

Operations Report Operations Report Eddie Dauterive | Chief Operations Officer

Safety & Technical Training

Personal Incidents

Reportable Incidents (TCIR) - All work-related injuries or illnesses.



Jul: 0 YTD: 10

Days Away, Restricted, or Transfer (DART) - Incidents causing restricted duty where the employee can perform another activity without missing days.



Jul: 0 YTD: 5

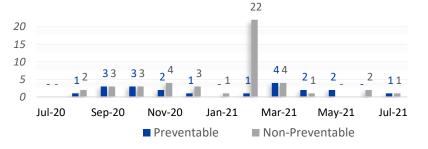
Days Restricted: 2020 YTD - 157 2021 YTD - 230

Lost Time - Incidents that result in an employee missing work due to an injury.



Vehicle Incidents

Preventable & Non-Preventable Vehicle Accidents



Preventable:

Jul: 1 YTD: 10

Non-Preventable:

yttp: 31







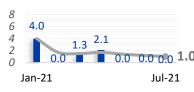
KPI Progression

TCIR



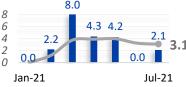
Platinum: ≤ 2.0

DART



Platinum: ≤ 0.6

Vehicle Incident Rate

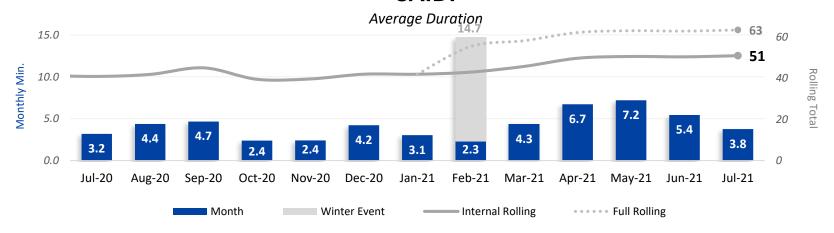


Platinum: ≤ 1.0



Reliability

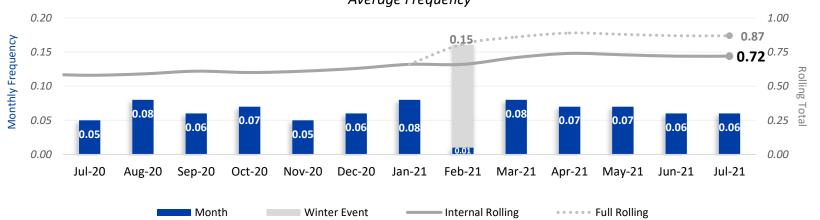
SAIDI





SAIFI

Average Frequency



Estimated Time of Response (ETR)

% of Outages with ETR Provided





Control Center System Upgrades (OSII)

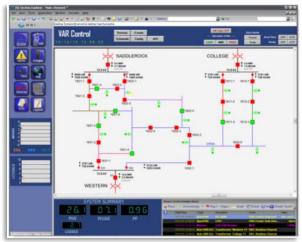
Systems and Components Being Upgraded:

- Upgrading PEC's existing OSII Distribution Management System (DMS) and SCADA system to the most current versions.
- Replacing existing Trimble Outage Management (OMS) with a fully integrated OSII Advanced system for OMS.

Upgrade Benefits:

- SCADA System and Distribution Management System Go-Live July 20th
 - Improved fault analysis
 - Operational modeling for switching activities
 - Voltage and load violations based on modeling with real-time SCADA data
- Outage Management System Go-Live August 10th
 - Directly integrated with SCADA / DMS
 - Automatic creation of outages on SCADA devices
 - Vehicle and crew management integration
 - Lightning and radar integration
 - Improved outage tracking and prediction
- All new server and network hardware
- Implementing an Operator Simulator with hands-on training ability
- New dashboards and reporting







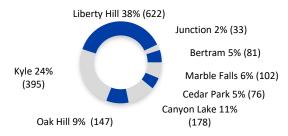
System Growth

Monthly Line Extensions

2019: 16,640 2020: 19,458 2021 YTD: 12,139



Line Extensions by District (1,634)



