Operations Report

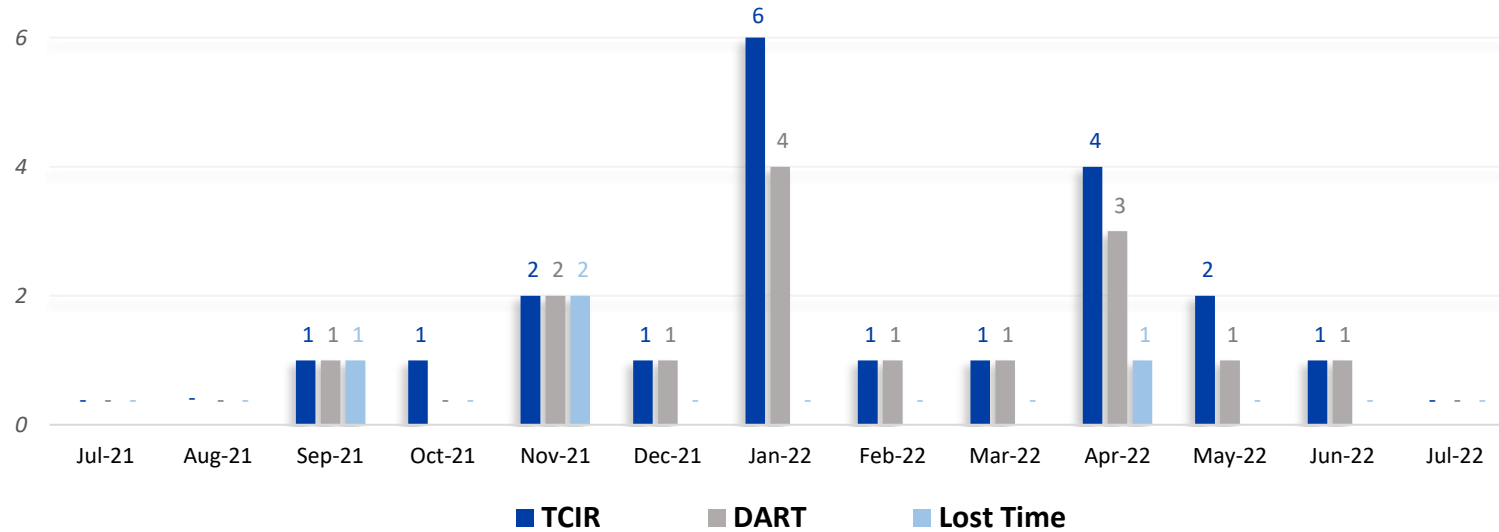**Eddie Dauterive** | Chief Operations Officer

August 19, 2022

Safety & Technical Training

Personal Incidents

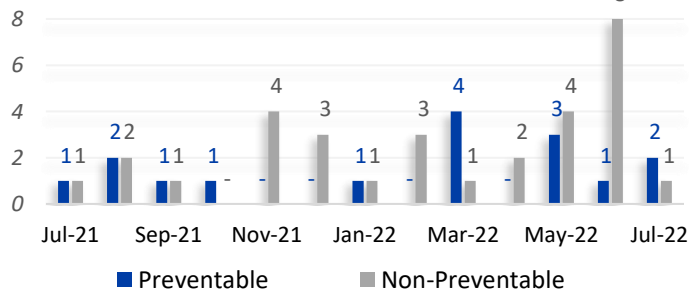**Reportable Injuries, Days Away, and Lost Time Incidents**

