



## DC Power Line Undergrounding

Community Hearings

Presented by: Caryn Bacon, Pepco and Keith Foxx, DDOT

Date: July 24, 2014

# Agenda

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- 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

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- 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

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- 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
- Pepco's existing reliability enhancement program will be continued in all wards.

# Triennial Plan

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- 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. The next Triennial Plan will be filed in 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
- Triennial Plan also includes the DC PLUG Education Plan and a commitment to District business contracting and resident hiring

# 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
	<b>14093</b>	<b>10</b>	<b>5</b>	<b>946</b>	<b>\$34,231,400</b>
	14261	4	7	1,279	\$23,512,340
	15177 <sup>(1)</sup>	8	8	2,223	\$40,780,050
	<b>Year 1 Total:</b>				<b>6,382</b>

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
	<b>15701</b>	<b>25</b>	<b>5</b>	<b>2,842</b>	<b>\$14,782,712</b>
	<b>14008</b>	<b>26</b>	<b>5</b>	<b>1,038</b>	<b>\$19,486,420</b>
	368	18	7	627	\$12,070,813
	15707 <sup>(2)</sup>	3	7	3,104	\$41,263,358
	14758	9	8	2,131	\$19,199,215
<b>Year 2 Total:</b>				<b>12,798</b>	<b>\$166,002,800</b>

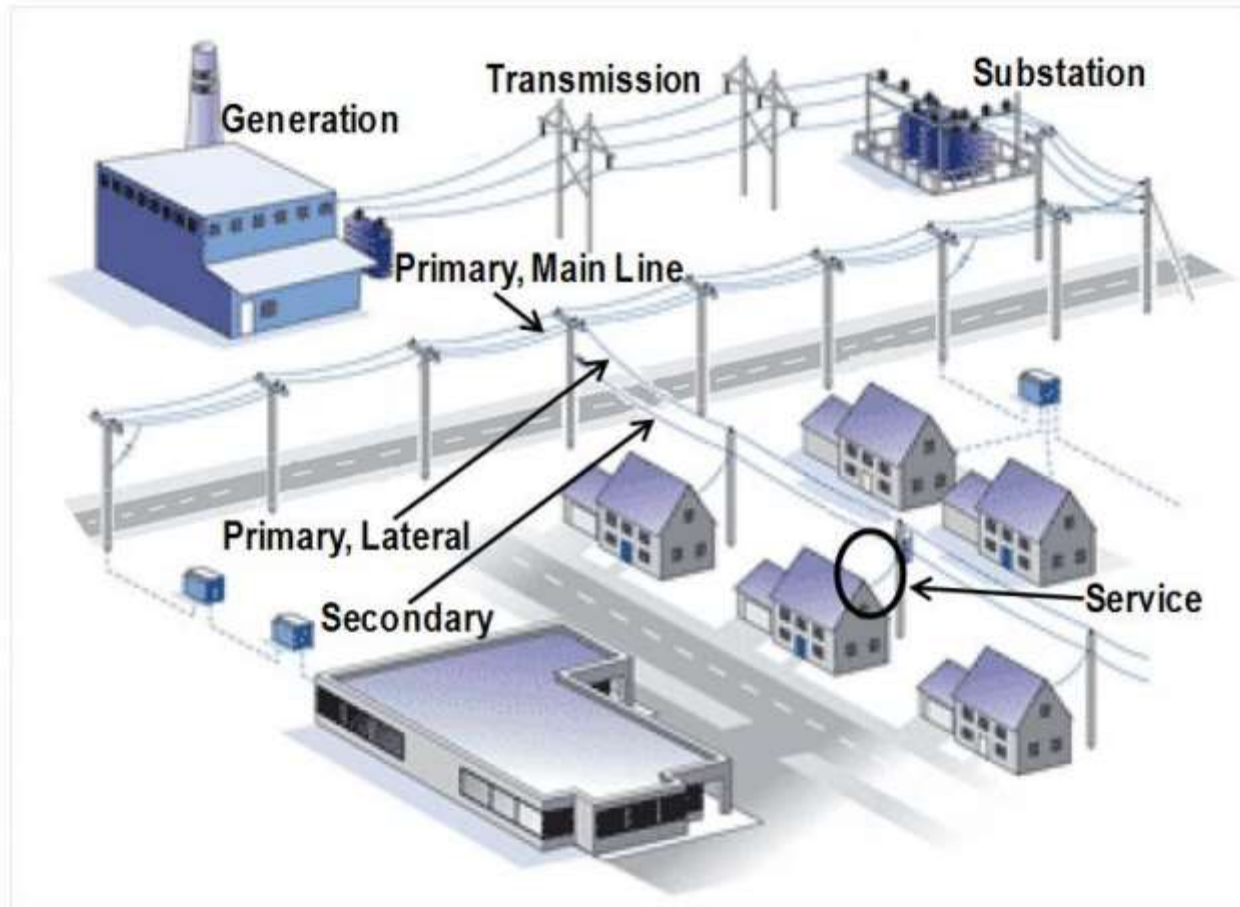
3	14136	22	3	983	\$5,493,159
	15944	21	3	715	\$19,688,647
	14766	19	3	715	\$10,341,696
	<b>14014</b>	<b>27</b>	<b>5</b>	<b>1,956</b>	<b>\$34,449,976</b>
	<b>15013</b>	<b>29</b>	<b>5</b>	<b>992</b>	<b>\$23,230,947</b>
	15130	34	7	1,937	\$10,921,457
	15166	16	8	2,140	\$27,681,744
	<b>Year 3 Total:</b>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