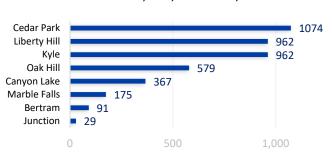
Miles of Distribution Line:

Underground: 6,177 (26%) Overhead: 17,413 (74%)

Total: 23,590

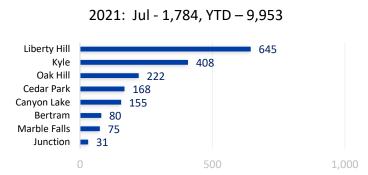
New Member Applications

2021: Jul - 4,239, YTD - 24,389



2020: Jul - 3,890, YTD - 19,618

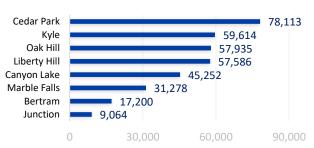
Meter Growth



2020: Jul - 1,911, YTD - 9,483

Meter Totals

2021: Jul – 356,042



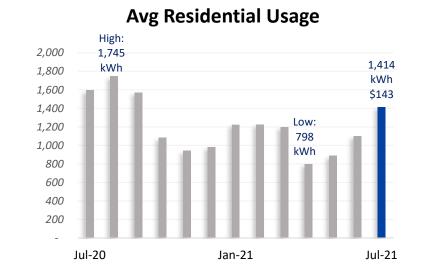
2020: Jul – 337,289



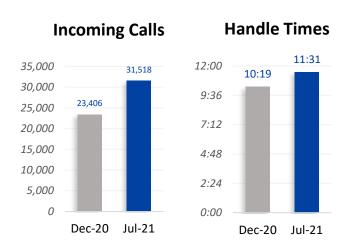
Member Relations

Notes:

- Average residential billing in July increased \$27 from June – still \$15 lower than last July's average.
- Call volumes and handle times remain high.
- Member contacts types cover many topics, the largest increase in types relate to billing and payment inquiries, and applications for service.
- Again processed over 4K applications in July, doubling monthly totals from 2020.

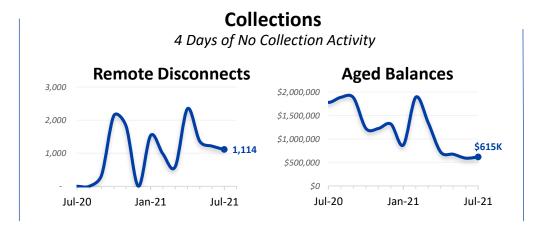


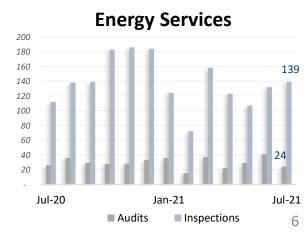
Call Volumes



Contact Types

Main Contact Types	July Totals		
Service Request	11K	31%	
Payment	7K	18%	
Billing Inquiry	4K	12%	
Autopay Deposit Waiver	2K	6%	
Payment Arrangement	2K	6%	
Account Update	2K	6%	
Outage	1K	3%	

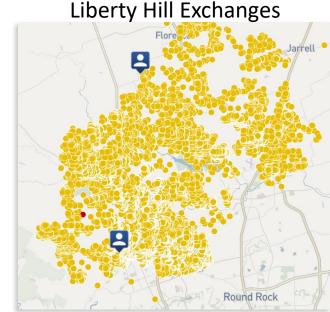






AMI Distribution Update

- Project is 15% complete overall.
- Currently in the full meter exchange phase in Liberty Hill (district is 90% complete).
- The Member Communication Plan is on track, operating with 5-weeks advance, and include letters, e-mails, and robo-calls:
 - Letters and notices are targeted by neighborhood and are working well.
 - Member Relations and the Project Team are continuously monitoring for impacts to call volume, escalations, or other issues.
- Meter supply from Sep. 2021 May 2022 remains at risk due to global component shortages (micro-chip), the Project Team is monitoring and evaluating potential impact to schedule.
- As of Aug 1:
 - Over 65,000 meters have been exchanged, roughly 5,000 per week
 - Over 110,000 meters have been delivered or shipped
 - Over 68,000 letters and 56,000 emails have been delivered
 - Approx. 55,000 robo-calls have been completed
 - Members opting out: 23 since project launch, 90 prior to project
- Next district for exchanges Cedar Park, beginning August 9.