2021 YTD: DART Days - 230,   Lost Time Days - 118
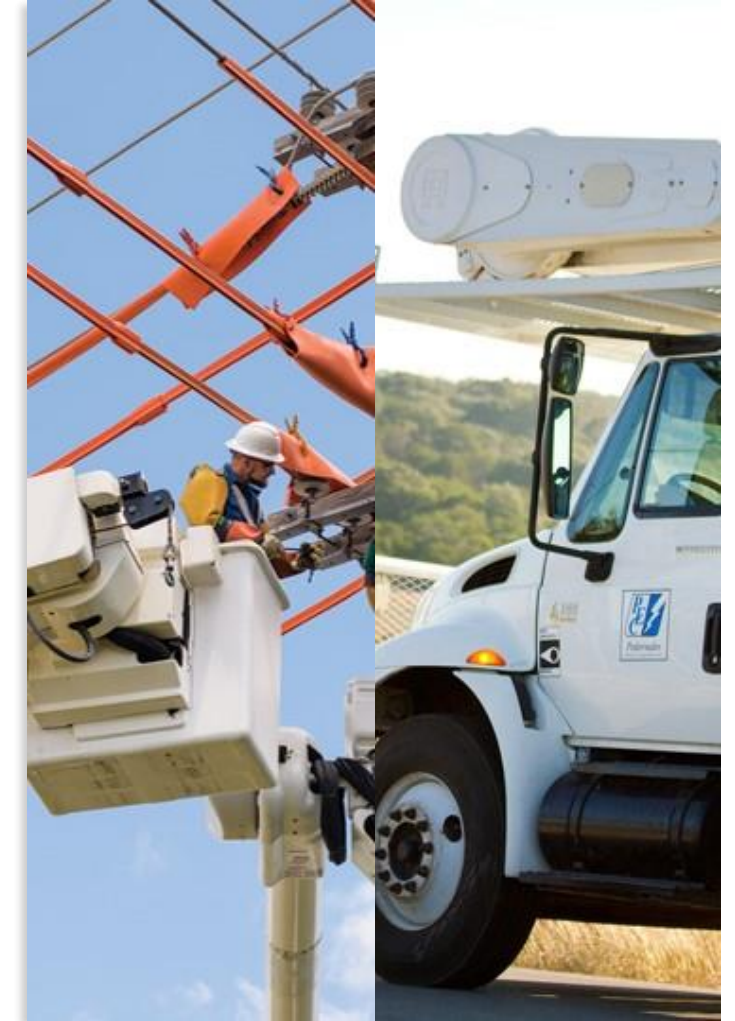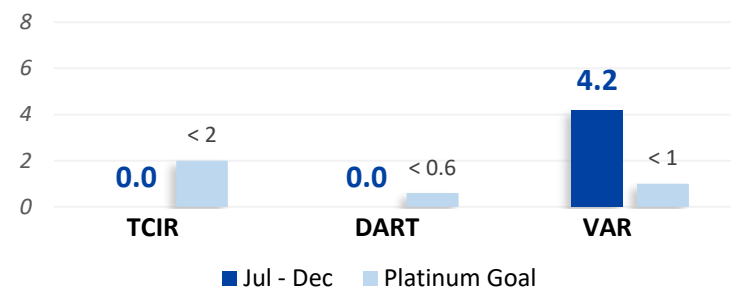2022 YTD: DART Days - 128,   Lost Time Days - 10

Chart (Jul-21 to Jul-22) — TCIR, DART, Lost Time:

Month	TCIR	DART	Lost Time
Jul-21	-	-	-
Aug-21	-	-	-
Sep-21	1	1	1
Oct-21	1	-	-
Nov-21	2	2	2
Dec-21	1	1	-
Jan-22	6	4	-
Feb-22	1	1	-
Mar-22	1	1	-
Apr-22	4	3	1
May-22	2	1	-
Jun-22	1	1	-
Jul-22	-	-	-

Legend: ■ TCIR ■ DART ■ Lost Time

Vehicle Incidents

Preventable & Non-Preventable

Preventable:
2021 YTD:
2022 YTD:

Chart (Jul-21 to Jul-22) — Preventable, Non-Preventable:

Month	Preventable	Non-Preventable
Jul-21	1	1
(Aug-21)	2	2
Sep-21	1	1
(Oct-21)	1	-
Nov-21	-	4
(Dec-21)	-	3
Jan-22	1	1
(Feb-22)	-	3
Mar-22	4	1
(Apr-22)	-	2
May-22	3	4
(Jun-22)	1	8
Jul-22	2	1

