



# Operations Report

Eddie Dauterive | Chief Operations Officer

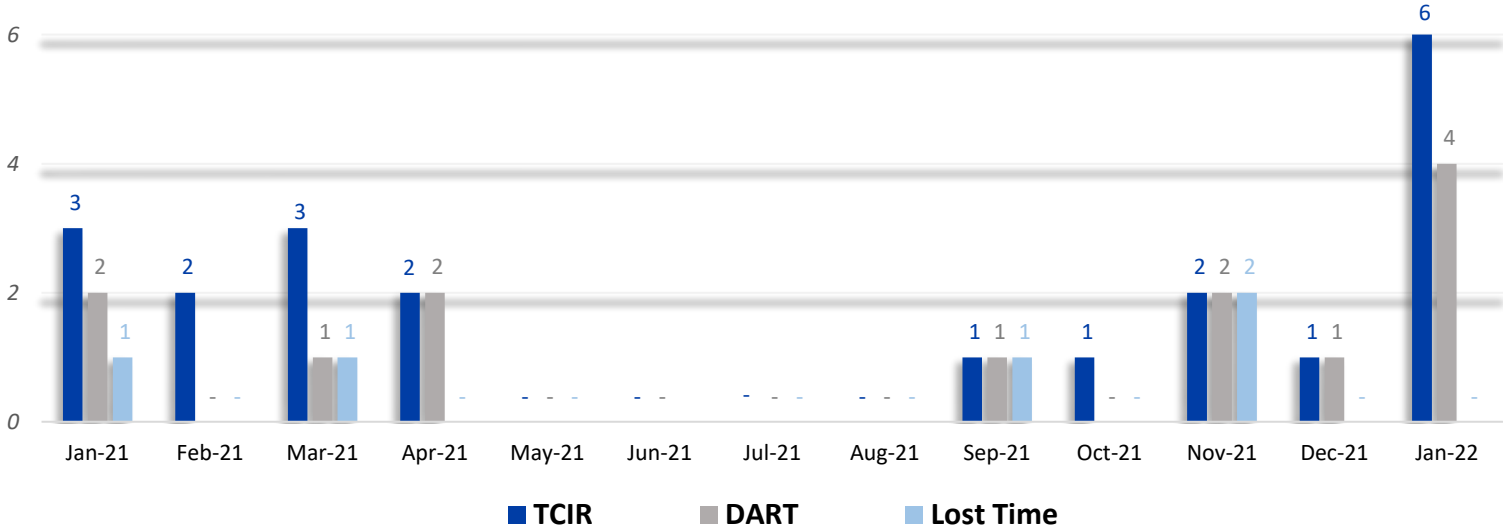
February 18, 2022

# Safety & Technical Training

## Personal Incidents

Reportable Injuries, Days Away, and Lost Time Incidents

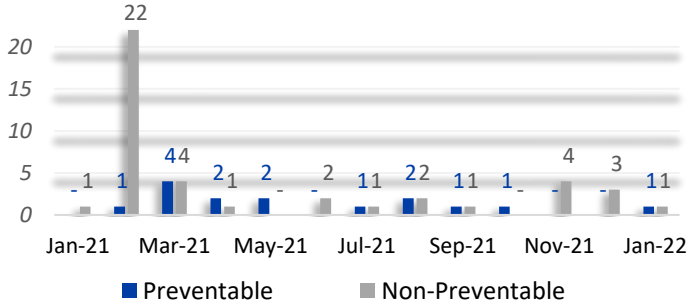
Days Restricted: 2021 – 472 2022 YTD – 38  
 Lost Time Days: 2021 – 198 2022 YTD – 0