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

<sup>(1)</sup> Feeder construction projected to carry over into Year 2

<sup>(2)</sup> 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:

	<b>Triennial Plan</b>	<b>Financing Plan</b>
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

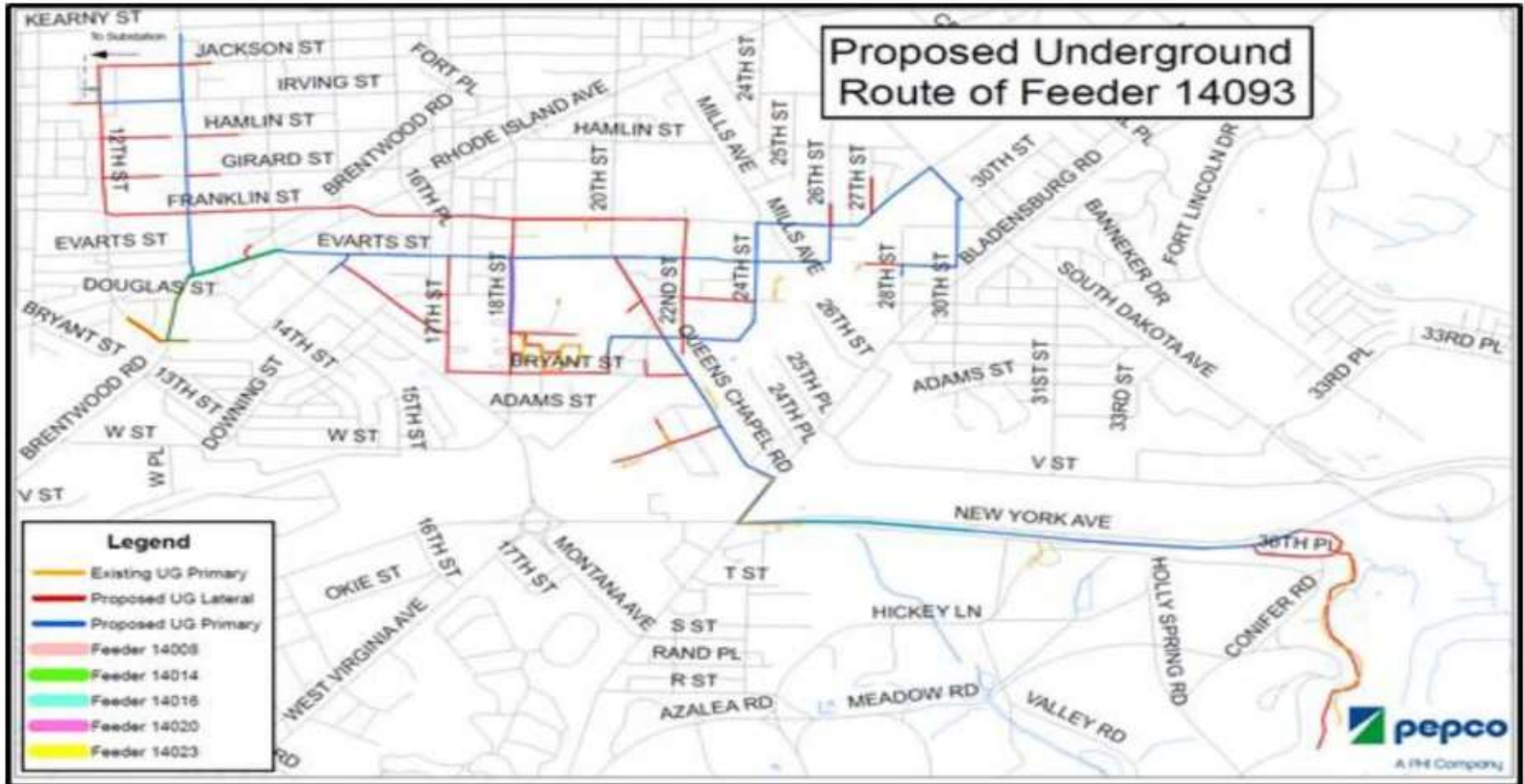
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- Provided are handouts detailing the work to be performed in your ward, including:
  - Feeder and year of construction
  - Ward
  - Neighborhoods
  - Description (percent residential/commercial)
  - Length of feeder (percent overhead and percent underground)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