Transmission Project Updates

- 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.
 - Provided structure coordinates to Engineer for highway bridge design.
 - Supplemental easement rights to be acquired Q2 through Q3 2021.
 - Starting foundation installs on weekly outages beginning Aug. 16 construction to continue through Spring 2022.
- Buda Turnersville line Relocation for TxDot (Kyle):
 - Relocating two structures for FM2001 extension.
 - Notified Hays County's Engineer of required Contribution in aid of construction.
 - Construction in Sep. 2021.
- 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.
 - Engineering identified 1 pole to replace in addition to the existing shield wire with OPGW.
 - Construction expected to begin in Q3 2021.
- Whitestone Blockhouse Leander line upgrade (Cedar Park):
 - 5.25 miles, rebuild existing 138 kV line to 440 MVA capacity.
 - Construction awarded to Volt Power, LLC.
 - Construction delayed to Sep. 2021 due to outage restrictions.
 - Completion scheduled for Q2 2022.





Transmission Project Updates

- McCarty Lane to Hunter (Kyle):
 - Conductor upgrade in conjunction with LCRA TSC upgrade of McCarty Lane to RR12.
 - Removing existing conductor in October 2021.
 - Construction anticipated for Q4 2021.
- Marshall Ford to Trading Post to Cedar Valley to Friendship to Rutherford (Oak Hill):
 - 15.41 miles, structural analysis shows a need to replace structures to meet current NESC requirements. Investigating alternative conductors to limit scope of structure replacement.
 - Power Engineers began detailed design for Marshall Ford to Trading Post section in Apr. 2021.
 - Construction expected to begin in Q3 2022.
- **Dripping Springs Rutherford** relocation (Oak Hill):
 - Construction on hold.
- Lago Vista to Nameless Transmission Overhaul (Cedar Park and Liberty Hill):
 - Burns and McDonnel selected in Apr. 2021 for design.



Substation Project Updates

- **Burnet Bertram Andice Remote Ends** (Bertram, Liberty Hill) Substation construction to support transmission line upgrade:
 - Construction crews at Andice were mobilized in Aug. 2020 and completed in Jan. 2021.
 - Construction at Bertram was completed in Dec. 2020.
 - Construction at Burnet completed in Jul. 2021. Energization scheduled for Aug. 05, 2021.
- **Pipeline Feeder Breaker and Ring Bus Upgrade** (Liberty Hill) Construction of additional feeder breakers and improved transmission bus:
 - Feeder breaker construction was completed in Oct. 2020.
 - Completion of ring bus will be delayed to be completed in Dec. 2021.
- Horseshoe Bay T1 Upgrade (Marble Falls) Upgrade 22.4 MVA power transformer to 37.3 MVA:
 - Construction started in Dec. 2020 and completed in Jul. 2021.
 - HST1 energization scheduled for Aug. 08, 2021.
 - HST2 scheduled to be out from Jul. 6 to Aug. 5, 2021.