## Vehicle Incidents

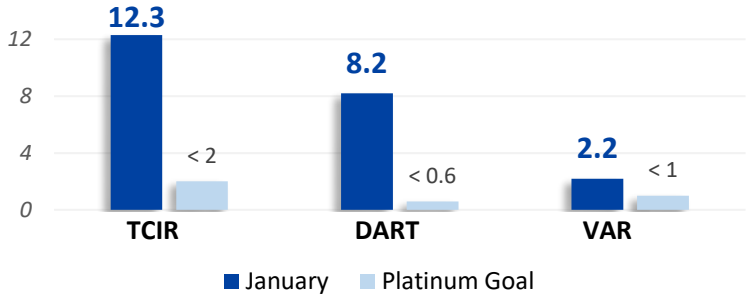
Preventable & Non-Preventable

2021 Preventable: 14  
 2021 Non-Preventable: 41



## KPI Progression

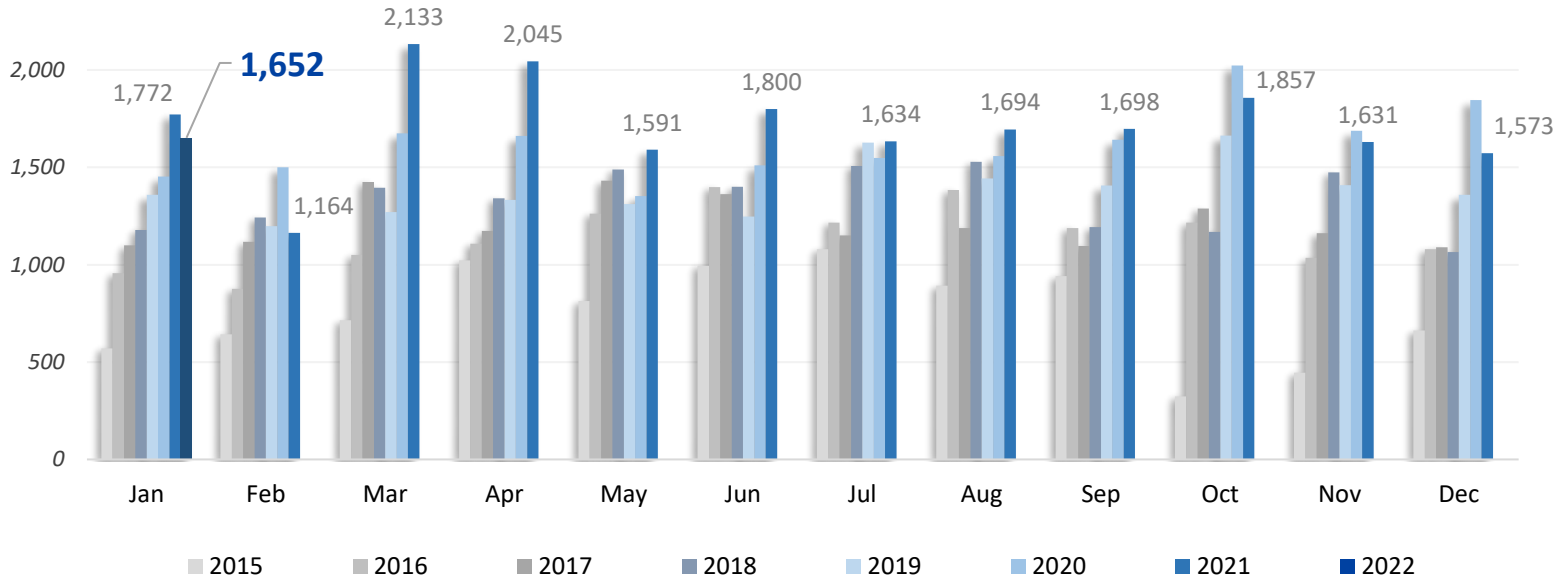
2022 Period One



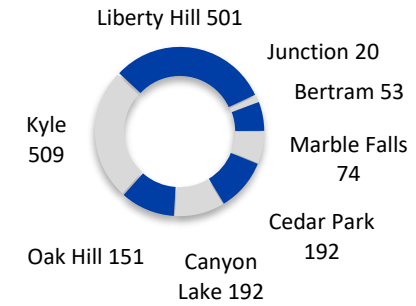
# System Growth

## Line Extensions Completed

2019: 16,640 2020: 19,458 2021: 20,592 2022 YTD: 1,652



## Line Extensions Per District



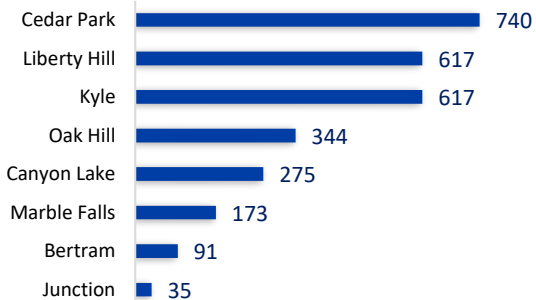
## Miles of Distribution Line:

