





- LEGEND**
- EXISTING UG PRIMARY
  - PROPOSED UG PRIMARY LATERAL
  - PROPOSED UG PRIMARY TRUNK

## FEEDER 467 AERIAL OVERVIEW

### PROPOSED UG ROUTE



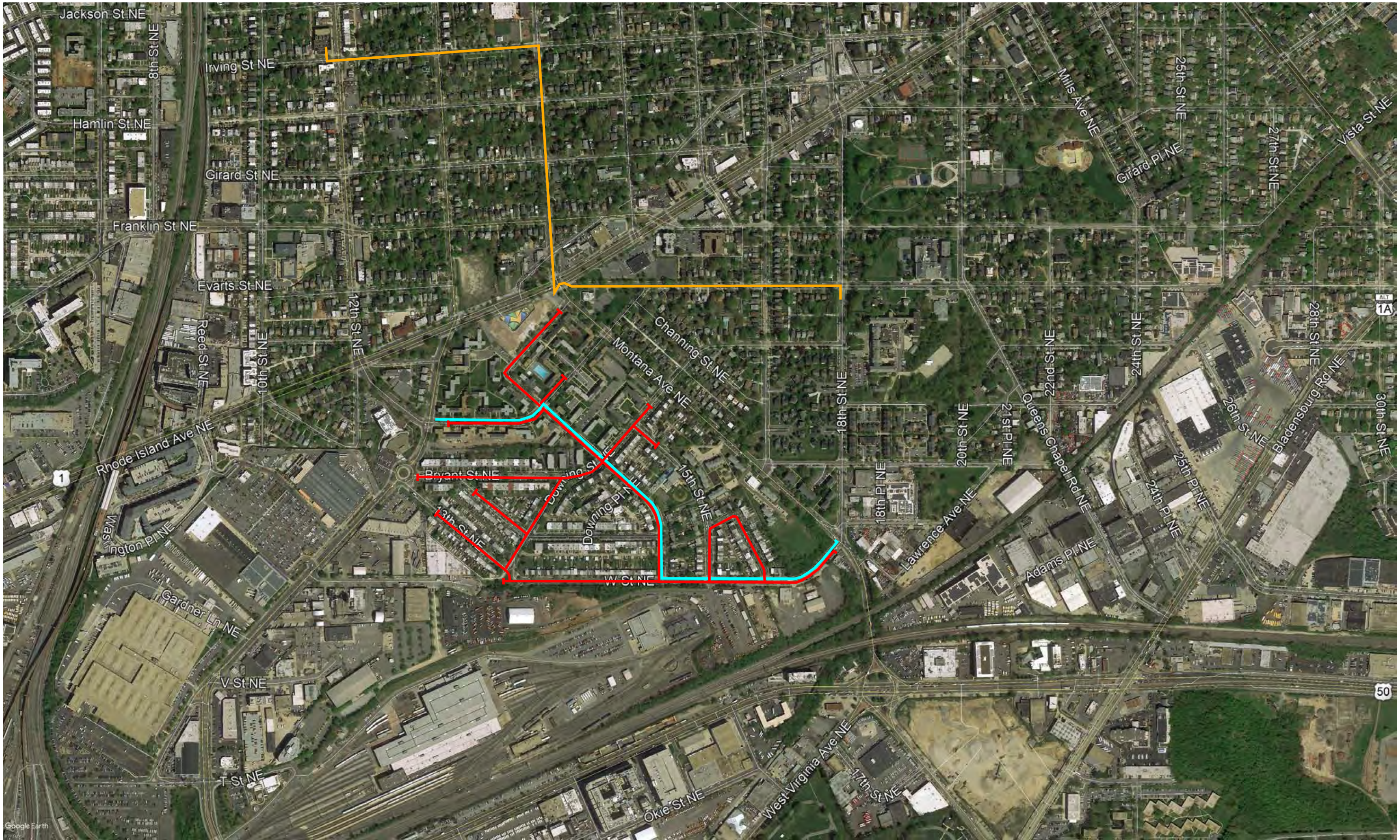
**LEGEND**

EXISTING UG PRIMARY

PROPOSED UG PRIMARY LATERAL

PROPOSED UG PRIMARY TRUNK





- LEGEND**
- EXISTING UG PRIMARY
  - PROPOSED UG PRIMARY LATERAL
  - PROPOSED UG PRIMARY TRUNK

# FEEDER 14008 AERIAL OVERVIEW

## PROPOSED UG ROUTE

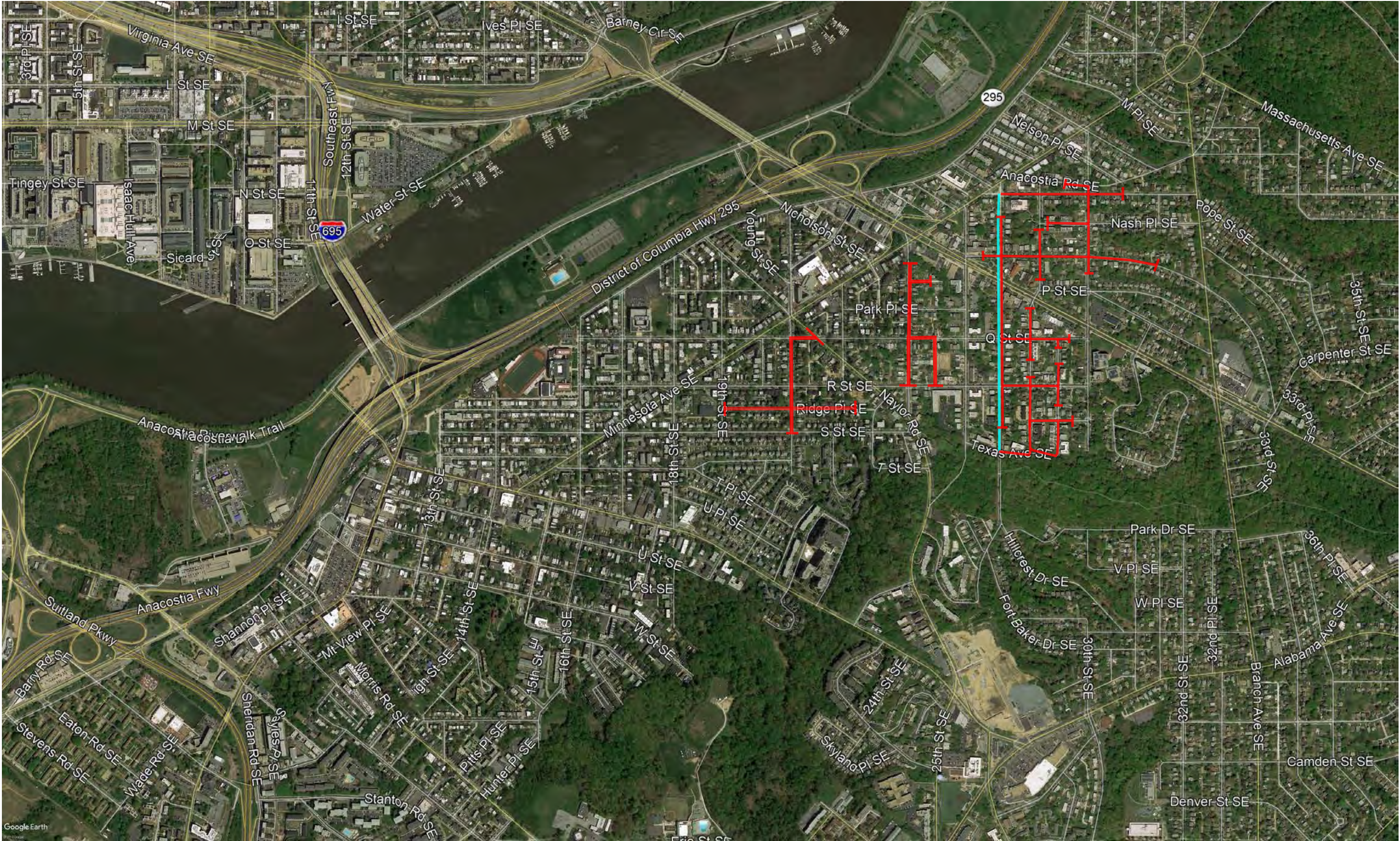






FEEDER 14093 GIS ONELINE  
PROPOSED UG ROUTE

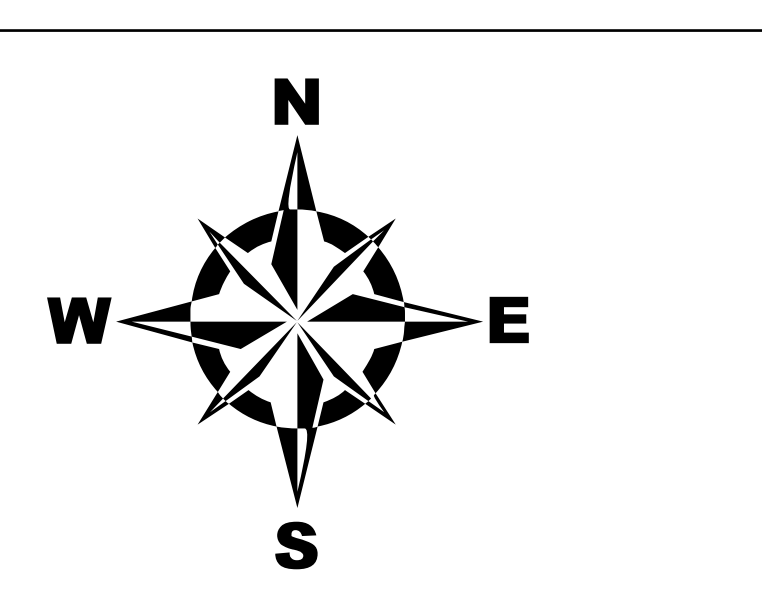
- LEGEND
- EXISTING UG PRIMARY
  - PROPOSED UG PRIMARY LATERAL
  - PROPOSED UG PRIMARY TRUNK



- LEGEND**
- EXISTING UG PRIMARY
  - PROPOSED UG PRIMARY LATERAL
  - PROPOSED UG PRIMARY TRUNK

FEEDER 14702 AERIAL OVERVIEW  
PROPOSED UG ROUTE

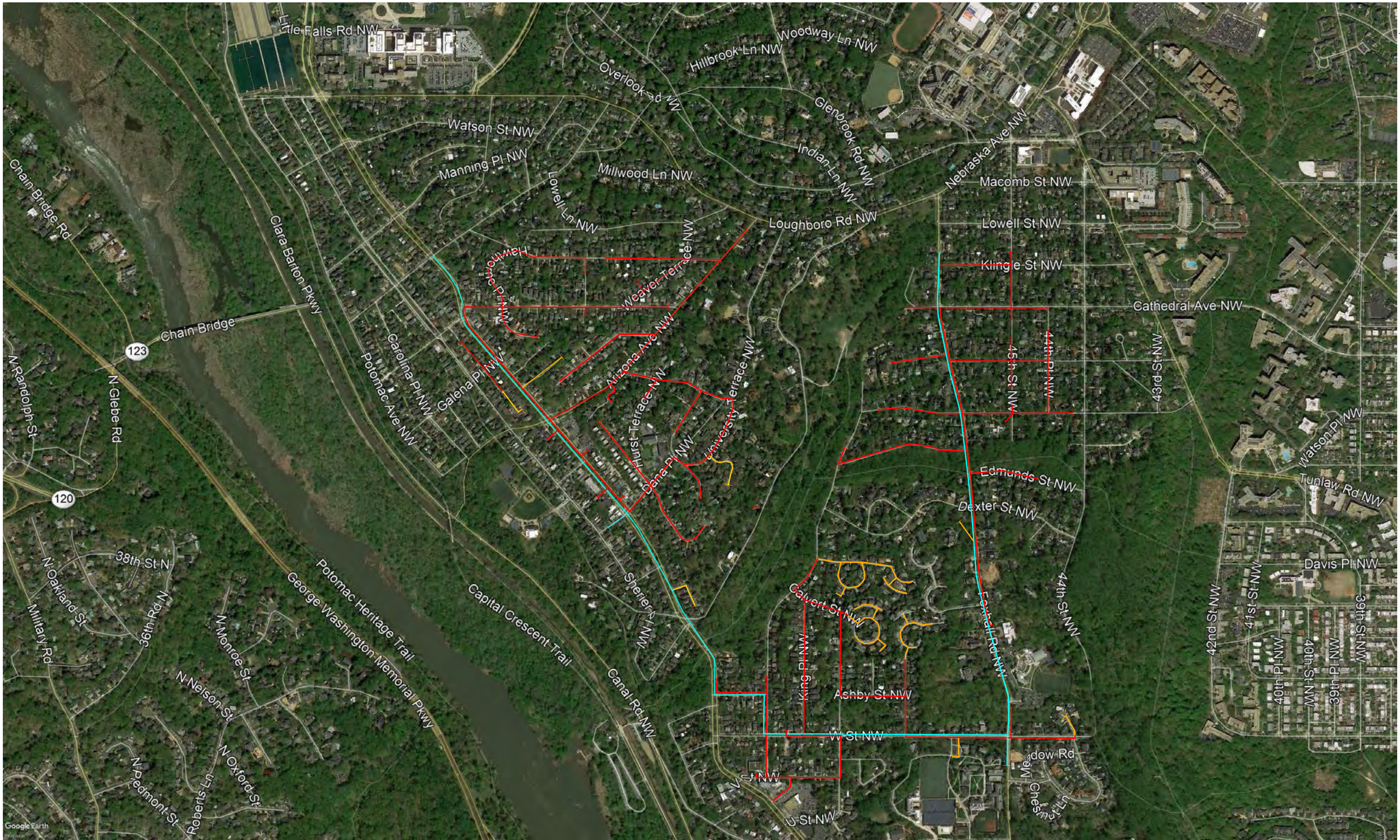




1 inch = 250 feet

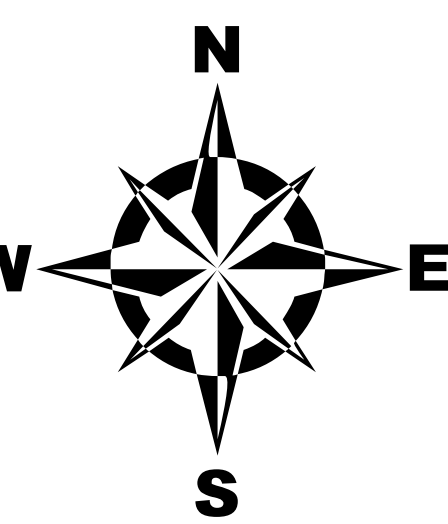
- LEGEND**
- EXISTING UG PRIMARY
  - PROPOSED UG PRIMARY LATERAL
  - PROPOSED UG PRIMARY TRUNK





- LEGEND**
- EXISTING UG PRIMARY
  - PROPOSED UG PRIMARY LATERAL
  - PROPOSED UG PRIMARY TRUNK

**FEEDER 14767 AERIAL OVERVIEW**  
**PROPOSED UG ROUTE**



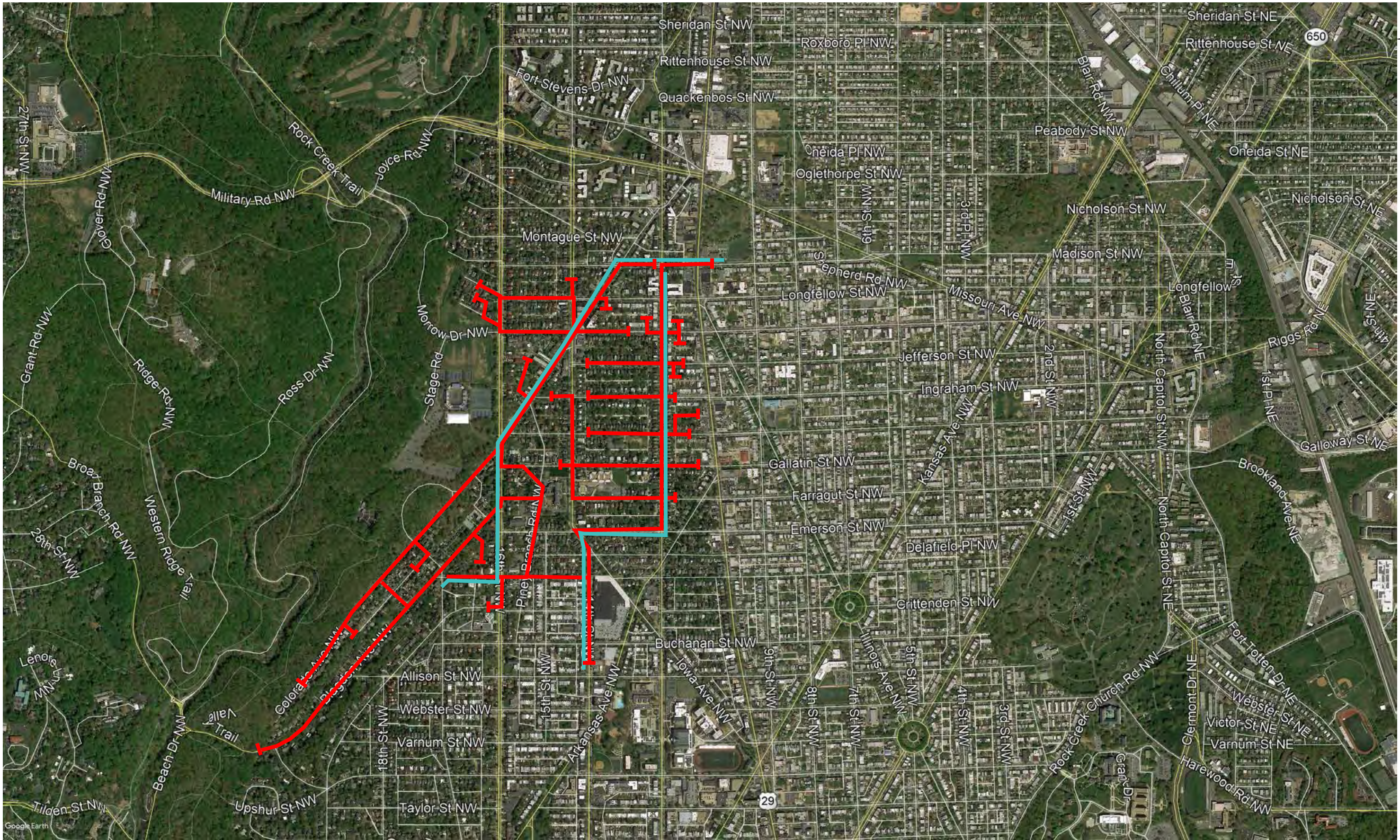
# FEEDER 14767 GIS ONELINE PROPOSED UG ROUTE

- LEGEND**
- EXISTING UG PRIMARY
  - PROPOSED UG PRIMARY LATERAL
  - PROPOSED UG PRIMARY TRUNK

1 inch = 250 feet



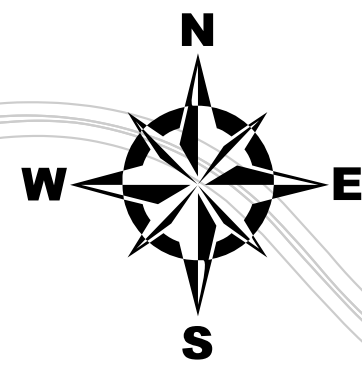
PLOTTED BY: 607215



- LEGEND**
- EXISTING UG PRIMARY
  - PROPOSED UG PRIMARY LATERAL
  - PROPOSED UG PRIMARY TRUNK

## FEEDER 15001 AERIAL OVERVIEW

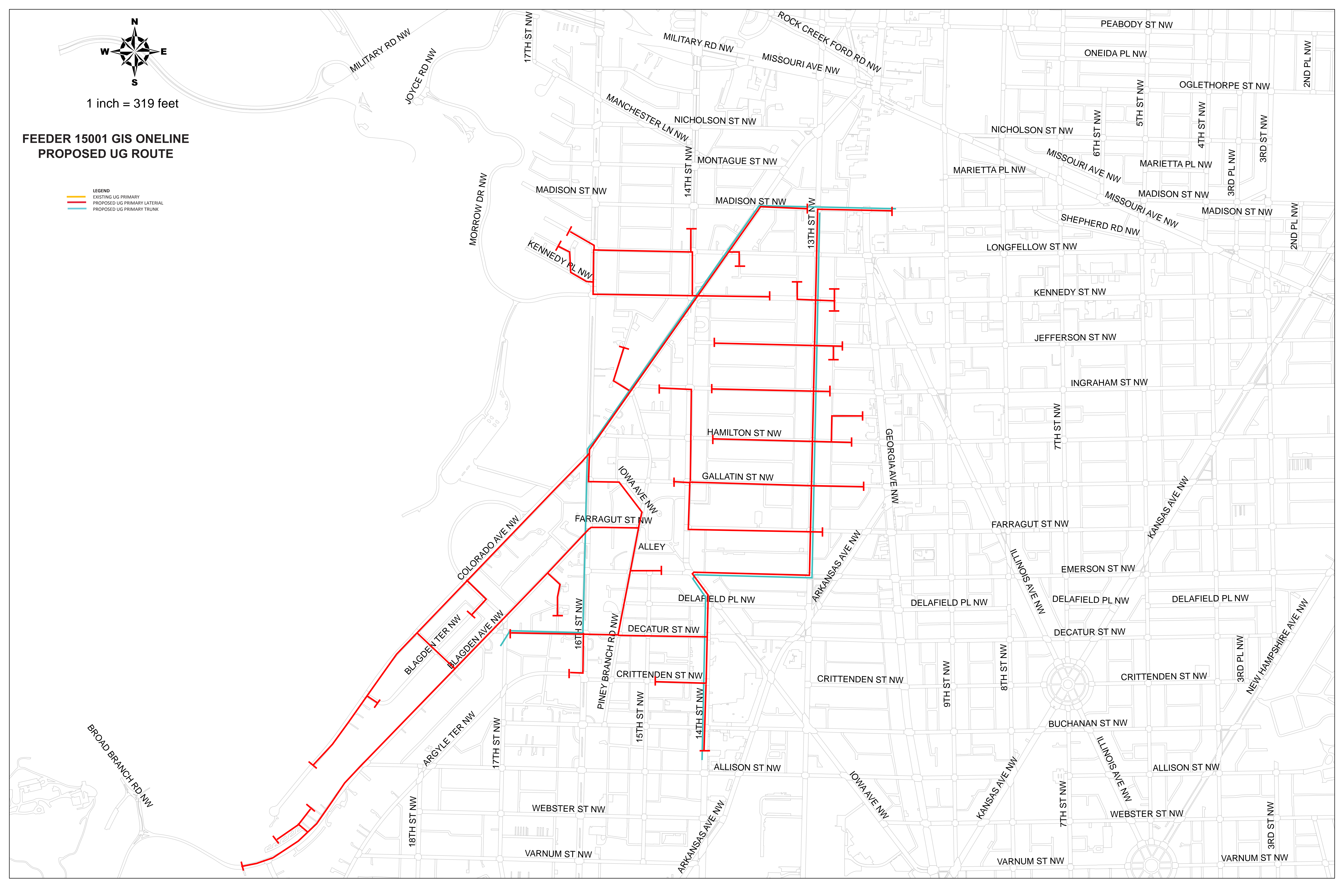
### PROPOSED UG ROUTE

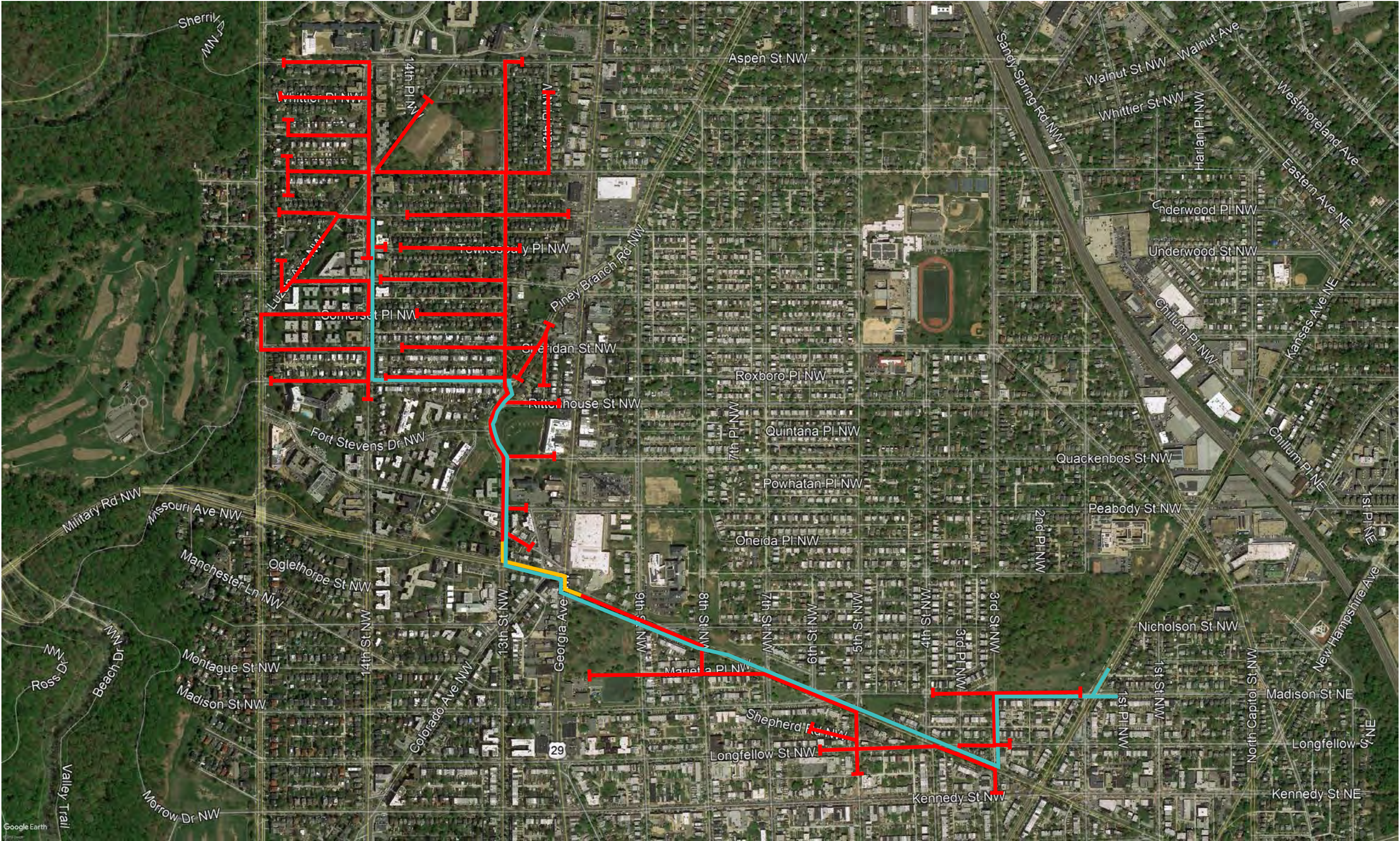


1 inch = 319 feet

**FEEDER 15001 GIS ONELINE  
PROPOSED UG ROUTE**

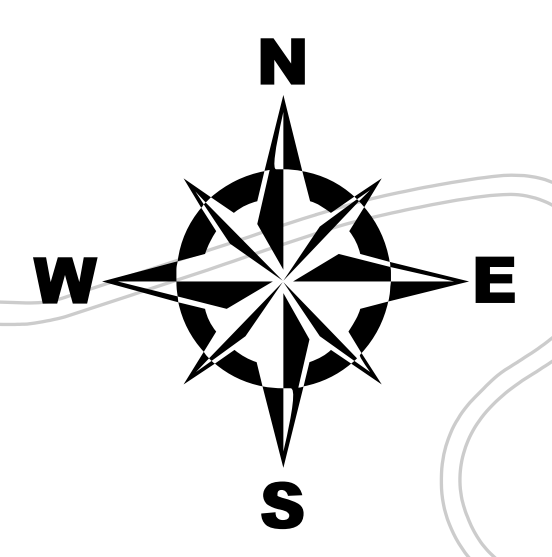
- LEGEND
- EXISTING UG PRIMARY
  - PROPOSED UG PRIMARY LATERAL
  - PROPOSED UG PRIMARY TRUNK





# FEEDER 15021 AERIAL OVERVIEW

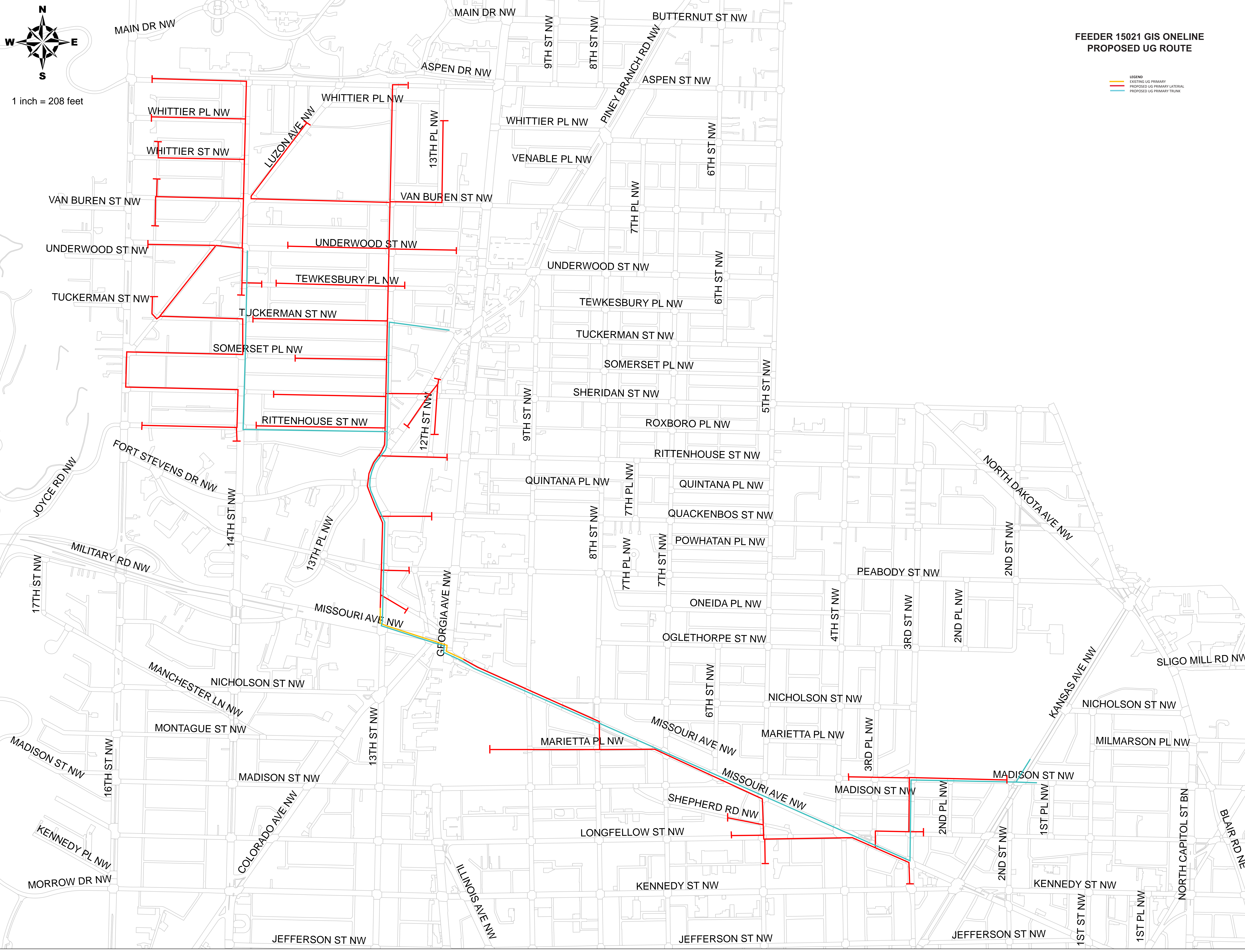
## PROPOSED UG ROUTE

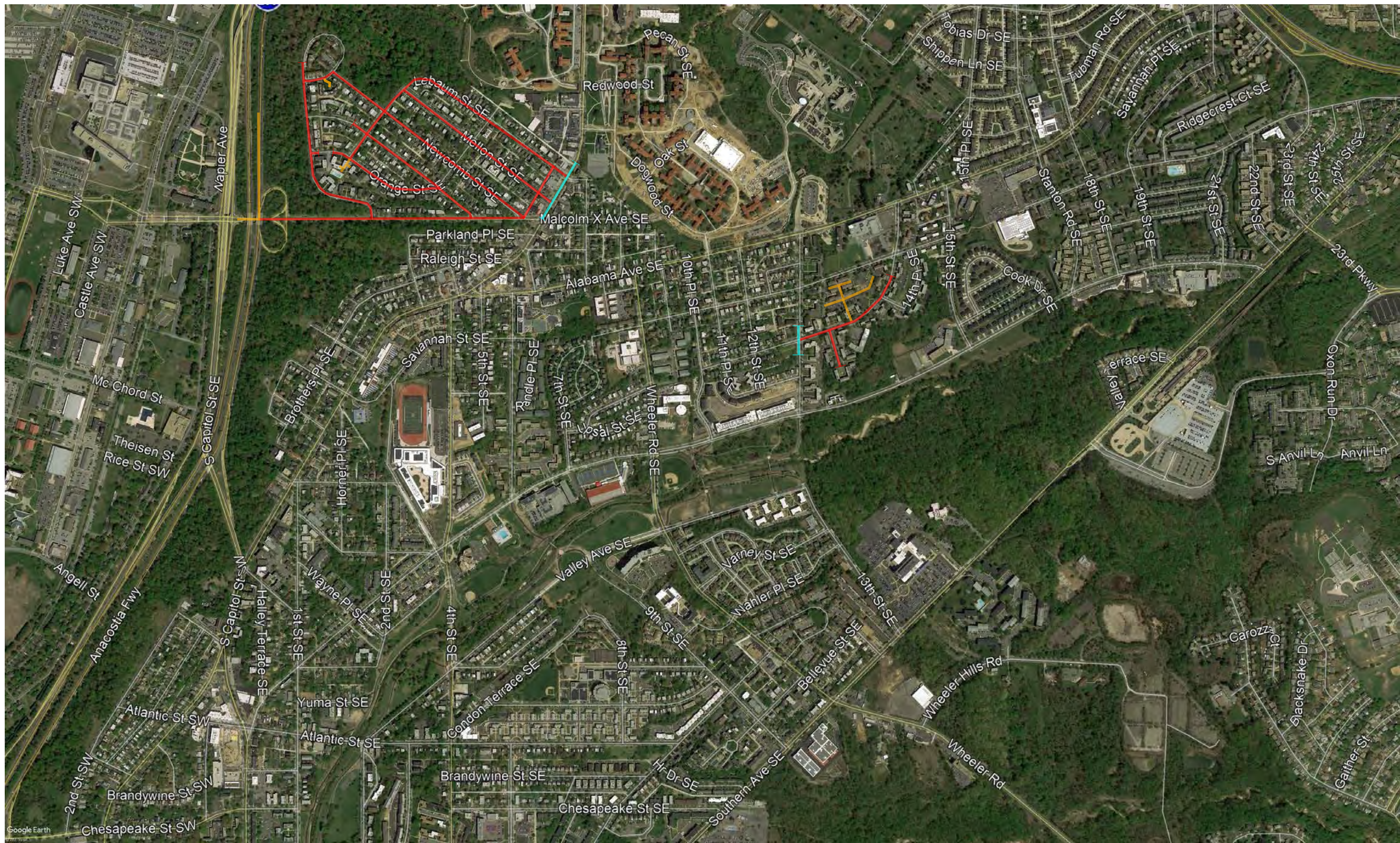


1 inch = 208 feet

# FEEDER 15021 GIS ONELINE PROPOSED UG ROUTE

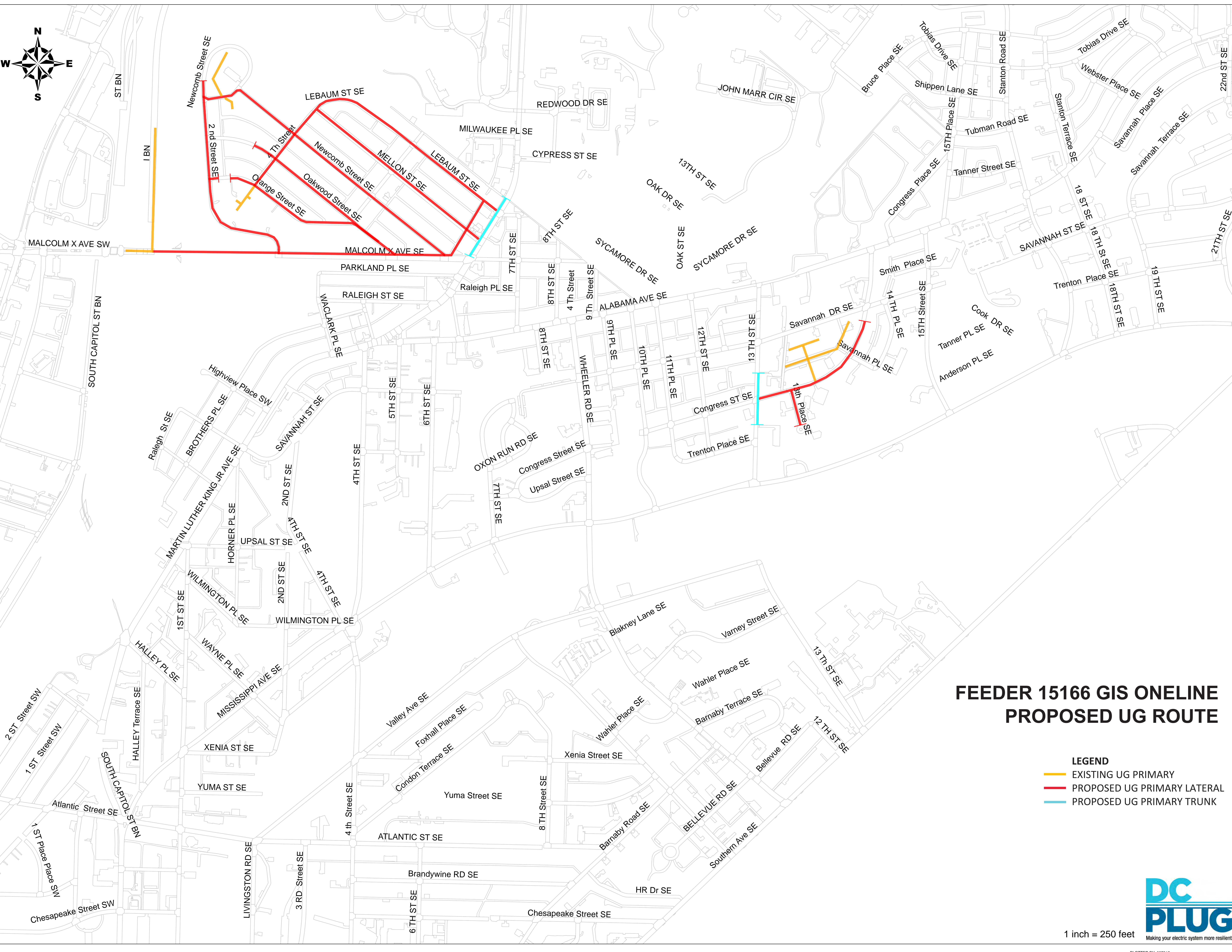
- LEGEND
- EXISTING UG PRIMARY
  - PROPOSED UG PRIMARY LATERAL
  - PROPOSED UG PRIMARY TRUNK





- LEGEND**
- EXISTING UG PRIMARY
  - PROPOSED UG PRIMARY LATERAL
  - PROPOSED UG PRIMARY TRUNK

# FEEDER 15166 AERIAL OVERVIEW PROPOSED UG ROUTE



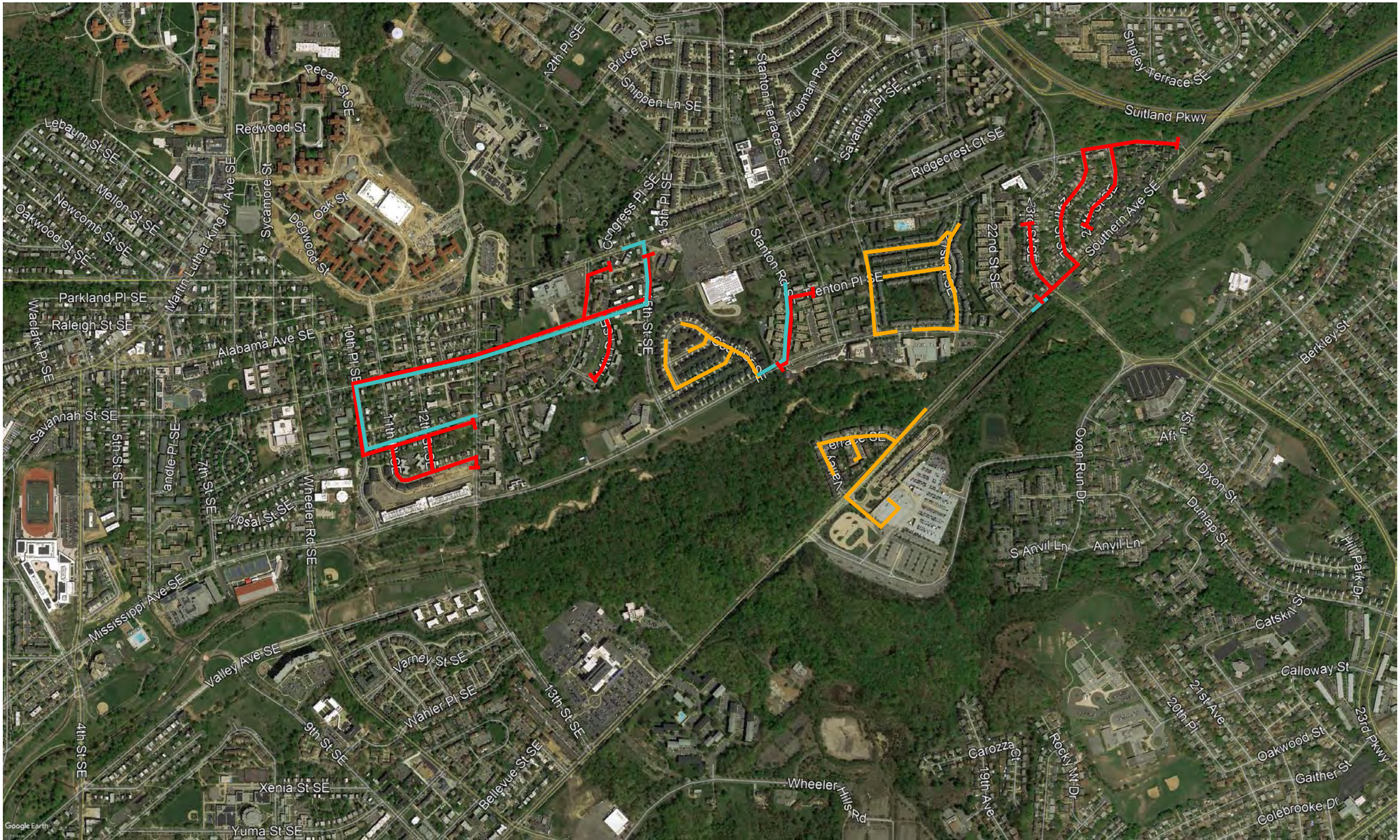
# FEEDER 15166 GIS ONELINE PROPOSED UG ROUTE

## LEGEND

- EXISTING UG PRIMARY
- PROPOSED UG PRIMARY LATERAL
- PROPOSED UG PRIMARY TRUNK

1 inch = 250 feet





- LEGEND**
- EXISTING UG PRIMARY
  - PROPOSED UG PRIMARY LATERAL
  - PROPOSED UG PRIMARY TRUNK



















**FEEDER 15171 AERIAL OVERVIEW**  
**PROPOSED UG ROUTE**



## **APPENDIX E: Existing Overhead Electrical Schematics**

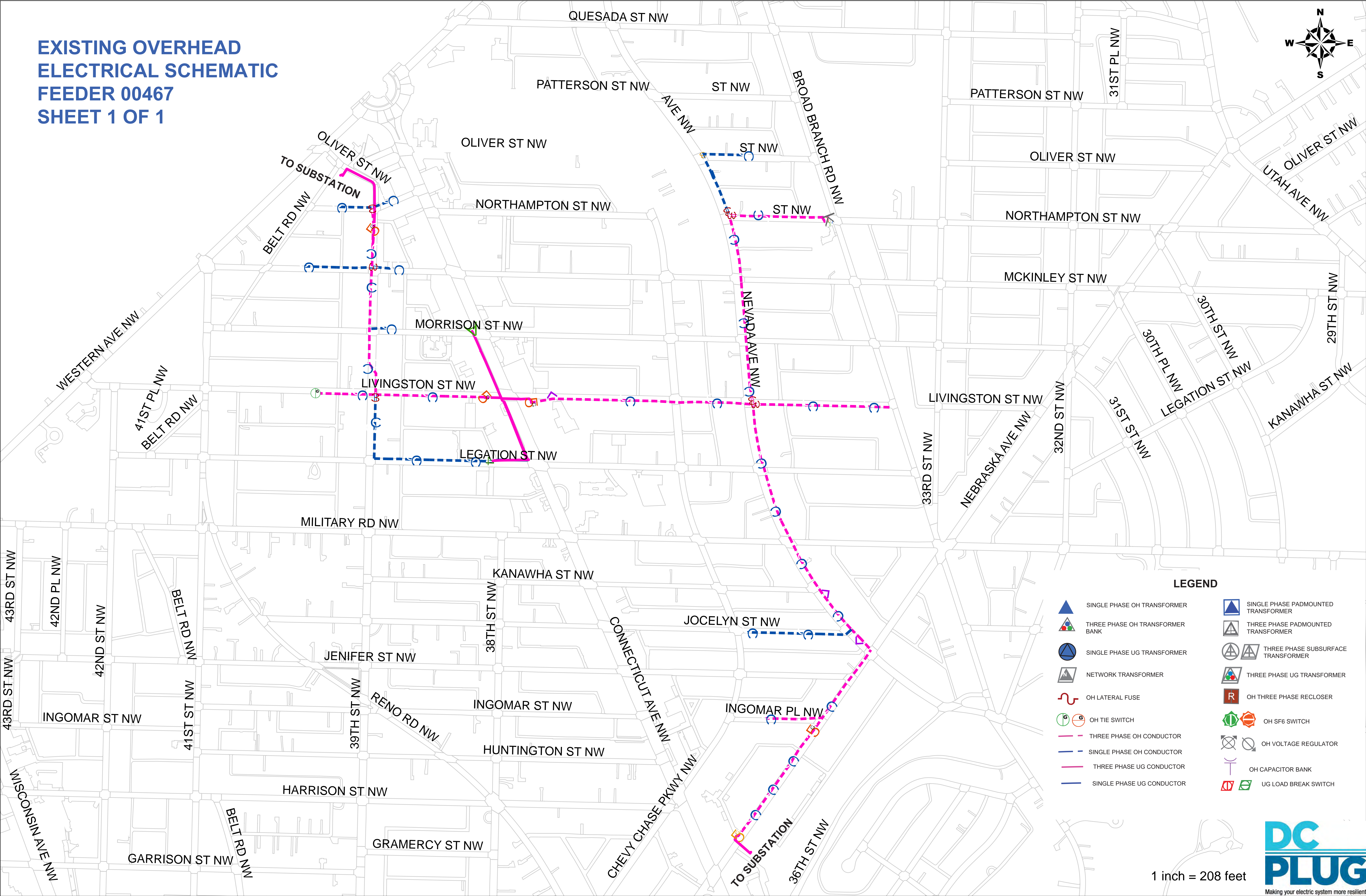
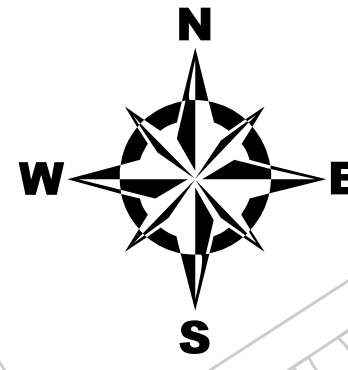
EXISTING OVERHEAD  
ELECTRICAL SCHEMATIC  
FEEDER 00118  
SHEET 1 OF 1

