



DC Power Line Undergrounding

Community Hearings

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Date: July 21, 2014

Agenda

- Background and History
- Task Force Evaluation and Recommendations
- Triennial Plan
- Triennial Plan Summary
- Current Overhead System
- Paying for the DC PLUG Initiative
- Community Facts
- What You'll See

Background and History

- Severe weather events, especially those between 2010 and 2012, challenged the electric system's resiliency
 - Severe thunderstorms
 - Snow-mageddon
 - Hurricane Irene
 - Derecho
 - Hurricane Sandy
- Mayor's Executive Order established a Task Force to evaluate options to improve resiliency during severe weather events
- Task Force members represented a broad cross section of stakeholders (District Government, OPC, Pepco, other utilities and citizen representatives)
- Electric Company Infrastructure Improvement Financing Act of 2014 (Act) became law on May 3, 2014

Task Force Evaluation and Recommendations

- The Task Force used a model to analyze outage data and service value to the community for all overhead feeders in the District of Columbia
- Feeders are primary distribution power lines that provide service to approximately 1,100 people within a neighborhood
- The recommended criteria for choosing which feeders would be moved underground include:
 - Average of outage frequency (SAIFI)
 - Duration of outages (SAIDI)
 - Economic impact
- The final recommendation is to move underground the primary lines of the least reliable feeders in Wards 3, 4, 5, 7 and 8

Triennial Plan

- The Act created a unique public-private partnership between Pepco and DDOT to bury overhead lines to significantly improve electric service during severe weather conditions
- In accordance with the Act, Pepco and DDOT filed a joint Triennial Plan on June 17, 2014 covering the three-year period 2015-2017
- Under the Triennial Plan, DDOT will construct the underground facilities and Pepco will install the underground electric distribution for 21 currently overhead feeders affected by outages
- Wards 3, 4, 5, 7 and 8 have been identified as the most vulnerable to prolonged overhead outages
- Pepco's existing reliability enhancement program will be continued in all wards

Triennial Plan Summary

| Year | Feeder | Ranking | Ward | # Custs Served | Estimated Total Cost |
|------|----------------------|---------|------|----------------|----------------------|
| 1 | 308 | 1 | 3 | 590 | \$11,687,949 |
| | 15001 | 13 | 4 | 1,344 | \$26,048,749 |
| | 14093 | 10 | 5 | 946 | \$34,231,400 |
| | 14261 | 4 | 7 | 1,279 | \$23,512,340 |
| | 15177 ⁽¹⁾ | 8 | 8 | 2,223 | \$40,780,050 |
| | Year 1 Total: | | | | 6,382 |

| | | | | | |
|---|----------------------|----|---|-------|---------------|
| 2 | 75 | 11 | 3 | 287 | \$10,868,172 |
| | 394 | 14 | 3 | 295 | \$10,003,495 |
| | 467 | 6 | 3 | 427 | \$9,479,476 |
| | 15021 | 30 | 4 | 2,047 | \$28,849,138 |
| | 15701 | 25 | 5 | 2,842 | \$14,782,712 |
| | 14008 | 26 | 5 | 1,038 | \$19,486,420 |
| | 368 | 18 | 7 | 627 | \$12,070,813 |
| | 15707 ⁽²⁾ | 3 | 7 | 3,104 | \$41,263,358 |
| | 14758 | 9 | 8 | 2,131 | \$19,199,215 |
| | Year 2 Total: | | | | 12,798 |