Underground: 6,400 (27%)  
 Overhead: 17,462 (73%)  
 Total: 23,862



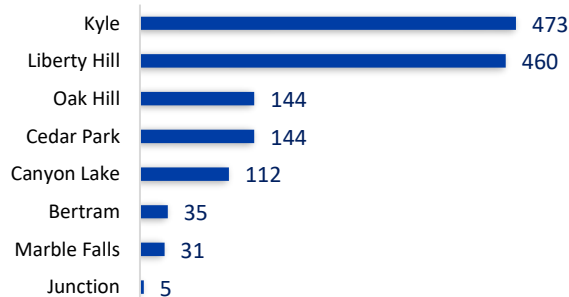
## Member Growth

Jan. 2022: 2,892



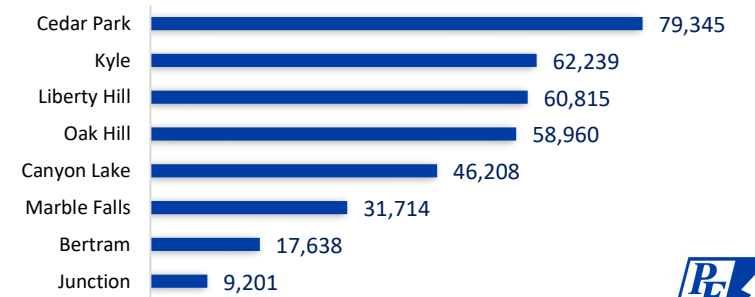
## Meter Growth

Jan. 2022: 1,404



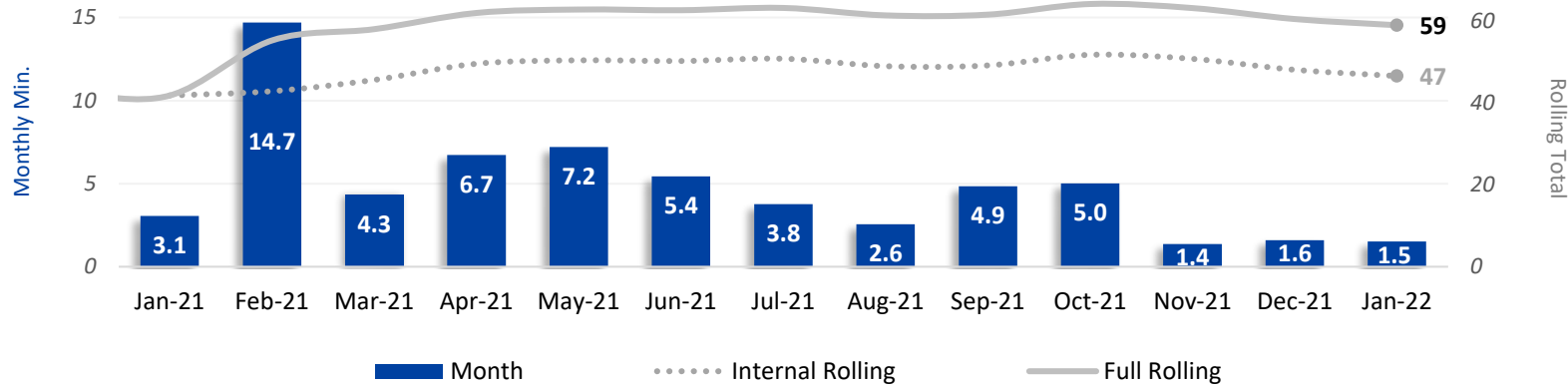
## Meter Totals

Jan. 2022: 366,120

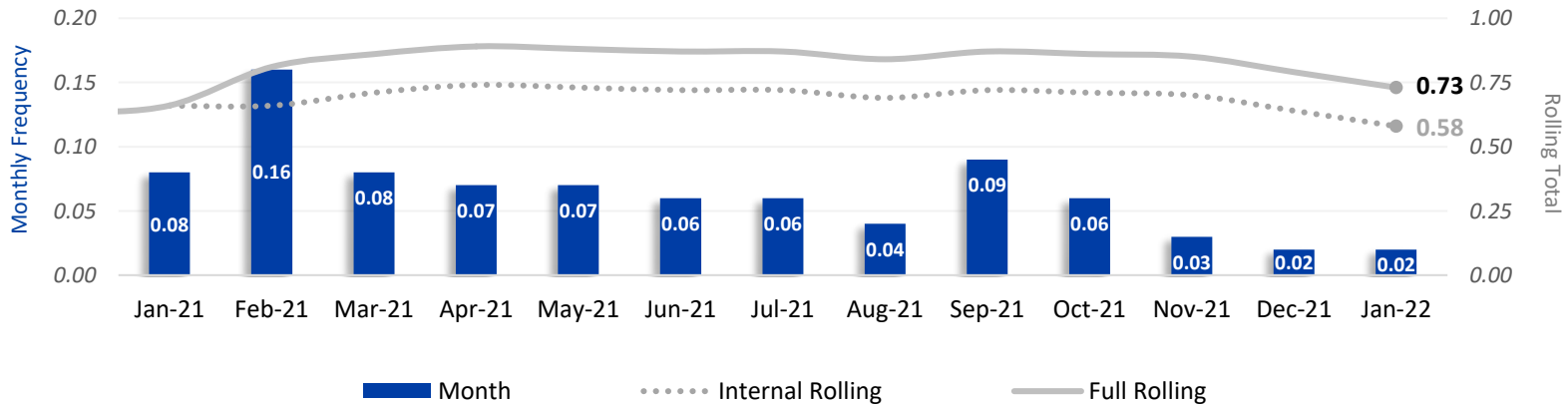


# Reliability

## System Average Interruption Duration Index (SAIDI)



## System Average Interruption Frequency Index (SAIFI)



# February Weather Front

## Pre-Event Preparation

- All district operations were on standby with continuous shift schedules assigned.
- Districts and vegetation management had contractor crews ready for support.
- Fuel supplies and winter vehicle gear fully stocked in all districts and HQ.
- Transportation, food and lodging preparations made in all districts and HQ.
- Member Relations readied shifts for continuous phone support and escalations.
- EOP activation protocols initiated and Incident Command Team on stand-by .

## Reliability Performance

- A few small outages the night of Wed. Feb 2. and were restored within an hour.
- Early morning crews were prepared in the districts to respond to any issues.
- At peak, a 15 min. interval occurred with less than 4K outages.
- As of 3pm, zero outages were pending.
- The EOP was never activated, operated at Alert and Preparedness level only.
- **Overall, the staff and system performed very well. The experience from last year and the improvements added since, prepared PEC very well for this event.**



## February 3<sup>rd</sup> Weather Forecast:

Rainfall:	1"-3"
Freezing Rain:	0.3"
Sleet:	0.2"
Temps:	mid-teens (16°)
Wind chills:	single digits (5°)

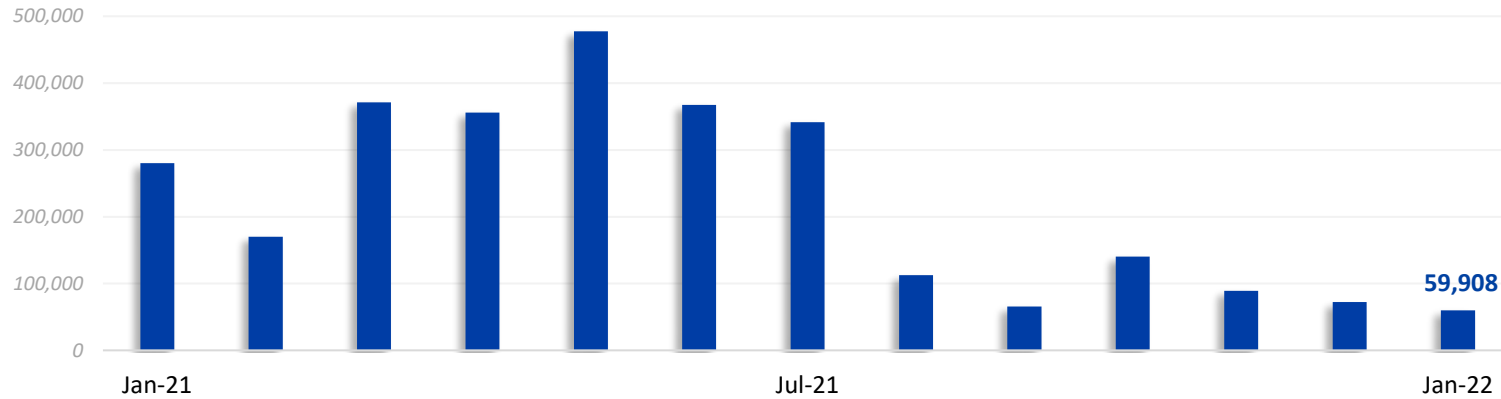


# System Maintenance

## Vegetation Management

Vegetation Pruned (Ft.)

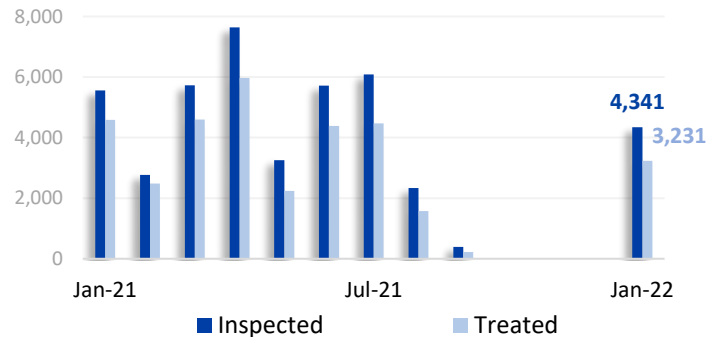
Miles Pruned: 11.35 mi.  
Locations: 722