LEGEND

-  SINGLE PHASE OH TRANSFORMER
-  THREE PHASE OH TRANSFORMER BANK
-  SINGLE PHASE UG TRANSFORMER
-  NETWORK TRANSFORMER
-  OH LATERAL FUSE
-  OH TIE SWITCH
-  THREE PHASE OH CONDUCTOR
-  SINGLE PHASE OH CONDUCTOR
-  THREE PHASE UG CONDUCTOR
-  SINGLE PHASE UG CONDUCTOR
-  SINGLE PHASE PADMOUNTED TRANSFORMER
-  THREE PHASE PADMOUNTED TRANSFORMER
-  THREE PHASE SUBSURFACE TRANSFORMER
-  THREE PHASE UG TRANSFORMER
-  OH THREE PHASE RECLOSER
-  OH SF6 SWITCH
-  OH VOLTAGE REGULATOR
-  OH CAPACITOR BANK

1 inch = 250 feet

EXISTING OVERHEAD  
ELECTRICAL SCHEMATIC  
FEEDER 00467  
SHEET 1 OF 1



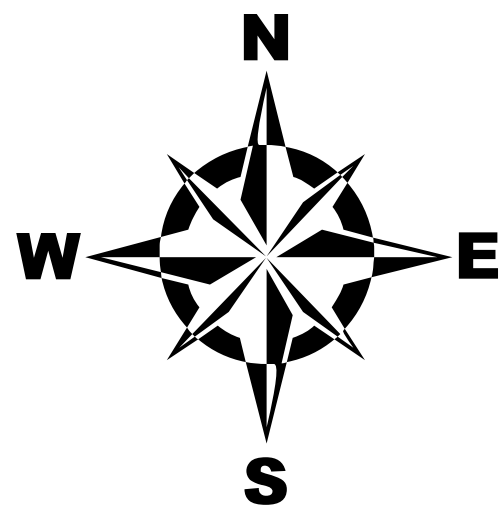
LEGEND

- |  |                                 |  |                                     |
|--|---------------------------------|--|-------------------------------------|
|  | SINGLE PHASE OH TRANSFORMER     |  | SINGLE PHASE PADMOUNTED TRANSFORMER |
|  | THREE PHASE OH TRANSFORMER BANK |  | THREE PHASE PADMOUNTED TRANSFORMER  |
|  | SINGLE PHASE UG TRANSFORMER     |  | THREE PHASE SUBSURFACE TRANSFORMER  |
|  | NETWORK TRANSFORMER             |  | THREE PHASE UG TRANSFORMER          |
|  | OH LATERAL FUSE                 |  | OH THREE PHASE RECLOSER             |
|  | OH TIE SWITCH                   |  | OH SF6 SWITCH                       |
|  | THREE PHASE OH CONDUCTOR        |  | OH VOLTAGE REGULATOR                |
|  | SINGLE PHASE OH CONDUCTOR       |  | OH CAPACITOR BANK                   |
|  | THREE PHASE UG CONDUCTOR        |  | UG LOAD BREAK SWITCH                |
|  | SINGLE PHASE UG CONDUCTOR       |  |                                     |

1 inch = 208 feet



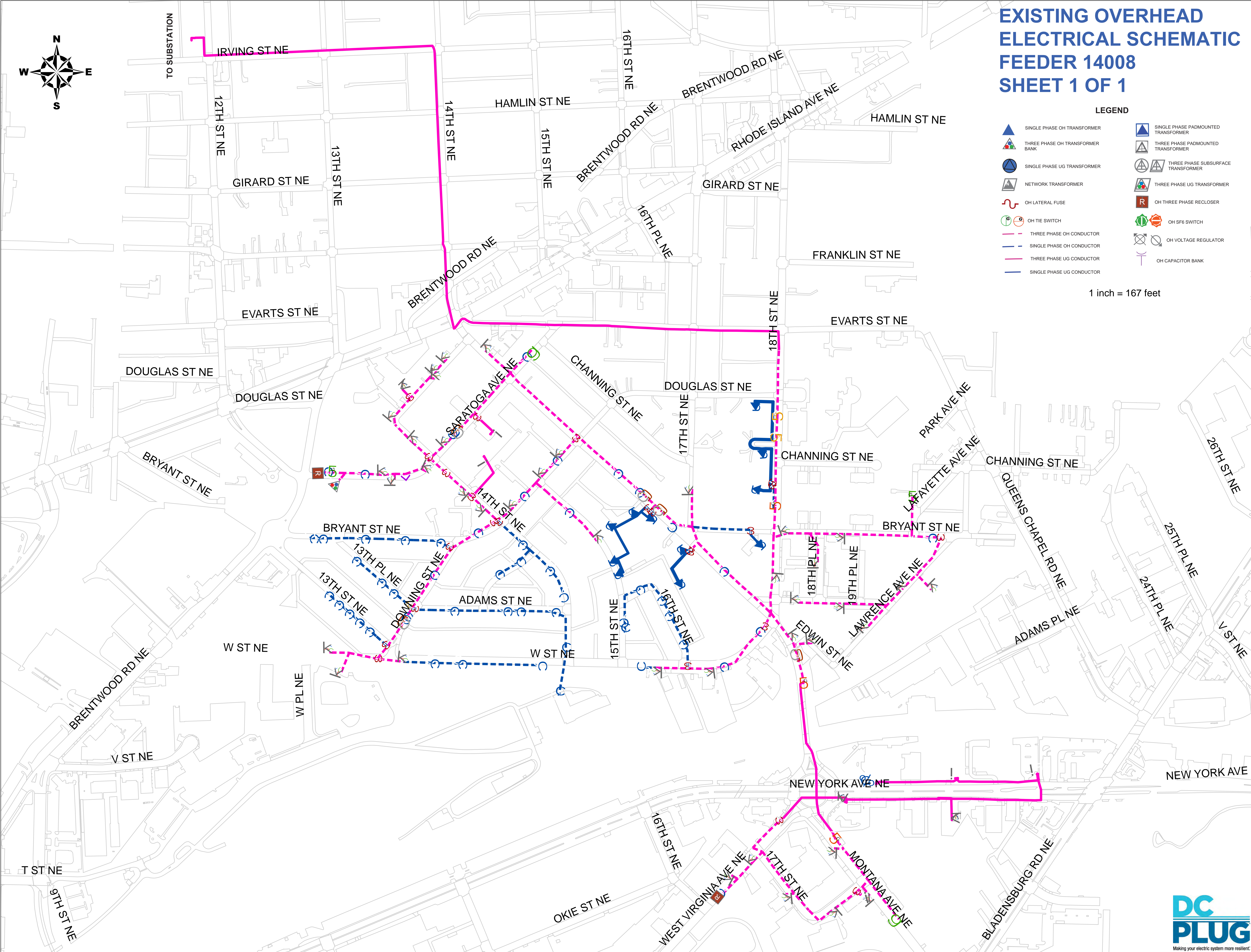
EXISTING OVERHEAD  
ELECTRICAL SCHEMATIC  
FEEDER 14008  
SHEET 1 OF 1

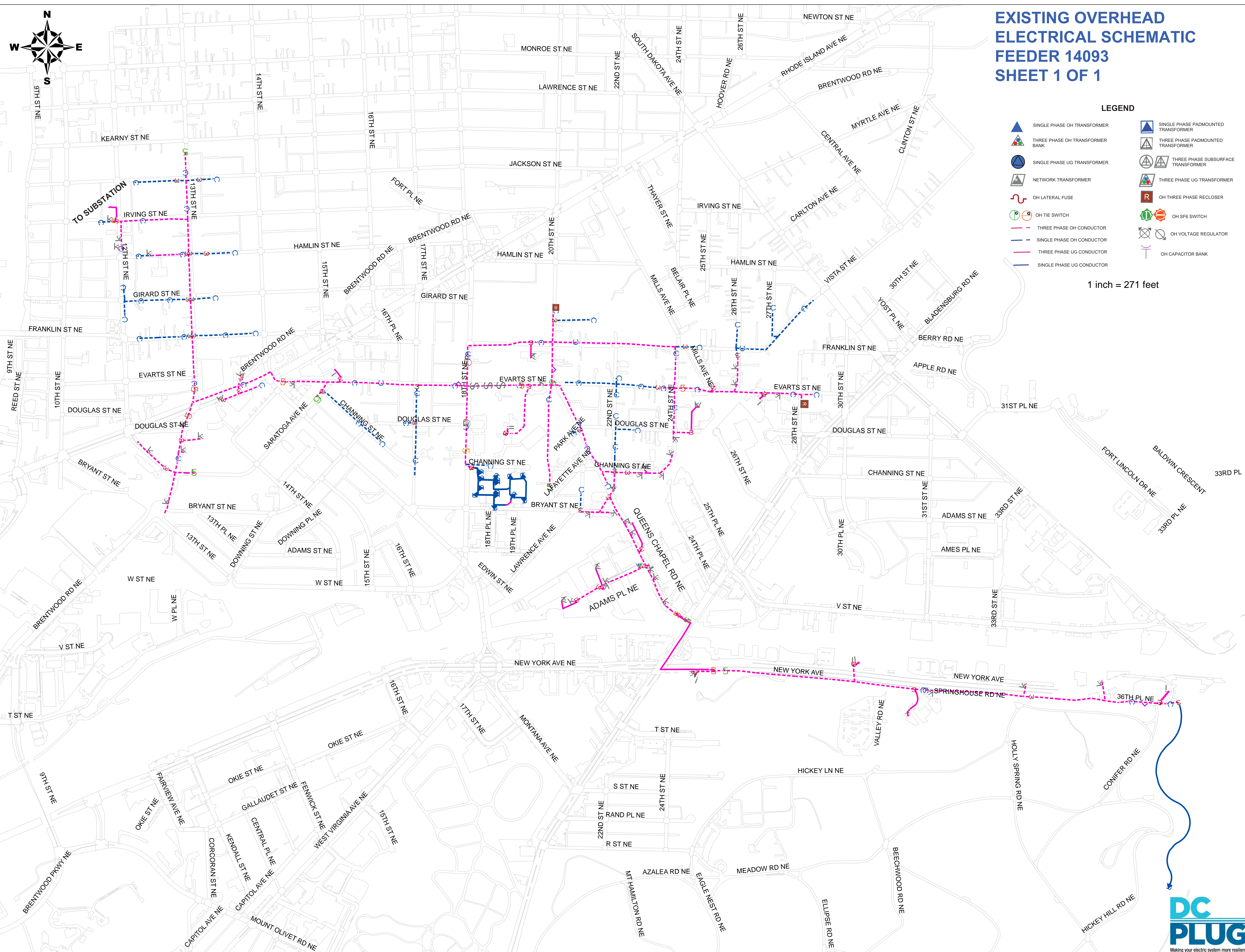


LEGEND

- |  |                                 |  |                                     |
|--|---------------------------------|--|-------------------------------------|
|  | SINGLE PHASE OH TRANSFORMER     |  | SINGLE PHASE PADMOUNTED TRANSFORMER |
|  | THREE PHASE OH TRANSFORMER BANK |  | THREE PHASE PADMOUNTED TRANSFORMER  |
|  | SINGLE PHASE UG TRANSFORMER     |  | THREE PHASE SUBSURFACE TRANSFORMER  |
|  | NETWORK TRANSFORMER             |  | THREE PHASE UG TRANSFORMER          |
|  | OH LATERAL FUSE                 |  | OH THREE PHASE RECLOSER             |
|  | OH TIE SWITCH                   |  | OH SF6 SWITCH                       |
|  | THREE PHASE OH CONDUCTOR        |  | OH VOLTAGE REGULATOR                |
|  | SINGLE PHASE OH CONDUCTOR       |  | OH CAPACITOR BANK                   |
|  | THREE PHASE UG CONDUCTOR        |  |                                     |
|  | SINGLE PHASE UG CONDUCTOR       |  |                                     |

1 inch = 167 feet























EXISTING OVERHEAD  
ELECTRICAL SCHEMATIC  
FEEDER 14093  
SHEET 1 OF 1

- LEGEND
- |  |                                 |  |                                     |
|--|---------------------------------|--|-------------------------------------|
|  | SINGLE PHASE OH TRANSFORMER     |  | SINGLE PHASE PADMOUNTED TRANSFORMER |
|  | THREE PHASE OH TRANSFORMER BANK |  | THREE PHASE PADMOUNTED TRANSFORMER  |
|  | SINGLE PHASE UG TRANSFORMER     |  | THREE PHASE SUBSURFACE TRANSFORMER  |
|  | NETWORK TRANSFORMER             |  | THREE PHASE UG TRANSFORMER          |
|  | OH LATERAL FUSE                 |  | OH THREE PHASE RECLOSER             |
|  | OH TIE SWITCH                   |  | OH SF6 SWITCH                       |
|  | THREE PHASE OH CONDUCTOR        |  | OH VOLTAGE REGULATOR                |
|  | SINGLE PHASE OH CONDUCTOR       |  | OH CAPACITOR BANK                   |
|  | THREE PHASE UG CONDUCTOR        |  |                                     |
|  | SINGLE PHASE UG CONDUCTOR       |  |                                     |

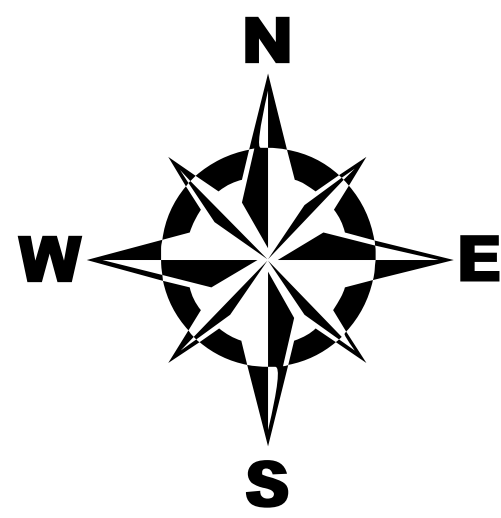
1 inch = 271 feet

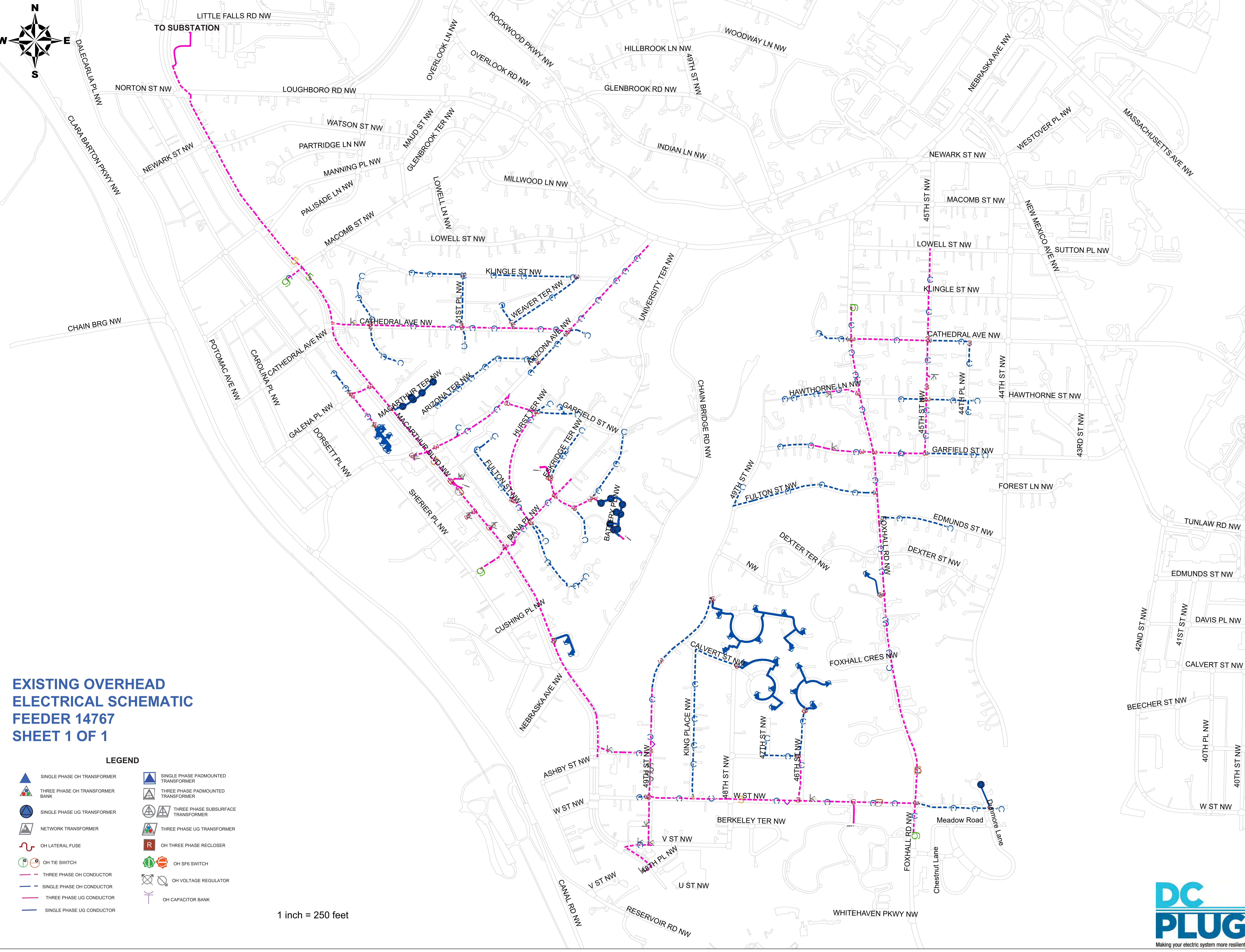
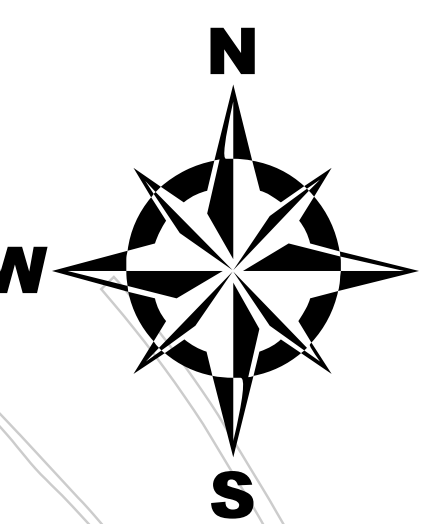
EXISTING OVERHEAD  
ELECTRICAL SCHEMATIC  
FEEDER 14702  
SHEET 1 OF 1

LEGEND

-  SINGLE PHASE OH TRANSFORMER
-  THREE PHASE OH TRANSFORMER BANK
-  SINGLE PHASE UG TRANSFORMER
-  NETWORK TRANSFORMER
-  OH LATERAL FUSE
-  OH TIE SWITCH
-  THREE PHASE OH CONDUCTOR
-  SINGLE PHASE OH CONDUCTOR
-  THREE PHASE UG CONDUCTOR
-  SINGLE PHASE UG CONDUCTOR
-  SINGLE PHASE PADMOUNTED TRANSFORMER
-  THREE PHASE PADMOUNTED TRANSFORMER
-  THREE PHASE SUBSURFACE TRANSFORMER
-  THREE PHASE UG TRANSFORMER
-  OH THREE PHASE RECLOSER
-  OH SF6 SWITCH
-  OH VOLTAGE REGULATOR
-  OH CAPACITOR BANK

1 inch = 250 feet





**EXISTING OVERHEAD  
ELECTRICAL SCHEMATIC  
FEEDER 14767  
SHEET 1 OF 1**



















**LEGEND**

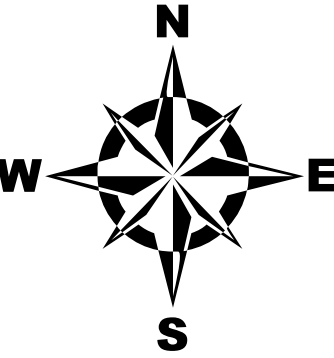
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|--|---------------------------------|--|-------------------------------------|
|  | SINGLE PHASE OH TRANSFORMER     |  | SINGLE PHASE PADMOUNTED TRANSFORMER |
|  | THREE PHASE OH TRANSFORMER BANK |  | THREE PHASE PADMOUNTED TRANSFORMER  |
|  | SINGLE PHASE UG TRANSFORMER     |  | THREE PHASE SUBSURFACE TRANSFORMER  |
|  | NETWORK TRANSFORMER             |  | THREE PHASE UG TRANSFORMER          |
|  | OH LATERAL FUSE                 |  | OH THREE PHASE RECLOSER             |
|  | OH TIE SWITCH                   |  | OH SF6 SWITCH                       |
|  | THREE PHASE OH CONDUCTOR        |  | OH VOLTAGE REGULATOR                |
|  | SINGLE PHASE OH CONDUCTOR       |  | OH CAPACITOR BANK                   |
|  | THREE PHASE UG CONDUCTOR        |  |                                     |
|  | SINGLE PHASE UG CONDUCTOR       |  |                                     |

1 inch = 250 feet

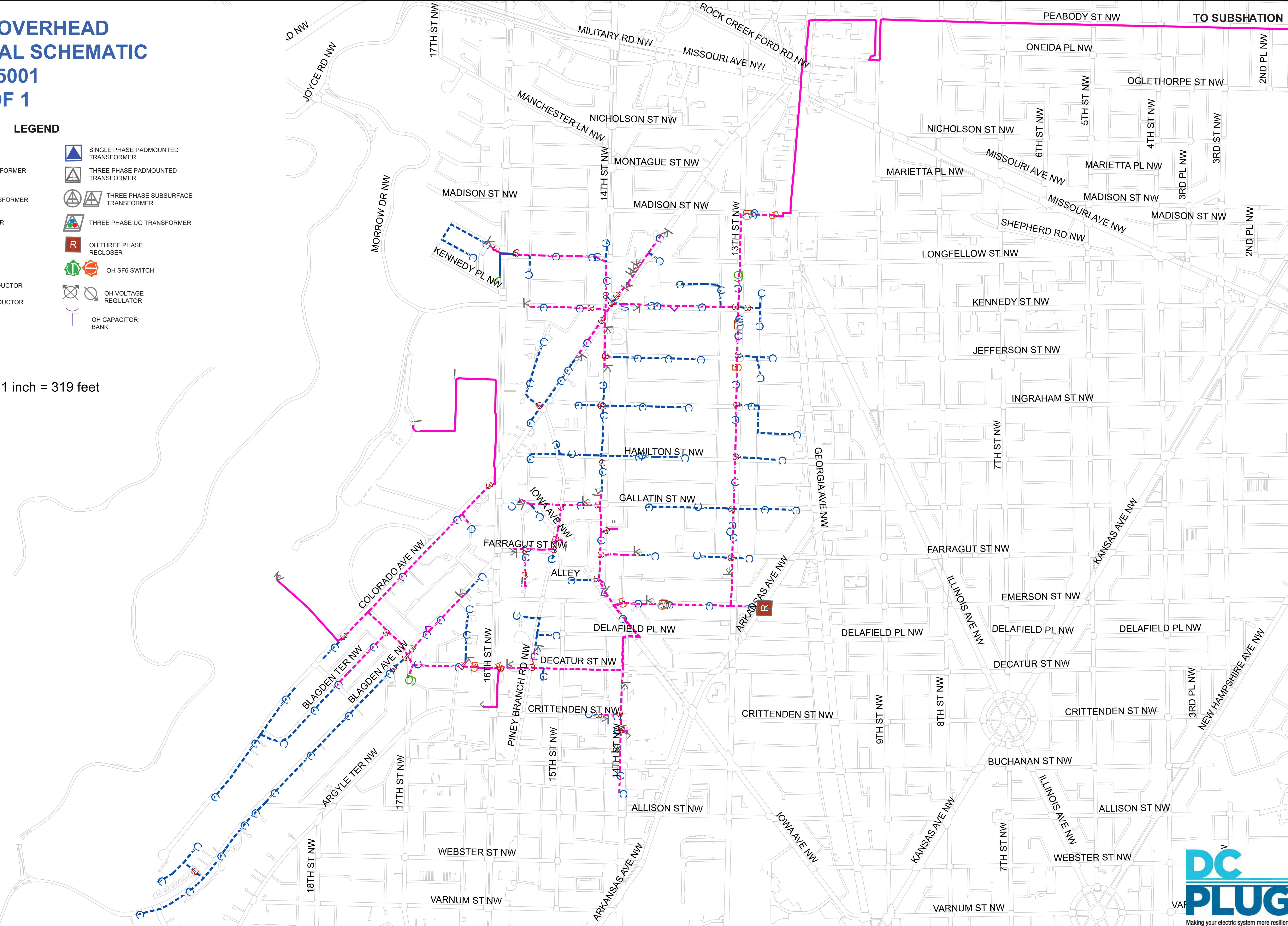
EXISTING OVERHEAD  
ELECTRICAL SCHEMATIC  
FEEDER 15001  
SHEET 1 OF 1

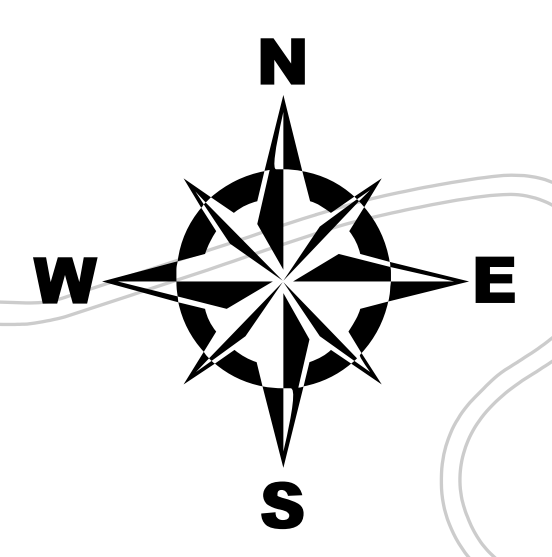
LEGEND

-  SINGLE PHASE OH TRANSFORMER
-  THREE PHASE OH TRANSFORMER BANK
-  SINGLE PHASE UG TRANSFORMER
-  NETWORK TRANSFORMER
-  OH LATERAL FUSE
-  OH TIE SWITCH
-  THREE PHASE OH CONDUCTOR
-  SINGLE PHASE OH CONDUCTOR
-  THREE PHASE UG CONDUCTOR
-  SINGLE PHASE UG CONDUCTOR
-  SINGLE PHASE PADMOUNTED TRANSFORMER
-  THREE PHASE PADMOUNTED TRANSFORMER
-  THREE PHASE SUBSURFACE TRANSFORMER
-  THREE PHASE UG TRANSFORMER
-  OH THREE PHASE RECLOSER
-  OH SF6 SWITCH
-  OH VOLTAGE REGULATOR
-  OH CAPACITOR BANK



1 inch = 319 feet



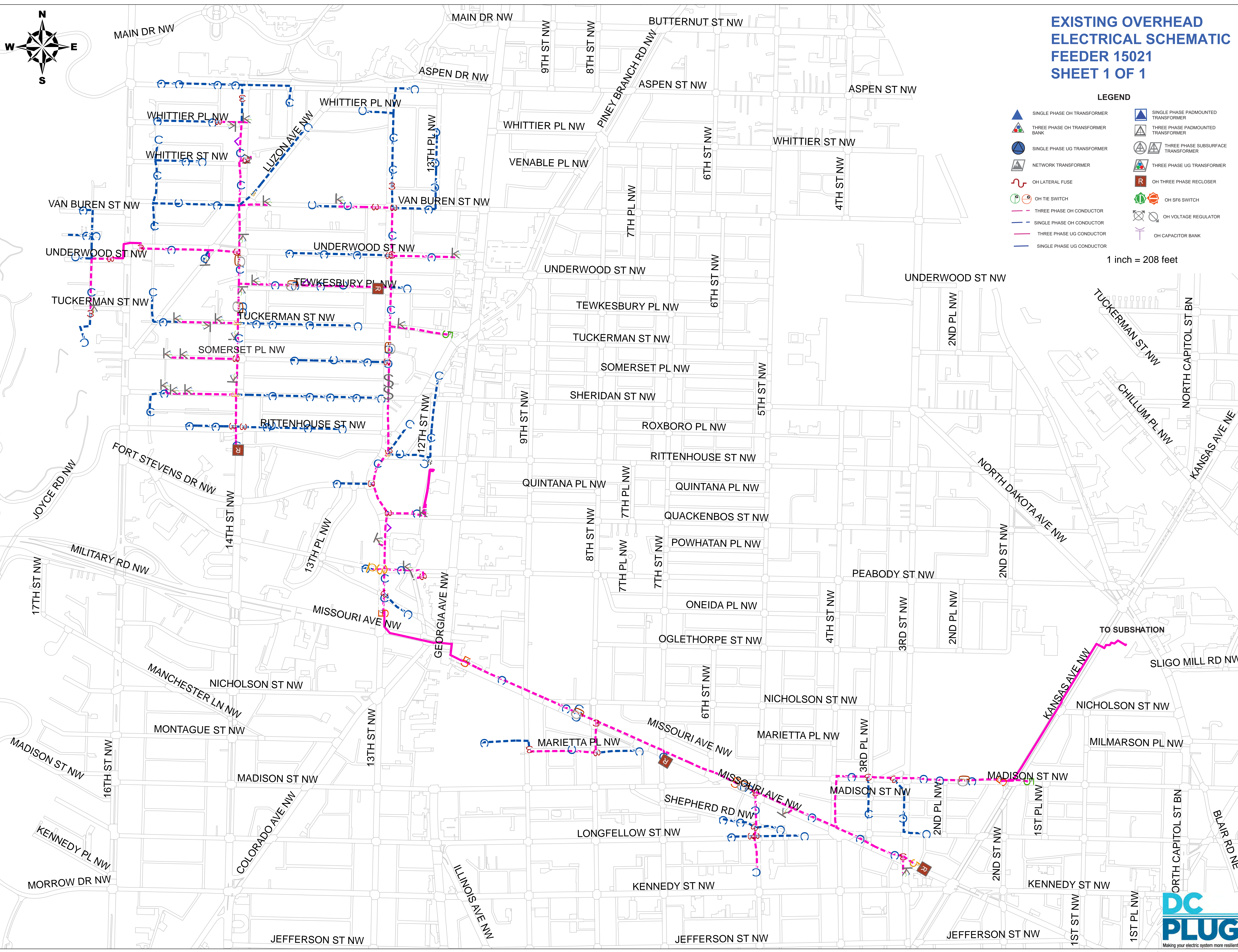


# EXISTING OVERHEAD ELECTRICAL SCHEMATIC FEEDER 15021 SHEET 1 OF 1

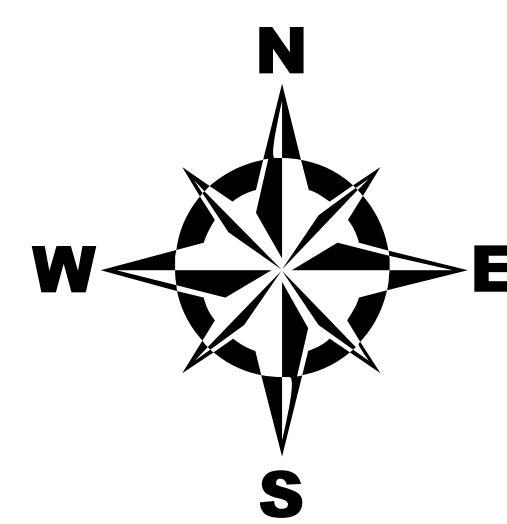
## LEGEND

- |  |                                 |  |                                     |
|--|---------------------------------|--|-------------------------------------|
|  | SINGLE PHASE OH TRANSFORMER     |  | SINGLE PHASE PADMOUNTED TRANSFORMER |
|  | THREE PHASE OH TRANSFORMER BANK |  | THREE PHASE PADMOUNTED TRANSFORMER  |
|  | SINGLE PHASE UG TRANSFORMER     |  | THREE PHASE SUBSURFACE TRANSFORMER  |
|  | NETWORK TRANSFORMER             |  | THREE PHASE UG TRANSFORMER          |
|  | OH LATERAL FUSE                 |  | OH THREE PHASE RECLOSER             |
|  | OH TIE SWITCH                   |  | OH SF6 SWITCH                       |
|  | THREE PHASE OH CONDUCTOR        |  | OH VOLTAGE REGULATOR                |
|  | SINGLE PHASE OH CONDUCTOR       |  | OH CAPACITOR BANK                   |
|  | THREE PHASE UG CONDUCTOR        |  |                                     |
|  | SINGLE PHASE UG CONDUCTOR       |  |                                     |

1 inch = 208 feet







1 inch = 250 feet



**EXISTING OVERHEAD  
ELECTRICAL  
SCHEMATIC FEEDER  
15171  
SHEET 1 OF 1**

**LEGEND**

- |  |                                 |  |                                     |
|--|---------------------------------|--|-------------------------------------|
|  | SINGLE PHASE OH TRANSFORMER     |  | SINGLE PHASE PADMOUNTED TRANSFORMER |
|  | THREE PHASE OH TRANSFORMER BANK |  | THREE PHASE PADMOUNTED TRANSFORMER  |
|  | SINGLE PHASE UG TRANSFORMER     |  | THREE PHASE SUBSURFACE TRANSFORMER  |
|  | NETWORK TRANSFORMER             |  | THREE PHASE UG TRANSFORMER          |
|  | OH LATERAL FUSE                 |  | OH THREE PHASE RECLOSER             |
|  | OH TIE SWITCH                   |  | OH SF6 SWITCH                       |
|  | THREE PHASE OH CONDUCTOR        |  | OH VOLTAGE REGULATOR                |
|  | SINGLE PHASE OH CONDUCTOR       |  | OH CAPACITOR BANK                   |
|  | THREE PHASE UG CONDUCTOR        |  |                                     |
|  | SINGLE PHASE UG CONDUCTOR       |  |                                     |



## **APPENDIX F: Preliminary Electrical Schematics**

**Due to Size, Provided in Paper Copy Only. See Oversized Tubes.**

**APPENDIX G: Preliminary Civil Schematics**

**Due to Size, Provided in Paper Copy Only. See Oversized Tubes.**

**APPENDIX H: Itemized Feeder Cost Estimates - CONFIDENTIAL**

**Provided Under Separate Cover**

**APPENDIX I:      Underground Project Charge Revenue  
Requirement and Rate Design**

Potomac Electric Power Company - District of Columbia  
Underground Project Charge - Rider "UPC"  
Second Biennial Plan  
September 30, 2019 Biennial Filing: Forecasted 2020-2021 Revenue Requirement Calculation

Forecasted Revenue Requirement		2020	2021
<b>I. Calculation of Average Rate Base</b>			
(1)	Gross Plant	\$ 2,788,213.14	\$ 7,041,029.09
(2)	Accumulated Depreciation	\$ 24,780.99	\$ 146,968.08
(3)	Deferred Tax Asset	\$ (6,724.48)	\$ (24,931.61)
(4)	Deferred Tax Liability	\$ 28,357.22	\$ 105,117.36
(5)	<b>Net Rate Base</b>	<b>\$ 2,741,799.42</b>	<b>\$ 6,813,875.27</b>
<b>II. Calculation of Operating Income</b>			
(6)	Operation & Maintenance Expense	\$ 778,950.00	\$ 1,223,767.00
(7)	Other O&M Expense	\$ 66,021.08	\$ -
(8)	Depreciation Expense	\$ 59,963.87	\$ 152,586.22
(9)	<b>Subtotal</b>	<b>\$ 904,934.95</b>	<b>\$ 1,376,353.22</b>
(10)	State Income Tax (Current)	\$ (97,666.99)	\$ (157,496.28)
(11)	Federal Income Tax (Current)	\$ (228,096.83)	\$ (367,825.40)
(12)	Deferred Taxes	\$ 56,714.43	\$ 96,805.85
(13)	Required Operating Income	\$ 635,885.57	\$ 947,837.39
(14)	Return Required	\$ 204,289.12	\$ 507,695.99
(15)	<b>Revenue Requirement</b>	<b>\$ 1,159,141.42</b>	<b>\$ 2,008,116.95</b>
<b>III. Income Statement Check</b>			
(16)	Revenue	\$ 1,159,141.42	\$ 2,008,116.95
(17)	Operation and Maintenance Expense	\$ 778,950.00	\$ 1,223,767.00
(18)	Amortization of Deferred Costs	\$ 66,021.08	\$ -
(19)	Depreciation Expense	\$ 59,963.87	\$ 152,586.22
(20)	Other Taxes	\$ -	\$ -
(21)	Interest Expense	\$ 72,561.83	\$ 180,329.48
(22)	<b>Net Income Before Taxes</b>	<b>\$ 181,644.64</b>	<b>\$ 451,434.25</b>
(23)	State Income Tax (Current)	\$ (2,037.83)	\$ 8,173.37
(24)	Federal Income Tax (Current)	\$ (4,759.25)	\$ 19,088.53
(25)	Income Tax Deferred	\$ 56,714.43	\$ 96,805.85
(26)	<b>Earnings</b>	<b>\$ 131,727.29</b>	<b>\$ 327,366.50</b>
(27)	<b>Return on Equity per WACC</b>	<b>\$ 131,727.29</b>	<b>\$ 327,366.50</b>
(28)	MACRS - Federal	\$ 266,063.90	\$ 504,381.86
(29)	MACRS - State	\$ 266,063.90	\$ 504,381.86
<b>IV. Calculation of Deferred Income Tax Liability</b>			
<b>Federal</b>			
(30)	Book Depreciation (AFUDC Equity)	\$ 245.55	\$ 567.47
(31)	Book Depreciation (Net of AFUDC Equity)	\$ 59,718.33	\$ 152,018.75
(32)	State Deferred Income Taxes	\$ 17,024.00	\$ 29,070.00
(33)	Tax Depreciation	\$ (266,063.90)	\$ (504,381.86)
(34)	Net Temporary Differences	\$ (189,321.57)	\$ (323,293.11)
(35)	Deferred Income Taxes at 21%	\$ (39,758.00)	\$ (67,892.00)
(36)	<b>Cumulative Deferred Income Tax Liability</b>	<b>\$ (39,758.00)</b>	<b>\$ (107,650.00)</b>
<b>State</b>			
(37)	Book Depreciation (AFUDC Equity)	\$ 245.55	\$ 567.47
(38)	Book Depreciation (Net of AFUDC Equity)	\$ 59,718.33	\$ 152,018.75
(39)	Tax Depreciation	\$ (266,063.90)	\$ (504,381.86)
(40)	Net Temporary Differences (Before NOLC)	\$ (206,345.57)	\$ (352,363.11)
(41)	Deferred Income Taxes at 8.25%	\$ (17,024.00)	\$ (29,070.00)
(42)	<b>Cumulative Deferred Income Tax Liability</b>	<b>\$ (17,024.00)</b>	<b>\$ (46,094.00)</b>

Potomac Electric Power Company - District of Columbia  
Underground Project Charge - Rider "UPC"  
Second Biennial Plan  
September 30, 2019 Biennial Filing: Forecasted 2020-2021 Revenue Requirement Calculation

Allocation of Forecasted 2020 and 2021 Revenue Requirements by Class and Calculation of Rider "UPC" by Class

Revenue Recovery Method	Total	Residential	MMA	GS-ND/T	GS-D-LV	GS-3A	MGT-LV / GT-LV	GT-3A	GT-3B	RT	SL/TS/OL LED	TN
(1) Total Authorized Base Revenue Requirement	\$ 396,697,247	\$ 76,740,338	\$ 10,804,681	\$ 14,589,672	\$ 31,763,556	\$ 68,336	\$ 202,004,191	\$ 52,040,852	\$ 421,572	\$ 6,739,346	\$ 1,450,638	\$ 74,065
(2) Authorized Energy Charge Recovery (Net of EDIT Credit)	\$ 108,715,835	\$ 27,357,286	\$ 3,013,724	\$ 8,847,074	\$ 14,435,913	\$ 25,182	\$ 44,185,203	\$ 10,157,054	\$ -	\$ -	\$ 676,422	\$ 17,977
(3) Authorized Demand Charge Recovery (Net of EDIT Credit)	\$ 194,689,507	\$ -	\$ -	\$ -	\$ 15,175,063	\$ 36,000	\$ 137,530,166	\$ 41,531,786	\$ 416,492	\$ -	\$ -	\$ -
(4) Other (Net of EDIT Credit)	\$ 7,507,677	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,739,346	\$ 768,331	\$ -
Total Applicable Revenues	\$ 310,913,019	\$ 27,357,286	\$ 3,013,724	\$ 8,847,074	\$ 29,610,976	\$ 61,182	\$ 181,715,369	\$ 51,688,840	\$ 416,492	\$ 6,739,346	\$ 1,444,753	\$ 17,977
(6) Percentage Share of Total Energy and Demand Charge Recovery	100.00%	8.80%	0.97%	2.85%	9.52%	0.02%	58.45%	16.62%	0.13%	2.17%	0.46%	0.01%
(7) Annual Revenue Requirement (2020)	\$ 1,159,141.42											
(8) Annual Revenue Requirement by Class (2020)	\$ 1,159,141.42	\$ 101,993.04	\$ 11,235.72	\$ 32,983.53	\$ 110,395.21	\$ 228.10	\$ 677,468.61	\$ 192,705.59	\$ 1,552.76	\$ 25,125.53	\$ 5,386.31	\$ 67.02
(9) Forecasted Sales by Class (kWh) (2020)		2,047,966,056	289,883,040	250,891,017	503,915,894	1,186,042	4,768,425,194	2,261,094,079	197,762,704	332,165,696	90,061,339	2,640,536
(10) Underground Project Charge Rate (\$/kWh) by Class (2020)		\$ 0.00005	\$ 0.00004	\$ 0.00013	\$ 0.00022	\$ 0.00019	\$ 0.00014	\$ 0.00009	\$ 0.00001	\$ 0.00008	\$ 0.00006	\$ 0.00003
(11) Percentage Increase in Distribution Revenue (2020 vs. FC 1150)	0.29%	0.13%	0.10%	0.23%	0.35%	0.33%	0.34%	0.37%	0.37%	0.37%	0.37%	0.09%
(12) Annual Revenue Requirement (2021)	\$ 2,008,116.95											
(13) Annual Revenue Requirement by Class (2021)	\$ 2,008,116.95	\$ 176,694.53	\$ 19,464.96	\$ 57,141.25	\$ 191,250.60	\$ 395.16	\$ 1,173,658.52	\$ 333,846.54	\$ 2,690.03	\$ 43,527.91	\$ 9,331.33	\$ 116.11
(14) Forecasted Sales by Class (kWh) (2021)		2,065,298,307	289,818,285	247,478,082	497,060,995	1,169,908	4,703,559,070	2,230,335,830	195,072,487	332,383,588	90,365,268	2,604,616
(15) Underground Project Charge Rate (\$/kWh) by Class (2021)		\$ 0.00009	\$ 0.00007	\$ 0.00023	\$ 0.00038	\$ 0.00034	\$ 0.00025	\$ 0.00015	\$ 0.00001	\$ 0.00013	\$ 0.00010	\$ 0.00004
(16) Percentage Increase in Distribution Revenue (2021 vs. FC 1150)	0.51%	0.23%	0.18%	0.39%	0.60%	0.58%	0.58%	0.64%	0.64%	0.65%	0.64%	0.16%

Notes:

- (1) Source: Formal Cases 1150 and 1151 Pepco Exhibit 4 Pages 13-26 of 216.
- (2) Source: Formal Cases 1150 and 1151 Pepco Exhibit 4 Pages 13-26 of 216.
- (3) Source: Formal Cases 1150 and 1151 Pepco Exhibit 4 Pages 13-26 of 216.
- (4) Source: Formal Cases 1150 and 1151 Pepco Exhibit 4 Pages 13-26 of 216.
- (5) Calculation: Line (2) + Line (3) + Line (4)
- (6) Calculation: For each class, Line (5) divided by Total Applicable Revenues.
- (7) Source: See Page 1 of 14, Line (14) for 2020.
- (8) Calculation: For each class, Line (6) multiplied by Line (7).
- (9) Source: Refer to Line (26) of "Forecasted Billing Determinants" on Page 13 of 14.
- (10) Calculation: For each class, Line (8) divided by Line (9), rounded to 5 decimal points.
- (11) Calculation: For each class, Line (8) divided by Line (1).
- (12) Source: See Page 1 of 14, Line (14) for 2021.
- (13) Calculation: For each class, Line (6) multiplied by Line (12).
- (14) Source: Refer to Line (26) of "Forecasted Billing Determinants" on Page 14 of 14.
- (15) Calculation: Line (13) / Line (14).
- (16) Calculation: Line (13) / Line (1).