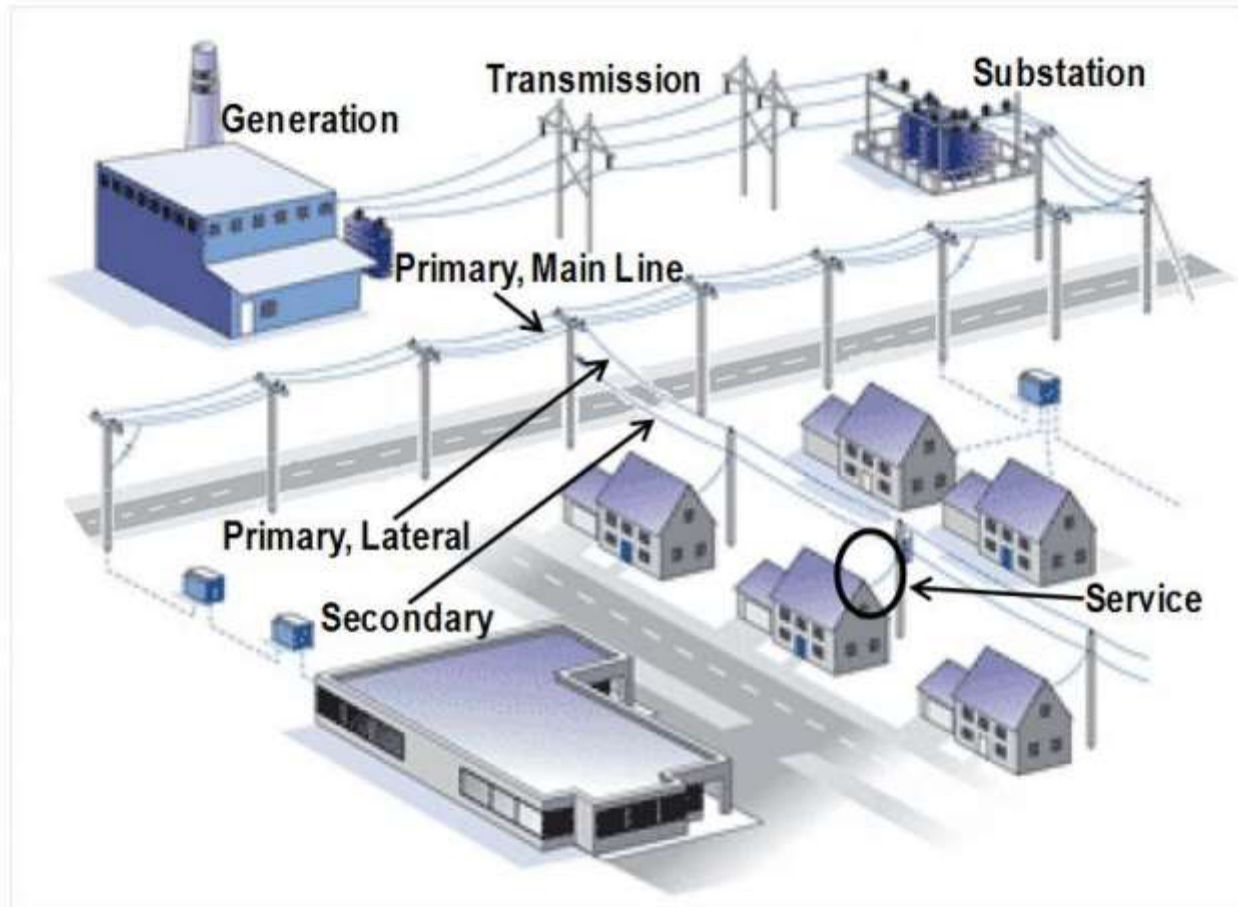
| | | | | | |
|---|----------------------|----|---|-------|--------------|
| 3 | 14136 | 22 | 3 | 983 | \$5,493,159 |
| | 15944 | 21 | 3 | 715 | \$19,688,647 |
| | 14766 | 19 | 3 | 715 | \$10,341,696 |
| | 14014 | 27 | 5 | 1,956 | \$34,449,976 |
| | 15013 | 29 | 5 | 992 | \$23,230,947 |
| | 15130 | 34 | 7 | 1,937 | \$10,921,457 |
| | 15166 | 16 | 8 | 2,140 | \$27,681,744 |
| | Year 3 Total: | | | | 9,438 |

Total Estimated Costs (3 Years) \$434,070,913

⁽¹⁾ Feeder construction projected to carry over into Year 2

⁽²⁾ Feeder construction projected to carry over into Year 3

The Current Overhead System



Paying for the DC PLUG Initiative

- The total \$1 billion DC PLUG initiative will be funded by three sources
 - \$500 million – funded by Pepco
 - \$375 million – Bonds issued by the District
 - \$62 to \$125 million – funded through DDOT
- Two surcharge mechanisms will be added to the customer's bill
 - The Triennial Plan, filed on June 17, 2014, will establish a surcharge to cover Pepco's investment in the initiative
 - The Financing Plan, to be filed on August 1, 2014 will authorize the issuance of \$375 million in bonds by the District and establish a surcharge to cover the payments on the bonds.
- The estimated monthly bill impact on the average residential customer is:

| | Triennial Plan | Financing Plan |
|--------|-----------------------|-----------------------|
| Year 1 | \$.18 per month | Pending |
| Year 2 | \$.52 per month | Pending |
| Year 3 | \$.91 per month | Pending |

- Residential Aid Discount (RAD) Customers will be exempt from both of the DC PLUG surcharges



