

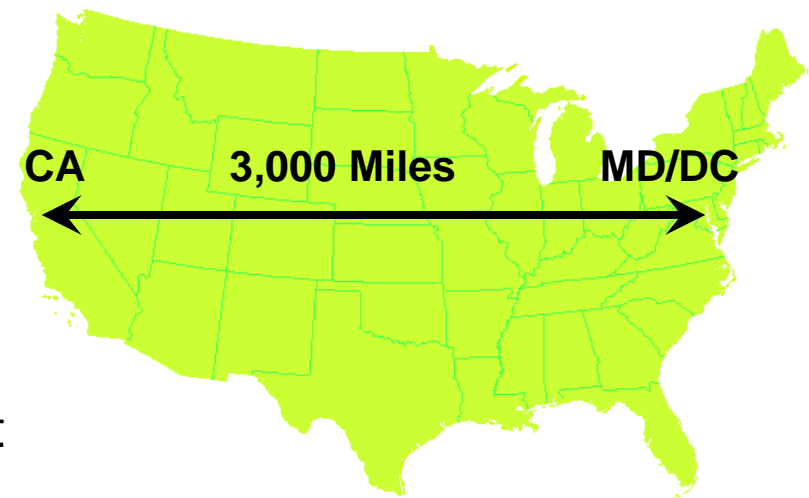
Pepco's Reliability Enhancement Program



About Pepco



- Incorporated as the *Potomac Electric Power Company* in **1896** – celebrates 115th-year anniversary in April 2011
- Provides electric service to the **District of Columbia**, and major portions of **Montgomery** and **Prince George's** counties
 - Customers: **782,967**
 - Total population: **2.1 million**
 - Service area: **640 square miles**
 - **14,266** miles of overhead lines
 - **10,718** miles of underground cable
 - **2,945** miles of underground conduit
 - **178** substations
 - **88,277** transformers



Pepco is a Regulated Business



- An energy-delivery company that is fully regulated
 - No longer generate power
- Rates are set by the Maryland Public Service Commission (PSC)
- Costs are subject to Commission review for prudence and approval in rate cases



Infrastructure



- Designed to operate in excess of 30 to 40 years
- Electric system technology has seen little change in more than a century
- Proactive schedule for infrastructure maintenance, e.g. poles, underground (URD) lines and substation equipment
- Proactive schedule for vegetation management (tree trimming)
- Storm response plan

2010 Intervening Events

- Weather patterns this year ranked the most severe in the nation according to the National Weather Service resulting in widespread, prolonged outages.
 - Back-to-back record-breaking winter storms
 - Record-breaking summer heat
 - Multiple, severe summer storms



The Tipping Point

- 2010 outage events, combined with customer dissatisfaction about restoration work, created a “tipping point” for customers – we heard you
 - We recognize the need to improve reliability
 - We recognize the need to do more work and invest more in our infrastructure
- Pepco already had in place a 5-year plan to replace aging infrastructure and improve reliability
 - A \$156.5 million effort

Pepco's Response

- *Announced in September an additional \$100 million for our reliability enhancement work*

A New Opportunity



- Electric system technology has advanced in recent years
- New digital technologies that comprise the “smart grid” are now available and will help improve reliability
- A \$104 million grant from the Federal government to install “smart grid” technology will offset costs to Maryland customers
- “Smart grid” will:
 - Improve outage management
 - Signal Pepco when customers are out

Enhanced 5-Year Reliability Plan



- **Enhanced Tree Trimming**
 - Increased trimming along public rights of way to improve clearance between the overhead electric wires and trees
- **Priority Feeder Expansion**
 - 45% expansion in program that targets least performing feeders
- **Load Growth Preparation**
 - Continue to evaluate the need to add or upgrade feeders to reliably serve new customers and support increased use by existing customers
- **Distribution Automation**
 - Installing smart control systems to allow the electric system to identify and isolate faults
- **Underground Cable Replacement**
 - Accelerate program to replace aging cables in underground-served developments
- **Selective Undergrounding & Substation Hardening**
 - Harden the high-voltage substation supply lines to reduce the number of tree-related outages

Reliability Commitment



- Committed to improving reliability and installing smart grid technology at lowest possible cost to customers
- Committed to working with our customers, through established community advisory groups, to help you better understand the work and costs involved, including how to capture individual savings
- Enhancements represent a major investment
 - Expenditures must be approved by the PSC, with customers bearing the cost
 - We will be looking for your support on cost-recovery