## Pole Testing & Treatment (PTT)

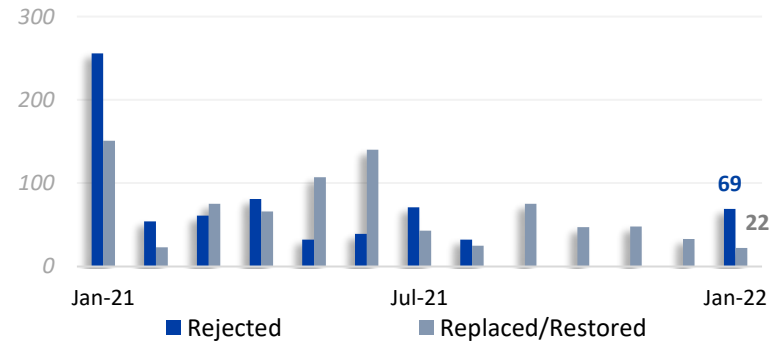
Poles Inspected & Treated

2021 Inspections: 28,523  
2021 Treated: 30,513



Poles Rejected & Replaced/Restored

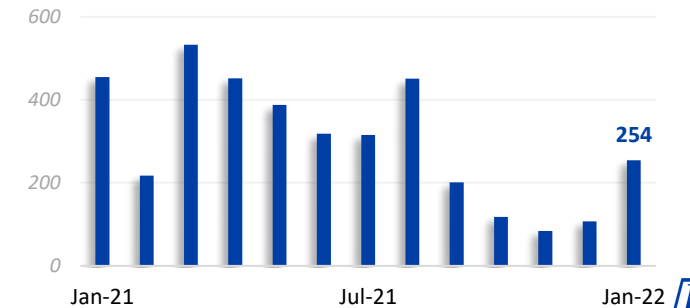
2021 Rejected: 626  
2021 Restored: 833



## URD Pad Mounts

URD Pad Restorations

2021: 3,639



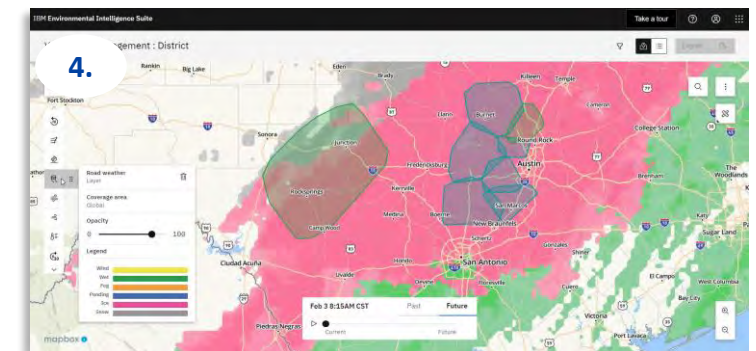
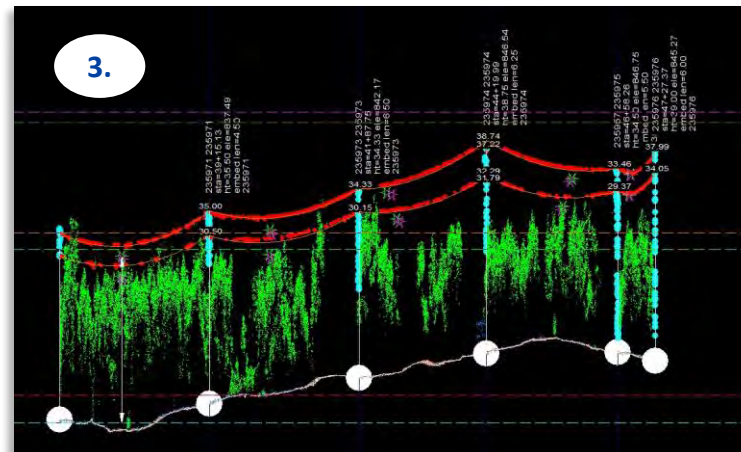
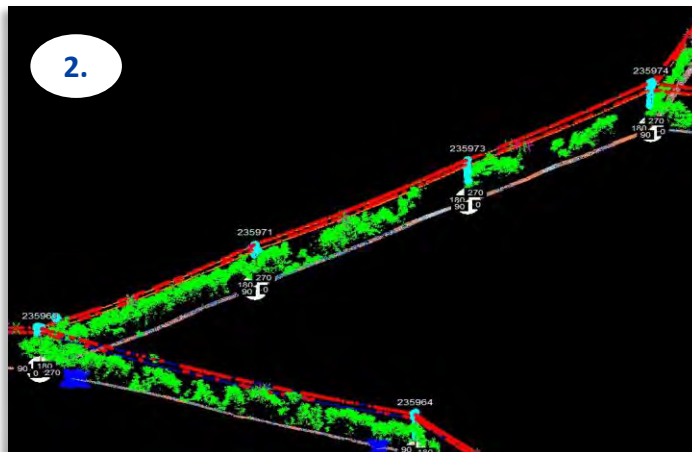
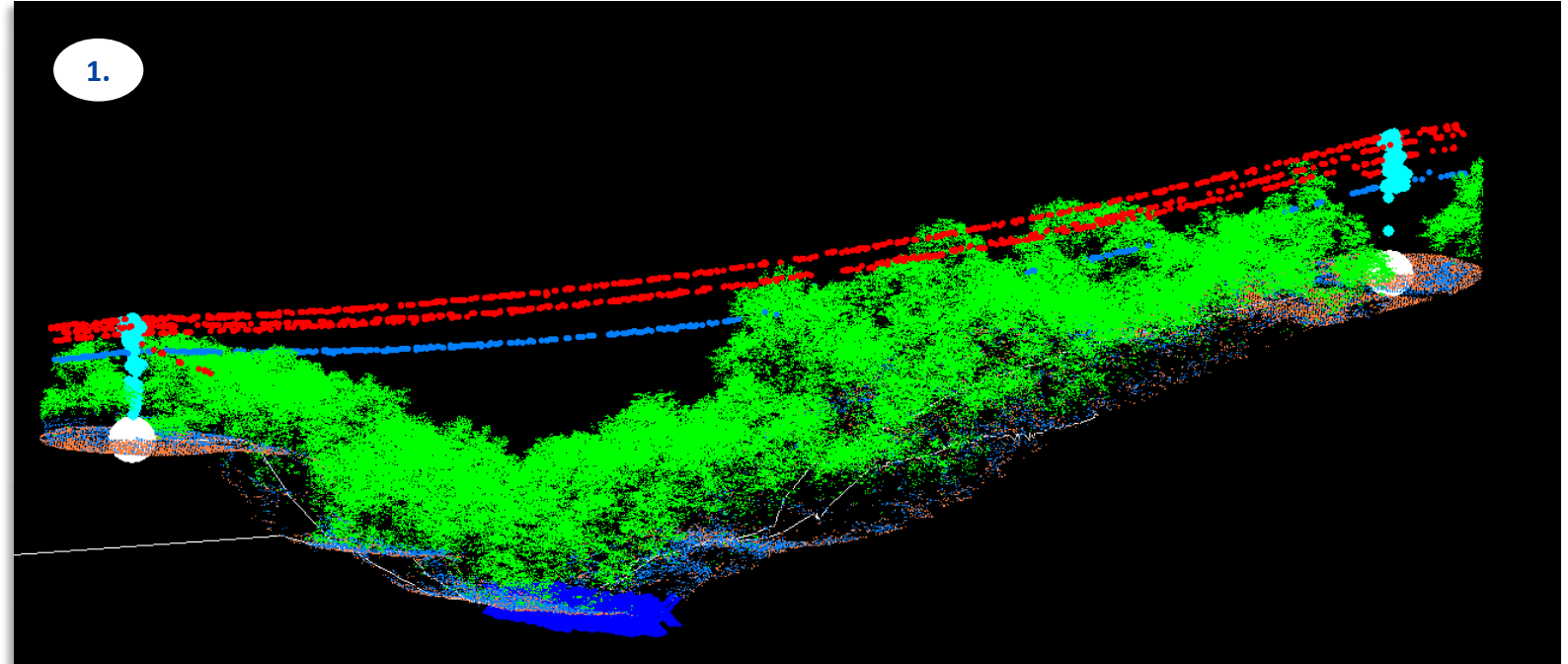
# System Maintenance

## LiDAR Technology

Provides highly accurate snapshots of PEC infrastructure for prioritizing and scheduling maintenance.