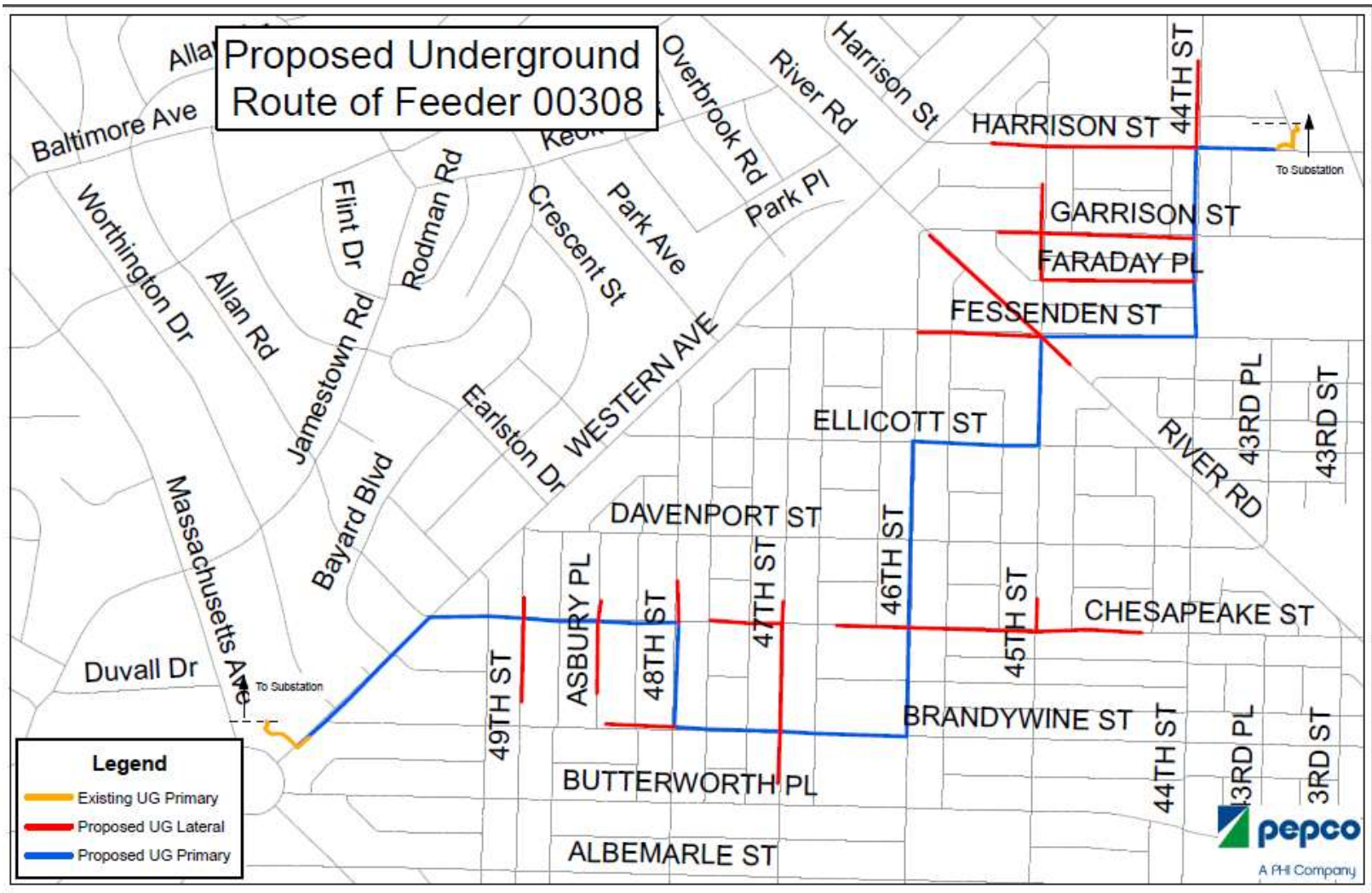
Community Facts

- Provided are handouts detailing the work to be performed in your ward, including:
 - Feeder and year of construction
 - Ward
 - Neighborhoods
 - Description (percent residential/commercial)
 - Length of feeder (percent overhead and percent underground)
 - Number of customers

Proposed Scope of Work- Example Feeder 00308:

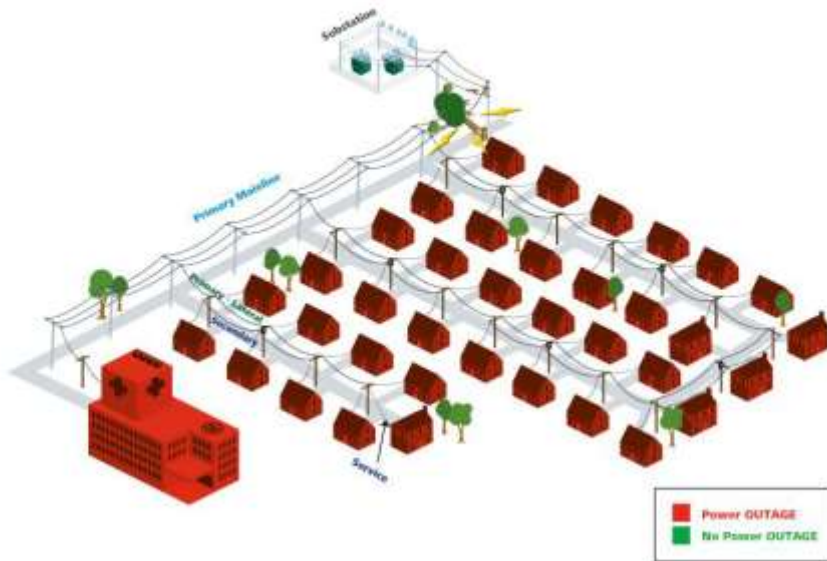
- Remove existing overhead primary wire and transformers
- Install approximately 60 manholes
- Install approximately 8 underground tap holes
- Install approximately 3.4 miles of duct bank in an underground trench
- Install ancillary civil equipment including associated paving milling
- Install approximately 75 transformers
- Install approximately 5 switches
- Install approximately 2 miles of mainline cable
- Install approximately 4.6 miles of lateral cable
- Install ancillary electrical equipment including cable supports, joints and insulators

One Line Diagrams- Example

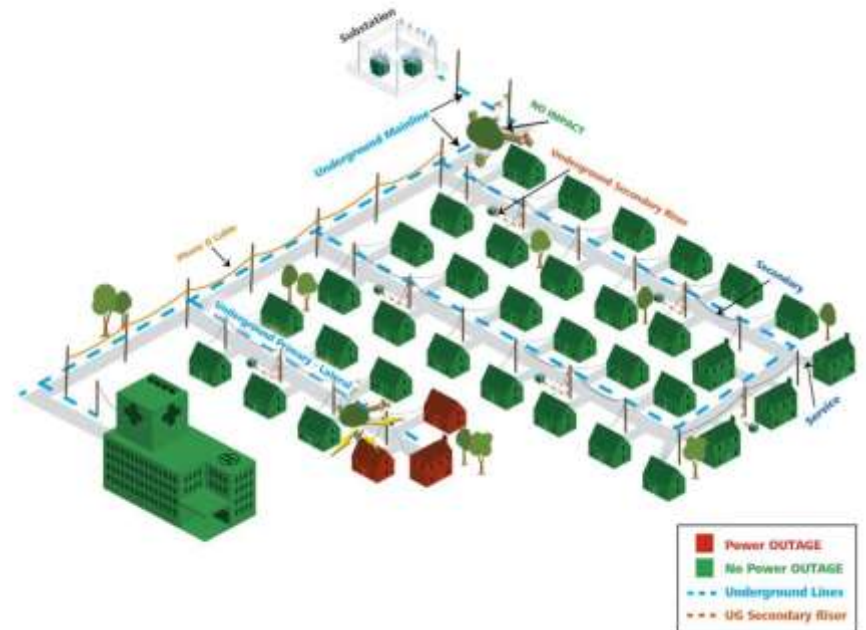


What You'll See

EXISTING OVERHEAD SYSTEM



PROPOSED UNDERGROUND PLAN



What You'll See

- Above Ground

Before



After



What You'll See

- Construction Phase
 - Coordination of capital improvement projects with other utility partners and within DDOT, as well as, with developers
 - Certified Arborist from DDOT's Urban Forestry Administration will review all DC PLUG plans
 - Any disturbed areas will be restored to original condition by contractor



What You'll See

- Construction Phase (cont'd.)
 - Work Time Restrictions: Louder construction activities prohibited from the earliest work hours and cease before evening hours. Normal allowable work hours are 7:00am to 7:00pm. Saturday hours, if applicable, are 9am to 5pm. No work on Sundays.
 - Traffic Impacts may include lane closures, parking restrictions and safe pedestrian detours.