Legend: ■ Preventable ■ Non-Preventable

KPI Progression

2022 Period Two

	Jul - Dec	Platinum Goal
TCIR	0.0	< 2
DART	0.0	< 0.6
VAR	4.2	< 1

Legend: ■ Jul - Dec ■ Platinum Goal

2

System Growth

Line Extensions Completed

2019: 16,640   2020: 19,458   2021: 20,592   2022 YTD: 12,488

Legend: 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022

Selected data labels:
- Jan: 1,772 / 1,652
- Feb: 1,164 / 1,550
- Mar: 2,133 / 2,137
- Apr: 2,045 / 1,901
- May: 1,591 / 2,042
- Jun: 1,800 / 1,754
- Jul: 1,634 / 1,452
- Aug: 1,694
- Sep: 1,698
- Oct: 1,857
- Nov: 1,631
- Dec: 1,573
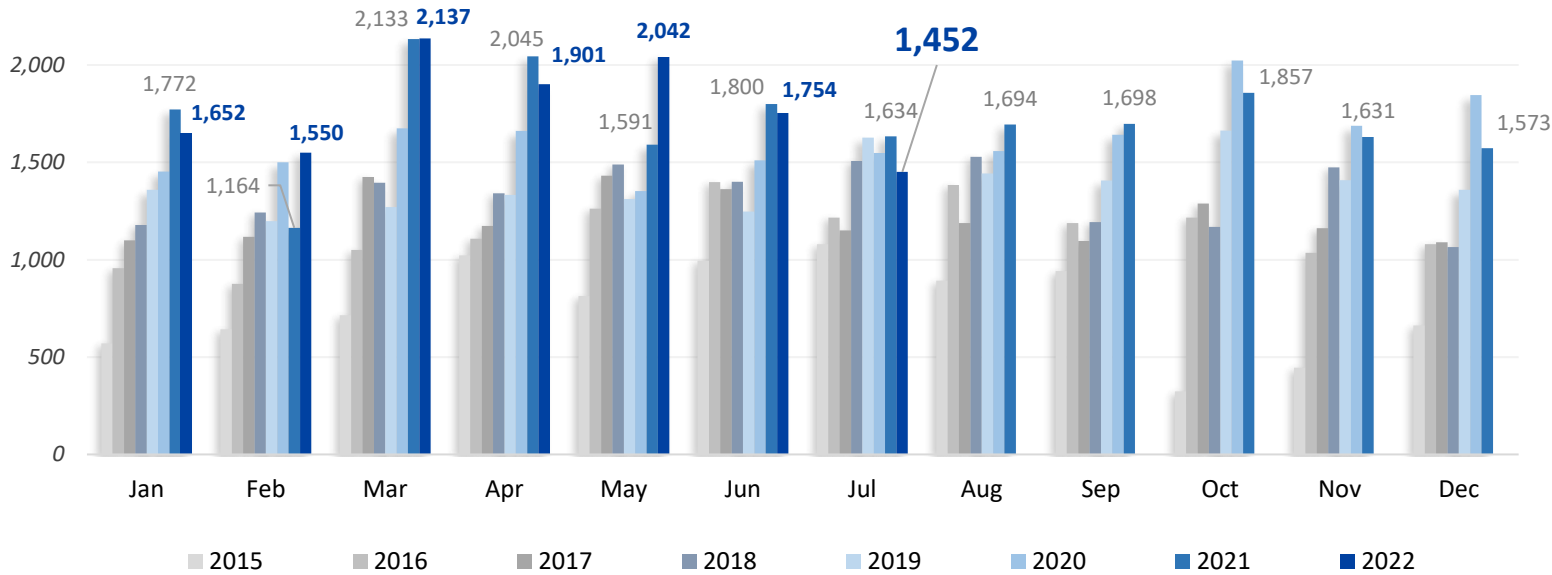
Line Extensions
Per District (1,452)