Substation Project Updates

- **Blockhouse Whitestone Remote Ends, Blockhouse T3** (*Cedar Park*) Substation construction to support transmission line upgrade and transformer addition:
 - The completion of the Blockhouse ring bus and the construction at Whitestone will be delayed until late 2021 and completed in 2022.
 - Construction for the Blockhouse T3 addition was completed on Mar. 19, 2021, relay testing completed on Mar. 31, 2021, and T3 energization completed on Apr. 6, 2021.
- **Fairland** (*Marble Falls*) Upgrade 22.4 MVA power transformer to 37.3 MVA and rebuild distribution bus:
 - Construction started in Nov. 2020 and completed on Jul. 1, 2021.
- **Bergheim** (Canyon) Upgrade 22.4 MVA power transformer to 46.7 MVA:
 - Engineering started in Jan. 2021 and completed in Apr. 2021.
 - Construction started in Jul. 2021 and to be completed in Nov. 2021.
- **Sattler** (Canyon) Replace 138kV switches:
 - Construction scheduled to be started on Sep. 16, 2021 and completed in Oct. 2021.





Substation & Transmission Maintenance Projects

- **Friendship** 138KV Switch Replacement Project (Oak Hill):
 - Transfer and switch replacement completed in May 2021.
- **Burnet Station Upgrade** Combination LCRA & PEC Project (*Burnet*):
 - Set up temporary equipment and install 69KV transmission bypass in Jul. 2020.
 - Temporary T1 transformer energized in Aug. 2020.
 - New control houses, feeder breakers, feeder panel and relays, and transformer panel and relays to be installed.
 - Set to be complete on Aug. 5, 2021.
- **Sattler** 138KV Switch Replacement Project (Canyon Lake):
 - Replace 8 switches by utilizing mobile substation through multiple phases in Sep. to Oct. 2021.
- **Graphite Mine** 138KV Ring Bus & Breakers Installation (*Bertram*):
 - LCRA project in Fall 2021 will utilize mobile substation and replace circuit switcher CS-3745 for T1.





System Maintenance

Vegetation Management

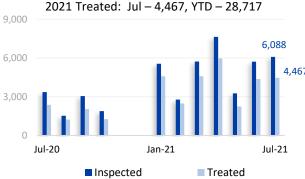
Vegetation Pruned (Ft.) 2021: Jul - 341,332, YTD - 2,363,557 500,000 375,000 250,000 Jul-20 2020: Jul - 148,637, YTD - 789,864





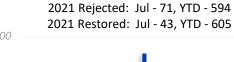
Pole Testing & Treatment (PTT)

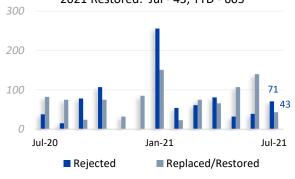
Poles Inspected & Treated 2021 Inspections: Jul - 6,088, YTD - 36,764 2021 Treated: Jul - 4,467, YTD - 28,717



2020 Inspections: Jul – 3,359, YTD – 30,871 2020 Treated: Jul - 2,370, YTD - 23,986

Poles Rejected & Replaced/Restored



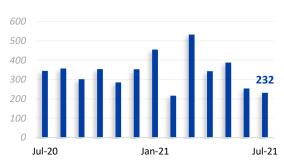


2020 Rejected: Jul - 38, YTD - 507 2020 Restored: Jul - 82, YTD - 971

URD Pad Mount Restorations

URD Pad Restorations

2021: Jul - 232, YTD - 2,422



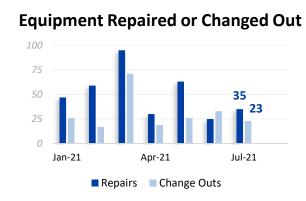
2020: Jul - 345, YTD - 2,652



System Maintenance

Technical Services





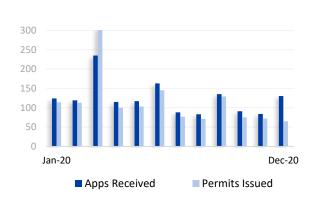




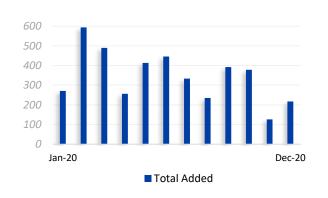


Pole Contacts

Applications Received & Permits Issued



Total Contacts Added



Notes:

- Equipment inspections include; reclosers, regulators, air break switches, capacitors, switchgears, and radio frequency issues.
- A new cost-saving process for pole contacts is under way utilizing Osmose Utilities Services.
- In 2020, PEC received nearly 1,500 contact applications and issued permits for 1,370.

