Strategic Underground Program

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Wouldn’t It Be Nice! ....

To Have Wires Underground

By P. U. Ross

THAT is what the customers of electric service say everytime we have a storm or high winds. They always hope for the wires to be underground. That is usually the first thing they say. "You have to cut a lot of wood and it’s a mess to keep them up. Wouldn’t it be nice to have them underground?" I hear that all the time. It does somewhat irritate me, but it doesn’t irri...
Background

- 58,000 miles of distribution lines
- About one-third underground now
- Over half of the overhead system consists of tap lines
- Prohibitively expensive to put the entire distribution system underground
A New Approach to Undergrounding

- Reliability initiative aimed at reducing the duration of storm restorations
- Reduce repair locations by undergrounding the most outage-prone tap lines
- SCC approval and review of project selection, cost prudence, and results
How Do We Select Projects?

- 10 year outage history for every tap line
  - “Device-level” outages
- Convert to “Events per Mile”
- Focus on single phase
  - Allows for broader impact across system
Performance Metrics
(Program to Date)

- Tap Lines Converted: 1,436
- Miles Converted: 475
- Annual Events Removed: 706
- CEI Customers Converted: 1,415
Strategic Underground Program Highlights

1. Improved Reliability
   - Reduces exposure during severe weather
   - Reduce power outages

2. Faster Response
   - Fewer repairs
   - Faster restoration time during major events

3. Minimal Impact to Property
   - Low-impact underground drilling technology
   - No project is complete until property is restored

4. Communication
   - Dedicated Dominion point of contact
   - Regular project communications
Stages of the Strategic Underground Program
Six Stages of Program

1. Evaluation
   - Data driven process to identify overhead lines most prone to outages

2. Design
   - Dominion representative visits area and takes field notes
   - Prepare proposed layout
Six Stages of Program

3. Obtaining Easements
   - Work cooperatively with property owners of the proposed route

4. Scheduling & Site Preparation
   - VA811 will identify public underground lines (water, sewer, gas)
   - Work with property owners to identify private underground equipment (irrigation, septic)
Six Stages of Program

5. Construction & Conversion
   • Low-impact, directional boring technology

6. Property Restoration
   • Ensure property has been restored to a similar condition prior to construction
A Complex Project

- Easements
- Telephone & Cable
- Meter Bases
Key Messages

• Every project benefits our customers by strengthening the system’s reliability

• A fair, data driven process will be used to choose projects

• We will communicate fully with landowners, work professionally, and respect their property
Trees and Underground Lines

- Committed to ensuring health and beauty of our natural landscape
- In most cases, use of low-impact drilling technology, rather than open trenching
- Advantages:
  - Minimize disruption to property
  - Maintaining health of trees
Thank you for spending time and money to improve the service in our neighborhood (Clover Hill Farms) off of Spring Run in Chesterfield County. The power stayed on during the entire storm. I've lived here for 15 years and until now, it was a given that we would lose power, while we could see lights shining in the neighborhoods around us. I cannot tell you how happy and grateful we are. I kept walking around, saying, "We have power". Lol, this probably sounds silly but it's not meant to be. Our family and our neighbors are very appreciative of your improvements to our neighborhood. Thank you so much! Stay safe and warm.
Strategic Underground Program℠

Questions

Visit our website at www.dom.com/underground