- Liberty Hill 416
- Junction 23
- Bertram 102
- Marble Falls 101
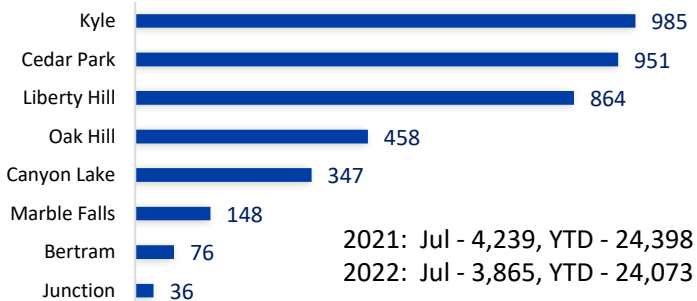- Cedar Park 73
- Canyon Lake 205
- Oak Hill 121
- Kyle 411
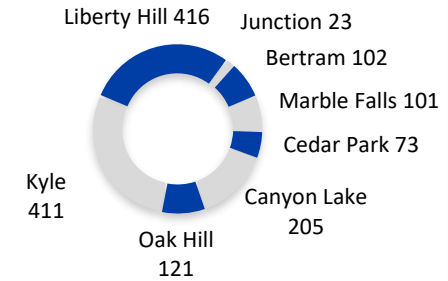
Miles of Distribution Line:
- Underground: 6,608 (27%)
- Overhead: 17,540 (73%)
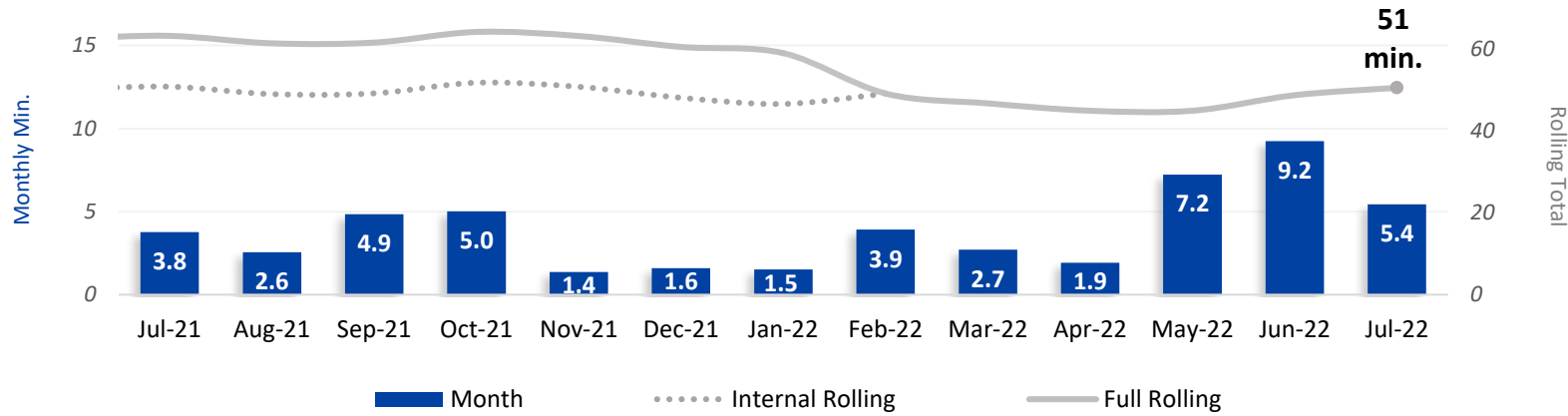- Total: 24,148

Member Applications (3,865)

District	Value
Kyle	985
Cedar Park	951
Liberty Hill	864
Oak Hill	458
Canyon Lake	347
Marble Falls	148
Bertram	76
Junction	36

2021: Jul - 4,239, YTD - 24,398
2022: Jul - 3,865, YTD - 24,073

Meter Growth (1,667)

District	Value
Kyle	520
Liberty Hill	448
Cedar Park	198
Canyon Lake	161
Bertram	118
Oak Hill	109
Marble Falls	83
Junction	31

2021: Jul - 1,784,   YTD - 9,953
2022: Jul - 1,667,   YTD - 10,747

Meter Totals (375,463)

District	Value
Cedar Park	79,889
Kyle	65,002
Liberty Hill	63,891
Oak Hill	59,696
Canyon Lake	47,243
Marble Falls	32,335
Bertram	18,103
Junction	9,304

Reliability

System Average Interruption Duration Index (SAIDI)

51 min.