**Potomac Electric Power Company - District of Columbia**

**Underground Project Charge - Rider "UPC"**

**Second Biennial Plan**

**September 30, 2019 Biennial Filing: Forecasted 2020-2021 Revenue Requirement Calculation**

**Forecasted Operation and Maintenance ("O&M") Expense (2020 - 2021)**

	<b>Description</b>	<b>2020</b>	<b>2021</b>
(1)	Customer Communication (Education Plan)	\$ 763,950	\$ 934,767
(2)	Customer Outreach Stations / Pop-Up Vehicles	\$ 15,000	\$ 15,000
(3)	PSC Costs	\$ -	\$ 125,000
(4)	OPC Costs	\$ -	\$ 149,000
(5)	<b>Total</b>	<b>\$ 778,950</b>	<b>\$ 1,223,767</b>

**Potomac Electric Power Company - District of Columbia**  
**Underground Project Charge - Rider "UPC"**  
**Second Biennial Plan**  
**September 30, 2019 Biennial Filing: Forecasted 2020-2021 Revenue Requirement Calculation**

**Other O&M Expense (2020 - 2021)**

	Description	2020	2021
(1)	Feeder 15707 Minnesota Avenue	\$ 216,000	\$ -
(2)	PSC Deposit Refund	\$ (59,183)	\$ -
(3)	OPC Deposit Refund	\$ (70,796)	
(4)	OPC Deposit Refund	\$ (20,000)	\$ -
(5)	<b>Total</b>	<b>\$ 66,021</b>	<b>\$ -</b>

**Potomac Electric Power Company - District of Columbia**

**Underground Project Charge - Rider "UPC"**

**Second Biennial Plan**

**September 30, 2019 Biennial Filing: Forecasted 2020-2021 Revenue Requirement Calculation**

**Forecasted Capital Expenditure and Electric Plant In-Service (2020-2021)**

	Through December 31, 2019	
	CWIP Balance	EPIS Balance
Cash	\$ 5,541,686	\$ 127,918
AFUDC-Debt	\$ 65,755	\$ 840
AFUDC-Equity	\$ 113,106	\$ 1,445

	Month	Capital Expenditure	Electric Plant In-Service
(1)	Jan-20	\$ 405,931	\$ -
(2)	Feb-20	\$ 374,835	\$ -
(3)	Mar-20	\$ 1,783,607	\$ -
(4)	Apr-20	\$ 974,481	\$ -
(5)	May-20	\$ 652,268	\$ -
(6)	Jun-20	\$ 730,803	\$ -
(7)	Jul-20	\$ 883,828	\$ -
(8)	Aug-20	\$ 1,029,036	\$ 6,872,465
(9)	Sep-20	\$ 782,464	\$ -
(10)	Oct-20	\$ 662,405	\$ -
(11)	Nov-20	\$ 802,313	\$ -
(12)	Dec-20	\$ 580,698	\$ -
(13)	Jan-21	\$ 502,168	\$ -
(14)	Feb-21	\$ 797,178	\$ -
(15)	Mar-21	\$ 1,012,145	\$ -
(16)	Apr-21	\$ 1,140,949	\$ -
(17)	May-21	\$ 1,062,379	\$ -
(18)	Jun-21	\$ 1,283,778	\$ -
(19)	Jul-21	\$ 1,545,656	\$ -
(20)	Aug-21	\$ 3,074,112	\$ -
(21)	Sep-21	\$ 2,907,141	\$ -
(22)	Oct-21	\$ 3,005,134	\$ -
(23)	Nov-21	\$ 3,855,843	\$ -
(24)	Dec-21	\$ 4,705,694	\$ -
(25)	<b>Total</b>	<b>\$ 34,554,846</b>	<b>\$ 6,872,465</b>

Potomac Electric Power Company - District of Columbia  
Underground Project Charge - Rider "UPC"  
Second Biennial Plan  
September 30, 2019 Biennial Filing: Forecasted 2020-2021 Revenue Requirement Calculation

Forecast as of 12/31/2019

I. Electric Plant In Service

	7/31/2019	August 2019	September 2019	October 2019	November 2019	December 2019	12/31/2019
(1) Total Electric Plant In Service	\$ 100,038	\$ -	\$ 30,165	\$ -	\$ -	\$ -	\$ 130,203
(2) Cash	\$ 97,918	\$ -	\$ 30,000	\$ -	\$ -	\$ -	\$ 127,918
(3) AFUDC Debt	\$ 779	\$ -	\$ 61	\$ -	\$ -	\$ -	\$ 840
(4) AFUDC Equity	\$ 1,341	\$ -	\$ 105	\$ -	\$ -	\$ -	\$ 1,445

II. Accumulated Depreciation

(5) Accumulated Depreciation (as of 7/31/2019)	\$ 8,963
(6) Incremental Monthly Depreciation (EPIS as of 7/30/2019)	\$ 312
(7) Incremental Monthly Depreciation (Electric Plant In-Serviced September 2019)	\$ 54
(8) Incremental Monthly Depreciation (EPIS as of 12/31/2019)	\$ 366
(9) Accumulated Depreciation (as of 12/31/2019)	\$ 10,711

III. Accumulated Depreciation - Equity

(10) Accumulated Depreciation - Equity (as of 7/31/2019)	\$ 120
(11) Incremental Monthly Depreciation - Equity (EPIS as of 7/30/2019)	\$ 4
(12) Incremental Monthly Depreciation - Equity (Electric Plant In-Serviced September 2019)	\$ 0
(13) Incremental Monthly Depreciation - Equity (EPIS as of 12/31/2019)	\$ 4
(14) Accumulated Depreciation - Equity (as of 12/31/2019)	\$ 142

IV. Construction Work In Progress

(15) Construction Work In Progress (as of 12/31/2019)	\$ 5,720,547
(16) Cash	\$ 5,541,686
(17) AFUDC Debt	\$ 65,755
(18) AFUDC Equity	\$ 113,106

Notes:

- (1) - (4) Source: As of 7/30/2019, Internal Company records. For September 2019, refer to page 5 of 12, Lines (15) to (17) for September 2019 in Attachment Pepco (C)-1, Reconciliation Compliance Filing, April 9, 2019.  
 (5) Source: Internal Company records.  
 (6) Source: Internal Company records.  
 (7) Source: Refer to page 6 of 12, in Attachment Pepco (C)-1, Reconciliation Compliance Filing, April 9, 2019.  
 (8) Calculation: Line (6) + Line (7).  
 (9) Calculation: Line (5) + [Line (6) X 5] + [Line (7) x 4.5].  
 (10) Calculation: As of July 31, 2019, [Line (4) / Line (1)] x Line (5).  
 (11) Calculation: As of July 31, 2019, [Line (4) / Line (1)] x Line (6).  
 (12) Calculation: For September 2019, [Line (4) / Line (1)] x Line (7).  
 (13) Calculation: Line (11) + Line (12).  
 (14) Calculation: Line (10) + [Line (11) x 5] + [Line (12) x 4.5].  
 (15) - (18) Source: Refer to page 5 of 12, Lines (4), (9), and (13) for Total 2019 in Attachment Pepco (C)-1, Reconciliation Compliance Filing, April 9, 2019.

Potomac Electric Power Company - District of Columbia  
Unaffiliated Project Owner - "PJM"  
Second Biennial Plan  
September 30, 2016 Biennial Filing: Forecasted 2020-2021 Revenue Requirement Calculation  
Accounted Electric Plant In Service Calculation (2020 - 2021)

(1)	(2)	(3)		(4)		(5)		(6)		(7)		(8)		(9)		(10)		(11)		(12)		(13)		(14)		(15)		(16)		(17)		(18)		(19)		(20)		(21)		(22)		(23)		(24)		(25)		(26)		(27)		(28)		(29)		(30)		(31)		(32)		(33)		(34)		(35)		(36)		(37)		(38)		(39)		(40)		(41)		(42)		(43)		(44)		(45)		(46)		(47)		(48)		(49)		(50)		(51)		(52)		(53)		(54)		(55)		(56)		(57)		(58)		(59)		(60)		(61)		(62)		(63)		(64)		(65)		(66)		(67)		(68)		(69)		(70)		(71)		(72)		(73)		(74)		(75)		(76)		(77)		(78)		(79)		(80)		(81)		(82)		(83)		(84)		(85)		(86)		(87)		(88)		(89)		(90)		(91)		(92)		(93)		(94)		(95)		(96)		(97)		(98)		(99)		(100)		(101)		(102)		(103)		(104)		(105)		(106)		(107)		(108)		(109)		(110)		(111)		(112)		(113)		(114)		(115)		(116)		(117)		(118)		(119)		(120)		(121)		(122)		(123)		(124)		(125)		(126)		(127)		(128)		(129)		(130)		(131)		(132)		(133)		(134)		(135)		(136)		(137)		(138)		(139)		(140)		(141)		(142)		(143)		(144)		(145)		(146)		(147)		(148)		(149)		(150)		(151)		(152)		(153)		(154)		(155)		(156)		(157)		(158)		(159)		(160)		(161)		(162)		(163)		(164)		(165)		(166)		(167)		(168)		(169)		(170)		(171)		(172)		(173)		(174)		(175)		(176)		(177)		(178)		(179)		(180)		(181)		(182)		(183)		(184)		(185)		(186)		(187)		(188)		(189)		(190)		(191)		(192)		(193)		(194)		(195)		(196)		(197)		(198)		(199)		(200)		(201)		(202)		(203)		(204)		(205)		(206)		(207)		(208)		(209)		(210)		(211)		(212)		(213)		(214)		(215)		(216)		(217)		(218)		(219)		(220)		(221)		(222)		(223)		(224)		(225)		(226)		(227)		(228)		(229)		(230)		(231)		(232)		(233)		(234)		(235)		(236)		(237)		(238)		(239)		(240)		(241)		(242)		(243)		(244)		(245)		(246)		(247)		(248)		(249)		(250)		(251)		(252)		(253)		(254)		(255)		(256)		(257)		(258)		(259)		(260)		(261)		(262)		(263)		(264)		(265)		(266)		(267)		(268)		(269)		(270)		(271)		(272)		(273)		(274)		(275)		(276)		(277)		(278)		(279)		(280)		(281)		(282)		(283)		(284)		(285)		(286)		(287)		(288)		(289)		(290)		(291)		(292)		(293)		(294)		(295)		(296)		(297)		(298)		(299)		(300)		(301)		(302)		(303)		(304)		(305)		(306)		(307)		(308)		(309)		(310)		(311)		(312)		(313)		(314)		(315)		(316)		(317)		(318)		(319)		(320)		(321)		(322)		(323)		(324)		(325)		(326)		(327)		(328)		(329)		(330)		(331)		(332)		(333)		(334)		(335)		(336)		(337)		(338)		(339)		(340)		(341)		(342)		(343)		(344)		(345)		(346)		(347)		(348)		(349)		(350)		(351)		(352)		(353)		(354)		(355)		(356)		(357)		(358)		(359)		(360)		(361)		(362)		(363)		(364)		(365)		(366)		(367)		(368)		(369)		(370)		(371)		(372)		(373)		(374)		(375)		(376)		(377)		(378)		(379)		(380)		(381)		(382)		(383)		(384)		(385)		(386)		(387)		(388)		(389)		(390)		(391)		(392)		(393)		(394)		(395)		(396)		(397)		(398)		(399)		(400)		(401)		(402)		(403)		(404)		(405)		(406)		(407)		(408)		(409)		(410)		(411)		(412)		(413)		(414)		(415)		(416)		(417)		(418)		(419)		(420)		(421)		(422)		(423)		(424)		(425)		(426)		(427)		(428)		(429)		(430)		(431)		(432)		(433)		(434)		(435)		(436)		(437)		(438)		(439)		(440)		(441)		(442)		(443)		(444)		(445)		(446)		(447)		(448)		(449)		(450)		(451)		(452)		(453)		(454)		(455)		(456)		(457)		(458)		(459)		(460)		(461)		(462)		(463)		(464)		(465)		(466)		(467)		(468)		(469)		(470)		(471)		(472)		(473)		(474)		(475)		(476)		(477)		(478)		(479)		(480)		(481)		(482)		(483)		(484)		(485)		(486)		(487)		(488)		(489)		(490)		(491)		(492)		(493)		(494)		(495)		(496)		(497)		(498)		(499)		(500)	
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Accumulated Depreciation	
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Potomac Electric Power Company - District of Columbia  
Underground Project Charge - Rider "UPC"  
Second Biennial Plan  
September 30, 2019 Biennial Filing: Forecasted 2020-2021 Revenue Requirement Calculation

Tax Depreciation (2020 - 2021)

	MACRS Federal Tax Depreciation - 20 Year Property Class	Rate
(1)	Year 1	3.750%
(2)	Year 2	7.219%
(3)	Year 3	6.677%
(4)	Year 4	6.177%
(5)	Year 5	5.713%
(6)	Year 6	5.285%
(7)	Year 7	4.888%
(8)	Year 8	4.522%
(9)	Year 9	4.462%
(10)	Year 10	4.461%
(11)	Year 11	4.462%
(12)	Year 12	4.461%
(13)	Year 13	4.462%
(14)	Year 14	4.461%
(15)	Year 15	4.462%
(16)	Year 16	4.461%
(17)	Year 17	4.462%
(18)	Year 18	4.461%
(19)	Year 19	4.462%
(20)	Year 20	4.461%
(21)	Year 21	2.231%

	Plant Closings	2016	2017	2018	2019	2020	2021	Total
		\$ 98,697	\$ -	\$ -	\$ 30,061	\$ 6,886,807	\$ -	
(22)	2016	3,701						3,701
(23)	2017	7,125	-					7,125
(24)	2018	6,590	-	-				6,590
(25)	2019	6,097	-	-	1,127			7,224
(26)	2020	5,639	-	-	2,170	258,255		266,064
(27)	2021	5,216	-	-	2,007	497,159	-	504,382
(28)	2022	4,824	-	-	1,857	459,832	-	466,513
(29)	2023	4,463	-	-	1,717	425,398	-	431,578
(30)	2024	4,404	-	-	1,589	393,443	-	399,436
(31)	2025	4,403	-	-	1,469	363,968	-	369,840
(32)	2026	4,404	-	-	1,359	336,627	-	342,390
(33)	2027	4,403	-	-	1,341	311,421	-	317,166
(34)	2028	4,404	-	-	1,341	307,289	-	313,034
(35)	2029	4,403	-	-	1,341	307,220	-	312,965
(36)	2030	4,404	-	-	1,341	307,289	-	313,034
(37)	2031	4,403	-	-	1,341	307,220	-	312,965
(38)	2032	4,404	-	-	1,341	307,289	-	313,034
(39)	2033	4,403	-	-	1,341	307,220	-	312,965
(40)	2034	4,404	-	-	1,341	307,289	-	313,034
(41)	2035	4,403	-	-	1,341	307,220	-	312,965
(42)	2036	2,202	-	-	1,341	307,289	-	310,832
(43)	2037		-	-	1,341	307,220	-	308,562
(44)	2038			-	1,341	307,289	-	308,630
(45)	2039				671	307,220	-	307,891
(46)	2040					153,645	-	153,645
(47)	2041						-	-

**Potomac Electric Power Company - District of Columbia**

**Underground Project Charge - Rider "UPC"**

**Second Biennial Plan**

**September 30, 2019 Biennial Filing: Forecasted 2020-2021 Revenue Requirement Calculation**

**Weighted Average Cost of Capital**

	Rate	Weight	Weighted Rate
(1) Long-Term Debt	5.340%	49.560%	2.65%
(2) Common Equity	9.525%	50.440%	4.80%
(3) <b>Weighted Average Cost of Capital</b>			<b>7.45%</b>

Source: Page 7 of Order No. 19433 in Formal Case 1150.

**Allowance for Funds Used During Construction (AFUDC) Rates**

(4) AFUDC - Debt	2.617%
(5) AFUDC - Equity	4.380%

Source: Internal Company Records.

**Potomac Electric Power Company - District of Columbia**  
**Underground Project Charge - Rider "UPC"**  
**Second Biennial Plan**  
**September 30, 2019 Biennial Filing: Forecasted 2020-2021 Revenue Requirement Calculation**

**Revenue Conversion Factor**

<u>Tax Rates</u>	<u>2020</u>	<u>2021</u>
(1) Federal Income Tax	0.21000	0.21000
(2) D.C. Franchise Tax Rate	0.08250	0.08250
 <u>Conversion Factor</u>		
(3) D.C. Taxable Income	1.00000	1.00000
(4) D.C. Franchise Tax Rate	0.08250	0.08250
(5) Federal Taxable Income	0.91750	0.91750
(6) Federal Income Tax	0.19268	0.19268
(7) Total Additional Taxes	0.27518	0.27518
(8) Increase in Earnings (1 - Additional Taxes)	0.72483	0.72483
(9) Revenue Conversion Factor	<b>1.379643</b>	<b>1.379643</b>

Potomac Electric Power Company - District of Columbia  
Underground Project Charge - Rider "UPC"  
Second Biennial Plan  
September 30, 2019 Biennial Filing: Forecasted 2020-2021 Revenue Requirement Calculation

I. Forecasted Billing Determinants (2020) (MWh)

	Month-Year	R	MMA	T	GSND	GS LV	GS 3A	MGT-LV / GT-LV	GT 3A	GT 3B	RT	SL/TS	TN	Total
(1)	Jan-20	201,080	22,200	2,040	18,627	41,509	98	392,786	186,251	16,290	26,270	8,573	218	915,941
(2)	Feb-20	182,913	22,613	1,816	16,580	36,948	87	349,629	165,787	14,500	24,613	8,541	194	824,221
(3)	Mar-20	158,481	19,643	1,954	17,845	39,766	94	376,299	178,434	15,606	20,928	7,592	208	836,851
(4)	Apr-20	135,085	18,826	1,933	17,647	39,326	93	372,134	176,459	15,434	31,161	6,948	206	815,251
(5)	May-20	121,116	20,591	2,018	18,426	41,062	97	388,556	184,246	16,115	26,164	6,332	215	824,937
(6)	Jun-20	179,042	26,012	2,196	20,051	44,684	105	422,828	200,497	17,536	33,036	5,825	234	952,046
(7)	Jul-20	233,485	31,493	2,577	23,535	52,446	123	496,281	235,327	20,582	32,927	6,095	275	1,135,145
(8)	Aug-20	211,267	34,447	2,353	21,484	47,877	113	453,043	214,824	18,789	25,354	6,579	251	1,036,380
(9)	Sep-20	181,579	31,862	2,099	19,169	42,718	101	404,233	191,679	16,765	31,793	7,309	224	929,531
(10)	Oct-20	138,495	24,143	2,003	18,289	40,757	96	385,669	182,877	15,995	25,605	8,804	214	842,946
(11)	Nov-20	140,984	18,455	1,856	16,947	37,766	89	357,373	169,459	14,821	24,115	8,735	198	790,799
(12)	Dec-20	164,439	19,598	1,919	17,527	39,058	92	369,595	175,255	15,328	30,201	8,728	205	841,944
(13)	Total	2,047,966	289,883	24,763	226,128	503,916	1,186	4,768,425	2,261,094	197,763	332,166	90,061	2,641	10,745,992

II. Forecasted Billing Determinants (2020) (kWh)

	Month-Year	R	MMA	T	GSND	GS LV	GS 3A	MGT-LV / GT-LV	GT 3A	GT 3B	RT	SL/TS	TN	Total
(14)	Jan-20	201,079,853	22,199,720	2,039,796	18,626,642	41,508,647	97,697	392,785,543	186,251,232	16,290,144	26,270,353	8,573,421	217,507	915,940,554
(15)	Feb-20	182,913,222	22,613,270	1,815,676	16,580,065	36,947,942	86,963	349,628,776	165,787,136	14,500,287	24,612,791	8,541,285	193,608	824,221,021
(16)	Mar-20	158,481,201	19,643,250	1,954,181	17,844,833	39,766,421	93,596	376,299,308	178,433,781	15,606,404	20,927,597	7,592,406	208,377	836,851,355
(17)	Apr-20	135,085,398	18,826,030	1,932,550	17,647,310	39,326,249	92,560	372,134,078	176,458,710	15,433,658	31,160,919	6,947,566	206,071	815,251,099
(18)	May-20	121,116,424	20,591,140	2,017,830	18,426,055	41,061,649	96,645	388,555,713	184,245,529	16,114,718	26,163,706	6,332,357	215,164	824,936,930
(19)	Jun-20	179,041,750	26,012,040	2,195,814	20,051,332	44,683,506	105,169	422,828,410	200,496,972	17,536,123	33,036,371	5,824,513	234,143	952,046,143
(20)	Jul-20	233,484,517	31,493,290	2,577,262	23,534,574	52,445,756	123,439	496,280,564	235,326,549	20,582,432	32,926,537	6,094,889	274,817	1,135,144,625
(21)	Aug-20	211,266,514	34,446,700	2,352,724	21,484,181	47,876,546	112,685	453,043,321	214,824,293	18,789,237	25,353,568	6,578,942	250,875	1,036,379,587
(22)	Sep-20	181,578,992	31,861,930	2,099,243	19,169,487	42,718,352	100,544	404,232,670	191,679,236	16,764,895	31,793,290	7,308,722	223,846	929,531,206
(23)	Oct-20	138,495,346	24,142,910	2,002,837	18,289,142	40,756,544	95,927	385,668,591	182,876,512	15,994,980	25,605,169	8,804,039	213,566	842,945,563
(24)	Nov-20	140,983,736	18,455,130	1,855,895	16,947,326	37,766,365	88,889	357,373,300	169,459,438	14,821,478	24,114,555	8,735,223	197,897	790,799,230
(25)	Dec-20	164,439,102	19,597,630	1,919,364	17,526,898	39,057,917	91,929	369,594,920	175,254,691	15,328,350	30,200,840	8,727,976	204,665	841,944,283
(26)	Total	2,047,966,056	289,883,040	24,763,172	226,127,846	503,915,894	1,186,042	4,768,425,194	2,261,094,079	197,762,704	332,165,696	90,061,339	2,640,536	10,745,991,596

Potomac Electric Power Company - District of Columbia  
Underground Project Charge - Rider "UPC"  
Second Biennial Plan  
September 30, 2019 Biennial Filing: Forecasted 2020-2021 Revenue Requirement Calculation

I. Forecasted Billing Determinants (2021) (MWh)

	Month-Year	R	MMA	T	GSND	GS LV	GS 3A	MGT-LV / GT-LV	GT 3A	GT 3B	RT	SL/TS	TN	Total
(1)	Jan-21	201,701	22,392	2,026	18,502	41,230	97	390,147	185,000	16,181	26,286	8,644	216	912,422
(2)	Feb-21	183,993	22,795	1,797	16,410	36,570	86	346,052	164,091	14,352	24,613	8,597	192	819,549
(3)	Mar-21	159,221	19,804	1,931	17,634	39,297	92	371,855	176,326	15,422	20,954	7,636	206	830,379
(4)	Apr-21	134,616	19,032	1,905	17,398	38,771	91	366,876	173,965	15,216	31,150	6,982	203	806,205
(5)	May-21	122,734	20,884	1,991	18,177	40,506	95	383,294	181,750	15,896	26,212	6,359	212	818,111
(6)	Jun-21	182,248	26,010	2,168	19,800	44,122	104	417,519	197,979	17,316	33,098	5,845	231	946,439
(7)	Jul-21	228,326	31,333	2,544	23,227	51,760	122	489,791	232,249	20,313	32,941	6,110	271	1,118,988
(8)	Aug-21	216,024	34,295	2,315	21,139	47,106	111	445,756	211,369	18,487	25,349	6,591	247	1,028,789
(9)	Sep-21	185,578	31,712	2,058	18,797	41,888	99	396,377	187,954	16,439	31,770	7,318	219	920,209
(10)	Oct-21	140,774	23,967	1,964	17,933	39,963	94	378,160	179,316	15,684	25,621	8,811	209	832,497
(11)	Nov-21	143,011	18,241	1,849	16,885	37,628	89	356,068	168,841	14,767	24,155	8,740	197	790,472
(12)	Dec-21	167,072	19,353	1,878	17,151	38,220	90	361,664	171,494	14,999	30,235	8,732	200	831,088
(13)	Total	2,065,298	289,818	24,426	223,052	497,061	1,170	4,703,559	2,230,336	195,072	332,384	90,365	2,605	10,655,146

II. Forecasted Billing Determinants (2021) (kWh)

	Month-Year	R	MMA	T	GSND	GS LV	GS 3A	MGT-LV / GT-LV	GT 3A	GT 3B	RT	SL/TS	TN	Total
(14)	Jan-21	201,701,047	22,392,110	2,026,093	18,501,511	41,229,798	97,041	390,146,863	185,000,021	16,180,709	26,286,008	8,644,354	216,045	912,421,599
(15)	Feb-21	183,993,329	22,795,030	1,797,101	16,410,444	36,569,948	86,073	346,051,914	164,091,058	14,351,942	24,613,249	8,597,308	191,628	819,549,024
(16)	Mar-21	159,220,527	19,803,870	1,931,102	17,634,088	39,296,784	92,491	371,855,256	176,326,499	15,422,094	20,954,230	7,636,384	205,916	830,379,241
(17)	Apr-21	134,616,196	19,032,440	1,905,243	17,397,957	38,770,578	91,252	366,875,908	173,965,389	15,215,583	31,149,605	6,981,657	203,159	806,204,968
(18)	May-21	122,734,480	20,884,290	1,990,505	18,176,529	40,505,590	95,336	383,293,873	181,750,467	15,896,492	26,212,097	6,358,709	212,251	818,110,619
(19)	Jun-21	182,247,722	26,009,545	2,168,240	19,799,539	44,122,396	103,849	417,518,768	197,979,244	17,315,914	33,097,850	5,844,777	231,203	946,439,045
(20)	Jul-21	228,326,245	31,332,900	2,543,562	23,226,838	51,759,980	121,825	489,791,244	232,249,440	20,313,298	32,940,571	6,110,475	271,224	1,118,987,602
(21)	Aug-21	216,023,974	34,295,220	2,314,882	21,138,618	47,106,474	110,872	445,756,328	211,368,943	18,487,021	25,348,612	6,590,885	246,839	1,028,788,669
(22)	Sep-21	185,577,960	31,711,900	2,058,445	18,796,939	41,888,146	98,590	396,376,639	187,954,059	16,439,078	31,769,786	7,317,909	219,495	920,208,947
(23)	Oct-21	140,774,408	23,966,840	1,963,844	17,933,074	39,963,061	94,059	378,160,062	179,316,114	15,683,575	25,621,386	8,811,006	209,408	832,496,836
(24)	Nov-21	143,010,627	18,241,400	1,849,116	16,885,427	37,628,427	88,564	356,068,029	168,840,504	14,767,344	24,154,982	8,740,273	197,174	790,471,868
(25)	Dec-21	167,071,792	19,352,740	1,878,178	17,150,808	38,219,815	89,956	361,664,184	171,494,091	14,999,436	30,235,214	8,731,531	200,273	831,088,018
(26)	Total	2,065,298,307	289,818,285	24,426,312	223,051,770	497,060,995	1,169,908	4,703,559,070	2,230,335,830	195,072,487	332,383,588	90,365,268	2,604,616	10,655,146,435

**APPENDIX J:      Underground Rider Revenue Requirement and  
Rate Design**

Potomac Electric Power Company - District of Columbia  
Underground Rider  
Second Biennial Plan  
September 30, 2019 Biennial Filing: Forecasted 2020-2021 Revenue Requirement Calculation

Allocation of Forecasted 2020 and 2021 Revenue Requirements by Class and Calculation of the Underground Rider by Class

Revenue Recovery Method	Total	Residential	MMA	GS-ND/T	GS-D-LV	GS-3A	MGT-LV / GT-LV	GT-3A	GT-3B	RT	SL/TS/OL LED	TN
(1) Total Authorized Base Revenue Requirement	\$ 396,697,247	\$ 76,740,338	\$ 10,804,681	\$ 14,589,672	\$ 31,763,556	\$ 68,336	\$ 202,004,191	\$ 52,040,852	\$ 421,572	\$ 6,739,346	\$ 1,450,638	\$ 74,065
(2) Authorized Energy Charge Recovery (Net of EDIT Credit)	\$ 108,715,835	\$ 27,357,286	\$ 3,013,724	\$ 8,847,074	\$ 14,435,913	\$ 25,182	\$ 44,185,203	\$ 10,157,054	\$ -	\$ -	\$ 676,422	\$ 17,977
(3) Authorized Demand Charge Recovery (Net of EDIT Credit)	\$ 194,689,507	\$ -	\$ -	\$ -	\$ 15,175,063	\$ 36,000	\$ 137,530,166	\$ 41,531,786	\$ 416,492	\$ -	\$ -	\$ -
(4) Other (Net of EDIT Credit)	\$ 7,507,677	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,739,346	\$ 768,331	\$ -
(5) Total Applicable Revenues	\$ 310,913,019	\$ 27,357,286	\$ 3,013,724	\$ 8,847,074	\$ 29,610,976	\$ 61,182	\$ 181,715,369	\$ 51,688,840	\$ 416,492	\$ 6,739,346	\$ 1,444,753	\$ 17,977
(6) Percentage Share of Total Energy and Demand Charge Recovery	100.00%	8.80%	0.97%	2.85%	9.52%	0.02%	58.45%	16.62%	0.13%	2.17%	0.46%	0.01%
(7) Annual Revenue Requirement (2020)	\$ 30,000,000.00											
(8) Annual Revenue Requirement by Class (2020)	\$ 30,000,000.00	\$ 2,639,705	\$ 290,794	\$ 853,654	\$ 2,857,163	\$ 5,903	\$ 17,533,718	\$ 4,987,457	\$ 40,187	\$ 650,280	\$ 139,404	\$ 1,735
(9) Forecasted Sales by Class (kWh) (2020)		2,047,966,056	289,883,040	250,891,017	503,915,894	1,186,042	4,768,425,194	2,261,094,079	197,762,704	332,165,696	90,061,339	2,640,536
(10) Underground Rider Rate (\$/kWh) by Class (2020)		\$ 0.00129	\$ 0.00100	\$ 0.00340	\$ 0.00567	\$ 0.00498	\$ 0.00368	\$ 0.00221	\$ 0.00020	\$ 0.00196	\$ 0.00155	\$ 0.00066
(11) Percentage Increase in Distribution Revenue	7.56%	3.44%	2.69%	5.85%	9.00%	8.64%	8.68%	9.58%	9.53%	9.65%	9.61%	2.34%
(12) Annual Revenue Requirement (2021)	\$ 30,000,000.00											
(13) Annual Revenue Requirement by Class (2021)	\$ 30,000,000.00	\$ 2,639,705	\$ 290,794	\$ 853,654	\$ 2,857,163	\$ 5,903	\$ 17,533,718	\$ 4,987,457	\$ 40,187	\$ 650,280	\$ 139,404	\$ 1,735
(14) Forecasted Sales by Class (kWh) (2021)		2,065,298,307	289,818,285	247,478,082	497,060,995	1,169,908	4,703,559,070	2,230,335,830	195,072,487	332,383,588	90,365,268	2,604,616
(15) Underground Rider Rate (\$/kWh) by Class (2021)		\$ 0.00128	\$ 0.00100	\$ 0.00345	\$ 0.00575	\$ 0.00505	\$ 0.00373	\$ 0.00224	\$ 0.00021	\$ 0.00196	\$ 0.00154	\$ 0.00067
(16) Percentage Increase in Distribution Revenue	7.56%	3.44%	2.69%	5.85%	9.00%	8.64%	8.68%	9.58%	9.53%	9.65%	9.61%	2.34%

Notes:

- (1) Source: Formal Cases 1150 and 1151 Pepco Exhibit 4 Pages 13-26 of 216.
- (2) Source: Formal Cases 1150 and 1151 Pepco Exhibit 4 Pages 13-26 of 216.
- (3) Source: Formal Cases 1150 and 1151 Pepco Exhibit 4 Pages 13-26 of 216.
- (4) Source: Formal Cases 1150 and 1151 Pepco Exhibit 4 Pages 13-26 of 216.
- (5) Calculation: Line (2) + Line (3) + Line (4)
- (6) Calculation: For each class, Line (5) divided by Total Applicable Revenues.
- (7) Source: Second Biennial Plan Annual Underground Rider Revenue Requirement.
- (8) Calculation: For each class, Line (6) multiplied by Line (7).
- (9) Source: Refer to Line (26) of "Forecasted Billing Determinants" on Page 2 of 3.
- (10) Calculation: For each class, Line (8) divided by Line (9), rounded to 5 decimal points.
- (11) Calculation: For each class, Line (8) divided by Line (1).
- (12) Source: Second Biennial Plan Annual Underground Rider Revenue Requirement.
- (13) Calculation: For each class, Line (6) multiplied by Line (12).
- (14) Source: Refer to Line (26) of "Forecasted Billing Determinants" on Page 3 of 3.
- (15) Calculation: Line (13) / Line (14).
- (16) Calculation: Line (13) / Line (1).

Potomac Electric Power Company - District of Columbia  
Underground Rider  
Second Biennial Plan  
September 30, 2019 Biennial Filing: Forecasted 2020-2021 Revenue Requirement Calculation

I. Forecasted Billing Determinants (2020) (MWh)

	Month-Year	R	MMA	T	GSND	GS LV	GS 3A	MGT-LV / GT-LV	GT 3A	GT 3B	RT	SL/TS	TN	Total
(1)	Jan-20	201,080	22,200	2,040	18,627	41,509	98	392,786	186,251	16,290	26,270	8,573	218	915,941
(2)	Feb-20	182,913	22,613	1,816	16,580	36,948	87	349,629	165,787	14,500	24,613	8,541	194	824,221
(3)	Mar-20	158,481	19,643	1,954	17,845	39,766	94	376,299	178,434	15,606	20,928	7,592	208	836,851
(4)	Apr-20	135,085	18,826	1,933	17,647	39,326	93	372,134	176,459	15,434	31,161	6,948	206	815,251
(5)	May-20	121,116	20,591	2,018	18,426	41,062	97	388,556	184,246	16,115	26,164	6,332	215	824,937
(6)	Jun-20	179,042	26,012	2,196	20,051	44,684	105	422,828	200,497	17,536	33,036	5,825	234	952,046
(7)	Jul-20	233,485	31,493	2,577	23,535	52,446	123	496,281	235,327	20,582	32,927	6,095	275	1,135,145
(8)	Aug-20	211,267	34,447	2,353	21,484	47,877	113	453,043	214,824	18,789	25,354	6,579	251	1,036,380
(9)	Sep-20	181,579	31,862	2,099	19,169	42,718	101	404,233	191,679	16,765	31,793	7,309	224	929,531
(10)	Oct-20	138,495	24,143	2,003	18,289	40,757	96	385,669	182,877	15,995	25,605	8,804	214	842,946
(11)	Nov-20	140,984	18,455	1,856	16,947	37,766	89	357,373	169,459	14,821	24,115	8,735	198	790,799
(12)	Dec-20	164,439	19,598	1,919	17,527	39,058	92	369,595	175,255	15,328	30,201	8,728	205	841,944
(13)	Total	2,047,966	289,883	24,763	226,128	503,916	1,186	4,768,425	2,261,094	197,763	332,166	90,061	2,641	10,745,992

II. Forecasted Billing Determinants (2020) (kWh)

	Month-Year	R	MMA	T	GSND	GS LV	GS 3A	MGT-LV / GT-LV	GT 3A	GT 3B	RT	SL/TS	TN	Total
(14)	Jan-20	201,079,853	22,199,720	2,039,796	18,626,642	41,508,647	97,697	392,785,543	186,251,232	16,290,144	26,270,353	8,573,421	217,507	915,940,554
(15)	Feb-20	182,913,222	22,613,270	1,815,676	16,580,065	36,947,942	86,963	349,628,776	165,787,136	14,500,287	24,612,791	8,541,285	193,608	824,221,021
(16)	Mar-20	158,481,201	19,643,250	1,954,181	17,844,833	39,766,421	93,596	376,299,308	178,433,781	15,606,404	20,927,597	7,592,406	208,377	836,851,355
(17)	Apr-20	135,085,398	18,826,030	1,932,550	17,647,310	39,326,249	92,560	372,134,078	176,458,710	15,433,658	31,160,919	6,947,566	206,071	815,251,099
(18)	May-20	121,116,424	20,591,140	2,017,830	18,426,055	41,061,649	96,645	388,555,713	184,245,529	16,114,718	26,163,706	6,332,357	215,164	824,936,930
(19)	Jun-20	179,041,750	26,012,040	2,195,814	20,051,332	44,683,506	105,169	422,828,410	200,496,972	17,536,123	33,036,371	5,824,513	234,143	952,046,143
(20)	Jul-20	233,484,517	31,493,290	2,577,262	23,534,574	52,445,756	123,439	496,280,564	235,326,549	20,582,432	32,926,537	6,094,889	274,817	1,135,144,625
(21)	Aug-20	211,266,514	34,446,700	2,352,724	21,484,181	47,876,546	112,685	453,043,321	214,824,293	18,789,237	25,353,568	6,578,942	250,875	1,036,379,587
(22)	Sep-20	181,578,992	31,861,930	2,099,243	19,169,487	42,718,352	100,544	404,232,670	191,679,236	16,764,895	31,793,290	7,308,722	223,846	929,531,206
(23)	Oct-20	138,495,346	24,142,910	2,002,837	18,289,142	40,756,544	95,927	385,668,591	182,876,512	15,994,980	25,605,169	8,804,039	213,566	842,945,563
(24)	Nov-20	140,983,736	18,455,130	1,855,895	16,947,326	37,766,365	88,889	357,373,300	169,459,438	14,821,478	24,114,555	8,735,223	197,897	790,799,230
(25)	Dec-20	164,439,102	19,597,630	1,919,364	17,526,898	39,057,917	91,929	369,594,920	175,254,691	15,328,350	30,200,840	8,727,976	204,665	841,944,283
(26)	Total	2,047,966,056	289,883,040	24,763,172	226,127,846	503,915,894	1,186,042	4,768,425,194	2,261,094,079	197,762,704	332,165,696	90,061,339	2,640,536	10,745,991,596

Potomac Electric Power Company - District of Columbia  
Underground Rider  
Second Biennial Plan  
September 30, 2019 Biennial Filing: Forecasted 2020-2021 Revenue Requirement Calculation

I. Forecasted Billing Determinants (2021) (MWh)

	Month-Year	R	MMA	T	GSND	GS LV	GS 3A	MGT-LV / GT-LV	GT 3A	GT 3B	RT	SL/TS	TN	Total
(1)	Jan-21	201,701	22,392	2,026	18,502	41,230	97	390,147	185,000	16,181	26,286	8,644	216	912,422
(2)	Feb-21	183,993	22,795	1,797	16,410	36,570	86	346,052	164,091	14,352	24,613	8,597	192	819,549
(3)	Mar-21	159,221	19,804	1,931	17,634	39,297	92	371,855	176,326	15,422	20,954	7,636	206	830,379
(4)	Apr-21	134,616	19,032	1,905	17,398	38,771	91	366,876	173,965	15,216	31,150	6,982	203	806,205
(5)	May-21	122,734	20,884	1,991	18,177	40,506	95	383,294	181,750	15,896	26,212	6,359	212	818,111
(6)	Jun-21	182,248	26,010	2,168	19,800	44,122	104	417,519	197,979	17,316	33,098	5,845	231	946,439
(7)	Jul-21	228,326	31,333	2,544	23,227	51,760	122	489,791	232,249	20,313	32,941	6,110	271	1,118,988
(8)	Aug-21	216,024	34,295	2,315	21,139	47,106	111	445,756	211,369	18,487	25,349	6,591	247	1,028,789
(9)	Sep-21	185,578	31,712	2,058	18,797	41,888	99	396,377	187,954	16,439	31,770	7,318	219	920,209
(10)	Oct-21	140,774	23,967	1,964	17,933	39,963	94	378,160	179,316	15,684	25,621	8,811	209	832,497
(11)	Nov-21	143,011	18,241	1,849	16,885	37,628	89	356,068	168,841	14,767	24,155	8,740	197	790,472
(12)	Dec-21	167,072	19,353	1,878	17,151	38,220	90	361,664	171,494	14,999	30,235	8,732	200	831,088
(13)	Total	2,065,298	289,818	24,426	223,052	497,061	1,170	4,703,559	2,230,336	195,072	332,384	90,365	2,605	10,655,146

II. Forecasted Billing Determinants (2021) (kWh)

	Month-Year	R	MMA	T	GSND	GS LV	GS 3A	MGT-LV / GT-LV	GT 3A	GT 3B	RT	SL/TS	TN	Total
(14)	Jan-21	201,701,047	22,392,110	2,026,093	18,501,511	41,229,798	97,041	390,146,863	185,000,021	16,180,709	26,286,008	8,644,354	216,045	912,421,599
(15)	Feb-21	183,993,329	22,795,030	1,797,101	16,410,444	36,569,948	86,073	346,051,914	164,091,058	14,351,942	24,613,249	8,597,308	191,628	819,549,024
(16)	Mar-21	159,220,527	19,803,870	1,931,102	17,634,088	39,296,784	92,491	371,855,256	176,326,499	15,422,094	20,954,230	7,636,384	205,916	830,379,241
(17)	Apr-21	134,616,196	19,032,440	1,905,243	17,397,957	38,770,578	91,252	366,875,908	173,965,389	15,215,583	31,149,605	6,981,657	203,159	806,204,968
(18)	May-21	122,734,480	20,884,290	1,990,505	18,176,529	40,505,590	95,336	383,293,873	181,750,467	15,896,492	26,212,097	6,358,709	212,251	818,110,619
(19)	Jun-21	182,247,722	26,009,545	2,168,240	19,799,539	44,122,396	103,849	417,518,768	197,979,244	17,315,914	33,097,850	5,844,777	231,203	946,439,045
(20)	Jul-21	228,326,245	31,332,900	2,543,562	23,226,838	51,759,980	121,825	489,791,244	232,249,440	20,313,298	32,940,571	6,110,475	271,224	1,118,987,602
(21)	Aug-21	216,023,974	34,295,220	2,314,882	21,138,618	47,106,474	110,872	445,756,328	211,368,943	18,487,021	25,348,612	6,590,885	246,839	1,028,788,669
(22)	Sep-21	185,577,960	31,711,900	2,058,445	18,796,939	41,888,146	98,590	396,376,639	187,954,059	16,439,078	31,769,786	7,317,909	219,495	920,208,947
(23)	Oct-21	140,774,408	23,966,840	1,963,844	17,933,074	39,963,061	94,059	378,160,062	179,316,114	15,683,575	25,621,386	8,811,006	209,408	832,496,836
(24)	Nov-21	143,010,627	18,241,400	1,849,116	16,885,427	37,628,427	88,564	356,068,029	168,840,504	14,767,344	24,154,982	8,740,273	197,174	790,471,868
(25)	Dec-21	167,071,792	19,352,740	1,878,178	17,150,808	38,219,815	89,956	361,664,184	171,494,091	14,999,436	30,235,214	8,731,531	200,273	831,088,018
(26)	Total	2,065,298,307	289,818,285	24,426,312	223,051,770	497,060,995	1,169,908	4,703,559,070	2,230,335,830	195,072,487	332,383,588	90,365,268	2,604,616	10,655,146,435

## **APPENDIX K:     Underground Project Charge Bill Impacts**

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 RIDER UPC RATES**  
**SCHEDULE "R"**  
**DISTRICT OF COLUMBIA**

KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE					
	\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)	(\$)	(%)
	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	ANNUAL	ANNUAL
0	17.03	17.11	-	-	17.03	17.11	-	-	0.00	0.00	0.00%	0.00%	0.00	0.00%
10	17.32	17.40	1.73203	1.74003	17.32	17.40	1.73206	1.74006	0.00	0.00	0.00%	0.00%	0.00	0.00%
20	17.61	17.69	0.88053	0.88453	17.61	17.69	0.88056	0.88456	0.00	0.00	0.00%	0.00%	0.00	0.00%
30	17.90	17.98	0.59670	0.59936	17.90	17.98	0.59673	0.59939	0.00	0.00	0.00%	0.00%	0.00	0.00%
40	18.85	18.95	0.47115	0.47380	18.85	18.95	0.47118	0.47383	0.00	0.00	0.00%	0.00%	0.00	0.00%
50	19.79	19.92	0.39582	0.39847	19.79	19.92	0.39585	0.39850	0.00	0.00	0.00%	0.00%	0.00	0.00%
100	24.52	24.78	0.24516	0.24780	24.52	24.78	0.24519	0.24783	0.00	0.00	0.00%	0.00%	0.00	0.00%
200	33.97	34.49	0.16983	0.17246	33.97	34.50	0.16986	0.17249	0.01	0.01	0.03%	0.03%	0.01	0.03%
300	43.42	44.21	0.14472	0.14735	43.42	44.21	0.14475	0.14738	0.01	0.01	0.02%	0.02%	0.01	0.02%
400	52.87	53.92	0.13216	0.13480	52.88	53.93	0.13219	0.13483	0.01	0.01	0.02%	0.02%	0.01	0.02%
500	63.69	64.37	0.12737	0.12873	63.70	64.38	0.12740	0.12876	0.02	0.02	0.03%	0.03%	0.02	0.03%
<b>648</b>	<b>79.70</b>	<b>79.83</b>	<b>0.12300</b>	<b>0.12319</b>	<b>79.72</b>	<b>79.85</b>	<b>0.12303</b>	<b>0.12322</b>	<b>0.02</b>	<b>0.02</b>	<b>0.03%</b>	<b>0.03%</b>	<b>0.02</b>	<b>0.03%</b>
700	85.33	85.26	0.12190	0.12180	85.35	85.28	0.12193	0.12183	0.02	0.02	0.02%	0.02%	0.02	0.02%
750	90.74	90.49	0.12099	0.12065	90.76	90.51	0.12102	0.12068	0.02	0.02	0.02%	0.02%	0.02	0.02%
800	96.15	95.71	0.12019	0.11964	96.18	95.73	0.12022	0.11967	0.02	0.02	0.02%	0.02%	0.02	0.02%
850	101.56	100.93	0.11949	0.11875	101.59	100.96	0.11952	0.11878	0.03	0.03	0.03%	0.03%	0.03	0.03%
900	106.97	106.16	0.11886	0.11795	107.00	106.18	0.11889	0.11798	0.03	0.03	0.03%	0.03%	0.03	0.03%
950	112.39	111.38	0.11830	0.11724	112.41	111.41	0.11833	0.11727	0.03	0.03	0.03%	0.03%	0.03	0.03%
1,000	117.80	116.61	0.11780	0.11661	117.83	116.64	0.11783	0.11664	0.03	0.03	0.03%	0.03%	0.03	0.03%
1,250	144.85	142.73	0.11588	0.11418	144.89	142.76	0.11591	0.11421	0.04	0.04	0.03%	0.03%	0.04	0.03%
1,500	171.91	168.85	0.11460	0.11256	171.95	168.89	0.11463	0.11259	0.04	0.05	0.02%	0.03%	0.05	0.03%
1,750	198.96	194.96	0.11369	0.11141	199.01	195.02	0.11372	0.11144	0.05	0.05	0.03%	0.03%	0.05	0.03%
2,000	226.02	221.08	0.11301	0.11054	226.08	221.14	0.11304	0.11057	0.06	0.06	0.03%	0.03%	0.06	0.03%
2,250	253.07	247.20	0.11248	0.10987	253.14	247.27	0.11251	0.10990	0.07	0.07	0.03%	0.03%	0.07	0.03%
2,500	280.12	273.32	0.11205	0.10933	280.20	273.40	0.11208	0.10936	0.07	0.07	0.02%	0.03%	0.07	0.03%
3,000	334.23	325.56	0.11141	0.10852	334.32	325.65	0.11144	0.10855	0.09	0.09	0.03%	0.03%	0.09	0.03%
3,500	388.34	377.80	0.11096	0.10794	388.45	377.91	0.11099	0.10797	0.11	0.11	0.03%	0.03%	0.11	0.03%
4,000	442.45	430.04	0.11061	0.10751	442.57	430.16	0.11064	0.10754	0.12	0.12	0.03%	0.03%	0.12	0.03%
5,000	550.67	534.52	0.11013	0.10690	550.82	534.67	0.11016	0.10693	0.15	0.15	0.03%	0.03%	0.15	0.03%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 RIDER UPC RATES**  
**SCHEDULE "MMA"**  
**DISTRICT OF COLUMBIA**

KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE					
	\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)	(\$)	(%)
	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	ANNUAL	ANNUAL
0	13.57	13.99	-	-	13.57	13.99	-	-	0.00	0.00	0.00%	0.00%	0.00	0.00%
100	20.44	21.82	0.20436	0.21821	20.44	21.82	0.20439	0.21824	0.00	0.00	0.00%	0.00%	0.00	0.00%
200	29.04	31.80	0.14520	0.15901	29.05	31.81	0.14523	0.15904	0.01	0.01	0.03%	0.03%	0.01	0.03%
300	37.64	41.78	0.12547	0.13928	37.65	41.79	0.12550	0.13931	0.01	0.01	0.03%	0.02%	0.01	0.02%
400	46.25	51.76	0.11561	0.12941	46.26	51.78	0.11564	0.12944	0.01	0.01	0.02%	0.02%	0.01	0.02%
500	56.10	62.41	0.11220	0.12483	56.11	62.43	0.11223	0.12486	0.01	0.01	0.02%	0.02%	0.01	0.02%
1000	105.36	115.66	0.10536	0.11566	105.39	115.69	0.10539	0.11569	0.03	0.03	0.03%	0.03%	0.03	0.03%
2000	203.89	222.15	0.10195	0.11107	203.95	222.21	0.10198	0.11110	0.06	0.06	0.03%	0.03%	0.06	0.03%
3000	302.42	328.63	0.10081	0.10954	302.51	328.72	0.10084	0.10957	0.09	0.09	0.03%	0.03%	0.09	0.03%
4000	400.95	435.12	0.10024	0.10878	401.07	435.24	0.10027	0.10881	0.12	0.12	0.03%	0.03%	0.12	0.03%
5000	499.48	541.61	0.09990	0.10832	499.63	541.76	0.09993	0.10835	0.15	0.15	0.03%	0.03%	0.15	0.03%
6000	598.01	648.10	0.09967	0.10802	598.19	648.28	0.09970	0.10805	0.18	0.18	0.03%	0.03%	0.18	0.03%
7000	696.53	754.59	0.09950	0.10780	696.74	754.80	0.09953	0.10783	0.21	0.21	0.03%	0.03%	0.21	0.03%
7500	745.80	807.83	0.09944	0.10771	746.02	808.06	0.09947	0.10774	0.23	0.23	0.03%	0.03%	0.23	0.03%
8000	795.06	861.08	0.09938	0.10763	795.30	861.32	0.09941	0.10766	0.24	0.24	0.03%	0.03%	0.24	0.03%
8500	844.33	914.32	0.09933	0.10757	844.58	914.58	0.09936	0.10760	0.26	0.25	0.03%	0.03%	0.25	0.03%
9000	893.59	967.57	0.09929	0.10751	893.86	967.84	0.09932	0.10754	0.27	0.27	0.03%	0.03%	0.27	0.03%
9500	942.86	1,020.81	0.09925	0.10745	943.14	1,021.10	0.09928	0.10748	0.29	0.29	0.03%	0.03%	0.29	0.03%
10000	992.12	1,074.06	0.09921	0.10741	992.42	1,074.36	0.09924	0.10744	0.30	0.30	0.03%	0.03%	0.30	0.03%
12500	1,238.44	1,340.28	0.09908	0.10722	1,238.82	1,340.65	0.09911	0.10725	0.38	0.38	0.03%	0.03%	0.38	0.03%
15000	1,484.76	1,606.50	0.09898	0.10710	1,485.21	1,606.95	0.09901	0.10713	0.45	0.45	0.03%	0.03%	0.45	0.03%
17500	1,731.09	1,872.72	0.09892	0.10701	1,731.61	1,873.25	0.09895	0.10704	0.53	0.53	0.03%	0.03%	0.53	0.03%
20000	1,977.41	2,138.94	0.09887	0.10695	1,978.01	2,139.54	0.09890	0.10698	0.60	0.60	0.03%	0.03%	0.60	0.03%
22500	2,223.73	2,405.16	0.09883	0.10690	2,224.40	2,405.84	0.09886	0.10693	0.67	0.67	0.03%	0.03%	0.67	0.03%
25000	2,470.05	2,671.39	0.09880	0.10686	2,470.80	2,672.14	0.09883	0.10689	0.75	0.75	0.03%	0.03%	0.75	0.03%
30000	2,962.69	3,203.83	0.09876	0.10679	2,963.59	3,204.73	0.09879	0.10682	0.90	0.90	0.03%	0.03%	0.90	0.03%
35000	3,455.34	3,736.27	0.09872	0.10675	3,456.39	3,737.32	0.09875	0.10678	1.05	1.05	0.03%	0.03%	1.05	0.03%
40000	3,947.98	4,268.72	0.09870	0.10672	3,949.18	4,269.92	0.09873	0.10675	1.20	1.20	0.03%	0.03%	1.20	0.03%
50000	4,933.27	5,333.60	0.09867	0.10667	4,934.77	5,335.10	0.09870	0.10670	1.50	1.50	0.03%	0.03%	1.50	0.03%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**

**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 RIDER UPC RATES**

**SCHEDULE "GS ND"**

**DISTRICT OF COLUMBIA**

KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE					
	\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)	(\$)	(%)
	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	ANNUAL	ANNUAL
0	27.42	27.42	-	-	27.42	27.42	-	-	0.00	0.00	0.00%	0.00%	0.00	0.00%
10	28.63	28.57	2.86336	2.85674	28.63	28.57	2.86342	2.85680	0.00	0.00	0.00%	0.00%	0.00	0.00%
20	29.85	29.71	1.49236	1.48574	29.85	29.72	1.49242	1.48580	0.00	0.00	0.00%	0.00%	0.00	0.00%
30	31.06	30.86	1.03536	1.02874	31.06	30.86	1.03542	1.02880	0.00	0.00	0.00%	0.00%	0.00	0.00%
40	32.27	32.01	0.80686	0.80024	32.28	32.01	0.80692	0.80030	0.00	0.00	0.00%	0.00%	0.00	0.00%
50	33.49	33.16	0.66976	0.66314	33.49	33.16	0.66982	0.66320	0.00	0.00	0.00%	0.00%	0.00	0.00%
100	39.56	38.89	0.39556	0.38894	39.56	38.90	0.39562	0.38900	0.01	0.01	0.03%	0.03%	0.01	0.03%
150	45.62	44.63	0.30416	0.29754	45.63	44.64	0.30422	0.29760	0.01	0.01	0.02%	0.02%	0.01	0.02%
200	51.69	50.37	0.25846	0.25184	51.70	50.38	0.25852	0.25190	0.01	0.01	0.02%	0.02%	0.01	0.02%
250	57.76	56.11	0.23104	0.22442	57.78	56.12	0.23110	0.22448	0.02	0.02	0.03%	0.04%	0.02	0.04%
300	63.83	61.84	0.21276	0.20614	63.85	61.86	0.21282	0.20620	0.02	0.02	0.03%	0.03%	0.02	0.03%
400	75.96	73.32	0.18991	0.18329	75.99	73.34	0.18997	0.18335	0.02	0.02	0.03%	0.03%	0.02	0.03%
500	88.10	84.79	0.17620	0.16958	88.13	84.82	0.17626	0.16964	0.03	0.03	0.03%	0.04%	0.03	0.03%
600	100.24	96.26	0.16706	0.16044	100.27	96.30	0.16712	0.16050	0.04	0.04	0.04%	0.04%	0.04	0.04%
700	112.37	107.74	0.16053	0.15391	112.41	107.78	0.16059	0.15397	0.04	0.04	0.04%	0.04%	0.04	0.04%
800	124.51	119.21	0.15564	0.14902	124.56	119.26	0.15570	0.14908	0.05	0.05	0.04%	0.04%	0.05	0.04%
900	136.64	130.69	0.15183	0.14521	136.70	130.74	0.15189	0.14527	0.05	0.05	0.04%	0.04%	0.05	0.04%
1,000	148.78	142.16	0.14878	0.14216	148.84	142.22	0.14884	0.14222	0.06	0.06	0.04%	0.04%	0.06	0.04%
1,250	179.12	170.85	0.14330	0.13668	179.20	170.92	0.14336	0.13674	0.07	0.08	0.04%	0.05%	0.08	0.04%
1,500	209.46	199.53	0.13964	0.13302	209.55	199.62	0.13970	0.13308	0.09	0.09	0.04%	0.05%	0.09	0.04%
1,750	239.80	228.22	0.13703	0.13041	239.91	228.32	0.13709	0.13047	0.10	0.11	0.04%	0.05%	0.11	0.05%
2,000	270.14	256.90	0.13507	0.12845	270.26	257.02	0.13513	0.12851	0.12	0.12	0.04%	0.05%	0.12	0.05%
2,500	330.82	314.27	0.13233	0.12571	330.97	314.42	0.13239	0.12577	0.15	0.15	0.05%	0.05%	0.15	0.05%
3,000	391.50	371.64	0.13050	0.12388	391.68	371.82	0.13056	0.12394	0.18	0.18	0.05%	0.05%	0.18	0.05%
3,500	452.18	429.01	0.12919	0.12257	452.39	429.22	0.12925	0.12263	0.21	0.21	0.05%	0.05%	0.21	0.05%
4,000	512.86	486.38	0.12822	0.12160	513.10	486.62	0.12828	0.12166	0.24	0.24	0.05%	0.05%	0.24	0.05%
5,000	634.22	601.12	0.12684	0.12022	634.52	601.42	0.12690	0.12028	0.30	0.30	0.05%	0.05%	0.30	0.05%
6,000	755.58	715.86	0.12593	0.11931	755.94	716.22	0.12599	0.11937	0.36	0.36	0.05%	0.05%	0.36	0.05%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in .

POTOMAC ELECTRIC POWER COMPANY

EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 RIDER UPC RATES

SCHEDULE "GS D LV"  
DISTRICT OF COLUMBIA

KW	Hours	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
			\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)		(%)	
			SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
10	100	1000	220.67	227.59	0.22067	0.22759	220.83	227.75	0.22083	0.22775	0.16	0.16	0.07%	0.07%
	200	2000	331.08	344.92	0.16554	0.17246	331.40	345.24	0.16570	0.17262	0.32	0.32	0.10%	0.09%
	300	3000	441.48	462.24	0.14716	0.15408	441.96	462.72	0.14732	0.15424	0.48	0.48	0.11%	0.10%
	400	4000	551.88	579.56	0.13797	0.14489	552.52	580.20	0.13813	0.14505	0.64	0.64	0.12%	0.11%
	500	5000	662.29	696.89	0.13246	0.13938	663.09	697.69	0.13262	0.13954	0.80	0.80	0.12%	0.11%
	600	6000	772.69	814.21	0.12878	0.13570	773.65	815.17	0.12894	0.13586	0.96	0.96	0.12%	0.12%
25	100	2,500	498.93	516.23	0.19957	0.20649	499.33	516.63	0.19973	0.20665	0.40	0.40	0.08%	0.08%
	200	5,000	774.94	809.54	0.15499	0.16191	775.74	810.34	0.15515	0.16207	0.80	0.80	0.10%	0.10%
	300	7,500	1,050.94	1,102.84	0.14013	0.14705	1,052.14	1,104.04	0.14029	0.14721	1.20	1.20	0.11%	0.11%
	400	10,000	1,326.95	1,396.15	0.13270	0.13962	1,328.55	1,397.75	0.13286	0.13978	1.60	1.60	0.12%	0.11%
	500	12,500	1,602.96	1,689.46	0.12824	0.13516	1,604.96	1,691.46	0.12840	0.13532	2.00	2.00	0.12%	0.12%
	600	15,000	1,878.97	1,982.77	0.12526	0.13218	1,881.37	1,985.17	0.12542	0.13234	2.40	2.40	0.13%	0.12%
50	100	5,000	962.69	997.29	0.19254	0.19946	963.49	998.09	0.19270	0.19962	0.80	0.80	0.08%	0.08%
	200	10,000	1,514.70	1,583.90	0.15147	0.15839	1,516.30	1,585.50	0.15163	0.15855	1.60	1.60	0.11%	0.10%
	300	15,000	2,066.72	2,170.52	0.13778	0.14470	2,069.12	2,172.92	0.13794	0.14486	2.40	2.40	0.12%	0.11%
	400	20,000	2,618.73	2,757.13	0.13094	0.13786	2,621.93	2,760.33	0.13110	0.13802	3.20	3.20	0.12%	0.12%
	500	25,000	3,170.75	3,343.75	0.12683	0.13375	3,174.75	3,347.75	0.12699	0.13391	4.00	4.00	0.13%	0.12%
	600	30,000	3,722.77	3,930.37	0.12409	0.13101	3,727.57	3,935.17	0.12425	0.13117	4.80	4.80	0.13%	0.12%
75	100	7,500	1,426.44	1,478.34	0.19019	0.19711	1,427.64	1,479.54	0.19035	0.19727	1.20	1.20	0.08%	0.08%
	200	15,000	2,254.47	2,358.27	0.15030	0.15722	2,256.87	2,360.67	0.15046	0.15738	2.40	2.40	0.11%	0.10%
	300	22,500	3,082.49	3,238.19	0.13700	0.14392	3,086.09	3,241.79	0.13716	0.14408	3.60	3.60	0.12%	0.11%
	400	30,000	3,910.52	4,118.12	0.13035	0.13727	3,915.32	4,122.92	0.13051	0.13743	4.80	4.80	0.12%	0.12%
	500	37,500	4,738.54	4,998.04	0.12636	0.13328	4,744.54	5,004.04	0.12652	0.13344	6.00	6.00	0.13%	0.12%
	600	45,000	5,566.56	5,877.96	0.12370	0.13062	5,573.76	5,885.16	0.12386	0.13078	7.20	7.20	0.13%	0.12%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 RIDER UPC RATES - DELIVERY ONLY**  
**SCHEDULE "MGT LV "**  
**DISTRICT OF COLUMBIA**

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 25 KW													
200	5,000	859.51	859.51	0.17190	0.17190	859.91	859.91	0.17198	0.17198	0.40	0.40	0.05%	0.05%
300	7,500	922.75	922.75	0.12303	0.12303	923.35	923.35	0.12311	0.12311	0.60	0.60	0.07%	0.07%
400	10,000	986.00	986.00	0.09860	0.09860	986.80	986.80	0.09868	0.09868	0.80	0.80	0.08%	0.08%
500	12,500	1,049.25	1,049.25	0.08394	0.08394	1,050.25	1,050.25	0.08402	0.08402	1.00	1.00	0.10%	0.10%
600	15,000	1,112.50	1,112.50	0.07417	0.07417	1,113.70	1,113.70	0.07425	0.07425	1.20	1.20	0.11%	0.11%
50 KW													
200	10,000	1,262.25	1,262.25	0.12623	0.12623	1,263.05	1,263.05	0.12631	0.12631	0.80	0.80	0.06%	0.06%
300	15,000	1,388.75	1,388.75	0.09258	0.09258	1,389.95	1,389.95	0.09266	0.09266	1.20	1.20	0.09%	0.09%
400	20,000	1,515.24	1,515.24	0.07576	0.07576	1,516.84	1,516.84	0.07584	0.07584	1.60	1.60	0.11%	0.11%
500	25,000	1,641.74	1,641.74	0.06567	0.06567	1,643.74	1,643.74	0.06575	0.06575	2.00	2.00	0.12%	0.12%
600	30,000	1,768.24	1,768.24	0.05894	0.05894	1,770.64	1,770.64	0.05902	0.05902	2.40	2.40	0.14%	0.14%
75 KW													
200	15,000	1,665.00	1,665.00	0.11100	0.11100	1,666.20	1,666.20	0.11108	0.11108	1.20	1.20	0.07%	0.07%
300	22,500	1,854.74	1,854.74	0.08243	0.08243	1,856.54	1,856.54	0.08251	0.08251	1.80	1.80	0.10%	0.10%
400	30,000	2,044.49	2,044.49	0.06815	0.06815	2,046.89	2,046.89	0.06823	0.06823	2.40	2.40	0.12%	0.12%
500	37,500	2,234.23	2,234.23	0.05958	0.05958	2,237.23	2,237.23	0.05966	0.05966	3.00	3.00	0.13%	0.13%
600	45,000	2,423.97	2,423.97	0.05387	0.05387	2,427.57	2,427.57	0.05395	0.05395	3.60	3.60	0.15%	0.15%
100 KW													
200	20,000	2,067.74	2,067.74	0.10339	0.10339	2,069.34	2,069.34	0.10347	0.10347	1.60	1.60	0.08%	0.08%
300	30,000	2,320.74	2,320.74	0.07736	0.07736	2,323.14	2,323.14	0.07744	0.07744	2.40	2.40	0.10%	0.10%
400	40,000	2,573.73	2,573.73	0.06434	0.06434	2,576.93	2,576.93	0.06442	0.06442	3.20	3.20	0.12%	0.12%
500	50,000	2,826.72	2,826.72	0.05653	0.05653	2,830.72	2,830.72	0.05661	0.05661	4.00	4.00	0.14%	0.14%
600	60,000	3,079.71	3,079.71	0.05133	0.05133	3,084.51	3,084.51	0.05141	0.05141	4.80	4.80	0.16%	0.16%

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
400	HOURS USE =	30%	26%	44%
500	HOURS USE =	27%	25%	48%
600	HOURS USE =	25%	24%	51%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 RIDER UPC RATES - DELIVERY ONLY**  
**SCHEDULE "MGT LV "**  
**DISTRICT OF COLUMBIA**

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
<b>MAXIMUM AND ON PEAK DEMAND = 200 KW</b>													
200	40,000	3,678.73	3,678.73	0.09197	0.09197	3,681.93	3,681.93	0.09205	0.09205	3.20	3.20	0.09%	0.09%
300	60,000	4,184.71	4,184.71	0.06975	0.06975	4,189.51	4,189.51	0.06983	0.06983	4.80	4.80	0.11%	0.11%
400	80,000	4,690.70	4,690.70	0.05863	0.05863	4,697.10	4,697.10	0.05871	0.05871	6.40	6.40	0.14%	0.14%
500	100,000	5,196.68	5,196.68	0.05197	0.05197	5,204.68	5,204.68	0.05205	0.05205	8.00	8.00	0.15%	0.15%
600	120,000	5,702.66	5,702.66	0.04752	0.04752	5,712.26	5,712.26	0.04760	0.04760	9.60	9.60	0.17%	0.17%
<b>400 KW</b>													
200	80,000	6,900.70	6,900.70	0.08626	0.08626	6,907.10	6,907.10	0.08634	0.08634	6.40	6.40	0.09%	0.09%
300	120,000	7,912.66	7,912.66	0.06594	0.06594	7,922.26	7,922.26	0.06602	0.06602	9.60	9.60	0.12%	0.12%
400	160,000	8,924.63	8,924.63	0.05578	0.05578	8,937.43	8,937.43	0.05586	0.05586	12.80	12.80	0.14%	0.14%
500	200,000	9,936.60	9,936.60	0.04968	0.04968	9,952.60	9,952.60	0.04976	0.04976	16.00	16.00	0.16%	0.16%
600	240,000	10,948.57	10,948.57	0.04562	0.04562	10,967.77	10,967.77	0.04570	0.04570	19.20	19.20	0.18%	0.18%
<b>600 KW</b>													
200	120,000	10,122.66	10,122.66	0.08436	0.08436	10,132.26	10,132.26	0.08444	0.08444	9.60	9.60	0.09%	0.09%
300	180,000	11,640.62	11,640.62	0.06467	0.06467	11,655.02	11,655.02	0.06475	0.06475	14.40	14.40	0.12%	0.12%
400	240,000	13,158.57	13,158.57	0.05483	0.05483	13,177.77	13,177.77	0.05491	0.05491	19.20	19.20	0.15%	0.15%
500	300,000	14,676.52	14,676.52	0.04892	0.04892	14,700.52	14,700.52	0.04900	0.04900	24.00	24.00	0.16%	0.16%
600	360,000	16,194.47	16,194.47	0.04498	0.04498	16,223.27	16,223.27	0.04506	0.04506	28.80	28.80	0.18%	0.18%
<b>800 KW</b>													
200	160,000	13,344.63	13,344.63	0.08340	0.08340	13,357.43	13,357.43	0.08348	0.08348	12.80	12.80	0.10%	0.10%
300	240,000	15,368.57	15,368.57	0.06404	0.06404	15,387.77	15,387.77	0.06412	0.06412	19.20	19.20	0.12%	0.12%
400	320,000	17,392.50	17,392.50	0.05435	0.05435	17,418.10	17,418.10	0.05443	0.05443	25.60	25.60	0.15%	0.15%
500	400,000	19,416.44	19,416.44	0.04854	0.04854	19,448.44	19,448.44	0.04862	0.04862	32.00	32.00	0.16%	0.16%
600	480,000	21,440.38	21,440.38	0.04467	0.04467	21,478.78	21,478.78	0.04475	0.04475	38.40	38.40	0.18%	0.18%

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
400	HOURS USE =	30%	26%	44%
500	HOURS USE =	27%	25%	48%
600	HOURS USE =	25%	24%	51%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY

EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 RIDER UPC RATES - DELIVERY ONLY

SCHEDULE "GT LV"  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
						MAXIMUM AND ON PEAK DEMAND = 100 KW							
200	20,000	2,067.74	2,067.74	0.10339	0.10339	2,069.34	2,069.34	0.10347	0.10347	1.60	1.60	0.08%	0.08%
300	30,000	2,320.74	2,320.74	0.07736	0.07736	2,323.14	2,323.14	0.07744	0.07744	2.40	2.40	0.10%	0.10%
400	40,000	2,573.73	2,573.73	0.06434	0.06434	2,576.93	2,576.93	0.06442	0.06442	3.20	3.20	0.12%	0.12%
500	50,000	2,826.72	2,826.72	0.05653	0.05653	2,830.72	2,830.72	0.05661	0.05661	4.00	4.00	0.14%	0.14%
600	60,000	3,079.71	3,079.71	0.05133	0.05133	3,084.51	3,084.51	0.05141	0.05141	4.80	4.80	0.16%	0.16%
										300 KW			
200	60,000	5,289.71	5,289.71	0.08816	0.08816	5,294.51	5,294.51	0.08824	0.08824	4.80	4.80	0.09%	0.09%
300	90,000	6,048.69	6,048.69	0.06721	0.06721	6,055.89	6,055.89	0.06729	0.06729	7.20	7.20	0.12%	0.12%
400	120,000	6,807.66	6,807.66	0.05673	0.05673	6,817.26	6,817.26	0.05681	0.05681	9.60	9.60	0.14%	0.14%
500	150,000	7,566.64	7,566.64	0.05044	0.05044	7,578.64	7,578.64	0.05052	0.05052	12.00	12.00	0.16%	0.16%
600	180,000	8,325.62	8,325.62	0.04625	0.04625	8,340.02	8,340.02	0.04633	0.04633	14.40	14.40	0.17%	0.17%
										500 KW			
200	100,000	8,511.68	8,511.68	0.08512	0.08512	8,519.68	8,519.68	0.08520	0.08520	8.00	8.00	0.09%	0.09%
300	150,000	9,776.64	9,776.64	0.06518	0.06518	9,788.64	9,788.64	0.06526	0.06526	12.00	12.00	0.12%	0.12%
400	200,000	11,041.60	11,041.60	0.05521	0.05521	11,057.60	11,057.60	0.05529	0.05529	16.00	16.00	0.14%	0.14%
500	250,000	12,306.56	12,306.56	0.04923	0.04923	12,326.56	12,326.56	0.04931	0.04931	20.00	20.00	0.16%	0.16%
600	300,000	13,571.52	13,571.52	0.04524	0.04524	13,595.52	13,595.52	0.04532	0.04532	24.00	24.00	0.18%	0.18%
										1,000 KW			
200	200,000	16,566.60	16,566.60	0.08283	0.08283	16,582.60	16,582.60	0.08291	0.08291	16.00	16.00	0.10%	0.10%
300	300,000	19,096.52	19,096.52	0.06366	0.06366	19,120.52	19,120.52	0.06374	0.06374	24.00	24.00	0.13%	0.13%
400	400,000	21,626.44	21,626.44	0.05407	0.05407	21,658.44	21,658.44	0.05415	0.05415	32.00	32.00	0.15%	0.15%
500	500,000	24,156.36	24,156.36	0.04831	0.04831	24,196.36	24,196.36	0.04839	0.04839	40.00	40.00	0.17%	0.17%
600	600,000	26,686.28	26,686.28	0.04448	0.04448	26,734.28	26,734.28	0.04456	0.04456	48.00	48.00	0.18%	0.18%

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
400	HOURS USE =	30%	26%	44%
500	HOURS USE =	27%	25%	48%
600	HOURS USE =	25%	24%	51%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 RIDER UPC RATES - DELIVERY ONLY**  
**SCHEDULE "GT LV "**  
**DISTRICT OF COLUMBIA**

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
<b>MAXIMUM AND ON PEAK DEMAND = 2,000 KW</b>													
200	400,000	32,676.44	32,676.44	0.08169	0.08169	32,708.44	32,708.44	0.08177	0.08177	32.00	32.00	0.10%	0.10%
300	600,000	37,736.28	37,736.28	0.06289	0.06289	37,784.28	37,784.28	0.06297	0.06297	48.00	48.00	0.13%	0.13%
400	800,000	42,796.12	42,796.12	0.05350	0.05350	42,860.12	42,860.12	0.05358	0.05358	64.00	64.00	0.15%	0.15%
500	1,000,000	47,855.96	47,855.96	0.04786	0.04786	47,935.96	47,935.96	0.04794	0.04794	80.00	80.00	0.17%	0.17%
600	1,200,000	52,915.80	52,915.80	0.04410	0.04410	53,011.80	53,011.80	0.04418	0.04418	96.00	96.00	0.18%	0.18%
<b>4,000 KW</b>													
200	800,000	64,896.12	64,896.12	0.08112	0.08112	64,960.12	64,960.12	0.08120	0.08120	64.00	64.00	0.10%	0.10%
300	1,200,000	75,015.80	75,015.80	0.06251	0.06251	75,111.80	75,111.80	0.06259	0.06259	96.00	96.00	0.13%	0.13%
400	1,600,000	85,135.48	85,135.48	0.05321	0.05321	85,263.48	85,263.48	0.05329	0.05329	128.00	128.00	0.15%	0.15%
500	2,000,000	95,255.16	95,255.16	0.04763	0.04763	95,415.16	95,415.16	0.04771	0.04771	160.00	160.00	0.17%	0.17%
600	2,400,000	105,374.84	105,374.84	0.04391	0.04391	105,566.84	105,566.84	0.04399	0.04399	192.00	192.00	0.18%	0.18%
<b>6,000 KW</b>													
200	1,200,000	97,115.80	97,115.80	0.08093	0.08093	97,211.80	97,211.80	0.08101	0.08101	96.00	96.00	0.10%	0.10%
300	1,800,000	112,295.32	112,295.32	0.06239	0.06239	112,439.32	112,439.32	0.06247	0.06247	144.00	144.00	0.13%	0.13%
400	2,400,000	127,474.84	127,474.84	0.05311	0.05311	127,666.84	127,666.84	0.05319	0.05319	192.00	192.00	0.15%	0.15%
500	3,000,000	142,654.36	142,654.36	0.04755	0.04755	142,894.36	142,894.36	0.04763	0.04763	240.00	240.00	0.17%	0.17%
600	3,600,000	157,833.88	157,833.88	0.04384	0.04384	158,121.88	158,121.88	0.04392	0.04392	288.00	288.00	0.18%	0.18%
<b>8,000 KW</b>													
200	1,600,000	129,335.48	129,335.48	0.08083	0.08083	129,463.48	129,463.48	0.08091	0.08091	128.00	128.00	0.10%	0.10%
300	2,400,000	149,574.84	149,574.84	0.06232	0.06232	149,766.84	149,766.84	0.06240	0.06240	192.00	192.00	0.13%	0.13%
400	3,200,000	169,814.20	169,814.20	0.05307	0.05307	170,070.20	170,070.20	0.05315	0.05315	256.00	256.00	0.15%	0.15%
500	4,000,000	190,053.56	190,053.56	0.04751	0.04751	190,373.56	190,373.56	0.04759	0.04759	320.00	320.00	0.17%	0.17%
600	4,800,000	210,292.92	210,292.92	0.04381	0.04381	210,676.92	210,676.92	0.04389	0.04389	384.00	384.00	0.18%	0.18%
<b>KWH DISTRIBUTION</b>													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 RIDER UPC RATES - DELIVERY ONLY**  
**SCHEDULE "GT 3A"**  
**DISTRICT OF COLUMBIA**

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 1,000 KW													
200	200,000	12,231.48	12,229.48	0.06116	0.06115	12,243.48	12,241.48	0.06122	0.06121	12.00	12.00	0.10%	0.10%
300	300,000	14,128.40	14,125.40	0.04709	0.04708	14,146.40	14,143.40	0.04715	0.04714	18.00	18.00	0.13%	0.13%
400	400,000	16,025.32	16,021.32	0.04006	0.04005	16,049.32	16,045.32	0.04012	0.04011	24.00	24.00	0.15%	0.15%
500	500,000	17,922.24	17,917.24	0.03584	0.03583	17,952.24	17,947.24	0.03590	0.03589	30.00	30.00	0.17%	0.17%
600	600,000	19,819.16	19,813.16	0.03303	0.03302	19,855.16	19,849.16	0.03309	0.03308	36.00	36.00	0.18%	0.18%
2,000 KW													
200	400,000	24,275.32	24,271.32	0.06069	0.06068	24,299.32	24,295.32	0.06075	0.06074	24.00	24.00	0.10%	0.10%
300	600,000	28,069.16	28,063.16	0.04678	0.04677	28,105.16	28,099.16	0.04684	0.04683	36.00	36.00	0.13%	0.13%
400	800,000	31,863.00	31,855.00	0.03983	0.03982	31,911.00	31,903.00	0.03989	0.03988	48.00	48.00	0.15%	0.15%
500	1,000,000	35,656.84	35,646.84	0.03566	0.03565	35,716.84	35,706.84	0.03572	0.03571	60.00	60.00	0.17%	0.17%
600	1,200,000	39,450.68	39,438.68	0.03288	0.03287	39,522.68	39,510.68	0.03294	0.03293	72.00	72.00	0.18%	0.18%
5,000 KW													
200	1,000,000	60,406.84	60,396.84	0.06041	0.06040	60,466.84	60,456.84	0.06047	0.06046	60.00	60.00	0.10%	0.10%
300	1,500,000	69,891.44	69,876.44	0.04659	0.04658	69,981.44	69,966.44	0.04665	0.04664	90.00	90.00	0.13%	0.13%
400	2,000,000	79,376.04	79,356.04	0.03969	0.03968	79,496.04	79,476.04	0.03975	0.03974	120.00	120.00	0.15%	0.15%
500	2,500,000	88,860.64	88,835.64	0.03554	0.03553	89,010.64	88,985.64	0.03560	0.03559	150.00	150.00	0.17%	0.17%
600	3,000,000	98,345.24	98,315.24	0.03278	0.03277	98,525.24	98,495.24	0.03284	0.03283	180.00	180.00	0.18%	0.18%
7,500 KW													
200	1,500,000	90,516.44	90,501.44	0.06034	0.06033	90,606.44	90,591.44	0.06040	0.06039	90.00	90.00	0.10%	0.10%
300	2,250,000	104,743.34	104,720.84	0.04655	0.04654	104,878.34	104,855.84	0.04661	0.04660	135.00	135.00	0.13%	0.13%
400	3,000,000	118,970.24	118,940.24	0.03966	0.03965	119,150.24	119,120.24	0.03972	0.03971	180.00	180.00	0.15%	0.15%
500	3,750,000	133,197.14	133,159.64	0.03552	0.03551	133,422.14	133,384.64	0.03558	0.03557	225.00	225.00	0.17%	0.17%
600	4,500,000	147,424.04	147,379.04	0.03276	0.03275	147,694.04	147,649.04	0.03282	0.03281	270.00	270.00	0.18%	0.18%
KWH DISTRIBUTION													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 RIDER UPC RATES - DELIVERY ONLY**  
**SCHEDULE "GT 3A"**  
**DISTRICT OF COLUMBIA**

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 10,000 KW													
200	2,000,000	120,626.04	120,606.04	0.06031	0.06030	120,746.04	120,726.04	0.06037	0.06036	120.00	120.00	0.10%	0.10%
300	3,000,000	139,595.24	139,565.24	0.04653	0.04652	139,775.24	139,745.24	0.04659	0.04658	180.00	180.00	0.13%	0.13%
400	4,000,000	158,564.44	158,524.44	0.03964	0.03963	158,804.44	158,764.44	0.03970	0.03969	240.00	240.00	0.15%	0.15%
500	5,000,000	177,533.64	177,483.64	0.03551	0.03550	177,833.64	177,783.64	0.03557	0.03556	300.00	300.00	0.17%	0.17%
600	6,000,000	196,502.84	196,442.84	0.03275	0.03274	196,862.84	196,802.84	0.03281	0.03280	360.00	360.00	0.18%	0.18%
20,000 KW													
200	4,000,000	241,064.44	241,024.44	0.06027	0.06026	241,304.44	241,264.44	0.06033	0.06032	240.00	240.00	0.10%	0.10%
300	6,000,000	279,002.84	278,942.84	0.04650	0.04649	279,362.84	279,302.84	0.04656	0.04655	360.00	360.00	0.13%	0.13%
400	8,000,000	316,941.24	316,861.24	0.03962	0.03961	317,421.24	317,341.24	0.03968	0.03967	480.00	480.00	0.15%	0.15%
500	10,000,000	354,879.64	354,779.64	0.03549	0.03548	355,479.64	355,379.64	0.03555	0.03554	600.00	600.00	0.17%	0.17%
600	12,000,000	392,818.04	392,698.04	0.03273	0.03272	393,538.04	393,418.04	0.03279	0.03278	720.00	720.00	0.18%	0.18%
30,000 KW													
200	6,000,000	361,502.84	361,442.84	0.06025	0.06024	361,862.84	361,802.84	0.06031	0.06030	360.00	360.00	0.10%	0.10%
300	9,000,000	418,410.44	418,320.44	0.04649	0.04648	418,950.44	418,860.44	0.04655	0.04654	540.00	540.00	0.13%	0.13%
400	12,000,000	475,318.04	475,198.04	0.03961	0.03960	476,038.04	475,918.04	0.03967	0.03966	720.00	720.00	0.15%	0.15%
500	15,000,000	532,225.64	532,075.64	0.03548	0.03547	533,125.64	532,975.64	0.03554	0.03553	900.00	900.00	0.17%	0.17%
600	18,000,000	589,133.24	588,953.24	0.03273	0.03272	590,213.24	590,033.24	0.03279	0.03278	1,080.00	1,080.00	0.18%	0.18%
40,000 KW													
200	8,000,000	481,941.24	481,861.24	0.06024	0.06023	482,421.24	482,341.24	0.06030	0.06029	480.00	480.00	0.10%	0.10%
300	12,000,000	557,818.04	557,698.04	0.04648	0.04647	558,538.04	558,418.04	0.04654	0.04653	720.00	720.00	0.13%	0.13%
400	16,000,000	633,694.84	633,534.84	0.03961	0.03960	634,654.84	634,494.84	0.03967	0.03966	960.00	960.00	0.15%	0.15%
500	20,000,000	709,571.64	709,371.64	0.03548	0.03547	710,771.64	710,571.64	0.03554	0.03553	1,200.00	1,200.00	0.17%	0.17%
600	24,000,000	785,448.44	785,208.44	0.03273	0.03272	786,888.44	786,648.44	0.03279	0.03278	1,440.00	1,440.00	0.18%	0.18%
KWH DISTRIBUTION													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 RIDER UPC RATES - DELIVERY ONLY**  
**SCHEDULE "GT 3B "**  
**DISTRICT OF COLUMBIA**

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 10,000 KW													
200	2,000,000	37,701.78	38,501.78	0.01885	0.01925	37,721.78	38,521.78	0.01886	0.01926	20.00	20.00	0.05%	0.05%
300	3,000,000	50,440.98	51,240.98	0.01681	0.01708	50,470.98	51,270.98	0.01682	0.01709	30.00	30.00	0.06%	0.06%
400	4,000,000	63,180.18	63,980.18	0.01580	0.01600	63,220.18	64,020.18	0.01581	0.01601	40.00	40.00	0.06%	0.06%
500	5,000,000	75,919.38	76,719.38	0.01518	0.01534	75,969.38	76,769.38	0.01519	0.01535	50.00	50.00	0.07%	0.07%
600	6,000,000	88,658.58	89,458.58	0.01478	0.01491	88,718.58	89,518.58	0.01479	0.01492	60.00	60.00	0.07%	0.07%
20,000 KW													
200	4,000,000	74,980.18	76,580.18	0.01875	0.01915	75,020.18	76,620.18	0.01876	0.01916	40.00	40.00	0.05%	0.05%
300	6,000,000	100,458.58	102,058.58	0.01674	0.01701	100,518.58	102,118.58	0.01675	0.01702	60.00	60.00	0.06%	0.06%
400	8,000,000	125,936.98	127,536.98	0.01574	0.01594	126,016.98	127,616.98	0.01575	0.01595	80.00	80.00	0.06%	0.06%
500	10,000,000	151,415.38	153,015.38	0.01514	0.01530	151,515.38	153,115.38	0.01515	0.01531	100.00	100.00	0.07%	0.07%
600	12,000,000	176,893.78	178,493.78	0.01474	0.01487	177,013.78	178,613.78	0.01475	0.01488	120.00	120.00	0.07%	0.07%
30,000 KW													
200	6,000,000	112,258.58	114,658.58	0.01871	0.01911	112,318.58	114,718.58	0.01872	0.01912	60.00	60.00	0.05%	0.05%
300	9,000,000	150,476.18	152,876.18	0.01672	0.01699	150,566.18	152,966.18	0.01673	0.01700	90.00	90.00	0.06%	0.06%
400	12,000,000	188,693.78	191,093.78	0.01572	0.01592	188,813.78	191,213.78	0.01573	0.01593	120.00	120.00	0.06%	0.06%
500	15,000,000	226,911.38	229,311.38	0.01513	0.01529	227,061.38	229,461.38	0.01514	0.01530	150.00	150.00	0.07%	0.07%
600	18,000,000	265,128.98	267,528.98	0.01473	0.01486	265,308.98	267,708.98	0.01474	0.01487	180.00	180.00	0.07%	0.07%
40,000 KW													
200	8,000,000	149,536.98	152,736.98	0.01869	0.01909	149,616.98	152,816.98	0.01870	0.01910	80.00	80.00	0.05%	0.05%
300	12,000,000	200,493.78	203,693.78	0.01671	0.01697	200,613.78	203,813.78	0.01672	0.01698	120.00	120.00	0.06%	0.06%
400	16,000,000	251,450.58	254,650.58	0.01572	0.01592	251,610.58	254,810.58	0.01573	0.01593	160.00	160.00	0.06%	0.06%
500	20,000,000	302,407.38	305,607.38	0.01512	0.01528	302,607.38	305,807.38	0.01513	0.01529	200.00	200.00	0.07%	0.07%
600	24,000,000	353,364.18	356,564.18	0.01472	0.01486	353,604.18	356,804.18	0.01473	0.01487	240.00	240.00	0.07%	0.07%
KWH DISTRIBUTION													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 RIDER UPC RATES**  
**SCHEDULE "R"**  
**DISTRICT OF COLUMBIA**

KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE					
	\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)	(\$)	(%)
	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	ANNUAL	ANNUAL
0	17.03	17.11	-	-	17.03	17.11	-	-	0.00	0.00	0.00%	0.00%	0.00	0.00%
10	17.32	17.40	1.73203	1.74003	17.32	17.40	1.73210	1.74010	0.00	0.00	0.00%	0.00%	0.00	0.00%
20	17.61	17.69	0.88053	0.88453	17.61	17.69	0.88060	0.88460	0.00	0.00	0.00%	0.00%	0.00	0.00%
30	17.90	17.98	0.59670	0.59936	17.90	17.98	0.59677	0.59943	0.00	0.00	0.00%	0.00%	0.00	0.00%
40	18.85	18.95	0.47115	0.47380	18.85	18.95	0.47122	0.47387	0.00	0.00	0.00%	0.00%	0.00	0.00%
50	19.79	19.92	0.39582	0.39847	19.79	19.93	0.39589	0.39854	0.00	0.00	0.00%	0.00%	0.00	0.00%
100	24.52	24.78	0.24516	0.24780	24.52	24.79	0.24523	0.24787	0.01	0.01	0.04%	0.04%	0.01	0.04%
200	33.97	34.49	0.16983	0.17246	33.98	34.51	0.16990	0.17253	0.01	0.01	0.03%	0.03%	0.01	0.03%
300	43.42	44.21	0.14472	0.14735	43.44	44.23	0.14479	0.14742	0.02	0.02	0.05%	0.05%	0.02	0.05%
400	52.87	53.92	0.13216	0.13480	52.89	53.95	0.13223	0.13487	0.03	0.03	0.06%	0.06%	0.03	0.06%
500	63.69	64.37	0.12737	0.12873	63.72	64.40	0.12744	0.12880	0.03	0.04	0.05%	0.06%	0.04	0.06%
<b>648</b>	<b>79.70</b>	<b>79.83</b>	<b>0.12300</b>	<b>0.12319</b>	<b>79.75</b>	<b>79.87</b>	<b>0.12307</b>	<b>0.12326</b>	<b>0.05</b>	<b>0.05</b>	<b>0.06%</b>	<b>0.06%</b>	<b>0.05</b>	<b>0.06%</b>
700	85.33	85.26	0.12190	0.12180	85.38	85.31	0.12197	0.12187	0.05	0.05	0.06%	0.06%	0.05	0.06%
750	90.74	90.49	0.12099	0.12065	90.79	90.54	0.12106	0.12072	0.05	0.05	0.06%	0.06%	0.05	0.06%
800	96.15	95.71	0.12019	0.11964	96.21	95.77	0.12026	0.11971	0.06	0.06	0.06%	0.06%	0.06	0.06%
850	101.56	100.93	0.11949	0.11875	101.62	100.99	0.11956	0.11882	0.06	0.06	0.06%	0.06%	0.06	0.06%
900	106.97	106.16	0.11886	0.11795	107.04	106.22	0.11893	0.11802	0.06	0.06	0.06%	0.06%	0.06	0.06%
950	112.39	111.38	0.11830	0.11724	112.45	111.45	0.11837	0.11731	0.07	0.07	0.06%	0.06%	0.07	0.06%
1,000	117.80	116.61	0.11780	0.11661	117.87	116.68	0.11787	0.11668	0.07	0.07	0.06%	0.06%	0.07	0.06%
1,250	144.85	142.73	0.11588	0.11418	144.94	142.81	0.11595	0.11425	0.09	0.09	0.06%	0.06%	0.09	0.06%
1,500	171.91	168.85	0.11460	0.11256	172.01	168.95	0.11467	0.11263	0.10	0.11	0.06%	0.07%	0.11	0.06%
1,750	198.96	194.96	0.11369	0.11141	199.08	195.09	0.11376	0.11148	0.12	0.12	0.06%	0.06%	0.12	0.06%
2,000	226.02	221.08	0.11301	0.11054	226.16	221.22	0.11308	0.11061	0.14	0.14	0.06%	0.06%	0.14	0.06%
2,250	253.07	247.20	0.11248	0.10987	253.23	247.36	0.11255	0.10994	0.16	0.16	0.06%	0.06%	0.16	0.06%
2,500	280.12	273.32	0.11205	0.10933	280.30	273.50	0.11212	0.10940	0.18	0.18	0.06%	0.07%	0.18	0.07%
3,000	334.23	325.56	0.11141	0.10852	334.44	325.77	0.11148	0.10859	0.21	0.21	0.06%	0.06%	0.21	0.06%
3,500	388.34	377.80	0.11096	0.10794	388.59	378.05	0.11103	0.10801	0.25	0.25	0.06%	0.07%	0.25	0.07%
4,000	442.45	430.04	0.11061	0.10751	442.73	430.32	0.11068	0.10758	0.28	0.28	0.06%	0.07%	0.28	0.06%
5,000	550.67	534.52	0.11013	0.10690	551.02	534.87	0.11020	0.10697	0.35	0.35	0.06%	0.07%	0.35	0.06%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 RIDER UPC RATES**  
**SCHEDULE "MMA"**  
**DISTRICT OF COLUMBIA**

KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE					
	\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)	(\$)	(%)
	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	ANNUAL	ANNUAL
0	13.57	13.99	-	-	13.57	13.99	-	-	0.00	0.00	0.00%	0.00%	0.00	0.00%
100	20.44	21.82	0.20436	0.21821	20.44	21.83	0.20442	0.21827	0.01	0.01	0.05%	0.05%	0.01	0.05%
200	29.04	31.80	0.14520	0.15901	29.05	31.81	0.14526	0.15907	0.01	0.01	0.03%	0.03%	0.01	0.03%
300	37.64	41.78	0.12547	0.13928	37.66	41.80	0.12553	0.13934	0.02	0.02	0.05%	0.05%	0.02	0.05%
400	46.25	51.76	0.11561	0.12941	46.27	51.79	0.11567	0.12947	0.02	0.02	0.04%	0.04%	0.02	0.04%
500	56.10	62.41	0.11220	0.12483	56.13	62.44	0.11226	0.12489	0.03	0.03	0.05%	0.05%	0.03	0.05%
1000	105.36	115.66	0.10536	0.11566	105.42	115.72	0.10542	0.11572	0.06	0.06	0.06%	0.05%	0.06	0.05%
2000	203.89	222.15	0.10195	0.11107	204.01	222.27	0.10201	0.11113	0.12	0.12	0.06%	0.05%	0.12	0.06%
3000	302.42	328.63	0.10081	0.10954	302.60	328.81	0.10087	0.10960	0.18	0.18	0.06%	0.05%	0.18	0.06%
4000	400.95	435.12	0.10024	0.10878	401.19	435.36	0.10030	0.10884	0.24	0.24	0.06%	0.06%	0.24	0.06%
5000	499.48	541.61	0.09990	0.10832	499.78	541.91	0.09996	0.10838	0.30	0.30	0.06%	0.06%	0.30	0.06%
6000	598.01	648.10	0.09967	0.10802	598.37	648.46	0.09973	0.10808	0.36	0.36	0.06%	0.06%	0.36	0.06%
7000	696.53	754.59	0.09950	0.10780	696.95	755.01	0.09956	0.10786	0.42	0.42	0.06%	0.06%	0.42	0.06%
7500	745.80	807.83	0.09944	0.10771	746.25	808.28	0.09950	0.10777	0.45	0.45	0.06%	0.06%	0.45	0.06%
8000	795.06	861.08	0.09938	0.10763	795.54	861.56	0.09944	0.10769	0.48	0.48	0.06%	0.06%	0.48	0.06%
8500	844.33	914.32	0.09933	0.10757	844.84	914.83	0.09939	0.10763	0.51	0.51	0.06%	0.06%	0.51	0.06%
9000	893.59	967.57	0.09929	0.10751	894.13	968.11	0.09935	0.10757	0.54	0.54	0.06%	0.06%	0.54	0.06%
9500	942.86	1,020.81	0.09925	0.10745	943.43	1,021.38	0.09931	0.10751	0.57	0.57	0.06%	0.06%	0.57	0.06%
10000	992.12	1,074.06	0.09921	0.10741	992.72	1,074.66	0.09927	0.10747	0.60	0.60	0.06%	0.06%	0.60	0.06%
12500	1,238.44	1,340.28	0.09908	0.10722	1,239.19	1,341.03	0.09914	0.10728	0.75	0.75	0.06%	0.06%	0.75	0.06%
15000	1,484.76	1,606.50	0.09898	0.10710	1,485.66	1,607.40	0.09904	0.10716	0.90	0.90	0.06%	0.06%	0.90	0.06%
17500	1,731.09	1,872.72	0.09892	0.10701	1,732.14	1,873.77	0.09898	0.10707	1.05	1.05	0.06%	0.06%	1.05	0.06%
20000	1,977.41	2,138.94	0.09887	0.10695	1,978.61	2,140.14	0.09893	0.10701	1.20	1.20	0.06%	0.06%	1.20	0.06%
22500	2,223.73	2,405.16	0.09883	0.10690	2,225.08	2,406.51	0.09889	0.10696	1.35	1.35	0.06%	0.06%	1.35	0.06%
25000	2,470.05	2,671.39	0.09880	0.10686	2,471.55	2,672.89	0.09886	0.10692	1.50	1.50	0.06%	0.06%	1.50	0.06%
30000	2,962.69	3,203.83	0.09876	0.10679	2,964.49	3,205.63	0.09882	0.10685	1.80	1.80	0.06%	0.06%	1.80	0.06%
35000	3,455.34	3,736.27	0.09872	0.10675	3,457.44	3,738.37	0.09878	0.10681	2.10	2.10	0.06%	0.06%	2.10	0.06%
40000	3,947.98	4,268.72	0.09870	0.10672	3,950.38	4,271.12	0.09876	0.10678	2.40	2.40	0.06%	0.06%	2.40	0.06%
50000	4,933.27	5,333.60	0.09867	0.10667	4,936.27	5,336.60	0.09873	0.10673	3.00	3.00	0.06%	0.06%	3.00	0.06%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**

**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 RIDER UPC RATES**

**SCHEDULE "GS ND"**

**DISTRICT OF COLUMBIA**

KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE					
	\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)	(\$)	(%)
	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	ANNUAL	ANNUAL
0	27.42	27.42	-	-	27.42	27.42	-	-	0.00	0.00	0.00%	0.00%	0.00	0.00%
10	28.63	28.57	2.86336	2.85674	28.64	28.57	2.86352	2.85690	0.00	0.00	0.00%	0.00%	0.00	0.00%
20	29.85	29.71	1.49236	1.48574	29.85	29.72	1.49252	1.48590	0.00	0.00	0.00%	0.00%	0.00	0.00%
30	31.06	30.86	1.03536	1.02874	31.07	30.87	1.03552	1.02890	0.00	0.00	0.00%	0.00%	0.00	0.00%
40	32.27	32.01	0.80686	0.80024	32.28	32.02	0.80702	0.80040	0.01	0.01	0.03%	0.03%	0.01	0.03%
50	33.49	33.16	0.66976	0.66314	33.50	33.17	0.66992	0.66330	0.01	0.01	0.03%	0.03%	0.01	0.03%
100	39.56	38.89	0.39556	0.38894	39.57	38.91	0.39572	0.38910	0.02	0.02	0.05%	0.05%	0.02	0.05%
150	45.62	44.63	0.30416	0.29754	45.65	44.66	0.30432	0.29770	0.02	0.02	0.04%	0.04%	0.02	0.04%
200	51.69	50.37	0.25846	0.25184	51.72	50.40	0.25862	0.25200	0.03	0.03	0.06%	0.06%	0.03	0.06%
250	57.76	56.11	0.23104	0.22442	57.80	56.15	0.23120	0.22458	0.04	0.04	0.07%	0.07%	0.04	0.07%
300	63.83	61.84	0.21276	0.20614	63.88	61.89	0.21292	0.20630	0.05	0.05	0.08%	0.08%	0.05	0.08%
400	75.96	73.32	0.18991	0.18329	76.03	73.38	0.19007	0.18345	0.06	0.06	0.08%	0.08%	0.06	0.08%
500	88.10	84.79	0.17620	0.16958	88.18	84.87	0.17636	0.16974	0.08	0.08	0.09%	0.09%	0.08	0.09%
600	100.24	96.26	0.16706	0.16044	100.33	96.36	0.16722	0.16060	0.10	0.10	0.10%	0.10%	0.10	0.10%
700	112.37	107.74	0.16053	0.15391	112.48	107.85	0.16069	0.15407	0.11	0.11	0.10%	0.10%	0.11	0.10%
800	124.51	119.21	0.15564	0.14902	124.64	119.34	0.15580	0.14918	0.13	0.13	0.10%	0.11%	0.13	0.11%
900	136.64	130.69	0.15183	0.14521	136.79	130.83	0.15199	0.14537	0.14	0.14	0.10%	0.11%	0.14	0.11%
1,000	148.78	142.16	0.14878	0.14216	148.94	142.32	0.14894	0.14232	0.16	0.16	0.11%	0.11%	0.16	0.11%
1,250	179.12	170.85	0.14330	0.13668	179.32	171.05	0.14346	0.13684	0.20	0.20	0.11%	0.12%	0.20	0.11%
1,500	209.46	199.53	0.13964	0.13302	209.70	199.77	0.13980	0.13318	0.24	0.24	0.11%	0.12%	0.24	0.12%
1,750	239.80	228.22	0.13703	0.13041	240.08	228.50	0.13719	0.13057	0.28	0.28	0.12%	0.12%	0.28	0.12%
2,000	270.14	256.90	0.13507	0.12845	270.46	257.22	0.13523	0.12861	0.32	0.32	0.12%	0.12%	0.32	0.12%
2,500	330.82	314.27	0.13233	0.12571	331.22	314.67	0.13249	0.12587	0.40	0.40	0.12%	0.13%	0.40	0.12%
3,000	391.50	371.64	0.13050	0.12388	391.98	372.12	0.13066	0.12404	0.48	0.48	0.12%	0.13%	0.48	0.13%
3,500	452.18	429.01	0.12919	0.12257	452.74	429.57	0.12935	0.12273	0.56	0.56	0.12%	0.13%	0.56	0.13%
4,000	512.86	486.38	0.12822	0.12160	513.50	487.02	0.12838	0.12176	0.64	0.64	0.12%	0.13%	0.64	0.13%
5,000	634.22	601.12	0.12684	0.12022	635.02	601.92	0.12700	0.12038	0.80	0.80	0.13%	0.13%	0.80	0.13%
6,000	755.58	715.86	0.12593	0.11931	756.54	716.82	0.12609	0.11947	0.96	0.96	0.13%	0.13%	0.96	0.13%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in .

