Vegetation Mgmt Program

Richard Arellano I Vice President, Support Services
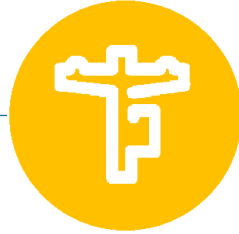
September 2020

Importance of Vegetation Maintenance

Safety

When vegetation contacts energized lines, they can become ignition sources for fires.

Vegetation in contact with a high-voltage source poses an electrocution risk and creates hazardous work conditions for employees, contractors, and members.

Reliability

Vegetation in contact with electrical equipment causes outages and "blinks."

Vegetation around electrical equipment can impede operations, thereby increasing both the frequency and duration of outages.

Affordability

A well-trimmed electric distribution system significantly reduces unnecessary expenses:

- Damage claims
- Premature equipment failure
- Outages
- Line loss

PEC's Vegetation Maintenance Program

Regular Tasks

- Perform proximity trimming around energized equipment for safety and reliability.

- Clear transmission right-of-ways (ROW) to meet NERC standards.

- Apply herbicide to increase longevity of trim cycles.

- Re-seed ROW to control regrowth and to increase habitat.

- Provide member education regarding proper planting around utility equipment.

- Support other programs (PTT and Pole Contacts) with trimming for upcoming projects.

- Assist district operations when an arborist is requested.

Cyclical Maintenance Process

- **Five-year maintenance cycle** - Organized by substation areas, operational data, and line-worker feedback.

- **Member Notifications** - Via automated calls, email, USPS, social media, and door-to-door.

- **Contractor Utilization** - Targeted removal of invasive, fast-growing species.

