

DC Power Line Undergrounding

Community Hearings

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Agenda

- Background and History
- Task Force Evaluation and Recommendations
- Applications Required by the Act
- Triennial Plan
- Triennial Plan Summary
- Current Overhead System
- Community Facts
- What You'll See
- Integrated Communication Strategy
- Paying for the DC PLUG Initiative / Financing Application



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



Applications Required by the Act

- 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
- The Act required two separate applications for Commission approval: Triennial Plan and Financing Order
 - Pepco and DDOT jointly filed a Triennial Plan on June 17, 2014 covering the three-year period 2015-2017. The next Triennial Plan will be filed in 2017
 - On August 1, 2014, Pepco filed the Application for Financing
 Order with the Commission as required by the Act



Triennial Plan

- 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	
	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	\$136,260,487	
	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	
2	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	\$166,002,800	
	14136	22	3	983	\$5,493,159	
3	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	\$131,807,626	

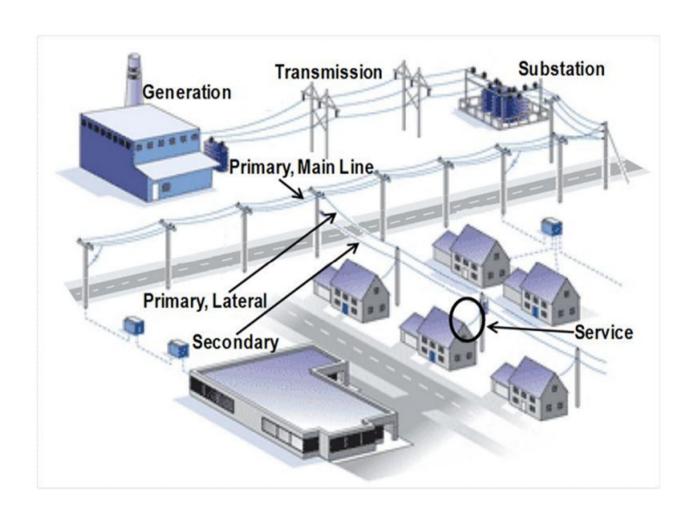
Total Estimated Costs (3 Years) \$434,070,913



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

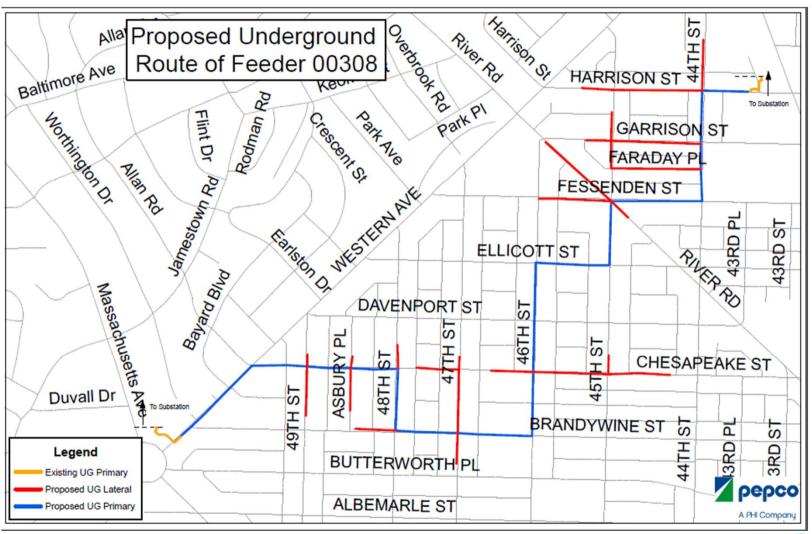
⁽²⁾ Feeder construction projected to carry over into Year 3

The Current Overhead System





One Line Diagrams - Example





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:

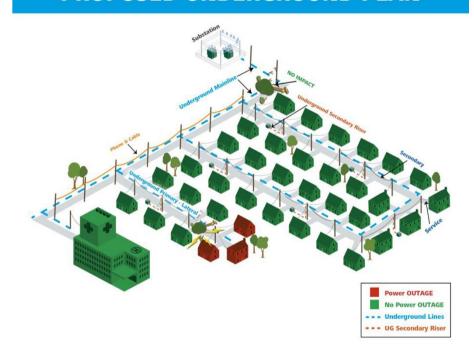
- Remove existing overhead primary wire and transformers
- Install approximately 60 manholes
- Install approximately 8 underground tap holes
- Install approximately 3.4 miles of duct bank in an underground trench
- Install ancillary civil equipment including associated paving milling
- Install approximately 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



EXISTING OVERHEAD SYSTEM

Power OUTAGE No Power OUTAGE

PROPOSED UNDERGROUND PLAN





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





- 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, which may include lane closures, parking restrictions and safe pedestrian detours, will be posted with advance notice.





Above Ground

Before



After





Integrated Communications Strategy- DC PLUG Education Plan

- Comprehensive plan to educate and update District of Columbia customers and other stakeholders on the DC PLUG initiative
 - Responsive and reliable information is critical for successful implementation of the DC PLUG initiative.
- Community engagement meetings hosted by the DC PLUG team, for each feeder, with a focus on key phases:
 - Project introduction and planning
 - Construction kick-off (what to expect)
 - Progress updates
- Community outreach in coordination with the Mayor's Office of Neighborhood Engagement, ANCs, OPC, PSC, community meetings, and other forums



Integrated Communications Strategy- DC PLUG Education Plan

- Mechanisms and tools to connect residents, businesses, and other stakeholders
 - Public libraries and other convenient neighborhood sites to give customers access to project information and to receive direct feedback from customers
 - Video broadcasts on Ch. 16 with tapes on construction progress
 - Dedicated DC PLUG website with updated project details (including FAQ, photos and videos) and customer feedback links
 - Dedicated DC PLUG customer service phone number and email address
 - Communication materials including information kits, fact sheets, bill inserts, door hangers, posters, and newsletters (coordination with District agencies, DC Council and Pepco services)
 - Media and digital communications including news releases/conferences, media kits, interviews, reporter ride-alongs, and social media



Paying for the DC PLUG Initiative - Summary

- The total \$1 billion DC PLUG initiative will be funded by three sources
 - \$500 million funded by Pepco
 - \$375 million net bonds issued by the District
 - \$62 to \$125 million funded through DDOT
- Two surcharge mechanisms will be added to the customers' bills
 - The Triennial Plan, filed on June 17, 2014, will establish a surcharge to cover Pepco's investment in the initiative
 - The Financing Plan, 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.
- Residential Aid Discount (RAD) Customers will be exempt from both of the DC PLUG surcharges



Paying for the DC PLUG Initiative – Financing Plan

- Authorizes the District to issue up to \$375M in bonds
- Approves a surcharge to cover the repayment of bonds and ongoing financing costs
- Key terms of the proposed bond offering
 - Estimated issuance date March 2015
 - \$375M of net bond proceeds for the initiative
 - Multiple bond tranches issued
 - Final maturity scheduled to be 18 years, but will be no greater than 30 years
 - Overall average life of approximately 10.5 years
- Fixed interest rates however final terms will be determined at time of issuance



Paying for the DC PLUG Initiative – Customer Impact

The estimated monthly bill surcharge impact on the average residential customer is:

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 Financing Plan

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Year 1	\$.18 per month	\$1.12 per month
Year 2	\$.52 per month	\$1.12 per month
Year 3	\$.91 per month	\$1.12 per month

- The Commission is expected to approve the Triennial Plan and Financing Plan in the 4th quarter of 2014
- The monthly surcharges are expected to begin in the first half of 2015
- The estimated monthly bill impact is in line with the estimates communicated by the Task Force Report in 2013, and at its expected peak in 2022 is forecasted to be approximately \$3.25 per month (\$2.13 for the Triennial Plan and \$1.12 for the Financing Plan) for a typical residential customer using 750 kwh/month

