

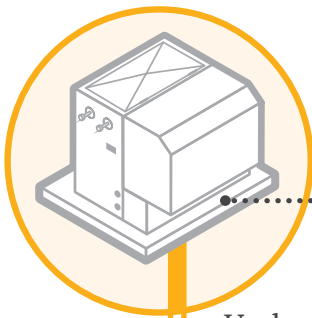
Hurricane Hardening

Hurricane season in the United States runs June 1 through November 30. As the intensity and frequency of storms have increased over the past decade, electric cooperatives whose territories are vulnerable to hurricanes have worked to improve their systems to minimize damage and disruptions from high winds and flooding and speed recovery times. Here are some of the key measures co-ops take to harden the grid.



Vegetation Management

Conduct regular trimming and removal of trees within rights-of-way



Pad-mounted transformer

Pole

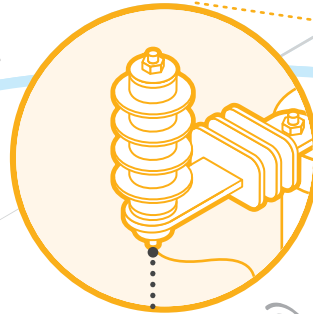
Underground power lines

Undergrounding

Move vulnerable sections of line underground to protect them from high winds and falling trees

Lightning Arresters

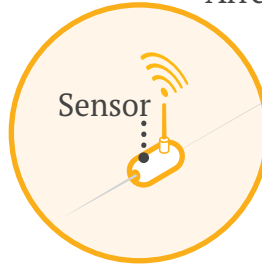
Install devices that divert surges from lightning strikes to keep power flowing



Arrester

DA/FLISR

Deploy "self-healing" systems like distribution automation and fault location, isolation and service restoration to minimize the scope and duration of outages

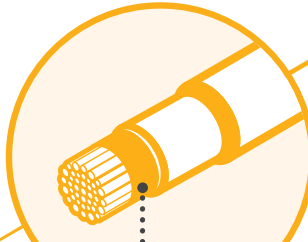


Sensor

Cutout fuse

Wire Upgrades

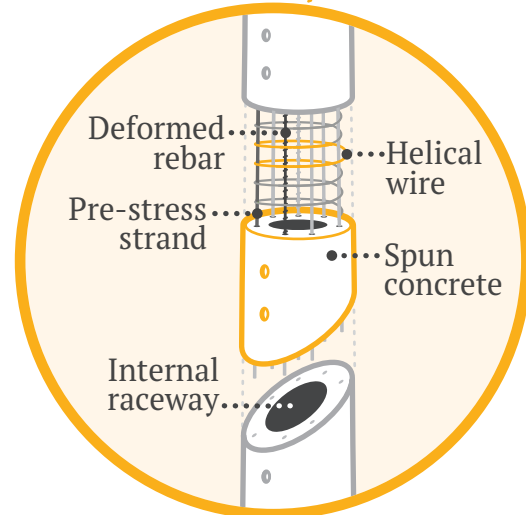
Replace standard conductor with larger-diameter, coated "tree wire" to resist damage from wind and tree limbs



Semiconducting shield

Pole Management

Increase pole inspections and repairs and replace wood poles with higher-class wood, metal or concrete to better withstand strong winds



Deformed rebar

Pre-stress strand

Helical wire

Spun concrete

Internal raceway