### Examples of data collected:

1. Detailed profile of an elevation change.
2. 3D view of a span.
3. 2D profile with pole data, conductor, trees.
4. IBM's weather forecast technology shares road conditions (pink represents ice observed on roads).

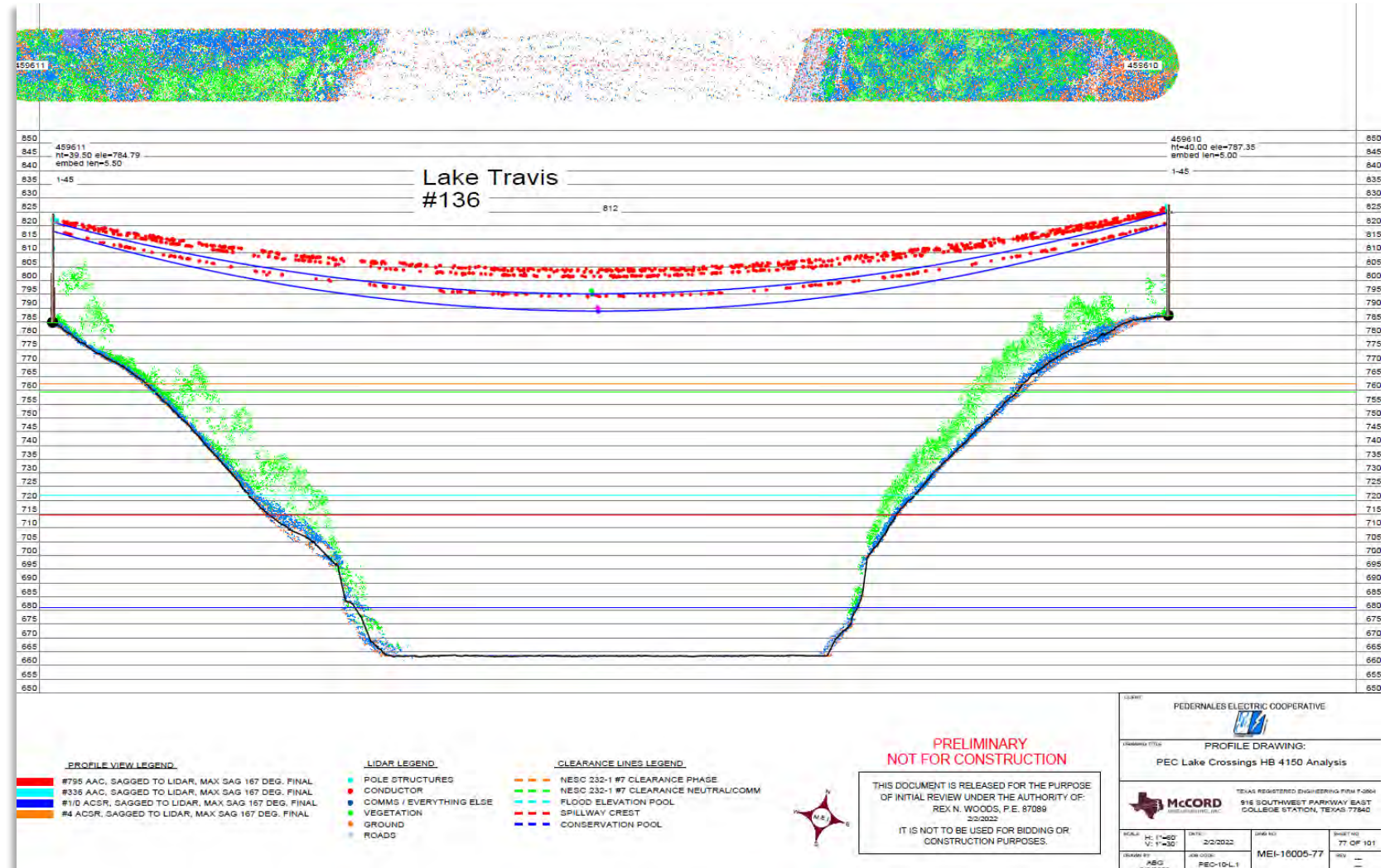


# System Maintenance

## LiDAR - Additional Uses

This data also supports other PEC projects. For example, the recent U.S. House Bill 415 requiring electric utilities to identify elevation and sag over water crossings.

Provided here is an example of identified elevation levels of PEC equipment over Lake Travis.