## Proposed Scope of Work- Example Feeder 14093:

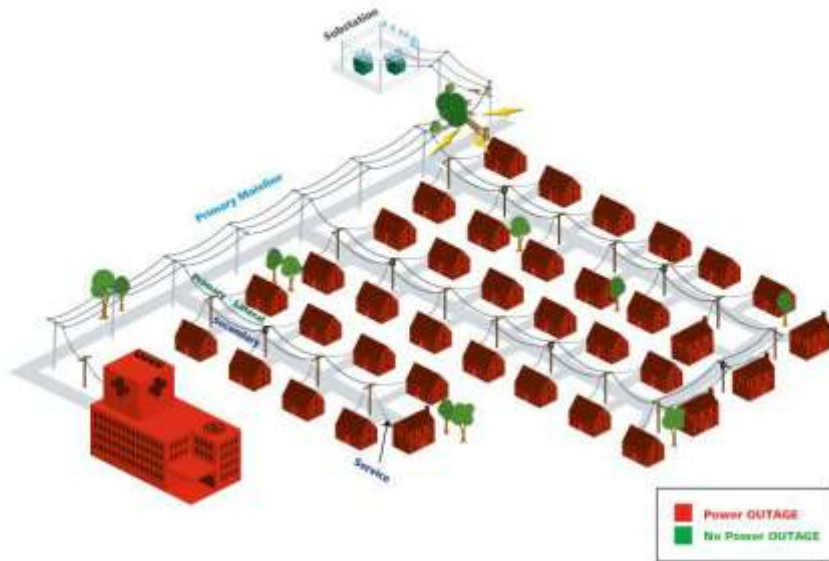
- Remove existing overhead primary wire and transformers
- Install approximately 170 manholes
- Install approximately 58 underground tap holes
- Install approximately 9.8 miles of duct bank in an underground trench
- Install ancillary civil equipment including associated paving milling
- Install approximately 165 transformers
- Install approximately 20 switches
- Install approximately 5 miles of mainline cable
- Install approximately 19.2 miles of lateral cable
- Install ancillary electrical equipment including cable supports, joints and insulators

# One Line Diagrams- Example

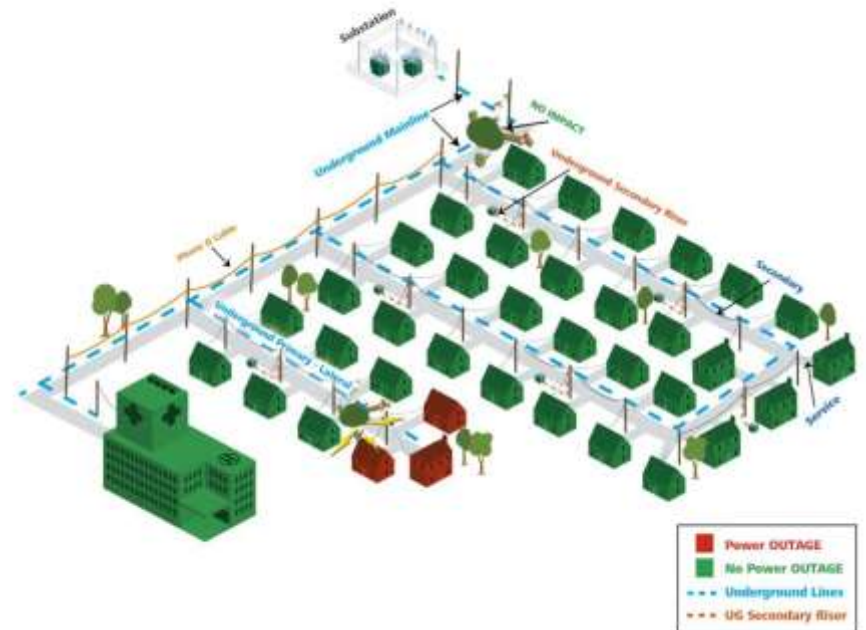


# What You'll See

## 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.