5-Year Reliability Enhancement Plan Budget

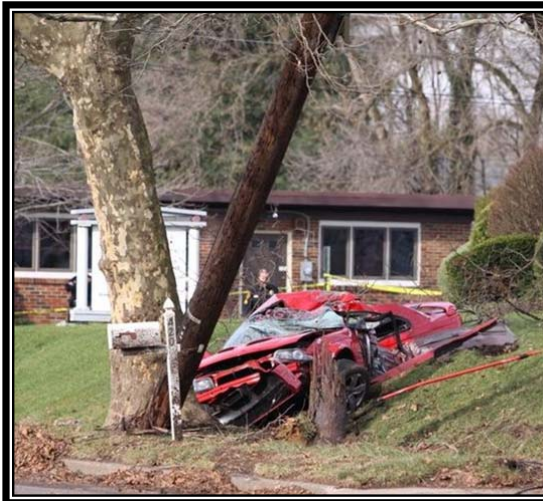


	Prior Five-Year Plan	Prior Annual Spending	Enhanced Five-Year Plan	Enhanced Annual Spending
1. Enhanced Vegetation Management	\$21.5	\$4.3	\$36.5	\$7.3
2. Priority Feeders	\$22.5	\$4.5	\$32.5	\$6.5
3. Load Growth	\$60.0	\$12.0	\$60.0	\$12.0
4. Distribution Automation	\$6.0	\$1.2	\$15.0	\$3.0
5. URD Cable Replacement	\$31.5	\$6.3	\$37.5	\$7.5
6. Selective Undergrounding / Substation Improvements	\$0	\$0	\$75.0	\$15.0
TOTAL	\$141.5	\$28.3	\$256.5	\$51.3

Outages Can Happen on Blue Sky Days

In addition to storms, outages may be caused by:

- Animals that comes into contact with electric facilities
- Automobile accidents
- Construction accidents
- Tree limbs weakened during previous storms
- Equipment failures