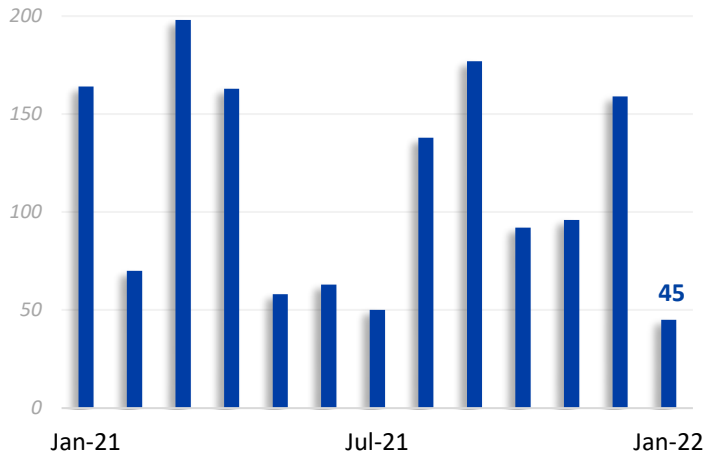


# System Maintenance

## Technical Services

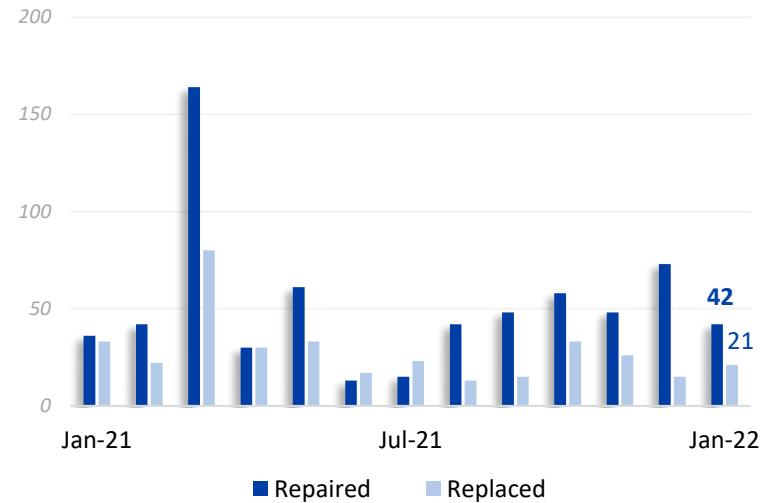
### Equipment Inspections

2021: 1,429



### Equipment Repaired & Replaced

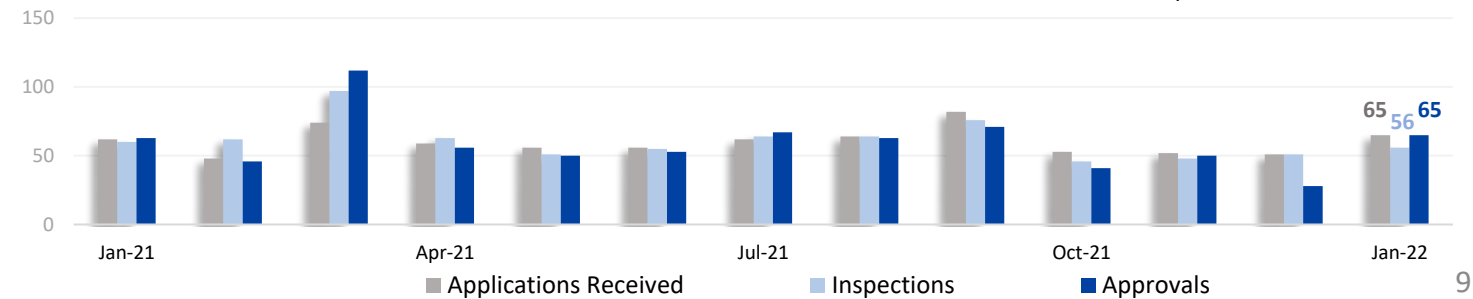
2021: 970



## Pole Contacts

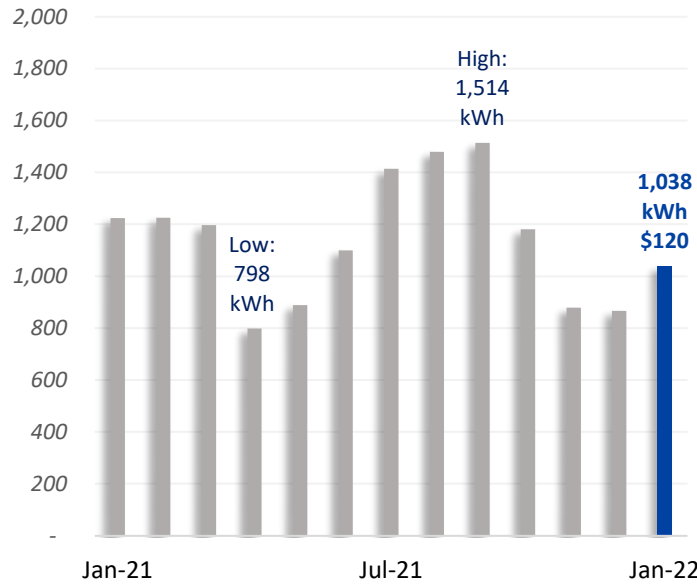
### Applications Received & Permits Issued

2021: Received – 719, Inspected – 793, Issued - 765



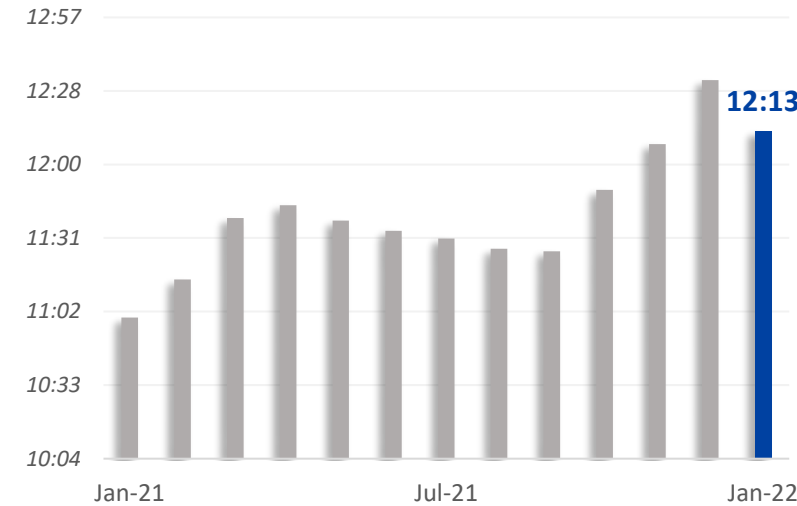
# Member Relations

## Average Residential Usage



## Member Contacts

### Average Handle Time



Jan. Phone Contacts: 21,993  
Jan. Office Contacts: 6,112

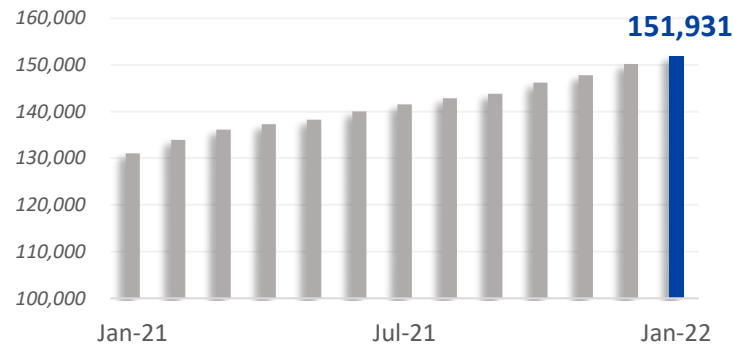


## Contact Types

2021: 419,277 Contacts

Main Contact Types	Jan. Totals	
Service Request	8,365	27%
Payment	6,746	21%
Billing Inquiry	4,266	14%
Payment Arrangement	2,405	8%
Account Update	1,768	6%
Autopay Deposit Waiver	1,499	5%