POTOMAC ELECTRIC POWER COMPANY

EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 RIDER UPC RATES

SCHEDULE "GS D LV"  
DISTRICT OF COLUMBIA

KW	Hours	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
			\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
			SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
10	100	1000	220.67	227.59	0.22067	0.22759	220.99	227.91	0.22099	0.22791	0.32	0.32	0.15%	0.14%
	200	2000	331.08	344.92	0.16554	0.17246	331.72	345.56	0.16586	0.17278	0.64	0.64	0.19%	0.19%
	300	3000	441.48	462.24	0.14716	0.15408	442.44	463.20	0.14748	0.15440	0.96	0.96	0.22%	0.21%
	400	4000	551.88	579.56	0.13797	0.14489	553.16	580.84	0.13829	0.14521	1.28	1.28	0.23%	0.22%
	500	5000	662.29	696.89	0.13246	0.13938	663.89	698.49	0.13278	0.13970	1.60	1.60	0.24%	0.23%
	600	6000	772.69	814.21	0.12878	0.13570	774.61	816.13	0.12910	0.13602	1.92	1.92	0.25%	0.24%
25	100	2,500	498.93	516.23	0.19957	0.20649	499.73	517.03	0.19989	0.20681	0.80	0.80	0.16%	0.15%
	200	5,000	774.94	809.54	0.15499	0.16191	776.54	811.14	0.15531	0.16223	1.60	1.60	0.21%	0.20%
	300	7,500	1,050.94	1,102.84	0.14013	0.14705	1,053.34	1,105.24	0.14045	0.14737	2.40	2.40	0.23%	0.22%
	400	10,000	1,326.95	1,396.15	0.13270	0.13962	1,330.15	1,399.35	0.13302	0.13994	3.20	3.20	0.24%	0.23%
	500	12,500	1,602.96	1,689.46	0.12824	0.13516	1,606.96	1,693.46	0.12856	0.13548	4.00	4.00	0.25%	0.24%
	600	15,000	1,878.97	1,982.77	0.12526	0.13218	1,883.77	1,987.57	0.12558	0.13250	4.80	4.80	0.26%	0.24%
50	100	5,000	962.69	997.29	0.19254	0.19946	964.29	998.89	0.19286	0.19978	1.60	1.60	0.17%	0.16%
	200	10,000	1,514.70	1,583.90	0.15147	0.15839	1,517.90	1,587.10	0.15179	0.15871	3.20	3.20	0.21%	0.20%
	300	15,000	2,066.72	2,170.52	0.13778	0.14470	2,071.52	2,175.32	0.13810	0.14502	4.80	4.80	0.23%	0.22%
	400	20,000	2,618.73	2,757.13	0.13094	0.13786	2,625.13	2,763.53	0.13126	0.13818	6.40	6.40	0.24%	0.23%
	500	25,000	3,170.75	3,343.75	0.12683	0.13375	3,178.75	3,351.75	0.12715	0.13407	8.00	8.00	0.25%	0.24%
	600	30,000	3,722.77	3,930.37	0.12409	0.13101	3,732.37	3,939.97	0.12441	0.13133	9.60	9.60	0.26%	0.24%
75	100	7,500	1,426.44	1,478.34	0.19019	0.19711	1,428.84	1,480.74	0.19051	0.19743	2.40	2.40	0.17%	0.16%
	200	15,000	2,254.47	2,358.27	0.15030	0.15722	2,259.27	2,363.07	0.15062	0.15754	4.80	4.80	0.21%	0.20%
	300	22,500	3,082.49	3,238.19	0.13700	0.14392	3,089.69	3,245.39	0.13732	0.14424	7.20	7.20	0.23%	0.22%
	400	30,000	3,910.52	4,118.12	0.13035	0.13727	3,920.12	4,127.72	0.13067	0.13759	9.60	9.60	0.25%	0.23%
	500	37,500	4,738.54	4,998.04	0.12636	0.13328	4,750.54	5,010.04	0.12668	0.13360	12.00	12.00	0.25%	0.24%
	600	45,000	5,566.56	5,877.96	0.12370	0.13062	5,580.96	5,892.36	0.12402	0.13094	14.40	14.40	0.26%	0.24%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY  
EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 RIDER UPC RATES - DELIVERY ONLY**

**SCHEDULE "MGT LV "  
DISTRICT OF COLUMBIA**

HOURS USE		KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
			\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
			SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 25 KW														
200	5,000	859.51	859.51	0.17190	0.17190	860.46	860.46	0.17209	0.17209	0.95	0.95	0.11%	0.11%	
300	7,500	922.75	922.75	0.12303	0.12303	924.18	924.18	0.12322	0.12322	1.42	1.42	0.15%	0.15%	
400	10,000	986.00	986.00	0.09860	0.09860	987.90	987.90	0.09879	0.09879	1.90	1.90	0.19%	0.19%	
500	12,500	1,049.25	1,049.25	0.08394	0.08394	1,051.63	1,051.63	0.08413	0.08413	2.38	2.38	0.23%	0.23%	
600	15,000	1,112.50	1,112.50	0.07417	0.07417	1,115.35	1,115.35	0.07436	0.07436	2.85	2.85	0.26%	0.26%	
50 KW														
200	10,000	1,262.25	1,262.25	0.12623	0.12623	1,264.15	1,264.15	0.12642	0.12642	1.90	1.90	0.15%	0.15%	
300	15,000	1,388.75	1,388.75	0.09258	0.09258	1,391.60	1,391.60	0.09277	0.09277	2.85	2.85	0.21%	0.21%	
400	20,000	1,515.24	1,515.24	0.07576	0.07576	1,519.04	1,519.04	0.07595	0.07595	3.80	3.80	0.25%	0.25%	
500	25,000	1,641.74	1,641.74	0.06567	0.06567	1,646.49	1,646.49	0.06586	0.06586	4.75	4.75	0.29%	0.29%	
600	30,000	1,768.24	1,768.24	0.05894	0.05894	1,773.94	1,773.94	0.05913	0.05913	5.70	5.70	0.32%	0.32%	
75 KW														
200	15,000	1,665.00	1,665.00	0.11100	0.11100	1,667.85	1,667.85	0.11119	0.11119	2.85	2.85	0.17%	0.17%	
300	22,500	1,854.74	1,854.74	0.08243	0.08243	1,859.02	1,859.02	0.08262	0.08262	4.28	4.28	0.23%	0.23%	
400	30,000	2,044.49	2,044.49	0.06815	0.06815	2,050.19	2,050.19	0.06834	0.06834	5.70	5.70	0.28%	0.28%	
500	37,500	2,234.23	2,234.23	0.05958	0.05958	2,241.36	2,241.36	0.05977	0.05977	7.13	7.13	0.32%	0.32%	
600	45,000	2,423.97	2,423.97	0.05387	0.05387	2,432.52	2,432.52	0.05406	0.05406	8.55	8.55	0.35%	0.35%	
100 KW														
200	20,000	2,067.74	2,067.74	0.10339	0.10339	2,071.54	2,071.54	0.10358	0.10358	3.80	3.80	0.18%	0.18%	
300	30,000	2,320.74	2,320.74	0.07736	0.07736	2,326.44	2,326.44	0.07755	0.07755	5.70	5.70	0.25%	0.25%	
400	40,000	2,573.73	2,573.73	0.06434	0.06434	2,581.33	2,581.33	0.06453	0.06453	7.60	7.60	0.30%	0.30%	
500	50,000	2,826.72	2,826.72	0.05653	0.05653	2,836.22	2,836.22	0.05672	0.05672	9.50	9.50	0.34%	0.34%	
600	60,000	3,079.71	3,079.71	0.05133	0.05133	3,091.11	3,091.11	0.05152	0.05152	11.40	11.40	0.37%	0.37%	
KWH DISTRIBUTION														
		ON PK	INT	OFF PK										
200	HOURS USE =	31%	29%	40%										
300	HOURS USE =	33%	27%	40%										
400	HOURS USE =	30%	26%	44%										
500	HOURS USE =	27%	25%	48%										
600	HOURS USE =	25%	24%	51%										

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 RIDER UPC RATES - DELIVERY ONLY**  
**SCHEDULE "MGT LV "**  
**DISTRICT OF COLUMBIA**

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
<b>MAXIMUM AND ON PEAK DEMAND = 200 KW</b>													
200	40,000	3,678.73	3,678.73	0.09197	0.09197	3,686.33	3,686.33	0.09216	0.09216	7.60	7.60	0.21%	0.21%
300	60,000	4,184.71	4,184.71	0.06975	0.06975	4,196.11	4,196.11	0.06994	0.06994	11.40	11.40	0.27%	0.27%
400	80,000	4,690.70	4,690.70	0.05863	0.05863	4,705.90	4,705.90	0.05882	0.05882	15.20	15.20	0.32%	0.32%
500	100,000	5,196.68	5,196.68	0.05197	0.05197	5,215.68	5,215.68	0.05216	0.05216	19.00	19.00	0.37%	0.37%
600	120,000	5,702.66	5,702.66	0.04752	0.04752	5,725.46	5,725.46	0.04771	0.04771	22.80	22.80	0.40%	0.40%
<b>400 KW</b>													
200	80,000	6,900.70	6,900.70	0.08626	0.08626	6,915.90	6,915.90	0.08645	0.08645	15.20	15.20	0.22%	0.22%
300	120,000	7,912.66	7,912.66	0.06594	0.06594	7,935.46	7,935.46	0.06613	0.06613	22.80	22.80	0.29%	0.29%
400	160,000	8,924.63	8,924.63	0.05578	0.05578	8,955.03	8,955.03	0.05597	0.05597	30.40	30.40	0.34%	0.34%
500	200,000	9,936.60	9,936.60	0.04968	0.04968	9,974.60	9,974.60	0.04987	0.04987	38.00	38.00	0.38%	0.38%
600	240,000	10,948.57	10,948.57	0.04562	0.04562	10,994.17	10,994.17	0.04581	0.04581	45.60	45.60	0.42%	0.42%
<b>600 KW</b>													
200	120,000	10,122.66	10,122.66	0.08436	0.08436	10,145.46	10,145.46	0.08455	0.08455	22.80	22.80	0.23%	0.23%
300	180,000	11,640.62	11,640.62	0.06467	0.06467	11,674.82	11,674.82	0.06486	0.06486	34.20	34.20	0.29%	0.29%
400	240,000	13,158.57	13,158.57	0.05483	0.05483	13,204.17	13,204.17	0.05502	0.05502	45.60	45.60	0.35%	0.35%
500	300,000	14,676.52	14,676.52	0.04892	0.04892	14,733.52	14,733.52	0.04911	0.04911	57.00	57.00	0.39%	0.39%
600	360,000	16,194.47	16,194.47	0.04498	0.04498	16,262.87	16,262.87	0.04517	0.04517	68.40	68.40	0.42%	0.42%
<b>800 KW</b>													
200	160,000	13,344.63	13,344.63	0.08340	0.08340	13,375.03	13,375.03	0.08359	0.08359	30.40	30.40	0.23%	0.23%
300	240,000	15,368.57	15,368.57	0.06404	0.06404	15,414.17	15,414.17	0.06423	0.06423	45.60	45.60	0.30%	0.30%
400	320,000	17,392.50	17,392.50	0.05435	0.05435	17,453.30	17,453.30	0.05454	0.05454	60.80	60.80	0.35%	0.35%
500	400,000	19,416.44	19,416.44	0.04854	0.04854	19,492.44	19,492.44	0.04873	0.04873	76.00	76.00	0.39%	0.39%
600	480,000	21,440.38	21,440.38	0.04467	0.04467	21,531.58	21,531.58	0.04486	0.04486	91.20	91.20	0.43%	0.43%

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
400	HOURS USE =	30%	26%	44%
500	HOURS USE =	27%	25%	48%
600	HOURS USE =	25%	24%	51%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY

EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 RIDER UPC RATES - DELIVERY ONLY

SCHEDULE "GT LV"  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
						MAXIMUM AND ON PEAK DEMAND = 100 KW							
200	20,000	2,067.74	2,067.74	0.10339	0.10339	2,071.54	2,071.54	0.10358	0.10358	3.80	3.80	0.18%	0.18%
300	30,000	2,320.74	2,320.74	0.07736	0.07736	2,326.44	2,326.44	0.07755	0.07755	5.70	5.70	0.25%	0.25%
400	40,000	2,573.73	2,573.73	0.06434	0.06434	2,581.33	2,581.33	0.06453	0.06453	7.60	7.60	0.30%	0.30%
500	50,000	2,826.72	2,826.72	0.05653	0.05653	2,836.22	2,836.22	0.05672	0.05672	9.50	9.50	0.34%	0.34%
600	60,000	3,079.71	3,079.71	0.05133	0.05133	3,091.11	3,091.11	0.05152	0.05152	11.40	11.40	0.37%	0.37%
						300 KW							
200	60,000	5,289.71	5,289.71	0.08816	0.08816	5,301.11	5,301.11	0.08835	0.08835	11.40	11.40	0.22%	0.22%
300	90,000	6,048.69	6,048.69	0.06721	0.06721	6,065.79	6,065.79	0.06740	0.06740	17.10	17.10	0.28%	0.28%
400	120,000	6,807.66	6,807.66	0.05673	0.05673	6,830.46	6,830.46	0.05692	0.05692	22.80	22.80	0.33%	0.33%
500	150,000	7,566.64	7,566.64	0.05044	0.05044	7,595.14	7,595.14	0.05063	0.05063	28.50	28.50	0.38%	0.38%
600	180,000	8,325.62	8,325.62	0.04625	0.04625	8,359.82	8,359.82	0.04644	0.04644	34.20	34.20	0.41%	0.41%
						500 KW							
200	100,000	8,511.68	8,511.68	0.08512	0.08512	8,530.68	8,530.68	0.08531	0.08531	19.00	19.00	0.22%	0.22%
300	150,000	9,776.64	9,776.64	0.06518	0.06518	9,805.14	9,805.14	0.06537	0.06537	28.50	28.50	0.29%	0.29%
400	200,000	11,041.60	11,041.60	0.05521	0.05521	11,079.60	11,079.60	0.05540	0.05540	38.00	38.00	0.34%	0.34%
500	250,000	12,306.56	12,306.56	0.04923	0.04923	12,354.06	12,354.06	0.04942	0.04942	47.50	47.50	0.39%	0.39%
600	300,000	13,571.52	13,571.52	0.04524	0.04524	13,628.52	13,628.52	0.04543	0.04543	57.00	57.00	0.42%	0.42%
						1,000 KW							
200	200,000	16,566.60	16,566.60	0.08283	0.08283	16,604.60	16,604.60	0.08302	0.08302	38.00	38.00	0.23%	0.23%
300	300,000	19,096.52	19,096.52	0.06366	0.06366	19,153.52	19,153.52	0.06385	0.06385	57.00	57.00	0.30%	0.30%
400	400,000	21,626.44	21,626.44	0.05407	0.05407	21,702.44	21,702.44	0.05426	0.05426	76.00	76.00	0.35%	0.35%
500	500,000	24,156.36	24,156.36	0.04831	0.04831	24,251.36	24,251.36	0.04850	0.04850	95.00	95.00	0.39%	0.39%
600	600,000	26,686.28	26,686.28	0.04448	0.04448	26,800.28	26,800.28	0.04467	0.04467	114.00	114.00	0.43%	0.43%

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
400	HOURS USE =	30%	26%	44%
500	HOURS USE =	27%	25%	48%
600	HOURS USE =	25%	24%	51%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 RIDER UPC RATES - DELIVERY ONLY**  
**SCHEDULE "GT LV "**  
**DISTRICT OF COLUMBIA**

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
<b>MAXIMUM AND ON PEAK DEMAND = 2,000 KW</b>													
200	400,000	32,676.44	32,676.44	0.08169	0.08169	32,752.44	32,752.44	0.08188	0.08188	76.00	76.00	0.23%	0.23%
300	600,000	37,736.28	37,736.28	0.06289	0.06289	37,850.28	37,850.28	0.06308	0.06308	114.00	114.00	0.30%	0.30%
400	800,000	42,796.12	42,796.12	0.05350	0.05350	42,948.12	42,948.12	0.05369	0.05369	152.00	152.00	0.36%	0.36%
500	1,000,000	47,855.96	47,855.96	0.04786	0.04786	48,045.96	48,045.96	0.04805	0.04805	190.00	190.00	0.40%	0.40%
600	1,200,000	52,915.80	52,915.80	0.04410	0.04410	53,143.80	53,143.80	0.04429	0.04429	228.00	228.00	0.43%	0.43%
<b>4,000 KW</b>													
200	800,000	64,896.12	64,896.12	0.08112	0.08112	65,048.12	65,048.12	0.08131	0.08131	152.00	152.00	0.23%	0.23%
300	1,200,000	75,015.80	75,015.80	0.06251	0.06251	75,243.80	75,243.80	0.06270	0.06270	228.00	228.00	0.30%	0.30%
400	1,600,000	85,135.48	85,135.48	0.05321	0.05321	85,439.48	85,439.48	0.05340	0.05340	304.00	304.00	0.36%	0.36%
500	2,000,000	95,255.16	95,255.16	0.04763	0.04763	95,635.16	95,635.16	0.04782	0.04782	380.00	380.00	0.40%	0.40%
600	2,400,000	105,374.84	105,374.84	0.04391	0.04391	105,830.84	105,830.84	0.04410	0.04410	456.00	456.00	0.43%	0.43%
<b>6,000 KW</b>													
200	1,200,000	97,115.80	97,115.80	0.08093	0.08093	97,343.80	97,343.80	0.08112	0.08112	228.00	228.00	0.23%	0.23%
300	1,800,000	112,295.32	112,295.32	0.06239	0.06239	112,637.32	112,637.32	0.06258	0.06258	342.00	342.00	0.30%	0.30%
400	2,400,000	127,474.84	127,474.84	0.05311	0.05311	127,930.84	127,930.84	0.05330	0.05330	456.00	456.00	0.36%	0.36%
500	3,000,000	142,654.36	142,654.36	0.04755	0.04755	143,224.36	143,224.36	0.04774	0.04774	570.00	570.00	0.40%	0.40%
600	3,600,000	157,833.88	157,833.88	0.04384	0.04384	158,517.88	158,517.88	0.04403	0.04403	684.00	684.00	0.43%	0.43%
<b>8,000 KW</b>													
200	1,600,000	129,335.48	129,335.48	0.08083	0.08083	129,639.48	129,639.48	0.08102	0.08102	304.00	304.00	0.24%	0.24%
300	2,400,000	149,574.84	149,574.84	0.06232	0.06232	150,030.84	150,030.84	0.06251	0.06251	456.00	456.00	0.30%	0.30%
400	3,200,000	169,814.20	169,814.20	0.05307	0.05307	170,422.20	170,422.20	0.05326	0.05326	608.00	608.00	0.36%	0.36%
500	4,000,000	190,053.56	190,053.56	0.04751	0.04751	190,813.56	190,813.56	0.04770	0.04770	760.00	760.00	0.40%	0.40%
600	4,800,000	210,292.92	210,292.92	0.04381	0.04381	211,204.92	211,204.92	0.04400	0.04400	912.00	912.00	0.43%	0.43%
<b>KWH DISTRIBUTION</b>													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 RIDER UPC RATES - DELIVERY ONLY**  
**SCHEDULE "GT 3A"**  
**DISTRICT OF COLUMBIA**

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 1,000 KW													
200	200,000	12,231.48	12,229.48	0.06116	0.06115	12,255.48	12,253.48	0.06128	0.06127	24.00	24.00	0.20%	0.20%
300	300,000	14,128.40	14,125.40	0.04709	0.04708	14,164.40	14,161.40	0.04721	0.04720	36.00	36.00	0.25%	0.25%
400	400,000	16,025.32	16,021.32	0.04006	0.04005	16,073.32	16,069.32	0.04018	0.04017	48.00	48.00	0.30%	0.30%
500	500,000	17,922.24	17,917.24	0.03584	0.03583	17,982.24	17,977.24	0.03596	0.03595	60.00	60.00	0.33%	0.33%
600	600,000	19,819.16	19,813.16	0.03303	0.03302	19,891.16	19,885.16	0.03315	0.03314	72.00	72.00	0.36%	0.36%
2,000 KW													
200	400,000	24,275.32	24,271.32	0.06069	0.06068	24,323.32	24,319.32	0.06081	0.06080	48.00	48.00	0.20%	0.20%
300	600,000	28,069.16	28,063.16	0.04678	0.04677	28,141.16	28,135.16	0.04690	0.04689	72.00	72.00	0.26%	0.26%
400	800,000	31,863.00	31,855.00	0.03983	0.03982	31,959.00	31,951.00	0.03995	0.03994	96.00	96.00	0.30%	0.30%
500	1,000,000	35,656.84	35,646.84	0.03566	0.03565	35,776.84	35,766.84	0.03578	0.03577	120.00	120.00	0.34%	0.34%
600	1,200,000	39,450.68	39,438.68	0.03288	0.03287	39,594.68	39,582.68	0.03300	0.03299	144.00	144.00	0.37%	0.37%
5,000 KW													
200	1,000,000	60,406.84	60,396.84	0.06041	0.06040	60,526.84	60,516.84	0.06053	0.06052	120.00	120.00	0.20%	0.20%
300	1,500,000	69,891.44	69,876.44	0.04659	0.04658	70,071.44	70,056.44	0.04671	0.04670	180.00	180.00	0.26%	0.26%
400	2,000,000	79,376.04	79,356.04	0.03969	0.03968	79,616.04	79,596.04	0.03981	0.03980	240.00	240.00	0.30%	0.30%
500	2,500,000	88,860.64	88,835.64	0.03554	0.03553	89,160.64	89,135.64	0.03566	0.03565	300.00	300.00	0.34%	0.34%
600	3,000,000	98,345.24	98,315.24	0.03278	0.03277	98,705.24	98,675.24	0.03290	0.03289	360.00	360.00	0.37%	0.37%
7,500 KW													
200	1,500,000	90,516.44	90,501.44	0.06034	0.06033	90,696.44	90,681.44	0.06046	0.06045	180.00	180.00	0.20%	0.20%
300	2,250,000	104,743.34	104,720.84	0.04655	0.04654	105,013.34	104,990.84	0.04667	0.04666	270.00	270.00	0.26%	0.26%
400	3,000,000	118,970.24	118,940.24	0.03966	0.03965	119,330.24	119,300.24	0.03978	0.03977	360.00	360.00	0.30%	0.30%
500	3,750,000	133,197.14	133,159.64	0.03552	0.03551	133,647.14	133,609.64	0.03564	0.03563	450.00	450.00	0.34%	0.34%
600	4,500,000	147,424.04	147,379.04	0.03276	0.03275	147,964.04	147,919.04	0.03288	0.03287	540.00	540.00	0.37%	0.37%
KWH DISTRIBUTION													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 RIDER UPC RATES - DELIVERY ONLY**  
**SCHEDULE "GT 3A "**  
**DISTRICT OF COLUMBIA**

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 10,000 KW													
200	2,000,000	120,626.04	120,606.04	0.06031	0.06030	120,866.04	120,846.04	0.06043	0.06042	240.00	240.00	0.20%	0.20%
300	3,000,000	139,595.24	139,565.24	0.04653	0.04652	139,955.24	139,925.24	0.04665	0.04664	360.00	360.00	0.26%	0.26%
400	4,000,000	158,564.44	158,524.44	0.03964	0.03963	159,044.44	159,004.44	0.03976	0.03975	480.00	480.00	0.30%	0.30%
500	5,000,000	177,533.64	177,483.64	0.03551	0.03550	178,133.64	178,083.64	0.03563	0.03562	600.00	600.00	0.34%	0.34%
600	6,000,000	196,502.84	196,442.84	0.03275	0.03274	197,222.84	197,162.84	0.03287	0.03286	720.00	720.00	0.37%	0.37%
20,000 KW													
200	4,000,000	241,064.44	241,024.44	0.06027	0.06026	241,544.44	241,504.44	0.06039	0.06038	480.00	480.00	0.20%	0.20%
300	6,000,000	279,002.84	278,942.84	0.04650	0.04649	279,722.84	279,662.84	0.04662	0.04661	720.00	720.00	0.26%	0.26%
400	8,000,000	316,941.24	316,861.24	0.03962	0.03961	317,901.24	317,821.24	0.03974	0.03973	960.00	960.00	0.30%	0.30%
500	10,000,000	354,879.64	354,779.64	0.03549	0.03548	356,079.64	355,979.64	0.03561	0.03560	1,200.00	1,200.00	0.34%	0.34%
600	12,000,000	392,818.04	392,698.04	0.03273	0.03272	394,258.04	394,138.04	0.03285	0.03284	1,440.00	1,440.00	0.37%	0.37%
30,000 KW													
200	6,000,000	361,502.84	361,442.84	0.06025	0.06024	362,222.84	362,162.84	0.06037	0.06036	720.00	720.00	0.20%	0.20%
300	9,000,000	418,410.44	418,320.44	0.04649	0.04648	419,490.44	419,400.44	0.04661	0.04660	1,080.00	1,080.00	0.26%	0.26%
400	12,000,000	475,318.04	475,198.04	0.03961	0.03960	476,758.04	476,638.04	0.03973	0.03972	1,440.00	1,440.00	0.30%	0.30%
500	15,000,000	532,225.64	532,075.64	0.03548	0.03547	534,025.64	533,875.64	0.03560	0.03559	1,800.00	1,800.00	0.34%	0.34%
600	18,000,000	589,133.24	588,953.24	0.03273	0.03272	591,293.24	591,113.24	0.03285	0.03284	2,160.00	2,160.00	0.37%	0.37%
40,000 KW													
200	8,000,000	481,941.24	481,861.24	0.06024	0.06023	482,901.24	482,821.24	0.06036	0.06035	960.00	960.00	0.20%	0.20%
300	12,000,000	557,818.04	557,698.04	0.04648	0.04647	559,258.04	559,138.04	0.04660	0.04659	1,440.00	1,440.00	0.26%	0.26%
400	16,000,000	633,694.84	633,534.84	0.03961	0.03960	635,614.84	635,454.84	0.03973	0.03972	1,920.00	1,920.00	0.30%	0.30%
500	20,000,000	709,571.64	709,371.64	0.03548	0.03547	711,971.64	711,771.64	0.03560	0.03559	2,400.00	2,400.00	0.34%	0.34%
600	24,000,000	785,448.44	785,208.44	0.03273	0.03272	788,328.44	788,088.44	0.03285	0.03284	2,880.00	2,880.00	0.37%	0.37%
KWH DISTRIBUTION													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 RIDER UPC RATES - DELIVERY ONLY**  
**SCHEDULE "GT 3B "**  
**DISTRICT OF COLUMBIA**

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 10,000 KW													
200	2,000,000	37,701.78	38,501.78	0.01885	0.01925	37,721.78	38,521.78	0.01886	0.01926	20.00	20.00	0.05%	0.05%
300	3,000,000	50,440.98	51,240.98	0.01681	0.01708	50,470.98	51,270.98	0.01682	0.01709	30.00	30.00	0.06%	0.06%
400	4,000,000	63,180.18	63,980.18	0.01580	0.01600	63,220.18	64,020.18	0.01581	0.01601	40.00	40.00	0.06%	0.06%
500	5,000,000	75,919.38	76,719.38	0.01518	0.01534	75,969.38	76,769.38	0.01519	0.01535	50.00	50.00	0.07%	0.07%
600	6,000,000	88,658.58	89,458.58	0.01478	0.01491	88,718.58	89,518.58	0.01479	0.01492	60.00	60.00	0.07%	0.07%
20,000 KW													
200	4,000,000	74,980.18	76,580.18	0.01875	0.01915	75,020.18	76,620.18	0.01876	0.01916	40.00	40.00	0.05%	0.05%
300	6,000,000	100,458.58	102,058.58	0.01674	0.01701	100,518.58	102,118.58	0.01675	0.01702	60.00	60.00	0.06%	0.06%
400	8,000,000	125,936.98	127,536.98	0.01574	0.01594	126,016.98	127,616.98	0.01575	0.01595	80.00	80.00	0.06%	0.06%
500	10,000,000	151,415.38	153,015.38	0.01514	0.01530	151,515.38	153,115.38	0.01515	0.01531	100.00	100.00	0.07%	0.07%
600	12,000,000	176,893.78	178,493.78	0.01474	0.01487	177,013.78	178,613.78	0.01475	0.01488	120.00	120.00	0.07%	0.07%
30,000 KW													
200	6,000,000	112,258.58	114,658.58	0.01871	0.01911	112,318.58	114,718.58	0.01872	0.01912	60.00	60.00	0.05%	0.05%
300	9,000,000	150,476.18	152,876.18	0.01672	0.01699	150,566.18	152,966.18	0.01673	0.01700	90.00	90.00	0.06%	0.06%
400	12,000,000	188,693.78	191,093.78	0.01572	0.01592	188,813.78	191,213.78	0.01573	0.01593	120.00	120.00	0.06%	0.06%
500	15,000,000	226,911.38	229,311.38	0.01513	0.01529	227,061.38	229,461.38	0.01514	0.01530	150.00	150.00	0.07%	0.07%
600	18,000,000	265,128.98	267,528.98	0.01473	0.01486	265,308.98	267,708.98	0.01474	0.01487	180.00	180.00	0.07%	0.07%
40,000 KW													
200	8,000,000	149,536.98	152,736.98	0.01869	0.01909	149,616.98	152,816.98	0.01870	0.01910	80.00	80.00	0.05%	0.05%
300	12,000,000	200,493.78	203,693.78	0.01671	0.01697	200,613.78	203,813.78	0.01672	0.01698	120.00	120.00	0.06%	0.06%
400	16,000,000	251,450.58	254,650.58	0.01572	0.01592	251,610.58	254,810.58	0.01573	0.01593	160.00	160.00	0.06%	0.06%
500	20,000,000	302,407.38	305,607.38	0.01512	0.01528	302,607.38	305,807.38	0.01513	0.01529	200.00	200.00	0.07%	0.07%
600	24,000,000	353,364.18	356,564.18	0.01472	0.01486	353,604.18	356,804.18	0.01473	0.01487	240.00	240.00	0.07%	0.07%
KWH DISTRIBUTION													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

## **APPENDIX L:     Underground Rider Bill Impacts**

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 UNDERGROUND RIDER RATES**  
**SCHEDULE "R"**  
**DISTRICT OF COLUMBIA**

KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE					
	\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)	(\$)	(%)
	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	ANNUAL	ANNUAL
0	17.03	17.11	-	-	17.03	17.11	-	-	0.00	0.00	0.00%	0.00%	0.00	0.00%
10	17.32	17.40	1.73203	1.74003	17.32	17.40	1.73194	1.73994	0.00	0.00	0.00%	0.00%	0.00	0.00%
20	17.61	17.69	0.88053	0.88453	17.61	17.69	0.88044	0.88444	0.00	0.00	0.00%	0.00%	0.00	0.00%
30	17.90	17.98	0.59670	0.59936	17.90	17.98	0.59661	0.59927	0.00	0.00	0.00%	0.00%	0.00	0.00%
40	18.85	18.95	0.47115	0.47380	18.84	18.95	0.47106	0.47371	0.00	0.00	0.00%	0.00%	0.00	0.00%
50	19.79	19.92	0.39582	0.39847	19.79	19.92	0.39573	0.39838	0.00	0.00	0.00%	0.00%	0.00	0.00%
100	24.52	24.78	0.24516	0.24780	24.51	24.77	0.24507	0.24771	-0.01	-0.01	-0.04%	-0.04%	-0.01	-0.04%
200	33.97	34.49	0.16983	0.17246	33.95	34.47	0.16974	0.17237	-0.02	-0.02	-0.06%	-0.06%	-0.02	-0.06%
300	43.42	44.21	0.14472	0.14735	43.39	44.18	0.14463	0.14726	-0.03	-0.03	-0.07%	-0.07%	-0.03	-0.07%
400	52.87	53.92	0.13216	0.13480	52.83	53.88	0.13207	0.13471	-0.04	-0.04	-0.08%	-0.07%	-0.04	-0.07%
500	63.69	64.37	0.12737	0.12873	63.64	64.32	0.12728	0.12864	-0.05	-0.04	-0.08%	-0.06%	-0.04	-0.07%
<b>648</b>	<b>79.70</b>	<b>79.83</b>	<b>0.12300</b>	<b>0.12319</b>	<b>79.65</b>	<b>79.77</b>	<b>0.12291</b>	<b>0.12310</b>	<b>-0.06</b>	<b>-0.06</b>	<b>-0.08%</b>	<b>-0.08%</b>	<b>-0.06</b>	<b>-0.08%</b>
700	85.33	85.26	0.12190	0.12180	85.27	85.20	0.12181	0.12171	-0.06	-0.06	-0.07%	-0.07%	-0.06	-0.07%
750	90.74	90.49	0.12099	0.12065	90.67	90.42	0.12090	0.12056	-0.07	-0.07	-0.08%	-0.08%	-0.07	-0.08%
800	96.15	95.71	0.12019	0.11964	96.08	95.64	0.12010	0.11955	-0.07	-0.07	-0.07%	-0.07%	-0.07	-0.07%
850	101.56	100.93	0.11949	0.11875	101.49	100.86	0.11940	0.11866	-0.08	-0.08	-0.08%	-0.08%	-0.08	-0.08%
900	106.97	106.16	0.11886	0.11795	106.89	106.08	0.11877	0.11786	-0.08	-0.08	-0.07%	-0.08%	-0.08	-0.08%
950	112.39	111.38	0.11830	0.11724	112.30	111.30	0.11821	0.11715	-0.09	-0.09	-0.08%	-0.08%	-0.09	-0.08%
1,000	117.80	116.61	0.11780	0.11661	117.71	116.52	0.11771	0.11652	-0.09	-0.09	-0.08%	-0.08%	-0.09	-0.08%
1,250	144.85	142.73	0.11588	0.11418	144.74	142.61	0.11579	0.11409	-0.11	-0.11	-0.08%	-0.08%	-0.11	-0.08%
1,500	171.91	168.85	0.11460	0.11256	171.77	168.71	0.11451	0.11247	-0.14	-0.13	-0.08%	-0.08%	-0.13	-0.08%
1,750	198.96	194.96	0.11369	0.11141	198.80	194.81	0.11360	0.11132	-0.16	-0.16	-0.08%	-0.08%	-0.16	-0.08%
2,000	226.02	221.08	0.11301	0.11054	225.84	220.90	0.11292	0.11045	-0.18	-0.18	-0.08%	-0.08%	-0.18	-0.08%
2,250	253.07	247.20	0.11248	0.10987	252.87	247.00	0.11239	0.10978	-0.20	-0.20	-0.08%	-0.08%	-0.20	-0.08%
2,500	280.12	273.32	0.11205	0.10933	279.90	273.10	0.11196	0.10924	-0.23	-0.22	-0.08%	-0.08%	-0.22	-0.08%
3,000	334.23	325.56	0.11141	0.10852	333.96	325.29	0.11132	0.10843	-0.27	-0.27	-0.08%	-0.08%	-0.27	-0.08%
3,500	388.34	377.80	0.11096	0.10794	388.03	377.49	0.11087	0.10785	-0.31	-0.31	-0.08%	-0.08%	-0.31	-0.08%
4,000	442.45	430.04	0.11061	0.10751	442.09	429.68	0.11052	0.10742	-0.36	-0.36	-0.08%	-0.08%	-0.36	-0.08%
5,000	550.67	534.52	0.11013	0.10690	550.22	534.07	0.11004	0.10681	-0.45	-0.45	-0.08%	-0.08%	-0.45	-0.08%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 UNDERGROUND RIDER RATES**  
**SCHEDULE "MMA"**  
**DISTRICT OF COLUMBIA**

KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE					
	\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)	(\$)	(%)
	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	ANNUAL	ANNUAL
0	13.57	13.99	-	-	13.57	13.99	-	-	0.00	0.00	0.00%	0.00%	0.00	0.00%
100	20.44	21.82	0.20436	0.21821	20.42	21.81	0.20421	0.21806	-0.02	-0.02	-0.10%	-0.09%	-0.02	-0.09%
200	29.04	31.80	0.14520	0.15901	29.01	31.77	0.14505	0.15886	-0.03	-0.03	-0.10%	-0.09%	-0.03	-0.10%
300	37.64	41.78	0.12547	0.13928	37.60	41.74	0.12532	0.13913	-0.05	-0.05	-0.13%	-0.12%	-0.05	-0.12%
400	46.25	51.76	0.11561	0.12941	46.19	51.70	0.11546	0.12926	-0.06	-0.06	-0.13%	-0.12%	-0.06	-0.12%
500	56.10	62.41	0.11220	0.12483	56.02	62.34	0.11205	0.12468	-0.08	-0.08	-0.14%	-0.13%	-0.08	-0.13%
1000	105.36	115.66	0.10536	0.11566	105.21	115.51	0.10521	0.11551	-0.15	-0.15	-0.14%	-0.13%	-0.15	-0.13%
2000	203.89	222.15	0.10195	0.11107	203.59	221.85	0.10180	0.11092	-0.30	-0.30	-0.15%	-0.14%	-0.30	-0.14%
3000	302.42	328.63	0.10081	0.10954	301.97	328.18	0.10066	0.10939	-0.45	-0.45	-0.15%	-0.14%	-0.45	-0.14%
4000	400.95	435.12	0.10024	0.10878	400.35	434.52	0.10009	0.10863	-0.60	-0.60	-0.15%	-0.14%	-0.60	-0.14%
5000	499.48	541.61	0.09990	0.10832	498.73	540.86	0.09975	0.10817	-0.75	-0.75	-0.15%	-0.14%	-0.75	-0.14%
6000	598.01	648.10	0.09967	0.10802	597.11	647.20	0.09952	0.10787	-0.90	-0.90	-0.15%	-0.14%	-0.90	-0.14%
7000	696.53	754.59	0.09950	0.10780	695.48	753.54	0.09935	0.10765	-1.05	-1.05	-0.15%	-0.14%	-1.05	-0.14%
7500	745.80	807.83	0.09944	0.10771	744.67	806.71	0.09929	0.10756	-1.13	-1.13	-0.15%	-0.14%	-1.13	-0.14%
8000	795.06	861.08	0.09938	0.10763	793.86	859.88	0.09923	0.10748	-1.20	-1.20	-0.15%	-0.14%	-1.20	-0.14%
8500	844.33	914.32	0.09933	0.10757	843.05	913.05	0.09918	0.10742	-1.27	-1.28	-0.15%	-0.14%	-1.28	-0.14%
9000	893.59	967.57	0.09929	0.10751	892.24	966.22	0.09914	0.10736	-1.35	-1.35	-0.15%	-0.14%	-1.35	-0.14%
9500	942.86	1,020.81	0.09925	0.10745	941.43	1,019.39	0.09910	0.10730	-1.42	-1.42	-0.15%	-0.14%	-1.42	-0.14%
10000	992.12	1,074.06	0.09921	0.10741	990.62	1,072.56	0.09906	0.10726	-1.50	-1.50	-0.15%	-0.14%	-1.50	-0.14%
12500	1,238.44	1,340.28	0.09908	0.10722	1,236.57	1,338.40	0.09893	0.10707	-1.88	-1.88	-0.15%	-0.14%	-1.88	-0.14%
15000	1,484.76	1,606.50	0.09898	0.10710	1,482.51	1,604.25	0.09883	0.10695	-2.25	-2.25	-0.15%	-0.14%	-2.25	-0.14%
17500	1,731.09	1,872.72	0.09892	0.10701	1,728.46	1,870.10	0.09877	0.10686	-2.63	-2.63	-0.15%	-0.14%	-2.63	-0.15%
20000	1,977.41	2,138.94	0.09887	0.10695	1,974.41	2,135.94	0.09872	0.10680	-3.00	-3.00	-0.15%	-0.14%	-3.00	-0.14%
22500	2,223.73	2,405.16	0.09883	0.10690	2,220.35	2,401.79	0.09868	0.10675	-3.38	-3.38	-0.15%	-0.14%	-3.38	-0.15%
25000	2,470.05	2,671.39	0.09880	0.10686	2,466.30	2,667.64	0.09865	0.10671	-3.75	-3.75	-0.15%	-0.14%	-3.75	-0.14%
30000	2,962.69	3,203.83	0.09876	0.10679	2,958.19	3,199.33	0.09861	0.10664	-4.50	-4.50	-0.15%	-0.14%	-4.50	-0.15%
35000	3,455.34	3,736.27	0.09872	0.10675	3,450.09	3,731.02	0.09857	0.10660	-5.25	-5.25	-0.15%	-0.14%	-5.25	-0.15%
40000	3,947.98	4,268.72	0.09870	0.10672	3,941.98	4,262.72	0.09855	0.10657	-6.00	-6.00	-0.15%	-0.14%	-6.00	-0.15%
50000	4,933.27	5,333.60	0.09867	0.10667	4,925.77	5,326.10	0.09852	0.10652	-7.50	-7.50	-0.15%	-0.14%	-7.50	-0.15%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**

**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 UNDERGROUND RIDER RATES**

**SCHEDULE "GS ND"**

**DISTRICT OF COLUMBIA**

KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE					
	\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)	(\$)	(%)
	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	ANNUAL	ANNUAL
0	27.42	27.42	-	-	27.42	27.42	-	-	0.00	0.00	0.00%	0.00%	0.00	0.00%
10	28.63	28.57	2.86336	2.85674	28.62	28.56	2.86225	2.85563	-0.01	-0.01	-0.03%	-0.04%	-0.01	-0.03%
20	29.85	29.71	1.49236	1.48574	29.83	29.69	1.49125	1.48463	-0.02	-0.02	-0.07%	-0.07%	-0.02	-0.07%
30	31.06	30.86	1.03536	1.02874	31.03	30.83	1.03425	1.02763	-0.03	-0.03	-0.10%	-0.10%	-0.03	-0.10%
40	32.27	32.01	0.80686	0.80024	32.23	31.97	0.80575	0.79913	-0.04	-0.04	-0.12%	-0.12%	-0.04	-0.12%
50	33.49	33.16	0.66976	0.66314	33.43	33.10	0.66865	0.66203	-0.06	-0.06	-0.18%	-0.18%	-0.06	-0.18%
100	39.56	38.89	0.39556	0.38894	39.45	38.78	0.39445	0.38783	-0.11	-0.11	-0.28%	-0.28%	-0.11	-0.28%
150	45.62	44.63	0.30416	0.29754	45.46	44.46	0.30305	0.29643	-0.17	-0.17	-0.37%	-0.38%	-0.17	-0.38%
200	51.69	50.37	0.25846	0.25184	51.47	50.15	0.25735	0.25073	-0.22	-0.22	-0.43%	-0.44%	-0.22	-0.43%
250	57.76	56.11	0.23104	0.22442	57.48	55.83	0.22993	0.22331	-0.28	-0.28	-0.48%	-0.50%	-0.28	-0.49%
300	63.83	61.84	0.21276	0.20614	63.50	61.51	0.21165	0.20503	-0.33	-0.33	-0.52%	-0.53%	-0.33	-0.53%
400	75.96	73.32	0.18991	0.18329	75.52	72.87	0.18880	0.18218	-0.44	-0.44	-0.58%	-0.60%	-0.44	-0.59%
500	88.10	84.79	0.17620	0.16958	87.55	84.24	0.17509	0.16847	-0.55	-0.55	-0.62%	-0.65%	-0.55	-0.64%
600	100.24	96.26	0.16706	0.16044	99.57	95.60	0.16595	0.15933	-0.67	-0.67	-0.67%	-0.70%	-0.67	-0.68%
700	112.37	107.74	0.16053	0.15391	111.60	106.96	0.15942	0.15280	-0.78	-0.78	-0.69%	-0.72%	-0.78	-0.71%
800	124.51	119.21	0.15564	0.14902	123.62	118.32	0.15453	0.14791	-0.89	-0.89	-0.71%	-0.75%	-0.89	-0.73%
900	136.64	130.69	0.15183	0.14521	135.65	129.69	0.15072	0.14410	-1.00	-1.00	-0.73%	-0.77%	-1.00	-0.75%
1,000	148.78	142.16	0.14878	0.14216	147.67	141.05	0.14767	0.14105	-1.11	-1.11	-0.75%	-0.78%	-1.11	-0.77%
1,250	179.12	170.85	0.14330	0.13668	177.73	169.46	0.14219	0.13557	-1.39	-1.39	-0.78%	-0.81%	-1.39	-0.80%
1,500	209.46	199.53	0.13964	0.13302	207.80	197.87	0.13853	0.13191	-1.67	-1.66	-0.80%	-0.83%	-1.66	-0.82%
1,750	239.80	228.22	0.13703	0.13041	237.86	226.27	0.13592	0.12930	-1.94	-1.94	-0.81%	-0.85%	-1.94	-0.83%
2,000	270.14	256.90	0.13507	0.12845	267.92	254.68	0.13396	0.12734	-2.22	-2.22	-0.82%	-0.86%	-2.22	-0.85%
2,500	330.82	314.27	0.13233	0.12571	328.05	311.50	0.13122	0.12460	-2.77	-2.77	-0.84%	-0.88%	-2.77	-0.86%
3,000	391.50	371.64	0.13050	0.12388	388.17	368.31	0.12939	0.12277	-3.33	-3.33	-0.85%	-0.90%	-3.33	-0.88%
3,500	452.18	429.01	0.12919	0.12257	448.30	425.13	0.12808	0.12146	-3.88	-3.88	-0.86%	-0.90%	-3.88	-0.88%
4,000	512.86	486.38	0.12822	0.12160	508.42	481.94	0.12711	0.12049	-4.44	-4.44	-0.87%	-0.91%	-4.44	-0.89%
5,000	634.22	601.12	0.12684	0.12022	628.67	595.57	0.12573	0.11911	-5.55	-5.55	-0.88%	-0.92%	-5.55	-0.90%
6,000	755.58	715.86	0.12593	0.11931	748.92	709.20	0.12482	0.11820	-6.66	-6.66	-0.88%	-0.93%	-6.66	-0.91%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in .