- **Program Auditing** - PEC Utility Foresters audit the contractor work and may send crews back to locations if re-work is needed.
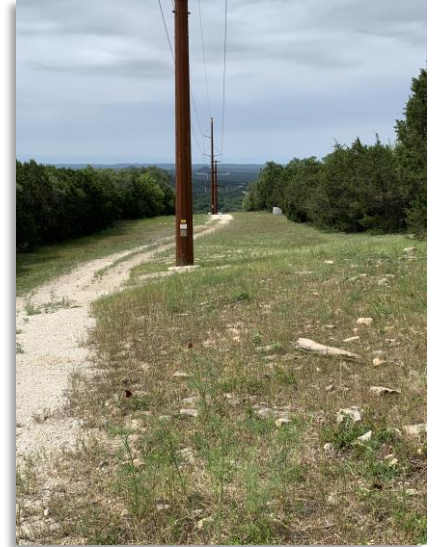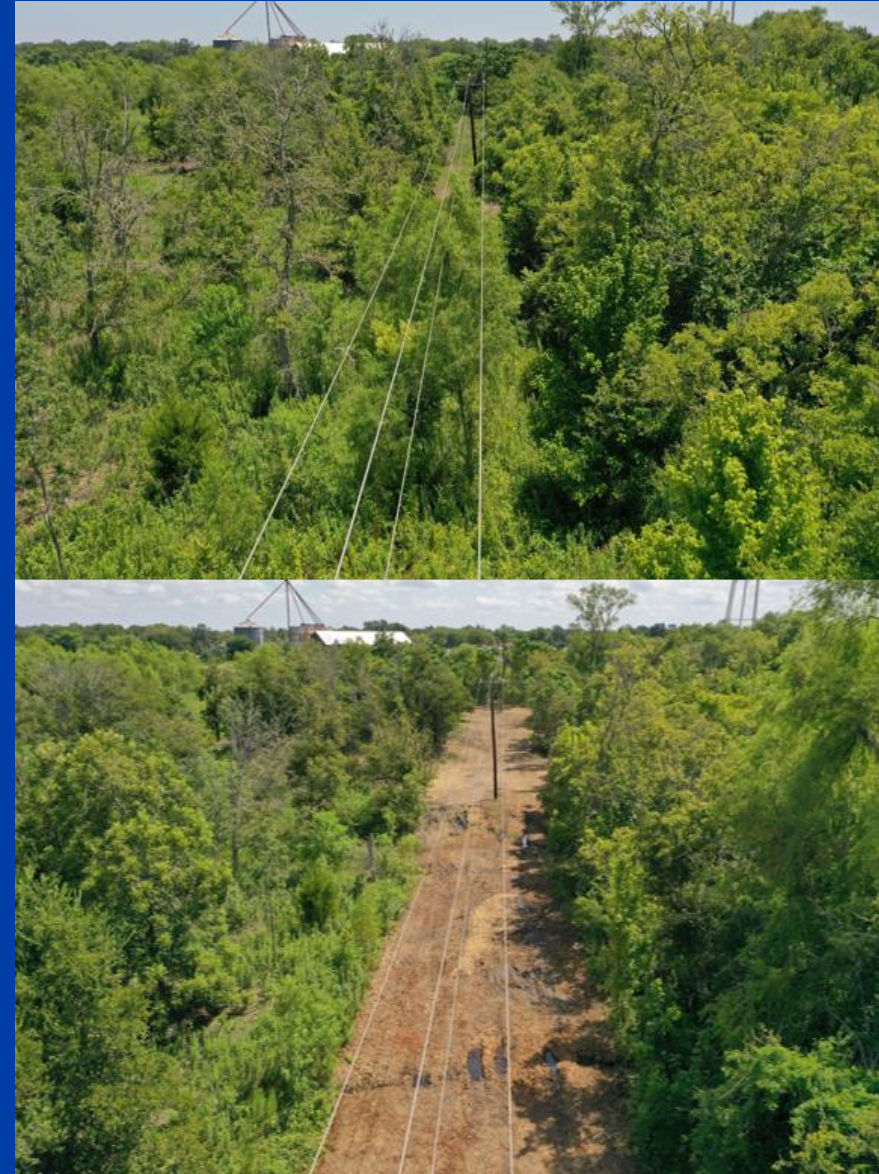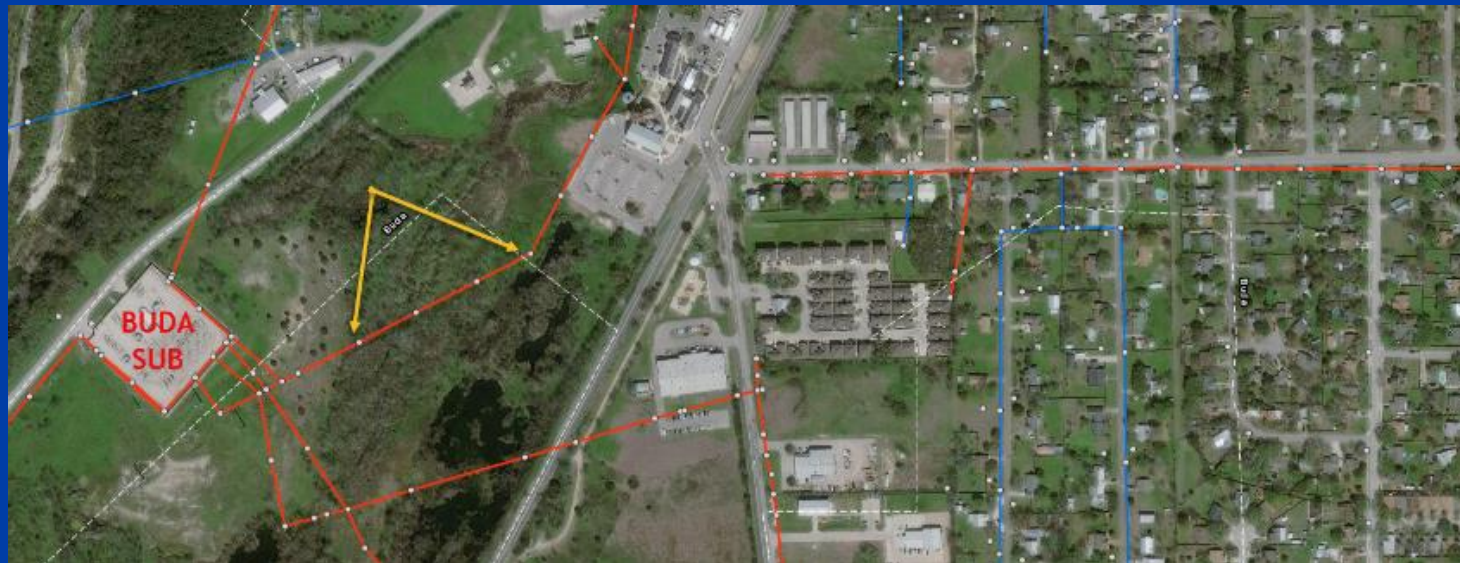
Accessing Equipment
Before & After

Removing Invasive Species
Before & After

Buda Substation Feeder Exit

Vegetation Maintenance Expense

Year	2017	2018	2019	2020 (YE Projected)
Internal Cost	$ 1,810,268	$ 1,460,547	$ 1,571,437	$ 1,414,837
Outside Services	$ 8,959,018	$ 6,933,851	$ 7,143,582	$ 8,894,249
Total	$ 10,771,303	$ 8,396,416	$ 8,717,038	$ 10,309,084
SAIDI	56 min.	54 min.	45 min.	41 min. *

Only 3.2% of all outages are vegetation related

Cost Considerations/Drivers:

2017 - Fully centralized VM

2018 - Hot shot crews moved to districts from centralized VM

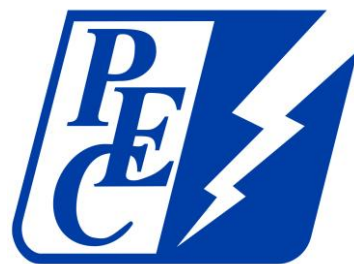2019 - Expanded criteria for tree removals

2020 - Accounting change to criteria for VM expense vs. capital, and increasing cost of outside services

Invasive Tree Removals	
2019 YTD	**2020 YTD**
5,815	20,216

2020 Budget Amendment in the amount of $5.8M is required in order to continue trimming trees for the safety and reliability of the PEC system and to further mitigate the risk of potential wildfires, including:

- **$4.3M - Vegetation Mgmt Program**
- **$1.5M - District Operations managing increased "hot shot" work for outage prevention and restoration**

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