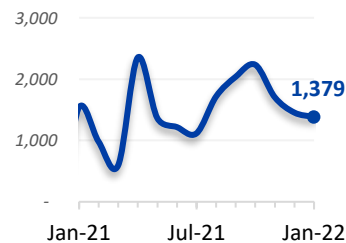
## Paperless Enrollments



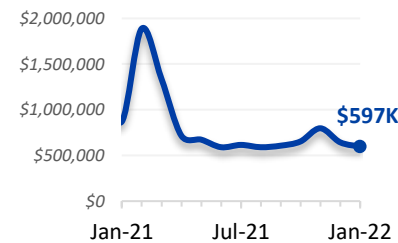
## Collections

One Holiday with No Collection Activity

### Remote Disconnects



### Aged Balances



## Energy Services

2021 Audits: 362  
2021 Interconnects: 1,628



# Transmission Projects

## Projects Completed:

- **Andice to Pipeline to Seward Junction Fiber Addition** (*Liberty Hill*):
  - 8.4 miles, replaces Shield Wire with OPGW in coordination with breaker addition at Pipeline.
  - Completed Dec. 2021.
- **McCarty Lane to Hunter** (*Kyle*):
  - Conductor upgrade in conjunction with LCRA TSC upgrade of McCarty Lane to RR12.
  - Completed Jan. 2022.

## Projects in Construction:

- **Wirtz to Flatrock to Paleface** (*Marble Falls*):
  - 17 miles, increases clearance over Lake Marble Falls, completes the overhaul begun in 2018, and increases capacity of transmission line to 440 MVA as part of Wirtz RAS exit strategy.
  - Construction to continue through Spring 2022.
- **Whitestone - Blockhouse – Leander** line upgrade (*Cedar Park*):
  - 5.25 miles, rebuild existing 138 kV line to 440 MVA capacity.
  - Finalizing supplemental easements. Completion scheduled for Q2 2022. Delays in construction between Leander and Blockhouse have put the planned May completion at risk.



# Transmission Projects

## Projects in Engineering:

- **Marshall Ford to Trading Post to Cedar Valley to Friendship to Rutherford (Oak Hill):**
  - 15.41 mi., analysis shows a need to replace structures to meet current NESC requirements.
  - ERCOT RPG review under way, construction expected to begin in Q3 2022.
- **Dripping Springs to Rutherford Relocation (Oak Hill):**
  - On hold pending direction from developer and resolution of complaint filed at PUCT.
- **Lago Vista to Nameless to Leander Transmission Overhaul (Cedar Park and Liberty Hill):**
  - Coordinating with Substation Design for cut-in to Hero Way Substation.
- **Sattler to Fischer (Canyon Lake):**
  - Raise crossing over Canyon Dam discharge channel.
  - U.S. Army Corps of Engineers granted extension of permit for existing facilities through January 2023.
  - Scope and estimate being developed to request budget.
- **Miller Creek to Henly (Oak Hill):**
  - Respacing between shield wire and conductor to reduce outage vulnerability during extreme weather.
  - Scope and estimate being developed to request budget.





# Substation Projects

## Projects Completed:

- **138KV Circuit Switcher Upgrades** (*Various districts*):
  - Construction at each location (7) to replace end-of-life transformer circuit switchers.
  - Completed Dec. 2021.
- **Andice to Pipeline to Seward Junction Remote Ends** (*Liberty Hill*):
  - Supporting transmission line upgrade project by upgrading and adding line relay panels.
  - Completed Dec. 2021.
- **Graphite Mine** (*Bertram*):
  - LCRA project to install new switch yard at to PEC substation with new 138KV ring bus and breakers.
  - During LCRA's project PEC replaced T1 circuit switcher.
  - PEC mobile supported load during the project.
  - Completed PEC's portion Dec. 2021.
- **Blockhouse & Leander Remote Ends** (*Leander*):
  - Supporting line upgrade of T326 with switch replacements and line relay panel upgrades.
  - Completed Jan. 2022.



# Substation Projects

## Projects in Construction:

- **Whitestone Bus Upgrade & T469 Remote Ends** (*Cedar Park*):
  - Upgrade 138KV Bus to 2000 Amp and terminal upgrades to support T469 line upgrade.
  - Whitestone – 138KV Bus upgrade to 4” pipe, switch and line relay panel replacements.
  - Blockhouse – 138KV switch replacements and line relay panel upgrades.
  - Scheduled completion in May 2022.
- **Wirtz to Flatrock to Paleface** (*Marble Falls*):
  - Supporting transmission line upgrade project.
  - Wirtz - 138KV breaker replacements, line relay, and breaker failure panel replacements.
  - Flatrock - 138KV breaker and line relay panel additions.
  - Paleface - 138KV Bus reconfiguration, 138KV switch replacements, and new line relay panels.
  - Completion in Apr. 2022.
- **Substation Satellite Clock Installations** (*Various Locations*):
  - Time synchronization for digital relays.



# Substation Projects

## Projects in Engineering:

- **Mobile Substation Upgrades:**
  - Mobile #1: Upgrade circuit switcher to 40KA and 25 KV breaker and relaying to SEL digital protection relays.
  - Mobile #2: Upgrade circuit switcher to 40KA and SEL digital protection relays.
  - Mobile #3: Upgrade circuit switcher to 40KA.
- **138KV Breaker Upgrades:**
  - Sattler: Upgrade OCBs 5580 & 5590 to SF6 Gas Breakers.
  - Cranes Mill: Upgrade OCBs 8580 & 8590 to SF6 Gas Breakers.
  - Buttercup: Upgrade 138KV Operating Bus to Double Breaker/Double Bus configuration.
  - Marshall Ford: CBs 8020, 9170, & 9180. Replace control cables.
- **Copperas Cove Addition:**
  - Addition of T1 25KV Total Main Breaker.
- **Hero Way:** New Substation.
- **Seward Junction:** T3 Addition.
- **Kyle:** T1 Upgrade to 46.7 MVA.

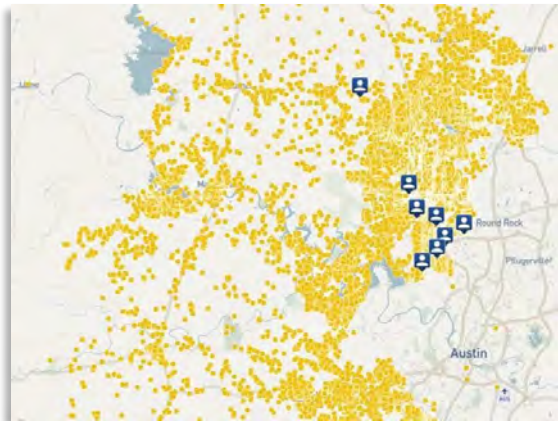


# AMI Distribution

- The Project is **30%** complete overall.
- Exchanges have been paused in the Eastern territory due supply shortages:
  - Will re-evaluate meter supply in early 2022 and adjust deployment, as necessary.
  - Project has transitioned to the Junction District to upgrade TWACS meters.