POTOMAC ELECTRIC POWER COMPANY

EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 UNDERGROUND RIDER RATES

SCHEDULE "GS D LV"  
DISTRICT OF COLUMBIA

KW	Hours	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
			\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
			SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
10	100	1000	220.67	227.59	0.22067	0.22759	221.46	228.38	0.22146	0.22838	0.79	0.79	0.36%	0.35%
	200	2000	331.08	344.92	0.16554	0.17246	332.66	346.50	0.16633	0.17325	1.58	1.58	0.48%	0.46%
	300	3000	441.48	462.24	0.14716	0.15408	443.85	464.61	0.14795	0.15487	2.37	2.37	0.54%	0.51%
	400	4000	551.88	579.56	0.13797	0.14489	555.04	582.72	0.13876	0.14568	3.16	3.16	0.57%	0.55%
	500	5000	662.29	696.89	0.13246	0.13938	666.24	700.84	0.13325	0.14017	3.95	3.95	0.60%	0.57%
	600	6000	772.69	814.21	0.12878	0.13570	777.43	818.95	0.12957	0.13649	4.74	4.74	0.61%	0.58%
25	100	2,500	498.93	516.23	0.19957	0.20649	500.90	518.20	0.20036	0.20728	1.98	1.97	0.40%	0.38%
	200	5,000	774.94	809.54	0.15499	0.16191	778.89	813.49	0.15578	0.16270	3.95	3.95	0.51%	0.49%
	300	7,500	1,050.94	1,102.84	0.14013	0.14705	1,056.87	1,108.77	0.14092	0.14784	5.92	5.93	0.56%	0.54%
	400	10,000	1,326.95	1,396.15	0.13270	0.13962	1,334.85	1,404.05	0.13349	0.14041	7.90	7.90	0.60%	0.57%
	500	12,500	1,602.96	1,689.46	0.12824	0.13516	1,612.84	1,699.34	0.12903	0.13595	9.88	9.88	0.62%	0.58%
	600	15,000	1,878.97	1,982.77	0.12526	0.13218	1,890.82	1,994.62	0.12605	0.13297	11.85	11.85	0.63%	0.60%
50	100	5,000	962.69	997.29	0.19254	0.19946	966.64	1,001.24	0.19333	0.20025	3.95	3.95	0.41%	0.40%
	200	10,000	1,514.70	1,583.90	0.15147	0.15839	1,522.60	1,591.80	0.15226	0.15918	7.90	7.90	0.52%	0.50%
	300	15,000	2,066.72	2,170.52	0.13778	0.14470	2,078.57	2,182.37	0.13857	0.14549	11.85	11.85	0.57%	0.55%
	400	20,000	2,618.73	2,757.13	0.13094	0.13786	2,634.53	2,772.93	0.13173	0.13865	15.80	15.80	0.60%	0.57%
	500	25,000	3,170.75	3,343.75	0.12683	0.13375	3,190.50	3,363.50	0.12762	0.13454	19.75	19.75	0.62%	0.59%
	600	30,000	3,722.77	3,930.37	0.12409	0.13101	3,746.47	3,954.07	0.12488	0.13180	23.70	23.70	0.64%	0.60%
75	100	7,500	1,426.44	1,478.34	0.19019	0.19711	1,432.37	1,484.27	0.19098	0.19790	5.93	5.93	0.42%	0.40%
	200	15,000	2,254.47	2,358.27	0.15030	0.15722	2,266.32	2,370.12	0.15109	0.15801	11.85	11.85	0.53%	0.50%
	300	22,500	3,082.49	3,238.19	0.13700	0.14392	3,100.27	3,255.97	0.13779	0.14471	17.77	17.77	0.58%	0.55%
	400	30,000	3,910.52	4,118.12	0.13035	0.13727	3,934.22	4,141.82	0.13114	0.13806	23.70	23.70	0.61%	0.58%
	500	37,500	4,738.54	4,998.04	0.12636	0.13328	4,768.17	5,027.67	0.12715	0.13407	29.63	29.63	0.63%	0.59%
	600	45,000	5,566.56	5,877.96	0.12370	0.13062	5,602.11	5,913.51	0.12449	0.13141	35.55	35.55	0.64%	0.60%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 UNDERGROUND RIDER RATES - DELIVERY ONLY**  
**SCHEDULE "MGT LV "**  
**DISTRICT OF COLUMBIA**

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
						MAXIMUM AND ON PEAK DEMAND =				25	KW		
200	5,000	859.51	859.51	0.17190	0.17190	858.41	858.41	0.17168	0.17168	(1.10)	(1.10)	-0.13%	-0.13%
300	7,500	922.75	922.75	0.12303	0.12303	921.10	921.10	0.12281	0.12281	(1.65)	(1.65)	-0.18%	-0.18%
400	10,000	986.00	986.00	0.09860	0.09860	983.80	983.80	0.09838	0.09838	(2.20)	(2.20)	-0.22%	-0.22%
500	12,500	1,049.25	1,049.25	0.08394	0.08394	1,046.50	1,046.50	0.08372	0.08372	(2.75)	(2.75)	-0.26%	-0.26%
600	15,000	1,112.50	1,112.50	0.07417	0.07417	1,109.20	1,109.20	0.07395	0.07395	(3.30)	(3.30)	-0.30%	-0.30%
										</			

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
400	HOURS USE =	30%	26%	44%
500	HOURS USE =	27%	25%	48%
600	HOURS USE =	25%	24%	51%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 UNDERGROUND RIDER RATES - DELIVERY ONLY**  
**SCHEDULE "MGT LV "**  
**DISTRICT OF COLUMBIA**

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
<b>MAXIMUM AND ON PEAK DEMAND = 200 KW</b>													
200	40,000	3,678.73	3,678.73	0.09197	0.09197	3,669.93	3,669.93	0.09175	0.09175	(8.80)	(8.80)	-0.24%	-0.24%
300	60,000	4,184.71	4,184.71	0.06975	0.06975	4,171.51	4,171.51	0.06953	0.06953	(13.20)	(13.20)	-0.32%	-0.32%
400	80,000	4,690.70	4,690.70	0.05863	0.05863	4,673.10	4,673.10	0.05841	0.05841	(17.60)	(17.60)	-0.38%	-0.38%
500	100,000	5,196.68	5,196.68	0.05197	0.05197	5,174.68	5,174.68	0.05175	0.05175	(22.00)	(22.00)	-0.42%	-0.42%
600	120,000	5,702.66	5,702.66	0.04752	0.04752	5,676.26	5,676.26	0.04730	0.04730	(26.40)	(26.40)	-0.46%	-0.46%
<b>400 KW</b>													
200	80,000	6,900.70	6,900.70	0.08626	0.08626	6,883.10	6,883.10	0.08604	0.08604	(17.60)	(17.60)	-0.26%	-0.26%
300	120,000	7,912.66	7,912.66	0.06594	0.06594	7,886.26	7,886.26	0.06572	0.06572	(26.40)	(26.40)	-0.33%	-0.33%
400	160,000	8,924.63	8,924.63	0.05578	0.05578	8,889.43	8,889.43	0.05556	0.05556	(35.20)	(35.20)	-0.39%	-0.39%
500	200,000	9,936.60	9,936.60	0.04968	0.04968	9,892.60	9,892.60	0.04946	0.04946	(44.00)	(44.00)	-0.44%	-0.44%
600	240,000	10,948.57	10,948.57	0.04562	0.04562	10,895.77	10,895.77	0.04540	0.04540	(52.80)	(52.80)	-0.48%	-0.48%
<b>600 KW</b>													
200	120,000	10,122.66	10,122.66	0.08436	0.08436	10,096.26	10,096.26	0.08414	0.08414	(26.40)	(26.40)	-0.26%	-0.26%
300	180,000	11,640.62	11,640.62	0.06467	0.06467	11,601.02	11,601.02	0.06445	0.06445	(39.60)	(39.60)	-0.34%	-0.34%
400	240,000	13,158.57	13,158.57	0.05483	0.05483	13,105.77	13,105.77	0.05461	0.05461	(52.80)	(52.80)	-0.40%	-0.40%
500	300,000	14,676.52	14,676.52	0.04892	0.04892	14,610.52	14,610.52	0.04870	0.04870	(66.00)	(66.00)	-0.45%	-0.45%
600	360,000	16,194.47	16,194.47	0.04498	0.04498	16,115.27	16,115.27	0.04476	0.04476	(79.20)	(79.20)	-0.49%	-0.49%
<b>800 KW</b>													
200	160,000	13,344.63	13,344.63	0.08340	0.08340	13,309.43	13,309.43	0.08318	0.08318	(35.20)	(35.20)	-0.26%	-0.26%
300	240,000	15,368.57	15,368.57	0.06404	0.06404	15,315.77	15,315.77	0.06382	0.06382	(52.80)	(52.80)	-0.34%	-0.34%
400	320,000	17,392.50	17,392.50	0.05435	0.05435	17,322.10	17,322.10	0.05413	0.05413	(70.40)	(70.40)	-0.40%	-0.40%
500	400,000	19,416.44	19,416.44	0.04854	0.04854	19,328.44	19,328.44	0.04832	0.04832	(88.00)	(88.00)	-0.45%	-0.45%
600	480,000	21,440.38	21,440.38	0.04467	0.04467	21,334.78	21,334.78	0.04445	0.04445	(105.60)	(105.60)	-0.49%	-0.49%

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
400	HOURS USE =	30%	26%	44%
500	HOURS USE =	27%	25%	48%
600	HOURS USE =	25%	24%	51%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY

EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 UNDERGROUND RIDER RATES - DELIVERY ONLY

SCHEDULE "GT LV "  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
						MAXIMUM AND ON PEAK DEMAND =				100 KW			
200	20,000	2,067.74	2,067.74	0.10339	0.10339	2,063.34	2,063.34	0.10317	0.10317	(4.40)	(4.40)	-0.21%	-0.21%
300	30,000	2,320.74	2,320.74	0.07736	0.07736	2,314.14	2,314.14	0.07714	0.07714	(6.60)	(6.60)	-0.28%	-0.28%
400	40,000	2,573.73	2,573.73	0.06434	0.06434	2,564.93	2,564.93	0.06412	0.06412	(8.80)	(8.80)	-0.34%	-0.34%
500	50,000	2,826.72	2,826.72	0.05653	0.05653	2,815.72	2,815.72	0.05631	0.05631	(11.00)	(11.00)	-0.39%	-0.39%
600	60,000	3,079.71	3,079.71	0.05133	0.05133	3,066.51	3,066.51	0.05111	0.05111	(13.20)	(13.20)	-0.43%	-0.43%
										300 KW			
200	60,000	5,289.71	5,289.71	0.08816	0.08816	5,276.51	5,276.51	0.08794	0.08794	(13.20)	(13.20)	-0.25%	-0.25%
300	90,000	6,048.69	6,048.69	0.06721	0.06721	6,028.89	6,028.89	0.06699	0.06699	(19.80)	(19.80)	-0.33%	-0.33%
400	120,000	6,807.66	6,807.66	0.05673	0.05673	6,781.26	6,781.26	0.05651	0.05651	(26.40)	(26.40)	-0.39%	-0.39%
500	150,000	7,566.64	7,566.64	0.05044	0.05044	7,533.64	7,533.64	0.05022	0.05022	(33.00)	(33.00)	-0.44%	-0.44%
600	180,000	8,325.62	8,325.62	0.04625	0.04625	8,286.02	8,286.02	0.04603	0.04603	(39.60)	(39.60)	-0.48%	-0.48%
										500 KW			
200	100,000	8,511.68	8,511.68	0.08512	0.08512	8,489.68	8,489.68	0.08490	0.08490	(22.00)	(22.00)	-0.26%	-0.26%
300	150,000	9,776.64	9,776.64	0.06518	0.06518	9,743.64	9,743.64	0.06496	0.06496	(33.00)	(33.00)	-0.34%	-0.34%
400	200,000	11,041.60	11,041.60	0.05521	0.05521	10,997.60	10,997.60	0.05499	0.05499	(44.00)	(44.00)	-0.40%	-0.40%
500	250,000	12,306.56	12,306.56	0.04923	0.04923	12,251.56	12,251.56	0.04901	0.04901	(55.00)	(55.00)	-0.45%	-0.45%
600	300,000	13,571.52	13,571.52	0.04524	0.04524	13,505.52	13,505.52	0.04502	0.04502	(66.00)	(66.00)	-0.49%	-0.49%
										1,000 KW			
200	200,000	16,566.60	16,566.60	0.08283	0.08283	16,522.60	16,522.60	0.08261	0.08261	(44.00)	(44.00)	-0.27%	-0.27%
300	300,000	19,096.52	19,096.52	0.06366	0.06366	19,030.52	19,030.52	0.06344	0.06344	(66.00)	(66.00)	-0.35%	-0.35%
400	400,000	21,626.44	21,626.44	0.05407	0.05407	21,538.44	21,538.44	0.05385	0.05385	(88.00)	(88.00)	-0.41%	-0.41%
500	500,000	24,156.36	24,156.36	0.04831	0.04831	24,046.36	24,046.36	0.04809	0.04809	(110.00)	(110.00)	-0.46%	-0.46%
600	600,000	26,686.28	26,686.28	0.04448	0.04448	26,554.28	26,554.28	0.04426	0.04426	(132.00)	(132.00)	-0.49%	-0.49%

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
400	HOURS USE =	30%	26%	44%
500	HOURS USE =	27%	25%	48%
600	HOURS USE =	25%	24%	51%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 UNDERGROUND RIDER RATES - DELIVERY ONLY**  
**SCHEDULE "GT LV "**  
**DISTRICT OF COLUMBIA**

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
<b>MAXIMUM AND ON PEAK DEMAND = 2,000 KW</b>													
200	400,000	32,676.44	32,676.44	0.08169	0.08169	32,588.44	32,588.44	0.08147	0.08147	(88.00)	(88.00)	-0.27%	-0.27%
300	600,000	37,736.28	37,736.28	0.06289	0.06289	37,604.28	37,604.28	0.06267	0.06267	(132.00)	(132.00)	-0.35%	-0.35%
400	800,000	42,796.12	42,796.12	0.05350	0.05350	42,620.12	42,620.12	0.05328	0.05328	(176.00)	(176.00)	-0.41%	-0.41%
500	1,000,000	47,855.96	47,855.96	0.04786	0.04786	47,635.96	47,635.96	0.04764	0.04764	(220.00)	(220.00)	-0.46%	-0.46%
600	1,200,000	52,915.80	52,915.80	0.04410	0.04410	52,651.80	52,651.80	0.04388	0.04388	(264.00)	(264.00)	-0.50%	-0.50%
<b>4,000 KW</b>													
200	800,000	64,896.12	64,896.12	0.08112	0.08112	64,720.12	64,720.12	0.08090	0.08090	(176.00)	(176.00)	-0.27%	-0.27%
300	1,200,000	75,015.80	75,015.80	0.06251	0.06251	74,751.80	74,751.80	0.06229	0.06229	(264.00)	(264.00)	-0.35%	-0.35%
400	1,600,000	85,135.48	85,135.48	0.05321	0.05321	84,783.48	84,783.48	0.05299	0.05299	(352.00)	(352.00)	-0.41%	-0.41%
500	2,000,000	95,255.16	95,255.16	0.04763	0.04763	94,815.16	94,815.16	0.04741	0.04741	(440.00)	(440.00)	-0.46%	-0.46%
600	2,400,000	105,374.84	105,374.84	0.04391	0.04391	104,846.84	104,846.84	0.04369	0.04369	(528.00)	(528.00)	-0.50%	-0.50%
<b>6,000 KW</b>													
200	1,200,000	97,115.80	97,115.80	0.08093	0.08093	96,851.80	96,851.80	0.08071	0.08071	(264.00)	(264.00)	-0.27%	-0.27%
300	1,800,000	112,295.32	112,295.32	0.06239	0.06239	111,899.32	111,899.32	0.06217	0.06217	(396.00)	(396.00)	-0.35%	-0.35%
400	2,400,000	127,474.84	127,474.84	0.05311	0.05311	126,946.84	126,946.84	0.05289	0.05289	(528.00)	(528.00)	-0.41%	-0.41%
500	3,000,000	142,654.36	142,654.36	0.04755	0.04755	141,994.36	141,994.36	0.04733	0.04733	(660.00)	(660.00)	-0.46%	-0.46%
600	3,600,000	157,833.88	157,833.88	0.04384	0.04384	157,041.88	157,041.88	0.04362	0.04362	(792.00)	(792.00)	-0.50%	-0.50%
<b>8,000 KW</b>													
200	1,600,000	129,335.48	129,335.48	0.08083	0.08083	128,983.48	128,983.48	0.08061	0.08061	(352.00)	(352.00)	-0.27%	-0.27%
300	2,400,000	149,574.84	149,574.84	0.06232	0.06232	149,046.84	149,046.84	0.06210	0.06210	(528.00)	(528.00)	-0.35%	-0.35%
400	3,200,000	169,814.20	169,814.20	0.05307	0.05307	169,110.20	169,110.20	0.05285	0.05285	(704.00)	(704.00)	-0.41%	-0.41%
500	4,000,000	190,053.56	190,053.56	0.04751	0.04751	189,173.56	189,173.56	0.04729	0.04729	(880.00)	(880.00)	-0.46%	-0.46%
600	4,800,000	210,292.92	210,292.92	0.04381	0.04381	209,236.92	209,236.92	0.04359	0.04359	(1,056.00)	(1,056.00)	-0.50%	-0.50%
<b>KWH DISTRIBUTION</b>													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY

EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 UNDERGROUND RIDER RATES - DELIVERY ONLY

SCHEDULE "GT 3A"

DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 1,000 KW													
200	200,000	12,231.48	12,229.48	0.06116	0.06115	12,215.48	12,213.48	0.06108	0.06107	(16.00)	(16.00)	-0.13%	-0.13%
300	300,000	14,128.40	14,125.40	0.04709	0.04708	14,104.40	14,101.40	0.04701	0.04700	(24.00)	(24.00)	-0.17%	-0.17%
400	400,000	16,025.32	16,021.32	0.04006	0.04005	15,993.32	15,989.32	0.03998	0.03997	(32.00)	(32.00)	-0.20%	-0.20%
500	500,000	17,922.24	17,917.24	0.03584	0.03583	17,882.24	17,877.24	0.03576	0.03575	(40.00)	(40.00)	-0.22%	-0.22%
600	600,000	19,819.16	19,813.16	0.03303	0.03302	19,771.16	19,765.16	0.03295	0.03294	(48.00)	(48.00)	-0.24%	-0.24%
2,000 KW													
200	400,000	24,275.32	24,271.32	0.06069	0.06068	24,243.32	24,239.32	0.06061	0.06060	(32.00)	(32.00)	-0.13%	-0.13%
300	600,000	28,069.16	28,063.16	0.04678	0.04677	28,021.16	28,015.16	0.04670	0.04669	(48.00)	(48.00)	-0.17%	-0.17%
400	800,000	31,863.00	31,855.00	0.03983	0.03982	31,799.00	31,791.00	0.03975	0.03974	(64.00)	(64.00)	-0.20%	-0.20%
500	1,000,000	35,656.84	35,646.84	0.03566	0.03565	35,576.84	35,566.84	0.03558	0.03557	(80.00)	(80.00)	-0.22%	-0.22%
600	1,200,000	39,450.68	39,438.68	0.03288	0.03287	39,354.68	39,342.68	0.03280	0.03279	(96.00)	(96.00)	-0.24%	-0.24%
5,000 KW													
200	1,000,000	60,406.84	60,396.84	0.06041	0.06040	60,326.84	60,316.84	0.06033	0.06032	(80.00)	(80.00)	-0.13%	-0.13%
300	1,500,000	69,891.44	69,876.44	0.04659	0.04658	69,771.44	69,756.44	0.04651	0.04650	(120.00)	(120.00)	-0.17%	-0.17%
400	2,000,000	79,376.04	79,356.04	0.03969	0.03968	79,216.04	79,196.04	0.03961	0.03960	(160.00)	(160.00)	-0.20%	-0.20%
500	2,500,000	88,860.64	88,835.64	0.03554	0.03553	88,660.64	88,635.64	0.03546	0.03545	(200.00)	(200.00)	-0.23%	-0.23%
600	3,000,000	98,345.24	98,315.24	0.03278	0.03277	98,105.24	98,075.24	0.03270	0.03269	(240.00)	(240.00)	-0.24%	-0.24%
7,500 KW													
200	1,500,000	90,516.44	90,501.44	0.06034	0.06033	90,396.44	90,381.44	0.06026	0.06025	(120.00)	(120.00)	-0.13%	-0.13%
300	2,250,000	104,743.34	104,720.84	0.04655	0.04654	104,563.34	104,540.84	0.04647	0.04646	(180.00)	(180.00)	-0.17%	-0.17%
400	3,000,000	118,970.24	118,940.24	0.03966	0.03965	118,730.24	118,700.24	0.03958	0.03957	(240.00)	(240.00)	-0.20%	-0.20%
500	3,750,000	133,197.14	133,159.64	0.03552	0.03551	132,897.14	132,859.64	0.03544	0.03543	(300.00)	(300.00)	-0.23%	-0.23%
600	4,500,000	147,424.04	147,379.04	0.03276	0.03275	147,064.04	147,019.04	0.03268	0.03267	(360.00)	(360.00)	-0.24%	-0.24%
KWH DISTRIBUTION													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 UNDERGROUND RIDER RATES - DELIVERY ONLY**  
**SCHEDULE "GT 3A"**  
**DISTRICT OF COLUMBIA**

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 10,000 KW													
200	2,000,000	120,626.04	120,606.04	0.06031	0.06030	120,466.04	120,446.04	0.06023	0.06022	(160.00)	(160.00)	-0.13%	-0.13%
300	3,000,000	139,595.24	139,565.24	0.04653	0.04652	139,355.24	139,325.24	0.04645	0.04644	(240.00)	(240.00)	-0.17%	-0.17%
400	4,000,000	158,564.44	158,524.44	0.03964	0.03963	158,244.44	158,204.44	0.03956	0.03955	(320.00)	(320.00)	-0.20%	-0.20%
500	5,000,000	177,533.64	177,483.64	0.03551	0.03550	177,133.64	177,083.64	0.03543	0.03542	(400.00)	(400.00)	-0.23%	-0.23%
600	6,000,000	196,502.84	196,442.84	0.03275	0.03274	196,022.84	195,962.84	0.03267	0.03266	(480.00)	(480.00)	-0.24%	-0.24%
20,000 KW													
200	4,000,000	241,064.44	241,024.44	0.06027	0.06026	240,744.44	240,704.44	0.06019	0.06018	(320.00)	(320.00)	-0.13%	-0.13%
300	6,000,000	279,002.84	278,942.84	0.04650	0.04649	278,522.84	278,462.84	0.04642	0.04641	(480.00)	(480.00)	-0.17%	-0.17%
400	8,000,000	316,941.24	316,861.24	0.03962	0.03961	316,301.24	316,221.24	0.03954	0.03953	(640.00)	(640.00)	-0.20%	-0.20%
500	10,000,000	354,879.64	354,779.64	0.03549	0.03548	354,079.64	353,979.64	0.03541	0.03540	(800.00)	(800.00)	-0.23%	-0.23%
600	12,000,000	392,818.04	392,698.04	0.03273	0.03272	391,858.04	391,738.04	0.03265	0.03264	(960.00)	(960.00)	-0.24%	-0.24%
30,000 KW													
200	6,000,000	361,502.84	361,442.84	0.06025	0.06024	361,022.84	360,962.84	0.06017	0.06016	(480.00)	(480.00)	-0.13%	-0.13%
300	9,000,000	418,410.44	418,320.44	0.04649	0.04648	417,690.44	417,600.44	0.04641	0.04640	(720.00)	(720.00)	-0.17%	-0.17%
400	12,000,000	475,318.04	475,198.04	0.03961	0.03960	474,358.04	474,238.04	0.03953	0.03952	(960.00)	(960.00)	-0.20%	-0.20%
500	15,000,000	532,225.64	532,075.64	0.03548	0.03547	531,025.64	530,875.64	0.03540	0.03539	(1,200.00)	(1,200.00)	-0.23%	-0.23%
600	18,000,000	589,133.24	588,953.24	0.03273	0.03272	587,693.24	587,513.24	0.03265	0.03264	(1,440.00)	(1,440.00)	-0.24%	-0.24%
40,000 KW													
200	8,000,000	481,941.24	481,861.24	0.06024	0.06023	481,301.24	481,221.24	0.06016	0.06015	(640.00)	(640.00)	-0.13%	-0.13%
300	12,000,000	557,818.04	557,698.04	0.04648	0.04647	556,858.04	556,738.04	0.04640	0.04639	(960.00)	(960.00)	-0.17%	-0.17%
400	16,000,000	633,694.84	633,534.84	0.03961	0.03960	632,414.84	632,254.84	0.03953	0.03952	(1,280.00)	(1,280.00)	-0.20%	-0.20%
500	20,000,000	709,571.64	709,371.64	0.03548	0.03547	707,971.64	707,771.64	0.03540	0.03539	(1,600.00)	(1,600.00)	-0.23%	-0.23%
600	24,000,000	785,448.44	785,208.44	0.03273	0.03272	783,528.44	783,288.44	0.03265	0.03264	(1,920.00)	(1,920.00)	-0.24%	-0.24%
KWH DISTRIBUTION													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 1 UNDERGROUND RIDER RATES - DELIVERY ONLY**  
**SCHEDULE "GT 3B "**  
**DISTRICT OF COLUMBIA**

HOURS		CURRENT RATES				PROPOSED YEAR 1 RATES				INCREASE			
USE	KWH	\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 10,000 KW													
200	2,000,000	37,701.78	38,501.78	0.01885	0.01925	37,461.78	38,261.78	0.01873	0.01913	(240.00)	(240.00)	-0.64%	-0.62%
300	3,000,000	50,440.98	51,240.98	0.01681	0.01708	50,080.98	50,880.98	0.01669	0.01696	(360.00)	(360.00)	-0.71%	-0.70%
400	4,000,000	63,180.18	63,980.18	0.01580	0.01600	62,700.18	63,500.18	0.01568	0.01588	(480.00)	(480.00)	-0.76%	-0.75%
500	5,000,000	75,919.38	76,719.38	0.01518	0.01534	75,319.38	76,119.38	0.01506	0.01522	(600.00)	(600.00)	-0.79%	-0.78%
600	6,000,000	88,658.58	89,458.58	0.01478	0.01491	87,938.58	88,738.58	0.01466	0.01479	(720.00)	(720.00)	-0.81%	-0.80%
20,000 KW													
200	4,000,000	74,980.18	76,580.18	0.01875	0.01915	74,500.18	76,100.18	0.01863	0.01903	(480.00)	(480.00)	-0.64%	-0.63%
300	6,000,000	100,458.58	102,058.58	0.01674	0.01701	99,738.58	101,338.58	0.01662	0.01689	(720.00)	(720.00)	-0.72%	-0.71%
400	8,000,000	125,936.98	127,536.98	0.01574	0.01594	124,976.98	126,576.98	0.01562	0.01582	(960.00)	(960.00)	-0.76%	-0.75%
500	10,000,000	151,415.38	153,015.38	0.01514	0.01530	150,215.38	151,815.38	0.01502	0.01518	(1,200.00)	(1,200.00)	-0.79%	-0.78%
600	12,000,000	176,893.78	178,493.78	0.01474	0.01487	175,453.78	177,053.78	0.01462	0.01475	(1,440.00)	(1,440.00)	-0.81%	-0.81%
30,000 KW													
200	6,000,000	112,258.58	114,658.58	0.01871	0.01911	111,538.58	113,938.58	0.01859	0.01899	(720.00)	(720.00)	-0.64%	-0.63%
300	9,000,000	150,476.18	152,876.18	0.01672	0.01699	149,396.18	151,796.18	0.01660	0.01687	(1,080.00)	(1,080.00)	-0.72%	-0.71%
400	12,000,000	188,693.78	191,093.78	0.01572	0.01592	187,253.78	189,653.78	0.01560	0.01580	(1,440.00)	(1,440.00)	-0.76%	-0.75%
500	15,000,000	226,911.38	229,311.38	0.01513	0.01529	225,111.38	227,511.38	0.01501	0.01517	(1,800.00)	(1,800.00)	-0.79%	-0.78%
600	18,000,000	265,128.98	267,528.98	0.01473	0.01486	262,968.98	265,368.98	0.01461	0.01474	(2,160.00)	(2,160.00)	-0.81%	-0.81%
40,000 KW													
200	8,000,000	149,536.98	152,736.98	0.01869	0.01909	148,576.98	151,776.98	0.01857	0.01897	(960.00)	(960.00)	-0.64%	-0.63%
300	12,000,000	200,493.78	203,693.78	0.01671	0.01697	199,053.78	202,253.78	0.01659	0.01685	(1,440.00)	(1,440.00)	-0.72%	-0.71%
400	16,000,000	251,450.58	254,650.58	0.01572	0.01592	249,530.58	252,730.58	0.01560	0.01580	(1,920.00)	(1,920.00)	-0.76%	-0.75%
500	20,000,000	302,407.38	305,607.38	0.01512	0.01528	300,007.38	303,207.38	0.01500	0.01516	(2,400.00)	(2,400.00)	-0.79%	-0.79%
600	24,000,000	353,364.18	356,564.18	0.01472	0.01486	350,484.18	353,684.18	0.01460	0.01474	(2,880.00)	(2,880.00)	-0.82%	-0.81%
KWH DISTRIBUTION													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 UNDERGROUND RIDER RATES**  
**SCHEDULE "R"**  
**DISTRICT OF COLUMBIA**

KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE					
	\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)	(\$)	(%)
	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	ANNUAL	ANNUAL
0	17.03	17.11	-	-	17.03	17.11	-	-	0.00	0.00	0.00%	0.00%	0.00	0.00%
10	17.32	17.40	1.73203	1.74003	17.32	17.40	1.73193	1.73993	0.00	0.00	0.00%	0.00%	0.00	0.00%
20	17.61	17.69	0.88053	0.88453	17.61	17.69	0.88043	0.88443	0.00	0.00	0.00%	0.00%	0.00	0.00%
30	17.90	17.98	0.59670	0.59936	17.90	17.98	0.59660	0.59926	0.00	0.00	0.00%	0.00%	0.00	0.00%
40	18.85	18.95	0.47115	0.47380	18.84	18.95	0.47105	0.47370	0.00	0.00	0.00%	0.00%	0.00	0.00%
50	19.79	19.92	0.39582	0.39847	19.79	19.92	0.39572	0.39837	0.00	0.00	0.00%	0.00%	0.00	0.00%
100	24.52	24.78	0.24516	0.24780	24.51	24.77	0.24506	0.24770	-0.01	-0.01	-0.04%	-0.04%	-0.01	-0.04%
200	33.97	34.49	0.16983	0.17246	33.95	34.47	0.16973	0.17236	-0.02	-0.02	-0.06%	-0.06%	-0.02	-0.06%
300	43.42	44.21	0.14472	0.14735	43.39	44.18	0.14462	0.14725	-0.03	-0.03	-0.07%	-0.07%	-0.03	-0.07%
400	52.87	53.92	0.13216	0.13480	52.83	53.88	0.13206	0.13470	-0.04	-0.04	-0.08%	-0.07%	-0.04	-0.07%
500	63.69	64.37	0.12737	0.12873	63.64	64.32	0.12727	0.12863	-0.05	-0.05	-0.08%	-0.08%	-0.05	-0.08%
<b>648</b>	<b>79.70</b>	<b>79.83</b>	<b>0.12300</b>	<b>0.12319</b>	<b>79.64</b>	<b>79.76</b>	<b>0.12290</b>	<b>0.12309</b>	<b>-0.06</b>	<b>-0.06</b>	<b>-0.08%</b>	<b>-0.08%</b>	<b>-0.06</b>	<b>-0.08%</b>
700	85.33	85.26	0.12190	0.12180	85.26	85.19	0.12180	0.12170	-0.07	-0.07	-0.08%	-0.08%	-0.07	-0.08%
750	90.74	90.49	0.12099	0.12065	90.67	90.41	0.12089	0.12055	-0.08	-0.07	-0.09%	-0.08%	-0.07	-0.08%
800	96.15	95.71	0.12019	0.11964	96.07	95.63	0.12009	0.11954	-0.08	-0.08	-0.08%	-0.08%	-0.08	-0.08%
850	101.56	100.93	0.11949	0.11875	101.48	100.85	0.11939	0.11865	-0.09	-0.08	-0.09%	-0.08%	-0.08	-0.08%
900	106.97	106.16	0.11886	0.11795	106.88	106.07	0.11876	0.11785	-0.09	-0.09	-0.08%	-0.08%	-0.09	-0.08%
950	112.39	111.38	0.11830	0.11724	112.29	111.29	0.11820	0.11714	-0.09	-0.09	-0.08%	-0.08%	-0.09	-0.08%
1,000	117.80	116.61	0.11780	0.11661	117.70	116.51	0.11770	0.11651	-0.10	-0.10	-0.08%	-0.09%	-0.10	-0.09%
1,250	144.85	142.73	0.11588	0.11418	144.73	142.60	0.11578	0.11408	-0.13	-0.13	-0.09%	-0.09%	-0.13	-0.09%
1,500	171.91	168.85	0.11460	0.11256	171.76	168.70	0.11450	0.11246	-0.15	-0.15	-0.09%	-0.09%	-0.15	-0.09%
1,750	198.96	194.96	0.11369	0.11141	198.79	194.79	0.11359	0.11131	-0.18	-0.18	-0.09%	-0.09%	-0.18	-0.09%
2,000	226.02	221.08	0.11301	0.11054	225.82	220.88	0.11291	0.11044	-0.20	-0.20	-0.09%	-0.09%	-0.20	-0.09%
2,250	253.07	247.20	0.11248	0.10987	252.84	246.98	0.11238	0.10977	-0.23	-0.22	-0.09%	-0.09%	-0.22	-0.09%
2,500	280.12	273.32	0.11205	0.10933	279.87	273.07	0.11195	0.10923	-0.25	-0.25	-0.09%	-0.09%	-0.25	-0.09%
3,000	334.23	325.56	0.11141	0.10852	333.93	325.26	0.11131	0.10842	-0.30	-0.30	-0.09%	-0.09%	-0.30	-0.09%
3,500	388.34	377.80	0.11096	0.10794	387.99	377.45	0.11086	0.10784	-0.35	-0.35	-0.09%	-0.09%	-0.35	-0.09%
4,000	442.45	430.04	0.11061	0.10751	442.05	429.64	0.11051	0.10741	-0.40	-0.40	-0.09%	-0.09%	-0.40	-0.09%
5,000	550.67	534.52	0.11013	0.10690	550.17	534.02	0.11003	0.10680	-0.50	-0.50	-0.09%	-0.09%	-0.50	-0.09%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 UNDERGROUND RIDER RATES**  
**SCHEDULE "MMA"**  
**DISTRICT OF COLUMBIA**

KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE					
	\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)	(\$)	(%)
	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	ANNUAL	ANNUAL
0	13.57	13.99	-	-	13.57	13.99	-	-	0.00	0.00	0.00%	0.00%	0.00	0.00%
100	20.44	21.82	0.20436	0.21821	20.42	21.81	0.20421	0.21806	-0.02	-0.02	-0.10%	-0.09%	-0.02	-0.09%
200	29.04	31.80	0.14520	0.15901	29.01	31.77	0.14505	0.15886	-0.03	-0.03	-0.10%	-0.09%	-0.03	-0.10%
300	37.64	41.78	0.12547	0.13928	37.60	41.74	0.12532	0.13913	-0.05	-0.05	-0.13%	-0.12%	-0.05	-0.12%
400	46.25	51.76	0.11561	0.12941	46.19	51.70	0.11546	0.12926	-0.06	-0.06	-0.13%	-0.12%	-0.06	-0.12%
500	56.10	62.41	0.11220	0.12483	56.02	62.34	0.11205	0.12468	-0.08	-0.08	-0.14%	-0.13%	-0.08	-0.13%
1000	105.36	115.66	0.10536	0.11566	105.21	115.51	0.10521	0.11551	-0.15	-0.15	-0.14%	-0.13%	-0.15	-0.13%
2000	203.89	222.15	0.10195	0.11107	203.59	221.85	0.10180	0.11092	-0.30	-0.30	-0.15%	-0.14%	-0.30	-0.14%
3000	302.42	328.63	0.10081	0.10954	301.97	328.18	0.10066	0.10939	-0.45	-0.45	-0.15%	-0.14%	-0.45	-0.14%
4000	400.95	435.12	0.10024	0.10878	400.35	434.52	0.10009	0.10863	-0.60	-0.60	-0.15%	-0.14%	-0.60	-0.14%
5000	499.48	541.61	0.09990	0.10832	498.73	540.86	0.09975	0.10817	-0.75	-0.75	-0.15%	-0.14%	-0.75	-0.14%
6000	598.01	648.10	0.09967	0.10802	597.11	647.20	0.09952	0.10787	-0.90	-0.90	-0.15%	-0.14%	-0.90	-0.14%
7000	696.53	754.59	0.09950	0.10780	695.48	753.54	0.09935	0.10765	-1.05	-1.05	-0.15%	-0.14%	-1.05	-0.14%
7500	745.80	807.83	0.09944	0.10771	744.67	806.71	0.09929	0.10756	-1.13	-1.13	-0.15%	-0.14%	-1.13	-0.14%
8000	795.06	861.08	0.09938	0.10763	793.86	859.88	0.09923	0.10748	-1.20	-1.20	-0.15%	-0.14%	-1.20	-0.14%
8500	844.33	914.32	0.09933	0.10757	843.05	913.05	0.09918	0.10742	-1.27	-1.28	-0.15%	-0.14%	-1.28	-0.14%
9000	893.59	967.57	0.09929	0.10751	892.24	966.22	0.09914	0.10736	-1.35	-1.35	-0.15%	-0.14%	-1.35	-0.14%
9500	942.86	1,020.81	0.09925	0.10745	941.43	1,019.39	0.09910	0.10730	-1.42	-1.42	-0.15%	-0.14%	-1.42	-0.14%
10000	992.12	1,074.06	0.09921	0.10741	990.62	1,072.56	0.09906	0.10726	-1.50	-1.50	-0.15%	-0.14%	-1.50	-0.14%
12500	1,238.44	1,340.28	0.09908	0.10722	1,236.57	1,338.40	0.09893	0.10707	-1.88	-1.88	-0.15%	-0.14%	-1.88	-0.14%
15000	1,484.76	1,606.50	0.09898	0.10710	1,482.51	1,604.25	0.09883	0.10695	-2.25	-2.25	-0.15%	-0.14%	-2.25	-0.14%
17500	1,731.09	1,872.72	0.09892	0.10701	1,728.46	1,870.10	0.09877	0.10686	-2.63	-2.63	-0.15%	-0.14%	-2.63	-0.15%
20000	1,977.41	2,138.94	0.09887	0.10695	1,974.41	2,135.94	0.09872	0.10680	-3.00	-3.00	-0.15%	-0.14%	-3.00	-0.14%
22500	2,223.73	2,405.16	0.09883	0.10690	2,220.35	2,401.79	0.09868	0.10675	-3.38	-3.38	-0.15%	-0.14%	-3.38	-0.15%
25000	2,470.05	2,671.39	0.09880	0.10686	2,466.30	2,667.64	0.09865	0.10671	-3.75	-3.75	-0.15%	-0.14%	-3.75	-0.14%
30000	2,962.69	3,203.83	0.09876	0.10679	2,958.19	3,199.33	0.09861	0.10664	-4.50	-4.50	-0.15%	-0.14%	-4.50	-0.15%
35000	3,455.34	3,736.27	0.09872	0.10675	3,450.09	3,731.02	0.09857	0.10660	-5.25	-5.25	-0.15%	-0.14%	-5.25	-0.15%
40000	3,947.98	4,268.72	0.09870	0.10672	3,941.98	4,262.72	0.09855	0.10657	-6.00	-6.00	-0.15%	-0.14%	-6.00	-0.15%
50000	4,933.27	5,333.60	0.09867	0.10667	4,925.77	5,326.10	0.09852	0.10652	-7.50	-7.50	-0.15%	-0.14%	-7.50	-0.15%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**

**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 UNDERGROUND RIDER RATES**

**SCHEDULE "GS ND"**

**DISTRICT OF COLUMBIA**

KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE					
	\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)	(\$)	(%)
	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	ANNUAL	ANNUAL
0	27.42	27.42	-	-	27.42	27.42	-	-	0.00	0.00	0.00%	0.00%	0.00	0.00%
10	28.63	28.57	2.86336	2.85674	28.62	28.56	2.86230	2.85568	-0.01	-0.01	-0.03%	-0.04%	-0.01	-0.03%
20	29.85	29.71	1.49236	1.48574	29.83	29.69	1.49130	1.48468	-0.02	-0.02	-0.07%	-0.07%	-0.02	-0.07%
30	31.06	30.86	1.03536	1.02874	31.03	30.83	1.03430	1.02768	-0.03	-0.03	-0.10%	-0.10%	-0.03	-0.10%
40	32.27	32.01	0.80686	0.80024	32.23	31.97	0.80580	0.79918	-0.04	-0.04	-0.12%	-0.12%	-0.04	-0.12%
50	33.49	33.16	0.66976	0.66314	33.44	33.10	0.66870	0.66208	-0.05	-0.05	-0.15%	-0.15%	-0.05	-0.15%
100	39.56	38.89	0.39556	0.38894	39.45	38.79	0.39450	0.38788	-0.11	-0.11	-0.28%	-0.28%	-0.11	-0.28%
150	45.62	44.63	0.30416	0.29754	45.47	44.47	0.30310	0.29648	-0.16	-0.16	-0.35%	-0.36%	-0.16	-0.36%
200	51.69	50.37	0.25846	0.25184	51.48	50.16	0.25740	0.25078	-0.21	-0.21	-0.41%	-0.42%	-0.21	-0.41%
250	57.76	56.11	0.23104	0.22442	57.50	55.84	0.22998	0.22336	-0.27	-0.27	-0.47%	-0.48%	-0.27	-0.48%
300	63.83	61.84	0.21276	0.20614	63.51	61.52	0.21170	0.20508	-0.32	-0.32	-0.50%	-0.52%	-0.32	-0.51%
400	75.96	73.32	0.18991	0.18329	75.54	72.89	0.18885	0.18223	-0.42	-0.42	-0.55%	-0.57%	-0.42	-0.56%
500	88.10	84.79	0.17620	0.16958	87.57	84.26	0.17514	0.16852	-0.53	-0.53	-0.60%	-0.63%	-0.53	-0.62%
600	100.24	96.26	0.16706	0.16044	99.60	95.63	0.16600	0.15938	-0.64	-0.64	-0.64%	-0.66%	-0.64	-0.65%
700	112.37	107.74	0.16053	0.15391	111.63	107.00	0.15947	0.15285	-0.74	-0.74	-0.66%	-0.69%	-0.74	-0.67%
800	124.51	119.21	0.15564	0.14902	123.66	118.36	0.15458	0.14796	-0.85	-0.85	-0.68%	-0.71%	-0.85	-0.70%
900	136.64	130.69	0.15183	0.14521	135.69	129.73	0.15077	0.14415	-0.95	-0.95	-0.70%	-0.73%	-0.95	-0.71%
1,000	148.78	142.16	0.14878	0.14216	147.72	141.10	0.14772	0.14110	-1.06	-1.06	-0.71%	-0.75%	-1.06	-0.73%
1,250	179.12	170.85	0.14330	0.13668	177.80	169.52	0.14224	0.13562	-1.32	-1.32	-0.74%	-0.77%	-1.32	-0.76%
1,500	209.46	199.53	0.13964	0.13302	207.87	197.94	0.13858	0.13196	-1.59	-1.59	-0.76%	-0.80%	-1.59	-0.78%
1,750	239.80	228.22	0.13703	0.13041	237.95	226.36	0.13597	0.12935	-1.86	-1.85	-0.78%	-0.81%	-1.85	-0.80%
2,000	270.14	256.90	0.13507	0.12845	268.02	254.78	0.13401	0.12739	-2.12	-2.12	-0.78%	-0.83%	-2.12	-0.81%
2,500	330.82	314.27	0.13233	0.12571	328.17	311.62	0.13127	0.12465	-2.65	-2.65	-0.80%	-0.84%	-2.65	-0.83%
3,000	391.50	371.64	0.13050	0.12388	388.32	368.46	0.12944	0.12282	-3.18	-3.18	-0.81%	-0.86%	-3.18	-0.84%
3,500	452.18	429.01	0.12919	0.12257	448.47	425.30	0.12813	0.12151	-3.71	-3.71	-0.82%	-0.86%	-3.71	-0.85%
4,000	512.86	486.38	0.12822	0.12160	508.62	482.14	0.12716	0.12054	-4.24	-4.24	-0.83%	-0.87%	-4.24	-0.85%
5,000	634.22	601.12	0.12684	0.12022	628.92	595.82	0.12578	0.11916	-5.30	-5.30	-0.84%	-0.88%	-5.30	-0.86%
6,000	755.58	715.86	0.12593	0.11931	749.22	709.50	0.12487	0.11825	-6.36	-6.36	-0.84%	-0.89%	-6.36	-0.87%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in .