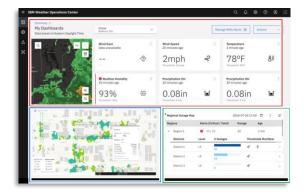
System Maintenance – Targeted Vegetation Mgmt.

IBM Solution – Environmental Intelligence Suite

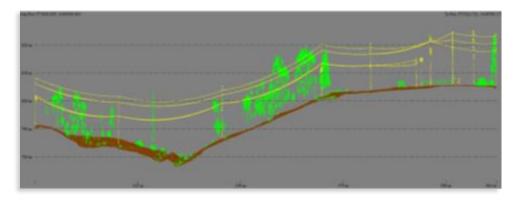
PEC has transitioned its approach to vegetation management, from cycled trimming schedules across the service territory to targeting high risk areas. System Maintenance staff are currently using IBM tools for vegetation identification and mapping, and are eager to expand its utilization of IBM's insight of weather and vegetation technologies.

IBM's New Interface Includes:

- Localized weather data, graphics, and alerts for factors related to soil moisture, precipitation, and wind patterns.
- Algorithms and A.I. technology to analyze 2D maps for 3D attributes to identify:
 - Line sag as positioned to tree canopies
 - Transmission height over water
 - Tree species types, health, and density for hazardous areas







System Maintenance – Targeted Vegetation Mgmt.

Feeder Prioritization

- PEC is able to overlay our Wildfire Interface mapping over the IBM system to add another factor of prioritization.
- This type of integration, along with weather and vegetation data, provides customizable feeder performance scoring that lead to actionable work by crews.

Feeder	Line segment	Total length	Work complete	Vegetation score	Tree SAIDI	SAIDI trend	Cycle lenth	Recommended actions
Feeder 1	Segment 1	3	7/13/2019	D 89.3	D 81.1	↑ 4%	5	Red flag
Feeder 2	Segment 2	4	8/3/2019	D 83.1	D 80.0	↓ 2%	3	Red flag
Feeder 3	Segment 3	3	8/3/2019	D 90.0	D 92.0	↓ 2%	3	Red flag
Feeder 4	Segment 4	2	6/15/2019	C 87.2	C 84.6	↓ 3%	3	Red flag
Feeder 5	Segment 5	4	8/3/2019	B 92.2	B 42.2	↓ 3%	3	Red flag
Feeder 6	Segment 6	1	8/11/2019	A 95.7	A 20.7	↓ 1%	3	Red flag
Feeder 7	Segment 7	1	1/1/2019	C 74.5	C 72.0	↑ 3%	3	Hazard tree mitigation
Feeder 8	Segment 8	1	8/3/2019	C 69.1	C 66.2	↓ 4%	3	Hazard tree mitigation
Feeder 9	Segment 9	3	8/3/2019	C 71.0	C 70.6	↑ 2%	3	Hazard tree mitigation
Feeder 10	Segment 10	3	8/3/2019	D 92.0	D 89.1	↓ 1%	5	Hazard tree mitigation

Facilities Update

Cedar Park	The new plat documents have been signed by both TxDOT and PEC, and submitted to the city. The new shed has been ordered for TxDOT as per the agreement. Now waiting for the city to process the plat and issue a permit.
Coop-wide Secondary Containment	Bertram, Cedar Park, Oak Hill, and Canyon Lake are complete. Junction and Haley Rd. are in planning.
Kyle	The Fleet Building is 90% complete, waiting on electrical components to ship for equipment start-up and testing. The Warehouse building is dried in and mechanical/electrical work has started. Paving is complete and the Fuel Island is in progress.
Leander	Development of site and building plans are ongoing, pending permits from the city.
Marble Falls	Planning for additional restrooms at the Technical Training Center.



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