## Eastern Territory Exchanges

- Large Power Members: 100%
- Liberty Hill District: 100%
- Cedar Park: 38%
- Meters Exchanged: 105,000
- Letters & Emails: 166,000
- Member Opt-Outs: 51



## Western Territory Exchanges

- Junction Exchanges: 57%
- Meters exchanged: 4,000
- Letters & Emails: 6,200
- Member Complaints: 6



Allegiant Flyer

An Allegiant flyer graphic designed to look like a house silhouette. The top part is a light blue sky with a white circle representing a sun or moon. The roofline is a dark blue triangle. The main body is white with a green base. The text on the flyer reads: "On behalf of Pedernales Electric Cooperative, Allegiant Utility Services needs to change your electric meter. Please call us to make an appointment." Below this is the Allegiant logo (a blue square with a white lightning bolt and the letters 'PE' in white) and the text "Allegiant UTILITY SERVICES". Further down, it says "An Allegiant technician came to change your meter but could not gain access. The process takes less than five minutes and the residence may be without power during that time." Below that is "Call us for an appointment 888-502-1845". At the bottom, there is a line for "DATE VISITED" and a box labeled "(STICKER HERE)".



# Cooperative Lighting Services

PEC began its Lighting Services contract with NextEra Energy Solutions in Nov. 2021.

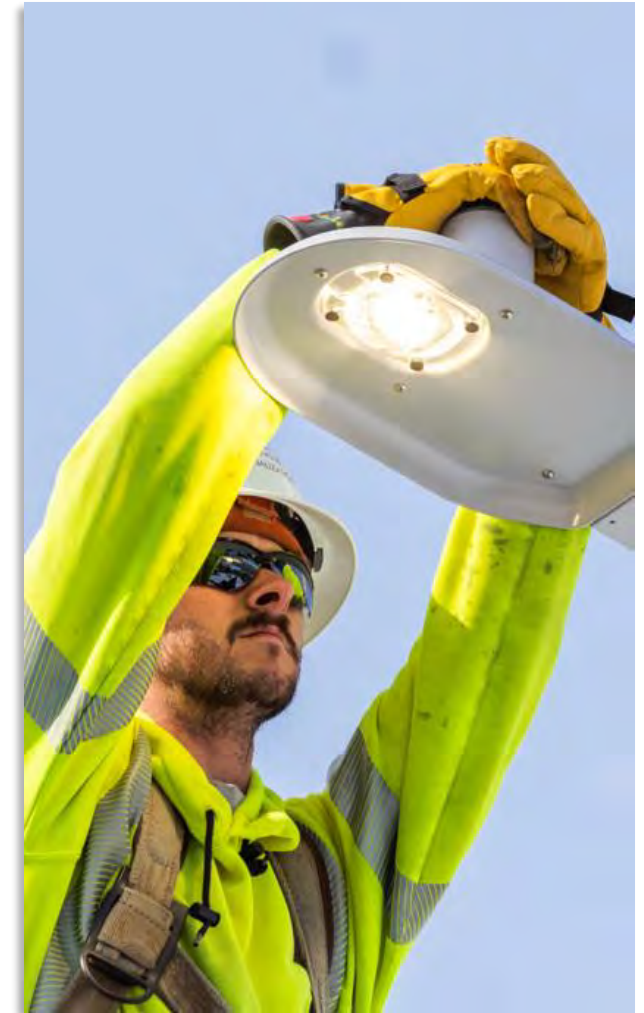
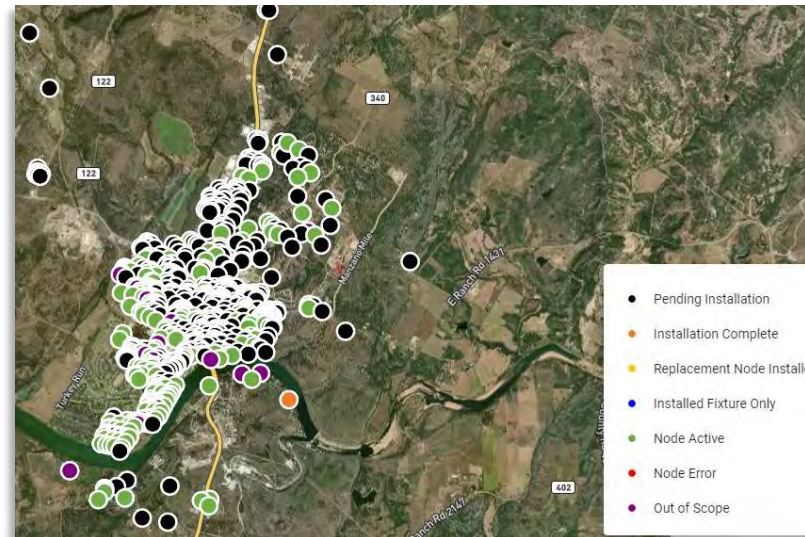
Approximately 30,000 cooperative-owned street and roadway lights in the Eastern territory will be replaced to new, energy-efficient, LED lighting.

The lighting services project additionally includes:

- Smart controls providing enhanced outage detection and advanced system management.
- Converting all PEC owned lights into Dark Sky friendly fixtures.
- Complete audit of all PEC owned lights.
- Updated PEC mapping system.

Progress - Exchanges as of Feb. 1:

- Lights Audited : 11,221
- Lights Replaced: 2,589



# Facilities

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## **Cedar Park Access**

The general contractor has mobilized and begun construction.

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## **Dripping Springs Renovation**

Renovations as are complete from a water leak in the slab around the kitchen and bathroom areas, existing finishes were replaced.

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## **Johnson City Service Center Security Gate**

Driveway widening and security gate upgrade at the Haley Rd site is complete. This project aligned the driveway with the city street for improved sight-lines and safety; add a second gate for improved ingress and egress; and improved security equipment to allow the gates to remained closed.

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## **Kyle Fleet Building & Warehouse**

The project has been completed and turned over to the district for use.

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## **Leander Development**

Building construction is in progress and on schedule.

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## **Marble Falls Training Center**

Completed construction for additional restrooms.



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