POTOMAC ELECTRIC POWER COMPANY

EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 UNDERGROUND RIDER RATES

SCHEDULE "GS D LV"  
DISTRICT OF COLUMBIA

KW	Hours	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
			\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
			SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
10	100	1000	220.67	227.59	0.22067	0.22759	221.54	228.46	0.22154	0.22846	0.87	0.87	0.39%	0.38%
	200	2000	331.08	344.92	0.16554	0.17246	332.82	346.66	0.16641	0.17333	1.74	1.74	0.53%	0.50%
	300	3000	441.48	462.24	0.14716	0.15408	444.09	464.85	0.14803	0.15495	2.61	2.61	0.59%	0.56%
	400	4000	551.88	579.56	0.13797	0.14489	555.36	583.04	0.13884	0.14576	3.48	3.48	0.63%	0.60%
	500	5000	662.29	696.89	0.13246	0.13938	666.64	701.24	0.13333	0.14025	4.35	4.35	0.66%	0.62%
	600	6000	772.69	814.21	0.12878	0.13570	777.91	819.43	0.12965	0.13657	5.22	5.22	0.68%	0.64%
25	100	2,500	498.93	516.23	0.19957	0.20649	501.10	518.40	0.20044	0.20736	2.18	2.17	0.44%	0.42%
	200	5,000	774.94	809.54	0.15499	0.16191	779.29	813.89	0.15586	0.16278	4.35	4.35	0.56%	0.54%
	300	7,500	1,050.94	1,102.84	0.14013	0.14705	1,057.47	1,109.37	0.14100	0.14792	6.53	6.53	0.62%	0.59%
	400	10,000	1,326.95	1,396.15	0.13270	0.13962	1,335.65	1,404.85	0.13357	0.14049	8.70	8.70	0.66%	0.62%
	500	12,500	1,602.96	1,689.46	0.12824	0.13516	1,613.84	1,700.34	0.12911	0.13603	10.88	10.88	0.68%	0.64%
	600	15,000	1,878.97	1,982.77	0.12526	0.13218	1,892.02	1,995.82	0.12613	0.13305	13.05	13.05	0.69%	0.66%
50	100	5,000	962.69	997.29	0.19254	0.19946	967.04	1,001.64	0.19341	0.20033	4.35	4.35	0.45%	0.44%
	200	10,000	1,514.70	1,583.90	0.15147	0.15839	1,523.40	1,592.60	0.15234	0.15926	8.70	8.70	0.57%	0.55%
	300	15,000	2,066.72	2,170.52	0.13778	0.14470	2,079.77	2,183.57	0.13865	0.14557	13.05	13.05	0.63%	0.60%
	400	20,000	2,618.73	2,757.13	0.13094	0.13786	2,636.13	2,774.53	0.13181	0.13873	17.40	17.40	0.66%	0.63%
	500	25,000	3,170.75	3,343.75	0.12683	0.13375	3,192.50	3,365.50	0.12770	0.13462	21.75	21.75	0.69%	0.65%
	600	30,000	3,722.77	3,930.37	0.12409	0.13101	3,748.87	3,956.47	0.12496	0.13188	26.10	26.10	0.70%	0.66%
75	100	7,500	1,426.44	1,478.34	0.19019	0.19711	1,432.97	1,484.87	0.19106	0.19798	6.53	6.53	0.46%	0.44%
	200	15,000	2,254.47	2,358.27	0.15030	0.15722	2,267.52	2,371.32	0.15117	0.15809	13.05	13.05	0.58%	0.55%
	300	22,500	3,082.49	3,238.19	0.13700	0.14392	3,102.07	3,257.77	0.13787	0.14479	19.57	19.57	0.63%	0.60%
	400	30,000	3,910.52	4,118.12	0.13035	0.13727	3,936.62	4,144.22	0.13122	0.13814	26.10	26.10	0.67%	0.63%
	500	37,500	4,738.54	4,998.04	0.12636	0.13328	4,771.17	5,030.67	0.12723	0.13415	32.63	32.63	0.69%	0.65%
	600	45,000	5,566.56	5,877.96	0.12370	0.13062	5,605.71	5,917.11	0.12457	0.13149	39.15	39.15	0.70%	0.67%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 UNDERGROUND RIDER RATES - DELIVERY ONLY**  
**SCHEDULE "MGT LV "**  
**DISTRICT OF COLUMBIA**

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 25 KW													
200	5,000	859.51	859.51	0.17190	0.17190	858.66	858.66	0.17173	0.17173	(0.85)	(0.85)	-0.10%	-0.10%
300	7,500	922.75	922.75	0.12303	0.12303	921.48	921.48	0.12286	0.12286	(1.28)	(1.28)	-0.14%	-0.14%
400	10,000	986.00	986.00	0.09860	0.09860	984.30	984.30	0.09843	0.09843	(1.70)	(1.70)	-0.17%	-0.17%
500	12,500	1,049.25	1,049.25	0.08394	0.08394	1,047.13	1,047.13	0.08377	0.08377	(2.13)	(2.13)	-0.20%	-0.20%
600	15,000	1,112.50	1,112.50	0.07417	0.07417	1,109.95	1,109.95	0.07400	0.07400	(2.55)	(2.55)	-0.23%	-0.23%
50 KW													
200	10,000	1,262.25	1,262.25	0.12623	0.12623	1,260.55	1,260.55	0.12606	0.12606	(1.70)	(1.70)	-0.13%	-0.13%
300	15,000	1,388.75	1,388.75	0.09258	0.09258	1,386.20	1,386.20	0.09241	0.09241	(2.55)	(2.55)	-0.18%	-0.18%
400	20,000	1,515.24	1,515.24	0.07576	0.07576	1,511.84	1,511.84	0.07559	0.07559	(3.40)	(3.40)	-0.22%	-0.22%
500	25,000	1,641.74	1,641.74	0.06567	0.06567	1,637.49	1,637.49	0.06550	0.06550	(4.25)	(4.25)	-0.26%	-0.26%
600	30,000	1,768.24	1,768.24	0.05894	0.05894	1,763.14	1,763.14	0.05877	0.05877	(5.10)	(5.10)	-0.29%	-0.29%
75 KW													
200	15,000	1,665.00	1,665.00	0.11100	0.11100	1,662.45	1,662.45	0.11083	0.11083	(2.55)	(2.55)	-0.15%	-0.15%
300	22,500	1,854.74	1,854.74	0.08243	0.08243	1,850.92	1,850.92	0.08226	0.08226	(3.83)	(3.83)	-0.21%	-0.21%
400	30,000	2,044.49	2,044.49	0.06815	0.06815	2,039.39	2,039.39	0.06798	0.06798	(5.10)	(5.10)	-0.25%	-0.25%
500	37,500	2,234.23	2,234.23	0.05958	0.05958	2,227.86	2,227.86	0.05941	0.05941	(6.38)	(6.38)	-0.29%	-0.29%
600	45,000	2,423.97	2,423.97	0.05387	0.05387	2,416.32	2,416.32	0.05370	0.05370	(7.65)	(7.65)	-0.32%	-0.32%
100 KW													
200	20,000	2,067.74	2,067.74	0.10339	0.10339	2,064.34	2,064.34	0.10322	0.10322	(3.40)	(3.40)	-0.16%	-0.16%
300	30,000	2,320.74	2,320.74	0.07736	0.07736	2,315.64	2,315.64	0.07719	0.07719	(5.10)	(5.10)	-0.22%	-0.22%
400	40,000	2,573.73	2,573.73	0.06434	0.06434	2,566.93	2,566.93	0.06417	0.06417	(6.80)	(6.80)	-0.26%	-0.26%
500	50,000	2,826.72	2,826.72	0.05653	0.05653	2,818.22	2,818.22	0.05636	0.05636	(8.50)	(8.50)	-0.30%	-0.30%
600	60,000	3,079.71	3,079.71	0.05133	0.05133	3,069.51	3,069.51	0.05116	0.05116	(10.20)	(10.20)	-0.33%	-0.33%

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
400	HOURS USE =	30%	26%	44%
500	HOURS USE =	27%	25%	48%
600	HOURS USE =	25%	24%	51%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 UNDERGROUND RIDER RATES - DELIVERY ONLY**  
**SCHEDULE "MGT LV "**  
**DISTRICT OF COLUMBIA**

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
<b>MAXIMUM AND ON PEAK DEMAND = 200 KW</b>													
200	40,000	3,678.73	3,678.73	0.09197	0.09197	3,671.93	3,671.93	0.09180	0.09180	(6.80)	(6.80)	-0.18%	-0.18%
300	60,000	4,184.71	4,184.71	0.06975	0.06975	4,174.51	4,174.51	0.06958	0.06958	(10.20)	(10.20)	-0.24%	-0.24%
400	80,000	4,690.70	4,690.70	0.05863	0.05863	4,677.10	4,677.10	0.05846	0.05846	(13.60)	(13.60)	-0.29%	-0.29%
500	100,000	5,196.68	5,196.68	0.05197	0.05197	5,179.68	5,179.68	0.05180	0.05180	(17.00)	(17.00)	-0.33%	-0.33%
600	120,000	5,702.66	5,702.66	0.04752	0.04752	5,682.26	5,682.26	0.04735	0.04735	(20.40)	(20.40)	-0.36%	-0.36%
<b>400 KW</b>													
200	80,000	6,900.70	6,900.70	0.08626	0.08626	6,887.10	6,887.10	0.08609	0.08609	(13.60)	(13.60)	-0.20%	-0.20%
300	120,000	7,912.66	7,912.66	0.06594	0.06594	7,892.26	7,892.26	0.06577	0.06577	(20.40)	(20.40)	-0.26%	-0.26%
400	160,000	8,924.63	8,924.63	0.05578	0.05578	8,897.43	8,897.43	0.05561	0.05561	(27.20)	(27.20)	-0.30%	-0.30%
500	200,000	9,936.60	9,936.60	0.04968	0.04968	9,902.60	9,902.60	0.04951	0.04951	(34.00)	(34.00)	-0.34%	-0.34%
600	240,000	10,948.57	10,948.57	0.04562	0.04562	10,907.77	10,907.77	0.04545	0.04545	(40.80)	(40.80)	-0.37%	-0.37%
<b>600 KW</b>													
200	120,000	10,122.66	10,122.66	0.08436	0.08436	10,102.26	10,102.26	0.08419	0.08419	(20.40)	(20.40)	-0.20%	-0.20%
300	180,000	11,640.62	11,640.62	0.06467	0.06467	11,610.02	11,610.02	0.06450	0.06450	(30.60)	(30.60)	-0.26%	-0.26%
400	240,000	13,158.57	13,158.57	0.05483	0.05483	13,117.77	13,117.77	0.05466	0.05466	(40.80)	(40.80)	-0.31%	-0.31%
500	300,000	14,676.52	14,676.52	0.04892	0.04892	14,625.52	14,625.52	0.04875	0.04875	(51.00)	(51.00)	-0.35%	-0.35%
600	360,000	16,194.47	16,194.47	0.04498	0.04498	16,133.27	16,133.27	0.04481	0.04481	(61.20)	(61.20)	-0.38%	-0.38%
<b>800 KW</b>													
200	160,000	13,344.63	13,344.63	0.08340	0.08340	13,317.43	13,317.43	0.08323	0.08323	(27.20)	(27.20)	-0.20%	-0.20%
300	240,000	15,368.57	15,368.57	0.06404	0.06404	15,327.77	15,327.77	0.06387	0.06387	(40.80)	(40.80)	-0.27%	-0.27%
400	320,000	17,392.50	17,392.50	0.05435	0.05435	17,338.10	17,338.10	0.05418	0.05418	(54.40)	(54.40)	-0.31%	-0.31%
500	400,000	19,416.44	19,416.44	0.04854	0.04854	19,348.44	19,348.44	0.04837	0.04837	(68.00)	(68.00)	-0.35%	-0.35%
600	480,000	21,440.38	21,440.38	0.04467	0.04467	21,358.78	21,358.78	0.04450	0.04450	(81.60)	(81.60)	-0.38%	-0.38%

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
400	HOURS USE =	30%	26%	44%
500	HOURS USE =	27%	25%	48%
600	HOURS USE =	25%	24%	51%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY

EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 UNDERGROUND RIDER RATES - DELIVERY ONLY

SCHEDULE "GT LV "  
DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
						MAXIMUM AND ON PEAK DEMAND = 100 KW							
200	20,000	2,067.74	2,067.74	0.10339	0.10339	2,064.34	2,064.34	0.10322	0.10322	(3.40)	(3.40)	-0.16%	-0.16%
300	30,000	2,320.74	2,320.74	0.07736	0.07736	2,315.64	2,315.64	0.07719	0.07719	(5.10)	(5.10)	-0.22%	-0.22%
400	40,000	2,573.73	2,573.73	0.06434	0.06434	2,566.93	2,566.93	0.06417	0.06417	(6.80)	(6.80)	-0.26%	-0.26%
500	50,000	2,826.72	2,826.72	0.05653	0.05653	2,818.22	2,818.22	0.05636	0.05636	(8.50)	(8.50)	-0.30%	-0.30%
600	60,000	3,079.71	3,079.71	0.05133	0.05133	3,069.51	3,069.51	0.05116	0.05116	(10.20)	(10.20)	-0.33%	-0.33%
										300 KW			
200	60,000	5,289.71	5,289.71	0.08816	0.08816	5,279.51	5,279.51	0.08799	0.08799	(10.20)	(10.20)	-0.19%	-0.19%
300	90,000	6,048.69	6,048.69	0.06721	0.06721	6,033.39	6,033.39	0.06704	0.06704	(15.30)	(15.30)	-0.25%	-0.25%
400	120,000	6,807.66	6,807.66	0.05673	0.05673	6,787.26	6,787.26	0.05656	0.05656	(20.40)	(20.40)	-0.30%	-0.30%
500	150,000	7,566.64	7,566.64	0.05044	0.05044	7,541.14	7,541.14	0.05027	0.05027	(25.50)	(25.50)	-0.34%	-0.34%
600	180,000	8,325.62	8,325.62	0.04625	0.04625	8,295.02	8,295.02	0.04608	0.04608	(30.60)	(30.60)	-0.37%	-0.37%
										500 KW			
200	100,000	8,511.68	8,511.68	0.08512	0.08512	8,494.68	8,494.68	0.08495	0.08495	(17.00)	(17.00)	-0.20%	-0.20%
300	150,000	9,776.64	9,776.64	0.06518	0.06518	9,751.14	9,751.14	0.06501	0.06501	(25.50)	(25.50)	-0.26%	-0.26%
400	200,000	11,041.60	11,041.60	0.05521	0.05521	11,007.60	11,007.60	0.05504	0.05504	(34.00)	(34.00)	-0.31%	-0.31%
500	250,000	12,306.56	12,306.56	0.04923	0.04923	12,264.06	12,264.06	0.04906	0.04906	(42.50)	(42.50)	-0.35%	-0.35%
600	300,000	13,571.52	13,571.52	0.04524	0.04524	13,520.52	13,520.52	0.04507	0.04507	(51.00)	(51.00)	-0.38%	-0.38%
										1,000 KW			
200	200,000	16,566.60	16,566.60	0.08283	0.08283	16,532.60	16,532.60	0.08266	0.08266	(34.00)	(34.00)	-0.21%	-0.21%
300	300,000	19,096.52	19,096.52	0.06366	0.06366	19,045.52	19,045.52	0.06349	0.06349	(51.00)	(51.00)	-0.27%	-0.27%
400	400,000	21,626.44	21,626.44	0.05407	0.05407	21,558.44	21,558.44	0.05390	0.05390	(68.00)	(68.00)	-0.31%	-0.31%
500	500,000	24,156.36	24,156.36	0.04831	0.04831	24,071.36	24,071.36	0.04814	0.04814	(85.00)	(85.00)	-0.35%	-0.35%
600	600,000	26,686.28	26,686.28	0.04448	0.04448	26,584.28	26,584.28	0.04431	0.04431	(102.00)	(102.00)	-0.38%	-0.38%

KWH DISTRIBUTION		ON PK	INT	OFF PK
200	HOURS USE =	31%	29%	40%
300	HOURS USE =	33%	27%	40%
400	HOURS USE =	30%	26%	44%
500	HOURS USE =	27%	25%	48%
600	HOURS USE =	25%	24%	51%

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 UNDERGROUND RIDER RATES - DELIVERY ONLY**  
**SCHEDULE "GT LV "**  
**DISTRICT OF COLUMBIA**

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
<b>MAXIMUM AND ON PEAK DEMAND = 2,000 KW</b>													
200	400,000	32,676.44	32,676.44	0.08169	0.08169	32,608.44	32,608.44	0.08152	0.08152	(68.00)	(68.00)	-0.21%	-0.21%
300	600,000	37,736.28	37,736.28	0.06289	0.06289	37,634.28	37,634.28	0.06272	0.06272	(102.00)	(102.00)	-0.27%	-0.27%
400	800,000	42,796.12	42,796.12	0.05350	0.05350	42,660.12	42,660.12	0.05333	0.05333	(136.00)	(136.00)	-0.32%	-0.32%
500	1,000,000	47,855.96	47,855.96	0.04786	0.04786	47,685.96	47,685.96	0.04769	0.04769	(170.00)	(170.00)	-0.36%	-0.36%
600	1,200,000	52,915.80	52,915.80	0.04410	0.04410	52,711.80	52,711.80	0.04393	0.04393	(204.00)	(204.00)	-0.39%	-0.39%
<b>4,000 KW</b>													
200	800,000	64,896.12	64,896.12	0.08112	0.08112	64,760.12	64,760.12	0.08095	0.08095	(136.00)	(136.00)	-0.21%	-0.21%
300	1,200,000	75,015.80	75,015.80	0.06251	0.06251	74,811.80	74,811.80	0.06234	0.06234	(204.00)	(204.00)	-0.27%	-0.27%
400	1,600,000	85,135.48	85,135.48	0.05321	0.05321	84,863.48	84,863.48	0.05304	0.05304	(272.00)	(272.00)	-0.32%	-0.32%
500	2,000,000	95,255.16	95,255.16	0.04763	0.04763	94,915.16	94,915.16	0.04746	0.04746	(340.00)	(340.00)	-0.36%	-0.36%
600	2,400,000	105,374.84	105,374.84	0.04391	0.04391	104,966.84	104,966.84	0.04374	0.04374	(408.00)	(408.00)	-0.39%	-0.39%
<b>6,000 KW</b>													
200	1,200,000	97,115.80	97,115.80	0.08093	0.08093	96,911.80	96,911.80	0.08076	0.08076	(204.00)	(204.00)	-0.21%	-0.21%
300	1,800,000	112,295.32	112,295.32	0.06239	0.06239	111,989.32	111,989.32	0.06222	0.06222	(306.00)	(306.00)	-0.27%	-0.27%
400	2,400,000	127,474.84	127,474.84	0.05311	0.05311	127,066.84	127,066.84	0.05294	0.05294	(408.00)	(408.00)	-0.32%	-0.32%
500	3,000,000	142,654.36	142,654.36	0.04755	0.04755	142,144.36	142,144.36	0.04738	0.04738	(510.00)	(510.00)	-0.36%	-0.36%
600	3,600,000	157,833.88	157,833.88	0.04384	0.04384	157,221.88	157,221.88	0.04367	0.04367	(612.00)	(612.00)	-0.39%	-0.39%
<b>8,000 KW</b>													
200	1,600,000	129,335.48	129,335.48	0.08083	0.08083	129,063.48	129,063.48	0.08066	0.08066	(272.00)	(272.00)	-0.21%	-0.21%
300	2,400,000	149,574.84	149,574.84	0.06232	0.06232	149,166.84	149,166.84	0.06215	0.06215	(408.00)	(408.00)	-0.27%	-0.27%
400	3,200,000	169,814.20	169,814.20	0.05307	0.05307	169,270.20	169,270.20	0.05290	0.05290	(544.00)	(544.00)	-0.32%	-0.32%
500	4,000,000	190,053.56	190,053.56	0.04751	0.04751	189,373.56	189,373.56	0.04734	0.04734	(680.00)	(680.00)	-0.36%	-0.36%
600	4,800,000	210,292.92	210,292.92	0.04381	0.04381	209,476.92	209,476.92	0.04364	0.04364	(816.00)	(816.00)	-0.39%	-0.39%
<b>KWH DISTRIBUTION</b>													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

POTOMAC ELECTRIC POWER COMPANY

EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 UNDERGROUND RIDER RATES - DELIVERY ONLY

SCHEDULE "GT 3A"

DISTRICT OF COLUMBIA

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 1,000 KW													
200	200,000	12,231.48	12,229.48	0.06116	0.06115	12,221.48	12,219.48	0.06111	0.06110	(10.00)	(10.00)	-0.08%	-0.08%
300	300,000	14,128.40	14,125.40	0.04709	0.04708	14,113.40	14,110.40	0.04704	0.04703	(15.00)	(15.00)	-0.11%	-0.11%
400	400,000	16,025.32	16,021.32	0.04006	0.04005	16,005.32	16,001.32	0.04001	0.04000	(20.00)	(20.00)	-0.12%	-0.12%
500	500,000	17,922.24	17,917.24	0.03584	0.03583	17,897.24	17,892.24	0.03579	0.03578	(25.00)	(25.00)	-0.14%	-0.14%
600	600,000	19,819.16	19,813.16	0.03303	0.03302	19,789.16	19,783.16	0.03298	0.03297	(30.00)	(30.00)	-0.15%	-0.15%
2,000 KW													
200	400,000	24,275.32	24,271.32	0.06069	0.06068	24,255.32	24,251.32	0.06064	0.06063	(20.00)	(20.00)	-0.08%	-0.08%
300	600,000	28,069.16	28,063.16	0.04678	0.04677	28,039.16	28,033.16	0.04673	0.04672	(30.00)	(30.00)	-0.11%	-0.11%
400	800,000	31,863.00	31,855.00	0.03983	0.03982	31,823.00	31,815.00	0.03978	0.03977	(40.00)	(40.00)	-0.13%	-0.13%
500	1,000,000	35,656.84	35,646.84	0.03566	0.03565	35,606.84	35,596.84	0.03561	0.03560	(50.00)	(50.00)	-0.14%	-0.14%
600	1,200,000	39,450.68	39,438.68	0.03288	0.03287	39,390.68	39,378.68	0.03283	0.03282	(60.00)	(60.00)	-0.15%	-0.15%
5,000 KW													
200	1,000,000	60,406.84	60,396.84	0.06041	0.06040	60,356.84	60,346.84	0.06036	0.06035	(50.00)	(50.00)	-0.08%	-0.08%
300	1,500,000	69,891.44	69,876.44	0.04659	0.04658	69,816.44	69,801.44	0.04654	0.04653	(75.00)	(75.00)	-0.11%	-0.11%
400	2,000,000	79,376.04	79,356.04	0.03969	0.03968	79,276.04	79,256.04	0.03964	0.03963	(100.00)	(100.00)	-0.13%	-0.13%
500	2,500,000	88,860.64	88,835.64	0.03554	0.03553	88,735.64	88,710.64	0.03549	0.03548	(125.00)	(125.00)	-0.14%	-0.14%
600	3,000,000	98,345.24	98,315.24	0.03278	0.03277	98,195.24	98,165.24	0.03273	0.03272	(150.00)	(150.00)	-0.15%	-0.15%
7,500 KW													
200	1,500,000	90,516.44	90,501.44	0.06034	0.06033	90,441.44	90,426.44	0.06029	0.06028	(75.00)	(75.00)	-0.08%	-0.08%
300	2,250,000	104,743.34	104,720.84	0.04655	0.04654	104,630.84	104,608.34	0.04650	0.04649	(112.50)	(112.50)	-0.11%	-0.11%
400	3,000,000	118,970.24	118,940.24	0.03966	0.03965	118,820.24	118,790.24	0.03961	0.03960	(150.00)	(150.00)	-0.13%	-0.13%
500	3,750,000	133,197.14	133,159.64	0.03552	0.03551	133,009.64	132,972.14	0.03547	0.03546	(187.50)	(187.50)	-0.14%	-0.14%
600	4,500,000	147,424.04	147,379.04	0.03276	0.03275	147,199.04	147,154.04	0.03271	0.03270	(225.00)	(225.00)	-0.15%	-0.15%
KWH DISTRIBUTION													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 UNDERGROUND RIDER RATES - DELIVERY ONLY**  
**SCHEDULE "GT 3A "**  
**DISTRICT OF COLUMBIA**

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 10,000 KW													
200	2,000,000	120,626.04	120,606.04	0.06031	0.06030	120,526.04	120,506.04	0.06026	0.06025	(100.00)	(100.00)	-0.08%	-0.08%
300	3,000,000	139,595.24	139,565.24	0.04653	0.04652	139,445.24	139,415.24	0.04648	0.04647	(150.00)	(150.00)	-0.11%	-0.11%
400	4,000,000	158,564.44	158,524.44	0.03964	0.03963	158,364.44	158,324.44	0.03959	0.03958	(200.00)	(200.00)	-0.13%	-0.13%
500	5,000,000	177,533.64	177,483.64	0.03551	0.03550	177,283.64	177,233.64	0.03546	0.03545	(250.00)	(250.00)	-0.14%	-0.14%
600	6,000,000	196,502.84	196,442.84	0.03275	0.03274	196,202.84	196,142.84	0.03270	0.03269	(300.00)	(300.00)	-0.15%	-0.15%
20,000 KW													
200	4,000,000	241,064.44	241,024.44	0.06027	0.06026	240,864.44	240,824.44	0.06022	0.06021	(200.00)	(200.00)	-0.08%	-0.08%
300	6,000,000	279,002.84	278,942.84	0.04650	0.04649	278,702.84	278,642.84	0.04645	0.04644	(300.00)	(300.00)	-0.11%	-0.11%
400	8,000,000	316,941.24	316,861.24	0.03962	0.03961	316,541.24	316,461.24	0.03957	0.03956	(400.00)	(400.00)	-0.13%	-0.13%
500	10,000,000	354,879.64	354,779.64	0.03549	0.03548	354,379.64	354,279.64	0.03544	0.03543	(500.00)	(500.00)	-0.14%	-0.14%
600	12,000,000	392,818.04	392,698.04	0.03273	0.03272	392,218.04	392,098.04	0.03268	0.03267	(600.00)	(600.00)	-0.15%	-0.15%
30,000 KW													
200	6,000,000	361,502.84	361,442.84	0.06025	0.06024	361,202.84	361,142.84	0.06020	0.06019	(300.00)	(300.00)	-0.08%	-0.08%
300	9,000,000	418,410.44	418,320.44	0.04649	0.04648	417,960.44	417,870.44	0.04644	0.04643	(450.00)	(450.00)	-0.11%	-0.11%
400	12,000,000	475,318.04	475,198.04	0.03961	0.03960	474,718.04	474,598.04	0.03956	0.03955	(600.00)	(600.00)	-0.13%	-0.13%
500	15,000,000	532,225.64	532,075.64	0.03548	0.03547	531,475.64	531,325.64	0.03543	0.03542	(750.00)	(750.00)	-0.14%	-0.14%
600	18,000,000	589,133.24	588,953.24	0.03273	0.03272	588,233.24	588,053.24	0.03268	0.03267	(900.00)	(900.00)	-0.15%	-0.15%
40,000 KW													
200	8,000,000	481,941.24	481,861.24	0.06024	0.06023	481,541.24	481,461.24	0.06019	0.06018	(400.00)	(400.00)	-0.08%	-0.08%
300	12,000,000	557,818.04	557,698.04	0.04648	0.04647	557,218.04	557,098.04	0.04643	0.04642	(600.00)	(600.00)	-0.11%	-0.11%
400	16,000,000	633,694.84	633,534.84	0.03961	0.03960	632,894.84	632,734.84	0.03956	0.03955	(800.00)	(800.00)	-0.13%	-0.13%
500	20,000,000	709,571.64	709,371.64	0.03548	0.03547	708,571.64	708,371.64	0.03543	0.03542	(1,000.00)	(1,000.00)	-0.14%	-0.14%
600	24,000,000	785,448.44	785,208.44	0.03273	0.03272	784,248.44	784,008.44	0.03268	0.03267	(1,200.00)	(1,200.00)	-0.15%	-0.15%
KWH DISTRIBUTION													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**POTOMAC ELECTRIC POWER COMPANY**  
**EXAMPLES COMPARING BILLS UNDER PRESENT AND PROPOSED YEAR 2 UNDERGROUND RIDER RATES - DELIVERY ONLY**  
**SCHEDULE "GT 3B "**  
**DISTRICT OF COLUMBIA**

HOURS USE	KWH	CURRENT RATES				PROPOSED YEAR 2 RATES				INCREASE			
		\$ AMOUNT OF BILL		\$/KWH		\$ AMOUNT OF BILL		\$/KWH		(\$)	(\$)	(%)	(%)
		SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER	WINTER
MAXIMUM AND ON PEAK DEMAND = 10,000 KW													
200	2,000,000	37,701.78	38,501.78	0.01885	0.01925	37,481.78	38,281.78	0.01874	0.01914	(220.00)	(220.00)	-0.58%	-0.57%
300	3,000,000	50,440.98	51,240.98	0.01681	0.01708	50,110.98	50,910.98	0.01670	0.01697	(330.00)	(330.00)	-0.65%	-0.64%
400	4,000,000	63,180.18	63,980.18	0.01580	0.01600	62,740.18	63,540.18	0.01569	0.01589	(440.00)	(440.00)	-0.70%	-0.69%
500	5,000,000	75,919.38	76,719.38	0.01518	0.01534	75,369.38	76,169.38	0.01507	0.01523	(550.00)	(550.00)	-0.72%	-0.72%
600	6,000,000	88,658.58	89,458.58	0.01478	0.01491	87,998.58	88,798.58	0.01467	0.01480	(660.00)	(660.00)	-0.74%	-0.74%
20,000 KW													
200	4,000,000	74,980.18	76,580.18	0.01875	0.01915	74,540.18	76,140.18	0.01864	0.01904	(440.00)	(440.00)	-0.59%	-0.57%
300	6,000,000	100,458.58	102,058.58	0.01674	0.01701	99,798.58	101,398.58	0.01663	0.01690	(660.00)	(660.00)	-0.66%	-0.65%
400	8,000,000	125,936.98	127,536.98	0.01574	0.01594	125,056.98	126,656.98	0.01563	0.01583	(880.00)	(880.00)	-0.70%	-0.69%
500	10,000,000	151,415.38	153,015.38	0.01514	0.01530	150,315.38	151,915.38	0.01503	0.01519	(1,100.00)	(1,100.00)	-0.73%	-0.72%
600	12,000,000	176,893.78	178,493.78	0.01474	0.01487	175,573.78	177,173.78	0.01463	0.01476	(1,320.00)	(1,320.00)	-0.75%	-0.74%
30,000 KW													
200	6,000,000	112,258.58	114,658.58	0.01871	0.01911	111,598.58	113,998.58	0.01860	0.01900	(660.00)	(660.00)	-0.59%	-0.58%
300	9,000,000	150,476.18	152,876.18	0.01672	0.01699	149,486.18	151,886.18	0.01661	0.01688	(990.00)	(990.00)	-0.66%	-0.65%
400	12,000,000	188,693.78	191,093.78	0.01572	0.01592	187,373.78	189,773.78	0.01561	0.01581	(1,320.00)	(1,320.00)	-0.70%	-0.69%
500	15,000,000	226,911.38	229,311.38	0.01513	0.01529	225,261.38	227,661.38	0.01502	0.01518	(1,650.00)	(1,650.00)	-0.73%	-0.72%
600	18,000,000	265,128.98	267,528.98	0.01473	0.01486	263,148.98	265,548.98	0.01462	0.01475	(1,980.00)	(1,980.00)	-0.75%	-0.74%
40,000 KW													
200	8,000,000	149,536.98	152,736.98	0.01869	0.01909	148,656.98	151,856.98	0.01858	0.01898	(880.00)	(880.00)	-0.59%	-0.58%
300	12,000,000	200,493.78	203,693.78	0.01671	0.01697	199,173.78	202,373.78	0.01660	0.01686	(1,320.00)	(1,320.00)	-0.66%	-0.65%
400	16,000,000	251,450.58	254,650.58	0.01572	0.01592	249,690.58	252,890.58	0.01561	0.01581	(1,760.00)	(1,760.00)	-0.70%	-0.69%
500	20,000,000	302,407.38	305,607.38	0.01512	0.01528	300,207.38	303,407.38	0.01501	0.01517	(2,200.00)	(2,200.00)	-0.73%	-0.72%
600	24,000,000	353,364.18	356,564.18	0.01472	0.01486	350,724.18	353,924.18	0.01461	0.01475	(2,640.00)	(2,640.00)	-0.75%	-0.74%
KWH DISTRIBUTION													
		ON PK	INT	OFF PK									
200	HOURS USE =	31%	29%	40%									
300	HOURS USE =	33%	27%	40%									
400	HOURS USE =	30%	26%	44%									
500	HOURS USE =	27%	25%	48%									
600	HOURS USE =	25%	24%	51%									

Note: Generally representative of the customer's bill under current rates including seasonal SOS rates effective in June (Summer) and November (Winter) of 2019.

**APPENDIX M:     Underground Project Charge and Underground  
Rider Tariffs**

CLEAN

**RATE SCHEDULES**

**FOR**

**ELECTRIC SERVICE**

**IN THE**

**DISTRICT OF COLUMBIA**



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An Exelon Company

**RATES AND REGULATORY PRACTICES GROUP**

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## UNDERGROUND PROJECT CHARGE – RIDER “UPC”

### AVAILABILITY

The Distribution Charges billed under the Schedules "R", "MMA", "GS ND", "GS LV", "GS 3A", "MGT LV", "T", "GT LV", "GT 3A", "GT 3B", "RT", "SL", "OL LED", "TS", and "TN" shall be subject to the Underground Project Charge as specified in the terms of this Rider UPC. Customers who take serviced under "Rider RAD – Residential Aid Discount" shall not be subject to Rider UPC.

The Underground Project Charge is intended to recover costs associated with work performed by Pepco to place underground certain electric power lines in the District of Columbia to be used by Pepco to provide electric distribution service in the District of Columbia.

Amounts payable with respect to Rider UPC (including any true-up of such amounts as described in "Adjustment to Charge" below) will be shown on customer bills as a separate line item, "Underground Project Charge, Pepco".

### DETERMINATION OF CHARGE

The Underground Project Charge will be based on revenue requirements calculated using projected annual expenditures and other authorized items and adjustments as follows:

1. Return on capital expenditures placed into service during the period at the authorized rate of return.
2. Recovery of capital expenditures placed into service during the period through depreciation expense.
3. Incremental operating and maintenance expenses and other authorized costs and charges.
4. Reconciliation of the deferred balance on an annual basis. (See "Adjustment to Charge")

### MONTHLY CHARGES AND RATES:

Rate Schedule	January 1, 2020	
R	\$0.00005	per kWh
MMA	\$0.00004	per kWh
GS ND	\$0.00013	per kWh
T	\$0.00013	per kWh
GS LV	\$0.00022	per kWh
GS 3A	\$0.00019	per kWh
MGT LV	\$0.00014	per kWh
GT LV	\$0.00014	per kWh
GT 3A	\$0.00009	per kWh
GT 3B	\$0.00001	per kWh
RT	\$0.00008	per kWh
SL/TS/OL LED	\$0.00006	per kWh
TN	\$0.00003	per kWh

### ADJUSTMENT TO CHARGE

The Company will file an update to the Underground Project Charge on or before April 1 of each year that Rider UPC is in effect. The update will include (1) forecasted expenditures for the calendar year in which the update is filed, and (2) a true up of the UPC costs and collections for the prior calendar year. The true-up shall be the difference between actual cost for the prior calendar year (based on actual capital expenditures, plant closings and depreciation expense, incremental operating and other authorizing costs and charges) and actual booked Underground Project Charge revenue. The true-up will be added to (for under-collection), and deducted from (for over-collection), the forecasted revenue requirement for the upcoming year.

## **DDOT UNDERGROUND ELECTRIC COMPANY INFRASTRUCTURE IMPROVEMENT CHARGE RECOVERY – UNDERGROUND RIDER**

### **APPLICABILITY**

The Distribution Charges billed under the Schedules "R", "MMA", "GS ND", "GS LV", "GS 3A", "MGT LV", "T", "GT LV", "GT 3A", "GT 3B", "RT", "SL", "OL LED", "TS", and "TN" shall be subject to the Underground Rider as specified in the terms of this Underground Rider. Customers who take service under "Rider RAD - Residential Aid Discount" shall not be subject to this Underground Rider.

The Underground Rider is intended to recover DDOT Underground Electric Company Infrastructure Improvement Charges imposed on Pepco to pay costs associated with work performed by the District Department of Transportation ("DDOT") to place underground certain electric power lines in the District of Columbia to be used by Pepco to provide electric distribution service in the District of Columbia.

Amounts payable with respect to the Underground Rider (including any true-up of such amounts as described in "Adjustment to Charge" below) will be included in the distribution energy charge on customer bills. Underground Rider charges for Schedules "RT", "TS", "SL", and "GT 3B" will be shown as a separate line item on customer bills.

### **DETERMINATION OF CHARGE**

Amounts payable with respect to the Underground Rider will be calculated based on the DDOT Underground Electric Company Infrastructure Improvement Charges imposed on Pepco in the applicable year.

### **MONTHLY CHARGES AND RATES:**

Rate Schedule	January 1, 2020	
R	\$0.00129	per kWh
MMA	\$0.00100	per kWh
GS ND	\$0.00340	per kWh
T	\$0.00340	per kWh
GS LV	\$0.00567	per kWh
GS 3A	\$0.00498	per kWh
MGT LV	\$0.00368	per kWh
GT LV	\$0.00368	per kWh
GT 3A	\$0.00221	per kWh
GT 3B	\$0.00020	per kWh
RT	\$0.00196	per kWh
SL/TS/OL LED	\$0.00155	per kWh
TN	\$0.00066	per kWh

### **ADJUSTMENT TO UNDERGROUND RIDER**

The Company will file an update to true-up amounts collected with respect to the Underground Rider not more frequently than twice per calendar year. The true-up shall be the difference between DDOT Underground Electric Company Infrastructure Improvement Charges imposed on Pepco for the period for which the update is filed and actual amounts collected by Pepco through the Underground Rider for the corresponding period. The true-up will be added to (for under-collection) or deducted from (for over-collection) the revenue requirement for the applicable period and will be allocated to each distribution service customer class in the proportion to the customer classes' contribution to the under-collection or over-collection.

REDLINE

**RATE SCHEDULES**

**FOR**

**ELECTRIC SERVICE**

**IN THE**

**DISTRICT OF COLUMBIA**



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An Exelon Company

**RATES AND REGULATORY PRACTICES GROUP**

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## UNDERGROUND PROJECT CHARGE – RIDER “UPC”

### AVAILABILITY

The Distribution Charges billed under the Schedules "R", "MMA", "GS ND", "GS LV", "GS 3A", "MGT LV", "T", "GT LV", "GT 3A", "GT 3B", "RT", "SL", "OL LED", "TS", and "TN" shall be subject to the Underground Project Charge as specified in the terms of this Rider UPC. Customers who take serviced under "Rider RAD – Residential Aid Discount" shall not be subject to Rider UPC.

The Underground Project Charge is intended to recover costs associated with work performed by Pepco to place underground certain electric power lines in the District of Columbia to be used by Pepco to provide electric distribution service in the District of Columbia.

Amounts payable with respect to Rider UPC (including any true-up of such amounts as described in "Adjustment to Charge" below) will be shown on customer bills as a separate line item, "Underground Project Charge, Pepco".

### DETERMINATION OF CHARGE

The Underground Project Charge will be based on revenue requirements calculated using projected annual expenditures and other authorized items and adjustments as follows:

1. Return on capital expenditures placed into service during the period at the authorized rate of return.
2. Recovery of capital expenditures placed into service during the period through depreciation expense.
3. Incremental operating and maintenance expenses and other authorized costs and charges.
4. Reconciliation of the deferred balance on an annual basis. (See "Adjustment to Charge")

### MONTHLY CHARGES AND RATES:

Rate Schedule	<del>April 1,</del> <del>2019</del> January 1, 2020	
R	<del>\$0.000020.00005</del>	per kWh
MMA	<del>\$0.000010.00004</del>	per kWh
GS ND	<del>\$0.000070.00013</del>	per kWh
T	<del>\$0.000070.00013</del>	per kWh
GS LV	<del>\$0.000060.00022</del>	per kWh
GS 3A	<del>\$0.000080.00019</del>	per kWh
MGT LV	<del>\$0.000060.00014</del>	per kWh
GT LV	<del>\$0.000060.00014</del>	per kWh
GT 3A	<del>\$0.000030.00009</del>	per kWh
GT 3B	<del>\$0.000000.00001</del>	per kWh
RT	<del>\$0.000030.00008</del>	per kWh
SL/TS/OL LED	<del>\$0.000030.00006</del>	per kWh
TN	<del>\$0.000000.00003</del>	per kWh

### ADJUSTMENT TO CHARGE

The Company will file an update to the Underground Project Charge on or before April 1 of each year that Rider UPC is in effect. The update will include (1) forecasted expenditures for the calendar year in which the update is filed, and (2) a true up of the UPC costs and collections for the prior calendar year. The true-up shall be the difference between actual cost for the prior calendar year (based on actual capital expenditures, plant closings and depreciation expense, incremental operating and other authorizing costs and charges) and actual booked Underground Project Charge revenue. The true-up will be added to (for under-collection), and deducted from (for over-collection), the forecasted revenue requirement for the upcoming year.

## DDOT UNDERGROUND ELECTRIC COMPANY INFRASTRUCTURE IMPROVEMENT CHARGE RECOVERY – UNDERGROUND RIDER

### APPLICABILITY

The Distribution Charges billed under the Schedules "R", "MMA", "GS ND", "GS LV", "GS 3A", "MGT LV", "T", "GT LV", "GT 3A", "GT 3B", "RT", "SL", "OL LED", "TS", and "TN" shall be subject to the Underground Rider as specified in the terms of this Underground Rider. Customers who take service under "Rider RAD - Residential Aid Discount" shall not be subject to this Underground Rider.

The Underground Rider is intended to recover DDOT Underground Electric Company Infrastructure Improvement Charges imposed on Pepco to pay costs associated with work performed by the District Department of Transportation ("DDOT") to place underground certain electric power lines in the District of Columbia to be used by Pepco to provide electric distribution service in the District of Columbia.

Amounts payable with respect to the Underground Rider (including any true-up of such amounts as described in "Adjustment to Charge" below) will be included in the distribution energy charge on customer bills. Underground Rider charges for Schedules "RT", "TS", "SL", and "GT 3B" will be shown as a separate line item on customer bills.

### DETERMINATION OF CHARGE

Amounts payable with respect to the Underground Rider will be calculated based on the DDOT Underground Electric Company Infrastructure Improvement Charges imposed on Pepco in the applicable year.

### MONTHLY CHARGES AND RATES:

Rate Schedule	<del>May 1, 2019</del> <u>January 1, 2020</u>	
R	<del>\$0.001380</del> <u>\$0.00129</u>	per kWh
MMA	<del>\$0.001150</del> <u>\$0.00100</u>	per kWh
GS ND	<del>\$0.004540</del> <u>\$0.00340</u>	per kWh
T	<del>\$0.004540</del> <u>\$0.00340</u>	per kWh
GS LV	<del>\$0.004880</del> <u>\$0.00567</u>	per kWh
GS 3A	<del>\$0.006020</del> <u>\$0.00498</u>	per kWh
MGT LV	<del>\$0.003900</del> <u>\$0.00368</u>	per kWh
GT LV	<del>\$0.003900</del> <u>\$0.00368</u>	per kWh
GT 3A	<del>\$0.002290</del> <u>\$0.00221</u>	per kWh
GT 3B	<del>\$0.000320</del> <u>\$0.00020</u>	per kWh
RT	<del>\$0.002170</del> <u>\$0.00196</u>	per kWh
SL/TS/OL LED	<del>\$0.001760</del> <u>\$0.00155</u>	per kWh
TN	<del>\$0.000790</del> <u>\$0.00066</u>	per kWh

### ADJUSTMENT TO UNDERGROUND RIDER

The Company will file an update to true-up amounts collected with respect to the Underground Rider not more frequently than twice per calendar year. The true-up shall be the difference between DDOT Underground Electric Company Infrastructure Improvement Charges imposed on Pepco for the period for which the update is filed and actual amounts collected by Pepco through the Underground Rider for the corresponding period. The true-up will be added to (for under-collection) or deducted from (for over-collection) the revenue requirement for the applicable period and will be allocated to each distribution service customer class in the proportion to the customer classes' contribution to the under-collection or over-collection.

## **APPENDIX N: DC PLUG Education Plan and Budget**



# INTEGRATED COMMUNICATIONS STRATEGY

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DC Power Line Undergrounding Education Plan

September 30, 2019



## INTRODUCTION

The Mayor's Power Line Undergrounding Task Force ("Task Force") recommended a unique public-private partnership between Potomac Electric Power Company ("Pepco") and the District that would result in a "game changer" to dramatically improve grid resiliency and reliability in the District of Columbia. As storms have increased in frequency and severity, the importance of placing parts of the electric system underground has grown.

On August 16, 2012, the Mayor of the District of Columbia, Vincent C. Gray, issued Executive Order 2012-130, to establish the Task Force.<sup>1</sup> The purpose of the Task Force was to "advise the Mayor on the general causes of storm-related power outages in the District, actions that may be taken to reduce future storm-related power outages, and the undergrounding of power lines."<sup>2</sup> The Task Force pooled the collective resources available in the District of Columbia to produce an analysis of the technical feasibility, infrastructure options and reliability implications of placing new or existing overhead distribution facilities underground in the District of Columbia. The 18-member Task Force — co-chaired by City Administrator Allen Y. Lew and Pepco Holdings Inc. Chairman, President and Chief Executive Officer Joseph M. Rigby — included representatives from the Council of the District of Columbia ("DC Council"), the District of Columbia Public Service Commission ("Commission"), the District of Columbia Office of the People's Counsel ("OPC"), city agencies, utilities, community representatives, experts and other parties.<sup>3</sup>

The Task Force recommended that further placing parts of Pepco's distribution system underground will make important contributions in the system's resiliency — hardening it against major storm events, with the added benefit of further improving overall reliability. Specifically, it chose one of five proposed scenarios for the selective undergrounding of power lines in the District.<sup>4</sup> Following is the scenario it chose:

- A multi-year program focused on up to 60 of the most vulnerable overhead distribution lines at an approximate cost of \$1 billion, with an annual limit on expenditures of approximately \$200 million.<sup>5</sup>

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<sup>1</sup> Executive Order No. 2012-130, D.C. Register Vol. 59 – No. 33 (August 27, 2012).

<sup>2</sup> Government of the District of Columbia, Executive Office of the Mayor. Mayor's Power Line Undergrounding Task Force Findings and Recommendations: Final Report, at 6 (Oct. 2013) ("Final Report").

<sup>3</sup> Final Report at 8.

<sup>4</sup> Final Report at 11.

<sup>5</sup> Final Report at 11.

This multi-year initiative for “DC PLUG,” which stands for **DC Power Line Undergrounding**, will be undertaken by the District, through the District Department of Transportation (“DDOT”), and Pepco.

The Task Force concluded that for District of Columbia electric system residents, businesses, and other stakeholders a project of this magnitude will limit the impact storms have on the electric system as it improves the infrastructure.<sup>6</sup> The most obvious benefits are the improved resiliency and enhanced service for all residents, businesses, and stakeholders.<sup>7</sup>

For all of those reasons, the District and Pepco must educate and communicate early and often with residents, businesses, and other stakeholders so that they understand the details and the benefits of the DC PLUG initiative – for those impacted directly as well as indirectly. The Task Force recommended the development and rollout of a comprehensive education and outreach program to explain the DC PLUG initiative and its impacts on District of Columbia residents, businesses, and other stakeholders (“Education Plan”).

The District and Pepco, including the DDOT, will update residents, businesses, and stakeholders in the affected wards – 3, 4, 5, 7 and 8 – throughout the entirety of the DC PLUG initiative. These updates will touch on all aspects of the work, including the schedule, locations and results.

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<sup>6</sup> Final Report at 11.

<sup>7</sup> Final Report at 68.

