



5-7-19

BUS-1

Additional Information

Florida Power & Light Company Storm Secure Underground Program

City of Fort Lauderdale

May 7, 2019



Overview

- ▶ Discuss a new pilot program that FPL has undertaken to underground segments of power lines to help enhance the reliability of your service and speed the restoration of power after a severe weather event, like a hurricane

The way FPL delivers power

- ▶ FPL operates 75,000 miles of power lines
- ▶ Overhead power lines – 60 percent
- ▶ Underground power lines – 40 percent



Power is delivered by two different power lines and poles

Neighborhood power line



Main power line



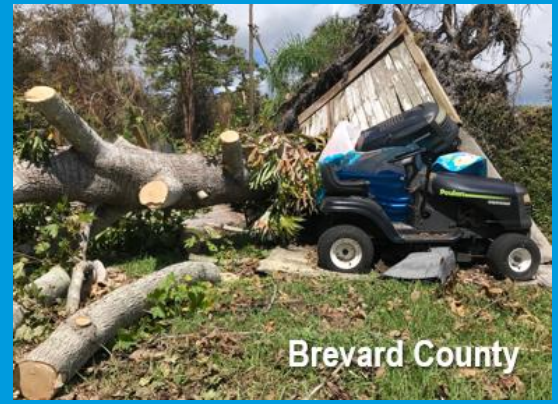
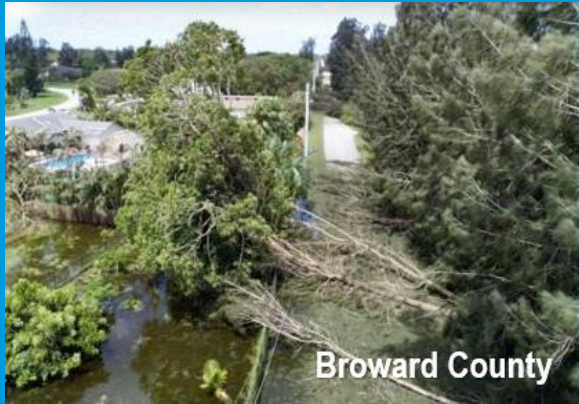
Hardening is focused on strengthening our infrastructure to better withstand hurricane-force winds



- ▶ Installing stronger poles/shortening span lengths
- ▶ Inspecting all power poles for strength/loading
- ▶ Clearing vegetation near power lines
- ▶ Converting overhead facilities to underground



During Hurricane Irma, most outages caused by wind-blown debris, trees



Underground power lines perform well during everyday and storm conditions

- ▶ Advantages to undergrounding:
 - ▶ Better reliability in normal and severe weather conditions, such as lightning and wind
 - ▶ Reduces power interruptions, especially due to vegetation issues
 - ▶ Speeds restoration efforts

50%
better in
day-to-day
operations

Underground power lines do not eliminate power outages

- ▶ Disadvantages to undergrounding:
 - ▶ Increases time to diagnose and repair a problem
 - ▶ More susceptible to flooding, which delays restoration efforts



This initiative is exploring the benefits of undergrounding specific neighborhood power lines

- ▶ **We started the pilot program in 2018 and have identified projects throughout our entire service area**
- ▶ **We will work with communities, neighborhoods and customers involved in each project**

The criteria for the undergrounding projects

Power line
performance
during
Hurricanes Irma
and/or Matthew

Outages on
power lines
due to vegetation
issues

Performance
of power line
during
day-to-day
operations

We are committed to communicating throughout the span of the project

- ▶ Obtaining easements and permits
- ▶ Project scheduling
- ▶ Site preparation
- ▶ Construction/installation of equipment
- ▶ Site restoration



Equipment that will be commonly used in undergrounding projects



Pad-mounted transformer



Hand-hole

Equipment that will be commonly used in undergrounding projects



Meter enclosure adapter box connected to meter enclosure

Overview of project

Before construction



CHANGING THE CURRENT. FPL.

Overview of project

After construction



CHANGING THE CURRENT. FPL

Equipment that will be commonly used in undergrounding projects

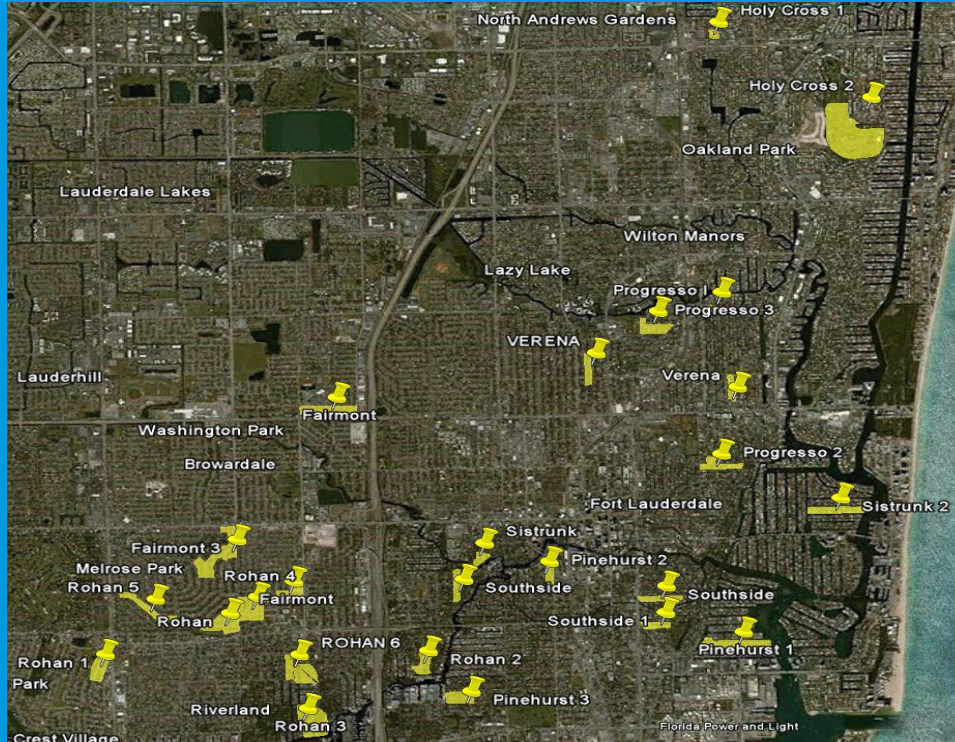


Horizontal or directional boring equipment



Cable reel

Projects in Fort Lauderdale



There are currently 23 active jobs, and plans are underway to add more projects in 2019





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