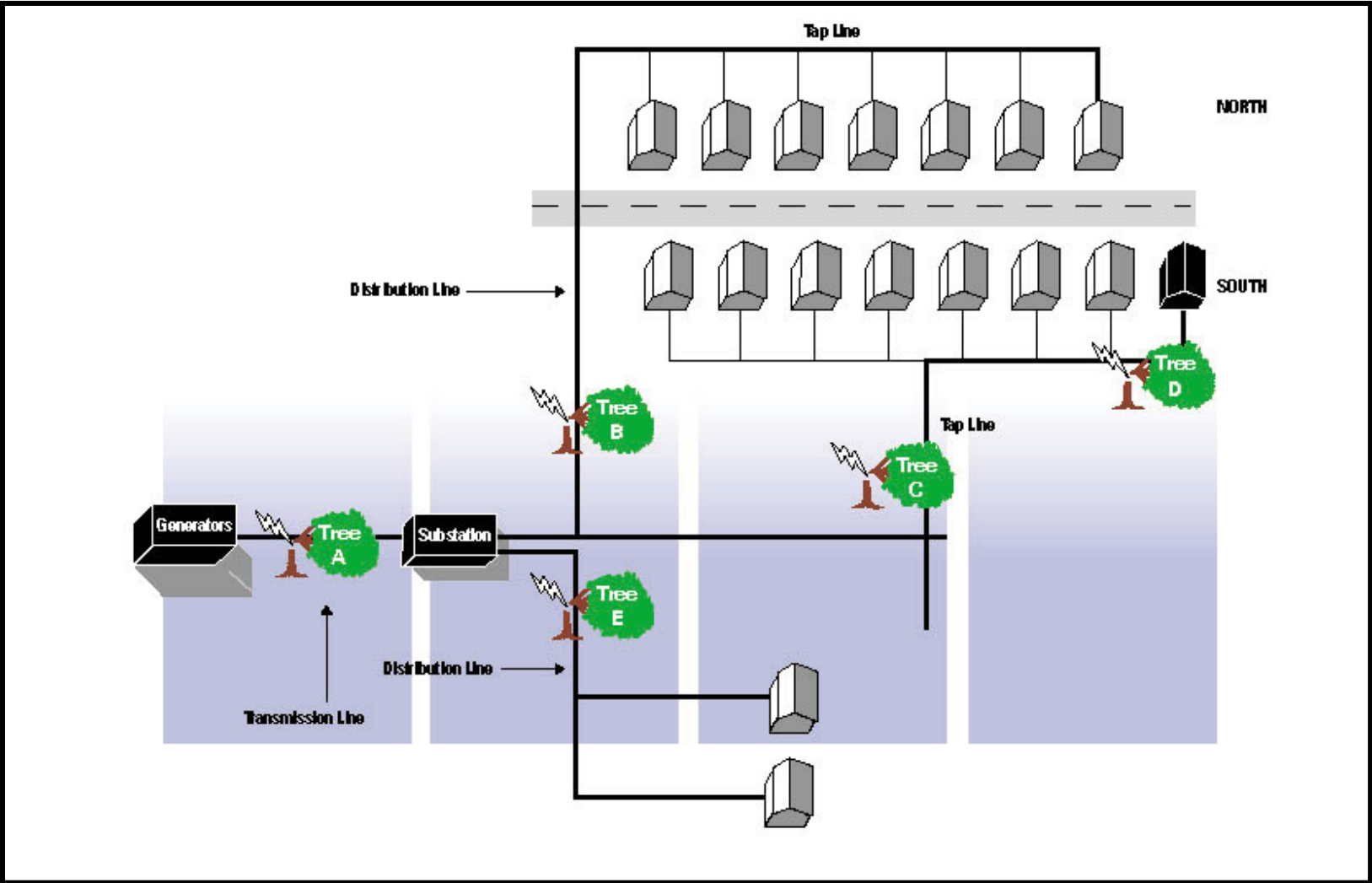


Restoration Priorities

- Life-threatening
- Critical public services
- Transmission lines
- Substations
- Main feeder trunk
- Lateral sections
- Individual homes/businesses



How power is restored



Customer Communication Strategy



- Inherent in any successful customer initiative is the need to keep the customer informed
- As a critical component of the Reliability Plan, we have incorporated a multi-phase, multi-channel, customer communication strategy

Component of the Communications Plan



- I. Customers on each affected circuit (feeder) will be notified of the scope and timeline for the reliability work being performed in their neighborhoods
- II. These letters will have a new look and feel – they will be formatted for easier reading; and the technical descriptions of the work will be written in a manner that customers can more easily understand

- III. The letters will provide the means for customers to contact us for more information (call; write or email to dedicated mail and email addresses).

The Customer Service System will be updated when a Reliability Plan letter is sent; the Contact Center customer service representatives (CSRs) will be trained to answer questions about the Plan.

Engineering support will be available to answer customers' more technical questions.

IV. We will improve our visibility when working in neighborhoods:

- Continue to use door hangers when working on customer property
- Begin using Pepco placards on all contractor vehicles
- Begin posting signs in neighborhoods where we are working a multi-day Reliability project

- V. We will improve customers' access to information on our website
 - Currently working on an application that will allow customers to view a map of the service territory to see what Reliability work is planned for their area
- VI. We will utilize social media platforms to disseminate information to our customers
- VII. We will maximize our community resources to inform customers of our progress on the Plan

VIII. We will send follow-up letters to the customers on affected feeders when the Reliability work has been completed. Customers will have the same options to contact us for more information.

Our Commitment



We're working for you

- To improve reliability
- To improve communications

APPENDIX

Reliability Enhancements Planned for your Community



- (content will be customized for each presentation)

Glossary of Electrical Equipment Terms



- **Animal Guard:** A non-conductive device installed on energized electrical equipment to minimize customer outages due to animal contact.
- **Automatic Circuit Recloser (ACR):** Remote control device monitored and operated by the Control Center designed to detect faults on the feeder downstream, and open to isolate faults from the rest of the feeder, thereby reducing the number of customers affected. The ACR also attempts to automatically reclose circuits because many of the faults are temporary and usually fall clear. In instances where faults do not clear themselves, the ACR will remain open until crews make repairs.
- **Cross Arm:** A non-conductive assembly (usually wooden) for supporting electrical wires on a utility pole.
- **Customer** - A "customer" represents one Pepco meter.
- **Distribution Transformer** - Converts electricity from high voltage to low voltage for delivery to individual customers. Each distribution transformer serves 1-20 customers.

Glossary of Electrical Equipment Terms



- **Feeder:** An electrical line that carries a large block of power from the substation to the customer. This includes overhead as well as underground facilities.
- **Fuse:** A safety device used to protect an electric circuit against excessive current.
- **Lateral:** A tap/wire off the main trunk of the feeder serving the smaller areas, protected by a fuse.
- **Lightning Arrester:** Protective devices for limiting surge voltages due to lightning strikes or equipment faults or other events, to prevent damage to equipment and disruption of service (also called surge arresters). These devices are installed on many different pieces of equipment such as power poles and towers, power transformers, circuit breakers, bus structures, and steel superstructures in substations.
- **Manhole:** An underground utility vault used to house electrical and other utility equipment.

Glossary of Electrical Equipment Terms



- **Pre-assembled Aerial Cable (PAC):** A type of insulated overhead cable which is more robust than standard overhead wire and is better able to withstand falling tree limbs.
- **Tree Wire:** An insulated overhead wire used to withstand incidental tree contact, particularly in heavily wooded areas.

Customer Choice



- In 2000, with electric industry restructuring approved by the Maryland and D.C. legislatures, Pepco's electricity market changed. Pepco no longer generates power, and competing electricity suppliers are allowed to market their electric supply.
 - For a list of Maryland electric suppliers visit the Maryland Public Service Commission web site at www.psc.state.md.us
 - For a list of electric suppliers in the District of Columbia visit the D.C. Public Service Commission web site at www.dcpsc.org
- Whether or not you choose another supplier, Pepco still delivers electricity to all customers in our service territory. We also respond to all emergency and routine service calls.