This document contains:

- 1. Objectives**
- 2. Overview**
- 3. Education Outreach, Materials and Coordination Process**
  - 3.1** Community Outreach
  - 3.2** Customer Communications
  - 3.3** Media Relations
  - 3.4** Digital Communications
  - 3.5** Paid Media
  - 3.6** Pepco Customer Service
  - 3.7** Internal Communications
  - 3.8** Thought Leadership
  - 3.9** Project Identity and Logo
  - 3.10** Communications Coordination Process
  - 3.11** Resources
- 4. Messages**
- 5. Timeline**
- 6. Budget**
- 7. Risk Mitigation**
- 8. Conclusion**
- 9. Appendix**



## 1. Objectives

## 1. OBJECTIVES

The goal of this Education Plan is to educate and update District of Columbia residential and commercial utility residents, businesses, and other stakeholders on the implementation of the Task Force's DC PLUG initiative. To that end, there are two sets of objectives – first, to educate residents, businesses, and other stakeholders about how the Task Force came to its decision:

- Explain the impact continuing, storm-related power outages have on residents, businesses, and other stakeholders;
- Explain that inaction to respond to the increasing storm frequency and intensity is not a viable option;
- Explain the analysis the Task Force performed to examine existing conditions, technical solutions and financing options, to develop a common understanding of the costs and benefits; and
- Explain the impact of placing power lines underground, including financial (pocketbook) and physical (lifestyle), on residents, businesses, and other stakeholders.

The second set of objectives is specific to the planning and implementation of the DC PLUG initiative:

- Educate residents, businesses, and other stakeholders about DC PLUG initiative planning, including the construction schedule for each ward and coordination with compatible and/or concurrent initiatives, work-effort progress and performance and infrastructure improvement benefits;
- Develop coherent community outreach and public awareness activities to provide timely notice to residents, businesses, and other stakeholders and to collect their feedback, throughout DC PLUG initiative implementation; and
- Present clear and reliable information (with user-friendly language) on resiliency and reliability improvements related to the DC PLUG construction work.

As the DC PLUG initiative progresses, objectives may evolve. The Education Plan applies to business audiences as well as residential audiences.



## 2. Overview

## 2. OVERVIEW

Education and communication will be critical to the success of the DC PLUG initiative. With the Mayor's announcement of the Task Force recommendations, efforts began to educate residents, businesses, and other stakeholders on the DC PLUG process, costs and achievable benefits. As the initiative moves through regulatory approval and implementation, those communication efforts will ramp up.

The DC PLUG initiative is committed to transparency in project planning and implementation. Effective communication and education for residents, businesses, and other stakeholders are fundamental components of the DC PLUG initiative. DC PLUG communications will help residents, businesses, and other stakeholders understand the scope and expected impact of the DC PLUG initiative, planned activities for the target areas, the infrastructure improvement process, and the multi-year implementation schedule. As with all infrastructure improvements, the impact of construction work on daily activity will be particularly important information for residents, businesses, and other stakeholders.

Development of the Education Plan, outreach and materials will consider resident, business, and other stakeholder needs and issues. The type of information, communication channels, and frequency of outreach, for instance, can be tailored for electric utility residents, businesses and other stakeholders.

Research will help guide all messaging to help ensure it is clear and engaging. In addition, the right messengers must be selected to champion the DC PLUG initiative, develop credibility and meaningfully engage residents, businesses, and other stakeholders. Messengers may include a variety of public faces such as elected officials, Pepco and DDOT representatives, OPC representatives, and Metropolitan Apartment and Office Building Association ("AOBA") representatives. The overall campaign theme and messaging, as well as supporting design and graphics, will be representative of the Task Force's directives while being informed by research, and the DC PLUG initiative will be positioned as a collaborative initiative.



### **3. Education Outreach, Materials and Coordination Process**

**3.1** Community Outreach

**3.2** Residents, Businesses, and Other Stakeholders Communications

**3.3** Media Relations

**3.4** Digital Communications

**3.5** Paid Media

**3.6** Customer Service

**3.7** Internal Communications

**3.8** Thought Leadership

**3.9** Project Identity and Logo

**3.10** Communications Coordination Process

**3.11** Resources

### **3. COMMUNITY OUTREACH AND EDUCATION MATERIALS**

The development of the community outreach and education materials outlined below is primarily focused on mechanisms and approaches that will educate residents, businesses, and other stakeholders about the DC PLUG initiative. While information designed to present background, common questions and answers, and processes, progress, and next steps in each phase of project implementation are customary strategies, success stories derived from actual work and improvements will also be used to educate residents, businesses, and other stakeholders. The Education Plan is intended to accommodate and integrate the planning, development and execution of DDOT outreach and education materials to avoid unnecessary redundancy and to leverage resources.

The DC PLUG initiative will benefit from the resources that Pepco will make available through its Corporate Communications team and DDOT's relationships. This full-service unit will bring proven experience in executing successful communication strategies for electric service programs. These resources will help ensure complete alignment of all messaging, quick development of outreach and materials, and coordination with DDOT and other counterparts. In addition, by utilizing existing channels and Pepco in-house resources for photography and other materials, cost efficiencies will be realized. Pepco has engaged a District of Columbia-based, woman-owned agency to manage paid media and media planning.

#### **3.1 Community Outreach**

A variety of community outreach and education materials will be imperative in the DC PLUG education initiative. These activities and materials focus both generally on the overall initiative and its District of Columbia-wide impacts and benefits and directly on the affected wards and the diverse resident segments within them. Some materials may also contain information regarding job inquiries. The execution of outreach will be a collaborative effort between the DDOT, Pepco, the Commission and OPC's consumer education and outreach divisions. The collaboration allows for synergies and benefits derived from input and participation of these entities and their ability to leverage their respective relationships. DDOT has experience conducting person-to-person community outreach, such as engaging customers, business, and stakeholders at community events and meetings, and will be supported by Pepco's proven model for direct community outreach.

The outreach and materials discussed here represent mechanisms and strategies that will enable the DC PLUG initiative to build communications for specific audiences and information exchange objectives. The intent is to use the best mechanism and strategy to achieve information distribution and education objectives throughout project development and implementation to all residents, businesses, and other stakeholders.

**3.1a** Community meetings: Throughout project development and implementation, Pepco and DDOT will proactively participate in public assemblies to discuss the DC PLUG initiative, expected reliability improvements, and incremental updates. The two entities will identify planned meetings and coordinate presentation slots to discuss the various projects and get resident, business, and other stakeholder feedback. As necessary, Pepco and DDOT will also convene and host meetings to achieve widespread outreach. Meeting venues will encompass the five target wards, specific feeder improvement neighborhoods, as well as the broader District of Columbia community. Public awareness and education are for directly and indirectly impacted residents, businesses, and other stakeholders of the DC PLUG initiative.

**3.1b** Advisory Neighborhood Commission (“ANC”), community and civic association engagement: Meetings, presentations, briefing letters and information kits will be used to directly educate the impacted Advisory Neighborhood Commissions and community and civic associations. The District and Pepco will partner with these organizations to organize educational events.

**3.1c** Community-based organizations and special population advocacy group coordination: The District and Pepco will partner where appropriate with community-based organizations and associations, including social services agencies, senior citizen support, special interest groups, faith-based organizations and non-English speaking advocacy groups to explain the DC PLUG initiative and leverage these organizations’ outreach channels. District of Columbia agencies, OPC and the PSC’s Office of Customer Services will also be critical resources for accessing special populations. Outreach will include forums that reach low-income recipients of Pepco’s “Residential Aid Credit” to inform these customers that they will be exempt from the Underground Project Charge and the DDOT Underground Electric Company Infrastructure Improvement Charge. Additionally, business customers will be reached through membership associations such as AOBA.

**3.1d** Community outreach coordination: Local community representatives with experience and credibility will coordinate and conduct meetings in areas affected

by the initiative. They will use materials created specifically for DC PLUG outreach.

**3.1e** Community outreach stations: The DC PLUG initiative will be touted at outreach stations during targeted periods, providing residents, businesses, and other stakeholders the opportunity to go to specified locations to get current updates on DC PLUG activities. Staff will be appropriately trained to respond to stakeholder inquiries. The objective is to give residents convenient access to the Pepco and DDOT team. Residents, businesses, and other stakeholders can speak with representatives and receive educational materials about the DC PLUG projects for the targeted neighborhoods. We will explore the use of electric vehicles from Pepco's fleet as innovative, mobile, and cost-effective pop-up centers, positioned in the community to allow for easy access by residents.

**3.1f** Special events: Making information available and being present where residents, businesses, and other stakeholders gather will help achieve far-reaching public awareness. In addition to the District of Columbia's array of neighborhood festivals throughout the summer, events hosted by community libraries and local schools and universities can be prime forums to extend outreach. DC PLUG will consider strategies such as staffing a booth to promote the program, distribute information and answer questions.

**3.1g** Community groups will be educated on the DC PLUG projects within their various wards and will use community outreach vehicles to educate impacted residents, businesses, and other stakeholders.

**3.1h** Government official and regulator meetings and conference calls: This outreach will begin before construction commences and will continue consistently throughout the program. This outreach will include quarterly conference calls with government officials and agency staff.

## **3.2 Customer Communications**

A variety of residents, businesses, and other stakeholder communications materials will be used to reach direct and indirect beneficiaries of the DC PLUG initiative. Outreach and materials will be targeted to the information needs of residents, businesses, and other stakeholders. Research will help determine which channels will achieve effective outreach and are the most engaging to the various stakeholders.

**3.2a** Information kit: The DC PLUG initiative will maintain publicly accessible information on the latest and most current project planning and implementation activities. Fact sheets, frequently asked questions and answers, press releases and other materials identified as communication tools will be organized into information kits that can be distributed to residents, businesses, and other stakeholders during community outreach events, posted to websites for easy access, and converted, as necessary, for media briefings.

**3.2b** Fact sheets: The DC PLUG initiative will use succinct fact sheets to describe the “what” and “why” (DC PLUG initiative scope and rationale); “how” (Pepco/DDOT roles and responsibilities); “when” (schedule for the multi-year program); and “where” (target wards) information for residents, businesses, and other stakeholders. In addition to explaining the initiative, fact sheets can also highlight project work and results (impact for direct and indirect beneficiaries). Fact sheets will be translated into Spanish and, based on demand, can be replicated for other languages through District translation resources.

**3.2c** Door hangers: Generally, residents immediately notice door hangers and recognize that the conveyed information requires special attention. While door hangers can be used to notify residents, businesses, and other stakeholders about work being done in the area, door hangers are particularly effective in announcing schedules, changes, and key events.

**3.2d** Meeting posters and fliers: DC PLUG project work will be featured as posters and fliers at community meetings to educate residents, businesses, and other stakeholders.

**3.2e** Key Messages: To achieve information consistency and reliability, key messages will be developed to guide customer service representatives, District and Pepco spokespersons, and field crews. The preparedness of these “ambassadors” is essential to give stakeholders confidence in DC PLUG information. Throughout project planning and implementation talking points will be revised to remain current and relevant to residents, businesses, and other stakeholders.

**3.2g** District Agency and DC Council newsletters – The DC PLUG initiative will leverage organization newsletters and DC Council members’ constituent newsletters to help provide updates and information regarding the projects within their communities where appropriate.

**3.2h** Worksite signs: “DC PLUG Work in Progress” signs will quickly identify project worksites for pedestrians and drivers. These signs will not only demarcate the current work areas but also convey the need for extra safety when approaching worksites.

### **3.3 Media Relations**

As the DC PLUG initiative evolves, this Education Plan will evolve to include new ideas around media relations and thought leadership.

**3.3a** News release program: A joint District-Pepco news release will announce updates on ongoing projects, project activities and results as appropriate. Releases may also highlight specific projects, results and dedicated crew members to ensure information continually stays in front of target audiences.

**3.3b** News conferences: For major announcements (program kickoff, completion of a significant project or outstanding results, for example), the communications teams will coordinate joint press conferences to highlight key areas of progress.

**3.3c** Media kits: District and Pepco communications teams will develop printed and electronic media kits that include fact sheets that feature information on progress to date and project-specific data, bios on key leaders and photos of projects for ease of use by the media.

**3.3d** Media interviews: Prepare District and Pepco leadership to effectively answer questions from media and coordinate interviews with print and broadcast reporters.

**3.3e** Reporter ride-alongs: When appropriate, plan for local reporters to ride along with field crews doing DC PLUG project work so they can report firsthand on the complexity of the work and the dedication of the crews.

**3.3f** Editorial board meetings and desk-side briefings: Coordinate and prepare leadership for editorial and briefing meetings with editorial staff of key large and neighborhood print outlets as appropriate. These meetings give leaders the opportunity to explain in detail the DC PLUG initiative, specific projects and results, as well as set the expectation for the work to come and the expected timeline.

### **3.4 Digital Communications**

The District’s and Pepco’s websites and social media channels will be leveraged to spread the word to residents, businesses, and other stakeholders about the initiative and allow them to engage in active communication about it.

**3.4a** Social media: Pepco and DDOT will engage residents, businesses, and other stakeholders in ongoing conversations about the work and answer any questions they might have.

**3.4b** Microsite: The branded microsite DCPLUGinfo.com will provide residents, business and other stakeholders information about the DC PLUG initiative through regular updates. It links to the District and Pepco websites, helping to increase education.

**3.4c** Website: DC PLUG web content has been created as part of Pepco's website to highlight project work and phases of the initiative, its benefits and its results. It links to the DC PLUG microsite.

**3.4d** Photography: Capture images which will be used to enhance outreach and materials. Photography will help put the project into perspective for residents, businesses, and other stakeholders, and help educate them through imagery.

**3.4e** Videos: Create videos for use on Channel 16, websites, and social media capturing project activities, community meetings and special events. DDOT will leverage resources, including the Office of Cable Television ("OTC") and Channel 16.

**3.4f** DC Council Websites: DC Council members' constituent newsletters and websites can be used as a means to house information and provide updates concerning projects within their respective communities. Those sites also can link to the DC PLUG microsite.

### **3.5 Paid media**

Paid media may be used to help educate residents, businesses, and other stakeholders based on available budget. Paid media would reflect the collaborative nature of the DC PLUG initiative, the work being done for the community and the direct and indirect benefits of the initiative for all residents, businesses, and other stakeholders.

Outreach and materials include:

**3.5a** Transit: DC PLUG project work to be featured in Metro rail stations and Metro bus shelters as budget permits. Digital ads in transit stations and bus stops could be included. Transit ad creative is included in Appendix 9.4.

**3.5b** Newspaper inserts: Free-standing inserts in District of Columbia newspapers and mailed to homes could be used, translated for Spanish-language media when appropriate.

**3.5c** Paid media: Digital, print, and radio should be considered for community outreach and education as budget permits.

**3.5d** Strategic media planning: A strategic media planner will purchase paid media to ensure it reaches key audiences and that the most cost-effective rates are negotiated. Pepco has engaged a District of Columbia-based, woman-owned agency to manage print and out-of-home media planning and buying. A contingency media budget has been included in the event that one is needed for issues that develop throughout the year. Digital media buying may be executed by a different entity based on capability and project need.

### **3.6 Pepco Customer Service**

In addition to all of the community outreach around the program, Pepco will leverage customer service outreach and materials to help ensure residents and businesses reaching out to Pepco will receive helpful, accurate and timely information.

**3.6a** Dedicated DC PLUG phone number: In addition to customer care centers for general inquiries, a phone number and voice messaging system is in operation to provide residents, businesses, and other stakeholders with the opportunity to have their detailed and specific questions, which may require additional research, addressed by the DC PLUG initiative team. The voice messaging system will be checked daily, and all calls will be returned by Pepco representatives within 48 hours.

**3.6b** Dedicated DC PLUG email address: An email address has been created to provide residents, businesses, and other stakeholders with the opportunity to email their questions to DC PLUG representatives. All emails will be checked daily, and all responses will be provided by Pepco representatives within 48 hours.

**3.6c** Customer service coordination: District call center (311) as well as OPC, Pepco and Commission's customer service representatives will be trained to help ensure they are able to effectively address customer inquiries about the DC PLUG initiative. In addition, representatives will receive relevant talking points as highlighted in the communications section of this document.

### **3.7 Internal Communications**

Some of the greatest champions for the DC PLUG will be those who are closest to it – District and Pepco employees. Materials will be developed to educate employees so they understand and can effectively communicate about the benefits of the DC PLUG initiative, fully engaging our colleagues and energizing the diverse, local communities where we live and work.

**3.7a** Regular updates: Post updates in internal publications and intranet resources for the District and at Pepco as well as about the DC PLUG efforts and results as appropriate.

**3.7b** Educational materials: Continue to develop and distribute educational materials on DC PLUG work to employees such as internal briefing sheets.

**3.7c** Face-to-face communications: Engage in face-to-face communications with employees, leveraging executives, subject matter experts, managers, supervisors, communications staff and other resources such as change networks.

### **3.9 Project Identity and Logo**

The District expressed an interest early in the process for the project to have its own identity. That identity helps residents, businesses, and stakeholders make the important connection between the different components of and entities involved in the DC PLUG initiative.

**3.9a** Project identity: A simple identity and tagline that residents, businesses, and other stakeholders can remember that also clearly identifies what the initiative is designed to deliver has been developed. The project identity – “DC PLUG” – is clean, clear, and meets these objectives. The tagline will enhance stakeholders’ understanding of the identity. This item is included in Appendix 9.3 to the Education Plan.

**3.9b** Logo: A simple logo and tagline have been developed for the “DC PLUG” identity as part of the creative development of the education outreach and materials. This item is included in Appendix 9.3 to the Education Plan.

A trademark search has been conducted to ensure the identity is not being used by another party, and the name has been secured.

**3.9c** Stipulations governing the logo: Pepco and DDOT will include the tagline “Making your electric system more resilient” with the DC PLUG logo and will also include the full name “District of Columbia Power Line Undergrounding.” Where the logo and the tagline appear on materials that contained or in some way linked to other explanatory text, including but not limited to press releases and other written materials, use of the logo and tagline alone is sufficient. However, where the logo and tagline are stand-alone components, Pepco and DDOT agree to include the full name of the initiative where space permits.

### **3.10 Communications Coordination Process**

A clear process for high-level coordination of messaging and materials is imperative to keep the flow and rhythm of production on pace with the initiative and aligned with the communication needs of residents, businesses, and stakeholders. The process will also ensure communications outreach and materials are clear and consistent, helping to eliminate confusion about the DC PLUG initiative. Once parties have offered feedback and the messaging approaches in this Education Plan are final, the following process will be implemented to ensure a coordinated approach to all engagement outreach and materials.

**3.10a** Undergrounding Project Consumer Education Task Force (“UPCE Committee”): In Order Nos. 17697 and 17770, the Commission established the Undergrounding Project Consumer Education Task Force in lieu of the Communications Coordination Committee and the Community Action Group that DDOT and Pepco had originally proposed in the approved Education Plan. The Mayor established the UPCE Committee on June 11, 2015 (Mayor’s Order 2015-162), including representatives from the City Administrator, Office of the Deputy Mayor for Planning and Economic Development, DDOT, Pepco, the Commission, OPC, the Apartment and Office Building Association of Metropolitan Washington, D.C. Climate Action, ANC Commissioners from Wards 3, 4, 5, 7, 8, and additional District Government representatives as deemed appropriate by the Mayor. The UPCE Committee is an advisory group that was formed to:

- 1) monitor the implementation of the consumer education and outreach provisions of the DC PLUG initiative Education Plan, to help ensure that the communication and engagement needs of the power line undergrounding initiative are achieved;

- 2) advise the DC PLUG project team on the structure, content, and distribution of materials designed to educate and inform the public on DC PLUG project planning, implementation timelines, potential consumer impacts and work progress;
- 3) contribute guidance on the proper development of a community input management system that includes transparent information on how to submit community comments, questions, recommendations, and complaints and procedures for internally processing, tracking, and following up on input received through the system;
- 4) recommend improvements to the undergrounding process based on consumer feedback and complaints filed with the UPCE Committee, the DC PLUG project team, or UPCE Committee entities; and
- 5) transmit to the Commission reports, as required by Section VI.C of the Mayor's Order, on education and engagement performance issues identified by the UPCE Committee, consumer communication improvement recommendations from the UPCE Committee, and UPCE Committee meeting minutes.

**3.10b** Communications coordination process: Once the Education Plan has been developed and is considered final, development of outreach and materials will begin in order to remain on track for early outreach to stakeholders. As mentioned above, a focused yet swift, high-level coordination of communications is critical to remaining on schedule. The project team will present materials to UPCE members at UPCE Committee meetings.

### **3.11 Resources**

Because this Education Plan will be a focused effort to engage and educate residents, businesses, and stakeholders, it will require dedicated staff who are able to focus on the Education Plan and its components.

**3.11a** Creative and media buying agency resources: As previously discussed, Pepco has engaged a District of Columbia-based, Certified Business Enterprise to manage creative strategy and execution as well as strategic media planning and buying for the First Biennial Plan. Pepco will follow contracting protocol to secure a District of Columbia-based, Certified Business Enterprise to manage future work.

**3.11b** Community relations coordinator: A full-time, contract resource retained by Pepco to manage all of the community communications, outreach, and materials listed in this Education Plan. This resource will be responsible for attending community meetings in support of DDOT's and Pepco's community outreach activities, coordinating outreach activities and materials and managing overall communications with residents, businesses, and stakeholders throughout the life of the DC PLUG initiative to ensure consistency. The community relations coordinator will be a resident of the District of Columbia.



#### 4. Messages

## 4. MESSAGES

Specific messages will be used for outreach and materials listed in the section above and will be framed in such a way as to be agreeable to residents, businesses, and stakeholders based on research. This section of the document will be updated regularly as messages or resident, business, and stakeholder needs change.

- **Pepco and the District of Columbia are proud to partner to execute the DC PLUG Initiative.**
  - The DC PLUG initiative will improve the resiliency of the energy grid by placing select feeder lines underground in Wards 3, 4, 5, 7, and 8.
    - The primary lines in Wards 1, 2, and 6 are already largely underground
  - Over the course of the initiative, Pepco and DDOT will place up to 30 feeders underground. Six feeders were selected to be placed underground in the First Biennial Plan.
  - These lines were chosen based on a rigorous ranking methodology that considered several factors, including the number of customers on each feeder, the outages on those feeders, construction costs, and equity among wards.
- **The DC PLUG Team is committed to economic development.**
  - Pepco and DDOT are working with the District's Office of Contracting and Procurement (OCP) and the District Department of Small and Local Business Development (DSLDB) to advertise the opportunities this work presents to local, diverse businesses
  - Through this collaboration with the District, Pepco is committed to ensuring District-based businesses are hired to perform this work.
- **The DC PLUG Team is committed to maintaining contact with the community and stakeholders**
  - Identify DDOT opportunity projects to minimize customer disruption
    - Opportunity Project - DC PLUG work on an existing DDOT Infrastructure Project Management Division (IPMD) project, which allows collaboration between DC PLUG and IPMD to place the DC PLUG civil infrastructure underground as a part of the IPMD project. These projects allow for a reduction in DC PLUG initiative construction expenses and decreases customer disruptions.
  - Pepco and DDOT will work collaboratively to execute the DC PLUG Education Plan, a comprehensive strategy to engage with and inform the community approved by the PSC.
  - The DC PLUG team has established dedicated contact channels for customers to communicate with Pepco and DDOT about the

project, including a website ([www.DCPLUGinfo.com](http://www.DCPLUGinfo.com)), email address, and phone number.

As the DC PLUG initiative progresses, messages will evolve.



## 5. Timeline

## 5. TIMELINE

Below is a timeline for the Education Plan to ensure the project stays on track. This will be adjusted as needed as the DC PLUG initiative matures. The communications and outreach tactics listed below reflect a sample of the cadence to be executed to deliver project updates to communities affected by DC PLUG construction work. Understanding that details such as construction information and schedules may change and that not all deliverables are appropriate for all circumstances, Pepco and DDOT will select from the tactics described below to execute the appropriate community updates.

## Tactics & Timelines

Timing	Tactic	Potential Deliverable
> 2 months from construction	List of external stakeholders are collectively provided to the DC PLUG project team. The PLUG Community Outreach Coordinator will begin conducting outreach. Select community meetings will be attended and collateral such as the DC PLUG Fact Sheet and contact information. The DC PLUG team will participate in any forums or large-scale meetings and events that are applicable to the DC PLUG initiative. The DC PLUG team will coordinate advertising as needed.	Stakeholder list PowerPoint Fact Sheet FAQ Sheet Attendance at events and meetings Transit advertising
2 months from construction	All available project information, including construction schedules should be updated on the DC PLUG website.	Website updates
Between 8 and 6 weeks from construction	Based on construction and road closure information, the DC PLUG team will request list of affected customers from GIS team.	Website updates
Between 8 and 4 weeks from construction	The DC PLUG Community Relations Coordinator uses the report and customer list to identify and conduct outreach to elected officials represented affected customers.	Project information communicated to elected officials and critical customers
30 days from construction	The DC PLUG team conducts outreach to ANCs and civic group representing affected customers. The DC PLUG team will also start to reach out to customers individually	Project information communicated to ANCs, Civic groups, and individual customers
30 days from construction	The DC PLUG team will follow-up on previous outreach by attending community meetings with the neighbors of affected areas.	Attendance at ANC and Community Meetings
15 days from construction	The DC PLUG team will work with Customer Experience make outbound calls to impacted residents.	Phone calls
7 days from construction	Contractor leaves door hangers along work route	Door hangers
During construction	Schedule for upcoming construction posted regularly on DCPLUGinfo.com (typically next two weeks of work)	Website updates

## **6. Budget**

## **6. BUDGET**

This Education Plan includes a detailed annual budget for the outreach and materials listed in the preceding pages.

Note that in addition to the outreach and materials, the budget includes a dedicated Pepco community relations coordinator, as discussed in the Resources section (4.11) of this Education Plan.

The budget combines Pepco and DDOT outreach and materials, and if OPC or other agencies agree that it is beneficial to coordinate all outreach and education materials for the DC PLUG initiative through one entity, the budget will be updated to include their outreach and materials as well.

The budget can also be updated as stakeholder needs change.



## **7. Risk Mitigation**

## 7. RISK MITIGATION

In a project of this magnitude, it is important to anticipate and prepare for any risks associated with the initiative.

This section may be updated over time as risks are identified or effectively mitigated.

POTENTIAL RISK	RISK MITIGATION
Residents, businesses, and stakeholders are outraged by prolonged traffic and parking disruption (permits that restrict parking excessively)	Explain at outset what can be expected and measures to mitigate the impact (such as doing work on only one feeder in an area at a time; work is coordinated with DDOT to avoid repeated disruptions)
Residents, businesses, and stakeholders don't understand why poles and wires are left	Explain at outset that only primary lines will be undergrounded; secondary and service lines as well as communications lines will remain overhead
Microsite is inoperable or inaccurate	Ensure microsite is appropriately tested prior to launch and that all content is reviewed through the Coordination Committee
Public outcry in areas in the District of Columbia that are not part of the DC PLUG initiative	Community outreach to and prepared information for areas not included in the DC PLUG initiative regarding the benefits of the initiative to those residents, businesses and other stakeholders as well
DC PLUG initiative comes in over budget	Regular updates on targets
DC PLUG initiative schedule slips	Regular updates on targets

Residents, businesses, and stakeholders don't think they are seeing the benefits they were promised	Explain how reliability statistics work and that although this will improve day-to-day, critical benefits will be experienced during and after severe storms
Messaging between different entities is inconsistent	Coordination Committee reviews all messaging to ensure consistency
Residents, businesses, and stakeholders are outraged about impact to public parking space between the curb and their front door	Explain at outset what can be expected and measures to mitigate the impact
Vegetation impact	Explain at outset what can be expected and measures to be taken to mitigate the impact (e.g., arborists will be used to help ensure proper vegetation management)
Business owner litigation for loss of revenue or preventing access	Work closely with potentially impacted businesses and communicate initiative activities to ensure minimal business impacts

Additionally, both DDOT and Pepco have well-established crisis communications plans for current operations. Pepco and DDOT will create a briefing specific to the DC PLUG initiative so that Pepco and DDOT crisis communications and on-site field personnel understand the initiative and are able to incorporate it into normal crisis communications operating procedures and have clear instructions about what to do in case of a crisis or media at the job site.



## 8. Conclusion

## **8. CONCLUSION**

The collaborative DC PLUG initiative will add grid resiliency to the District of Columbia's electricity infrastructure against the frequent and severe storms of the recent past.

Pepco's and the District's collective goal is to communicate to all residents, businesses, and stakeholders that the DC PLUG initiative will improve the infrastructure, limit the impact storms have on the electric system and stimulate economic growth through job creation. This Education Plan achieves that goal.

Pepco and the District will communicate early and often with residents, businesses, and stakeholders about all aspects of the work, including the schedule, locations and results so they understand the details and the benefits of this Education Plan and – equally as important to the plan's success – support it.



## 9. Appendix

Included in the appendix are several items relevant to the development of materials for this Education Plan:

- 9.1** ANCs and Civic Associations Affected
- 9.2** Budget
- 9.3** Logo and Tagline
- 9.4** Sample Creative

## **9.1 ANCs AND CIVIC ASSOCIATIONS AFFECTED**

The following ANCs will be impacted by the undergrounding project by construction anticipated to take place in their wards:

### Ward 3

ANC 3B, ANC 3C, ANC 3D, ANC 3E, ANC 3F, ANC 3G

### Ward 4

ANC 4A, ANC 4B, ANC 4C, ANC 4D

### Ward 5

ANC 5A, ANC 5B, ANC 5C, ANC 5D, ANC 5E

### Ward 7

ANC 7B, ANC 7C, ANC 7D, ANC 7E, ANC 7F

### Ward 8

ANC 8A, ANC 8B, ANC 8C, ANC 8D, ANC 8E

**Associations within the Federation of Civic Associations that will be affected by the undergrounding project include:**

16th Street Neighborhood Association  
American University Park Citizens Association  
Association of Oldest Inhabitants  
Bates Street Civic Association  
Benning Ridge Civic Association  
Bloomingdale Civic Association  
Brentwood Community Civic Association  
Brightwood Community Civic Association  
Brookland Neighborhood Civic Association  
Burleith Citizens Association

Burville Civic Association  
Cardozo-Shaw Neighborhood Association  
Central Northeast Civic Association  
Chevy Chase Citizens Association  
Cleveland Park Citizens Association  
Cloisters Homeowners Association  
Concerned Neighbors Coalition  
Congress Heights Community Association  
Crestwood Neighborhood League  
Deanwood Citizens Association  
Eastland Gardens Civic Association  
Edgewood Civic Association  
Fairlawn Citizens Association  
Forest Hills Citizens Association  
Forest Hills Citizens Association  
Fort Lincoln Civic Association  
Fort Stanton Civic Association  
Foxhall Community Citizens Association  
Friends of Kingman Park  
Friendship-Tenleytown Citizens Association  
Georgetown Residents Alliance  
Glover Park Citizens Association  
Hillandale Homeowners Association  
Hillcrest Community Civic Association  
Lamond-Riggs Citizens Association  
Marshall Heights Civic Association  
Michigan Park Citizens Association  
Mount Olivet Heights Citizens Association  
North Michigan Park Civic Association  
North Portal Estates Civic League  
Northeast Boundary Civic Association  
Palisades Citizens Association  
Penn-Branch Citizen/Civic Association  
Pleasant Hills Community & Civic Association  
Public Interest Civic Association  
Queens Chapel Civic Association  
Rock Creek East/Takoma Civic Association  
Shepherd Park Citizens Association  
Sixteenth Street Heights Citizens Association  
South Manor Neighborhood Association  
Spring Valley Court Citizens Association  
Spring Valley-Wesley Heights Citizens Association  
Takoma Park Citizens Association  
Western Avenue Citizens Association  
Woodley Park Community Association  
Woodridge Civic Association

## **9.2 DETAILED PROPOSED BUDGET**

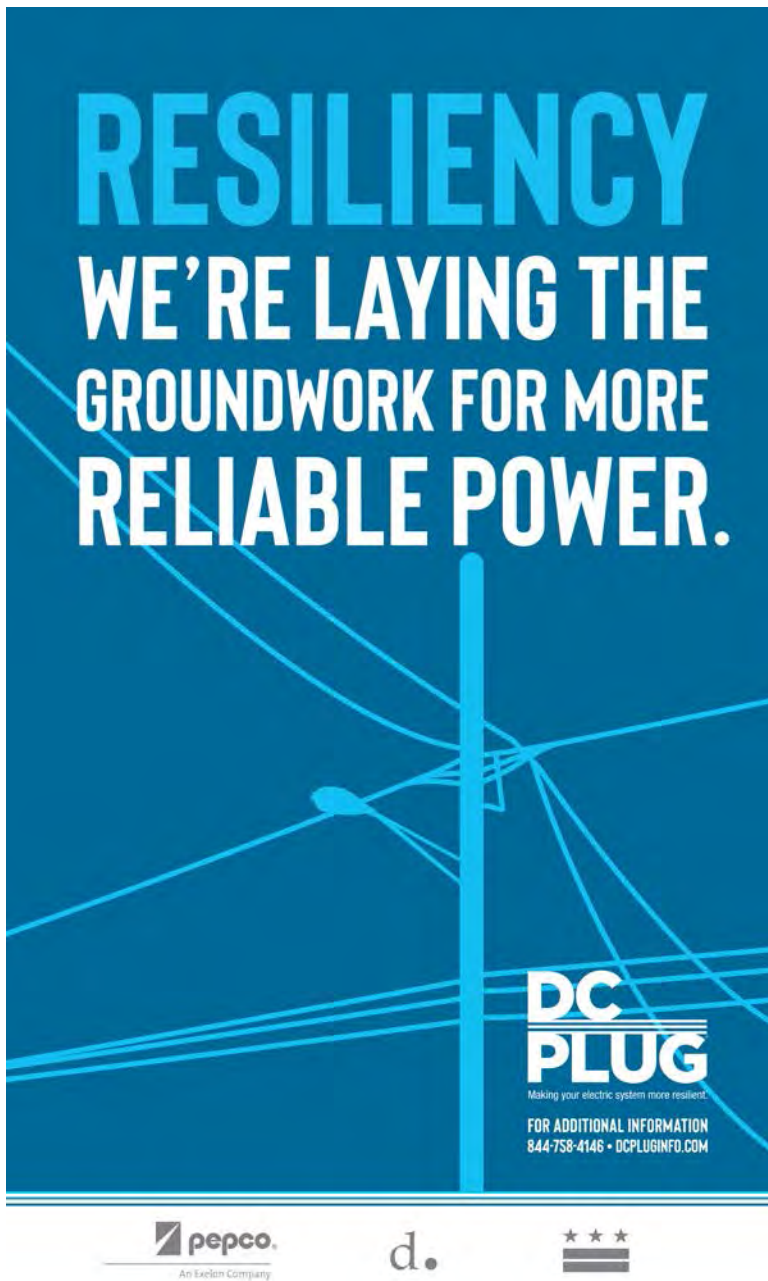
(See attached)

### 9.3 DC PLUG LOGO AND TAGLINE



Making your electric system more resilient.

## 9.4 DC PLUG Transit Ad Creative




The advertisement features a solid blue background with white text and stylized white lines representing power lines. The main headline reads "RESILIENCY WE'RE LAYING THE GROUNDWORK FOR MORE RELIABLE POWER." in a large, bold, sans-serif font. Below this, a stylized graphic of a power line pole with multiple lines crossing it is shown. In the bottom right corner, the "DC PLUG" logo is displayed, with "DC" above "PLUG" and horizontal lines separating them. Below the logo, the tagline "Making your electric system more resilient." is written in a smaller font. Further down, the text "FOR ADDITIONAL INFORMATION" is followed by the phone number "844-758-4146" and the website "DCPLUGINFO.COM". At the very bottom, three logos are aligned horizontally: the Pepco logo (a square with a diagonal line and the word "pepco" followed by "An Exelon Company"), the "d." logo, and a logo consisting of three stars above three horizontal bars.

**RESILIENCY**  
**WE'RE LAYING THE**  
**GROUNDWORK FOR MORE**  
**RELIABLE POWER.**


**DC**  
**PLUG**

Making your electric system more resilient.

FOR ADDITIONAL INFORMATION  
844-758-4146 • DCPLUGINFO.COM

 **pepco.**  
An Exelon Company

**d.**



Second Biennial Plan DC PLUG Education Plan Budget - Annual				
9.30.2019				
OUTREACH AND MATERIALS	DESCRIPTION	AUDIENCE	PEPCO COSTS	DISTRICT COSTS
Research				
Customer panel	Ongoing feedback	Customers	\$0.00	\$0.00
SUBTOTAL			\$0.00	\$0.00
Community Outreach				
Community information kits	Collection of materials developed as part of this plan	Customers, Elected officials		
- Write			\$0.00	\$0.00
- Print			\$2,000.00	\$0.00
- Digital info kit	Set of materials ready for electronic distribution		\$0.00	\$0.00
Mobile Pop-Up	Vehicle in the community to disseminate info to customers	Customers	\$10,000.00	
Community meetings	Executed by Pepco/DDOT, led by Community Relations Coordinator(s)	Customers	\$2,000.00	\$0.00
SUBTOTAL			\$14,000.00	\$0.00
Education				
Door hangers	Pre-work	Customers		
- Write / design refresh			\$2,000.00	\$0.00
- Spanish translation			\$1,000.00	\$0.00
- Print			\$2,000.00	\$0.00
Fact sheets	One overall fact sheet - one pagers for each feeder	All stakeholders	\$0.00	
- Write / design			\$20,000.00	\$0.00
- Spanish translation			\$5,000.00	\$0.00
- Print			\$2,000.00	\$0.00
Community meeting and special event posters	May include maps of affected areas, general project information, and benefits and status of work	Customers	\$0.00	
- Design			\$10,000.00	\$0.00
- Spanish translation			\$3,000.00	\$0.00
- Print			\$2,000.00	\$0.00
Fliers	Community meeting announcement flier		\$0.00	
- Design / layout			\$10,000.00	\$0.00
- Spanish translation			\$3,000.00	\$0.00
- Print			\$2,000.00	\$0.00
Worksite signs	One sign per crew identifying where work is occurring	All stakeholders	\$0.00	
- Design			\$6,000.00	\$0.00
- Production			\$16,000.00	\$0.00
Letters	One letter at the 30 day mark for customers on routes of selected feeders		\$0.00	
- Drafting / Spanish Translation			\$2,000.00	\$0.00
- Mailing			\$10,000.00	\$0.00
Direct Mail	To be deployed as needed for communities where work is being performed, assumes 5 mailers	All stakeholders	\$0.00	
- Design / layout			\$20,000.00	\$0.00
- Spanish translation			\$5,000.00	\$0.00
- Print / mailing			\$50,000.00	\$0.00
DCPLUGInfo.com	Microsite to provide customers information at their fingertips about DC PLUG and projects in their neighborhoods.	All stakeholders	\$0.00	
- Site Refresh	Re-examine layout, design	All stakeholders	\$50,000.00	\$0.00
- Maps	Development of new map interface	All stakeholders	\$20,000.00	\$0.00
- Site Maintenance, troubleshooting	Back-end work as needed	All stakeholders	\$10,000.00	\$0.00
Photography	Captures images to be used in outreach and materials	All stakeholders	\$0.00	\$0.00
Videos	Video storytelling - economic benefits of the initiative	All stakeholders	\$30,000.00	\$0.00
SUBTOTAL			\$281,000.00	\$0.00
Paid Media				
Transit	Metro stations/buses	Customers		
- Design			\$25,000.00	\$0.00
- Print			\$10,000.00	\$0.00

OUTREACH AND MATERIALS	DESCRIPTION	AUDIENCE	PEPCO COSTS	DISTRICT COSTS
- Diorama			\$2,700.00	\$0.00
- Bus curb side			\$7,800.00	\$0.00
- Media costs			\$0.00	\$0.00
Digital	Targeted digital advertising campaign to drive awareness of upcoming project work, benefits of the initiative (e.g., display network, Facebook, Twitter)	Customers	\$0.00	
- Creative			\$20,000.00	
- Ad Buy			\$200,000.00	
Newspaper insert	Pre and during construction. English versions in Washington Informer and Washington African American. Spanish version in El Pregundo, El Tiempo Latino and Washington Hispanic	Customers	\$0.00	
- Write/Design			\$24,000.00	\$0.00
- Spanish translation			\$3,000.00	\$0.00
- Layout			\$8,000.00	\$0.00
- Media buy (includes printing)			\$239,267.00	\$0.00
SUBTOTAL			\$539,767.00	\$0.00
Strategy				
*Logo and tag line	Development of an overall creative approach and theme line	All stakeholders		\$0.00
SUBTOTAL			\$0.00	\$0.00

Resources				
Community relations coordinators	Management of communications and community relations programs	All stakeholders	\$100,000.00	\$0.00
RESOURCES TOTAL			\$100,000.00	\$0.00

DDOT BUDGET	\$0
PEPCO BUDGET	\$934,767
BUDGET (TOTAL)	\$934,767

## **APPENDIX O:    Utility Coordination Protocol**

## UTILITY COORDINATION PROTOCOL

Section 308(c)(10) of the Undergrounding Act<sup>1</sup> requires “[a] protocol to be followed by the electric company and DDOT to provide notice and to coordinate engineering, design, and construction work performed pursuant to this act with the gas company, water utility, and other utilities that own or plan to construct, as approved by the Commission where applicable, facilities that may be affected by the DDOT Underground Electric Company Infrastructure Improvement Activity or Electric Company Infrastructure Improvement Activity.” This Utility Coordination Protocol (“Protocol”) is to establish the basic principles concerning how the District of Columbia Government, through DDOT, and Pepco will coordinate work affecting the public space of the District of Columbia in connection with the District of Columbia Power Line Undergrounding (“DC PLUG”) initiative undertaken pursuant to the Undergrounding Act. This Protocol is separate and apart from any other Memoranda of Understanding (“MOU”), Memoranda of Agreement (“MOA”) or other agreement entered into between DDOT or Pepco and any other utility company and is not intended to supersede any MOUs, MOAs, or other agreements.

### 1. Design Scope Development

- a. DDOT and Pepco shall, as early in the project planning and design process as possible, provide information to the utility companies regarding the scope and schedule of DC PLUG initiative work. Based on information provided by the utility companies, DDOT and Pepco will utilize the information to design the DC PLUG initiative work to minimize impact on the facilities of the utility companies to the greatest extent reasonably possible.
- b. At 30% design, DDOT and Pepco will provide preliminary civil schematic information for each electric feeder to the utility companies. DDOT and Pepco will coordinate with the utility companies to identify any utility company’s facilities that will be impacted due to the requirements of the DC PLUG initiative.
- c. At 65% design, any subsequent design revisions from the preliminary civil schematic of the DC PLUG initiative work, including design revisions of any other utility company with respect to relocation work, shall be shared with all the utility companies for their review to ensure that such changes have not changed the original determination of impact or conflict.

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<sup>1</sup> The Electric Company Infrastructure Improvement Financing Act of 2014 was amended by the Electric Company Infrastructure Improvement Emergency Financing Act of 2017 (as amended, the “Undergrounding Act”).

- d. Throughout the construction of a particular DC PLUG initiative project and as soon as DDOT and Pepco are aware of any changes in the DC PLUG initiative work or schedule, DDOT and Pepco will promptly inform the utility companies regarding any changes in the DC PLUG initiative work or schedule that may affect the facilities of a utility company.

## **2. Design**

- a. Based on the information provided by any utility company as described in Section 1 above, DDOT and Pepco, in consultation with the utility companies, will coordinate the engineering, design and construction of the DC PLUG initiative work so that the impact on the public is minimized to the greatest extent reasonably possible and infrastructure conflicts are avoided to the greatest extent reasonably possible. Where a conflict with the facilities of a utility company is deemed by DDOT and Pepco to be unavoidable, DDOT and Pepco will provide written notice to the utility company identifying the facilities of the utility company that must be relocated prior to the commencement of the DC PLUG initiative work on the feeder that has the conflict.
- b. In addition, DDOT and Pepco, in consultation with the utility companies, will evaluate and coordinate the engineering, design and construction work so that the cost, construction, sequencing and other impact on the facilities and customers of DDOT, Pepco and each of the utility companies is minimized to the greatest extent reasonably possible.
- c. On occasions when a relocation of a utility company's facilities is not necessary due to DC PLUG initiative work, but DDOT, Pepco and one or more utility companies agree that it is to their mutual benefit to combine work, DDOT and Pepco and the utility company will enter into a written agreement to detail the process for the performance of any combined work.
- d. All designs will be in accordance with DDOT's Design and Engineering manual and Pepco's Distribution Standards.

## **3. Construction and Costs for Relocation**

- a. Where a utility company must undertake work to relocate or modify its facilities such work will be undertaken by the utility company in a manner consistent with existing law, rule or regulation.

- b. Where a utility company, with the exception of DC Water, must undertake work to relocate or modify its facilities, such work will be undertaken by the utility company in a manner consistent with existing law, rule or regulation, and all costs associated with relocation to accommodate DC PLUG initiative infrastructure will be paid by the affected utility company, except as otherwise required by existing law, rule or regulation.
- c. Where DC Water must undertake work to relocate or modify its facilities, such work shall be undertaken by DC Water in a manner consistent with existing law, rule or regulation, and all costs associated with relocation to accommodate DC PLUG initiative infrastructure shall be paid in conformity with any existing Memorandum of Agreement between DC Water and DDOT.

#### **4. Utilities Coordination Meetings**

DDOT and Pepco will jointly host utility coordination meetings with the utility companies. The purpose of these meetings is to accomplish and promote the following:

- Discuss the planned work associated with the DC PLUG initiative
- Introductions of key personnel and contact representatives of each participant
- Identify opportunities for collaboration and provide a forum for resolution of conflicts between participants

DDOT and Pepco will hold regular utility coordination meetings, but not less frequently than monthly, commencing not later than the month following the issuance by DDOT and Pepco to the utility companies of the 30% preliminary design package.

#### **5. Media and Community Relations**

DDOT and Pepco shall coordinate with utility companies to handle media and community relations inquiries regarding the DC PLUG work.

**APPENDIX P: First Biennial Plan Status Report**

**First Biennial Plan Status Report Required Pursuant to D.C. Code §34-1313.08(a)(3)(I)**

The six feeders selected to be undergrounded pursuant to the First Biennial Plan are Feeders 308, 368, 14007, 14758, 14900 and 15009. None of these feeders was projected to be completed by September 30, 2019. The Ninety-Day Compliance Filing for the First Biennial Plan submitted by Pepco and DDOT on February 7, 2018 in accordance with D.C. Code §34-1313.08(b) projected that the first of these projects (Feeder 308) would be completed by January 2020 and the last (Feeder 15009) by January 2023.

*Feeder 308:* A notice to proceed with construction was issued on May 28, 2019. As of September 13, 2019, over 6500 feet of duct bank has been installed, along with 19 manholes, 13 transformer enclosures, and seven tap holes. Construction of the civil infrastructure is expected to be complete in Spring 2020 and project completion is expected to occur in the third quarter of 2020.

*Feeder 14900:* Construction on Feeder 14900 is being completed as part of the federally-funded Oregon Avenue Project. DDOT Infrastructure Project Management released the invitation for bids in January 2019, bids were received in March 2019. The electrical engineering procurement for Feeder 14900 was awarded in May 2019 and engineering is in progress, Construction is anticipated to begin by the fourth quarter of 2019, and project completion is expected by the first quarter of 2022.

*Feeders 368, 14007, 14758 and 15009:* The civil engineering request for quotes for Feeders 368, 14007, 14758 and 15009 was released in May 2019. The electrical engineering procurement for Feeders 368, 14007, 14758, and 15009 will commence following completion of the civil engineering design. The projected completion date for each of these feeders is:

Feeder	Current Projected End Date
368	May 2023
14758	September 2023
15009	October 2023
14007	November 2023

## CERTIFICATE OF SERVICE

I hereby certify that Potomac Electric Power Company's ("Pepco") and the District Department of Transportation's Approval for the Second Biennial Underground Infrastructure Improvement Projects Plan was sent to the recipients listed below on September 30, 2019 by electronic mail, first-class, postage prepaid, or hand delivery.

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