Monthly values (Month bars):
- Jul-21: 3.8
- Aug-21: 2.6
- Sep-21: 4.9
- Oct-21: 5.0
- Nov-21: 1.4
- Dec-21: 1.6
- Jan-22: 1.5
- Feb-22: 3.9
- Mar-22: 2.7
- Apr-22: 1.9
- May-22: 7.2
- Jun-22: 9.2
- Jul-22: 5.4

Y-axis (left): Monthly Min. — 0, 5, 10, 15
Y-axis (right): Rolling Total — 0, 20, 40, 60

Legend: Month | Internal Rolling | Full Rolling

System Average Interruption Frequency Index (SAIFI)

0.61

Monthly values (Month bars):
- Jul-21: 0.06
- Aug-21: 0.04
- Sep-21: 0.09
- Oct-21: 0.06
- Nov-21: 0.03
- Dec-21: 0.02
- Jan-22: 0.02
- Feb-22: 0.06
- Mar-22: 0.06
- Apr-22: 0.02
- May-22: 0.05
- Jun-22: 0.11
- Jul-22: 0.06

Y-axis (left): Monthly Frequency — 0.00, 0.05, 0.10, 0.15, 0.20
Y-axis (right): Rolling Total — 0.00, 0.25, 0.50, 0.75, 1.00

Legend: Month | Internal Rolling | Full Rolling
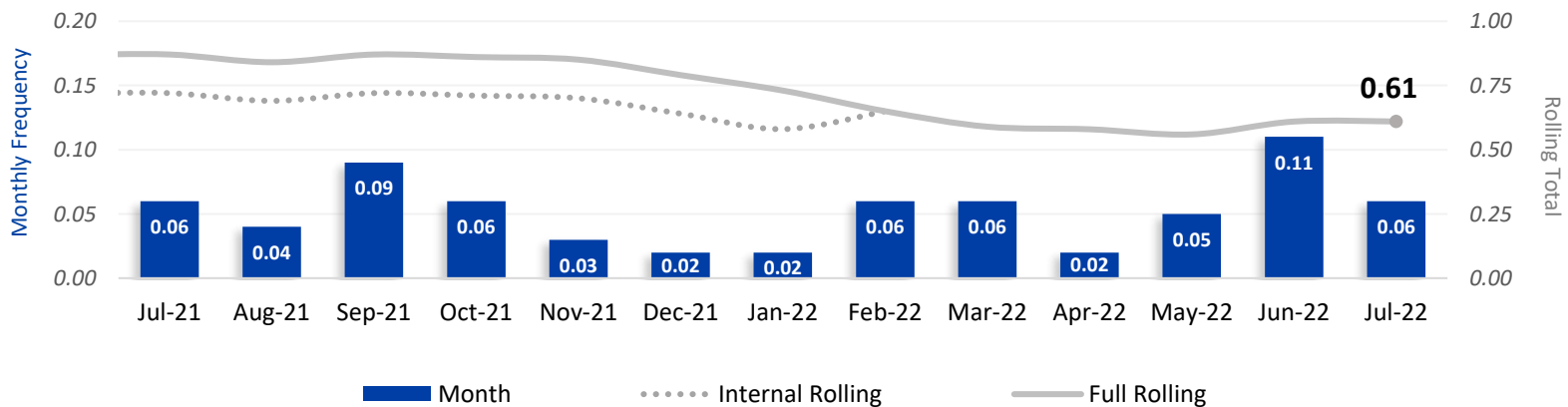
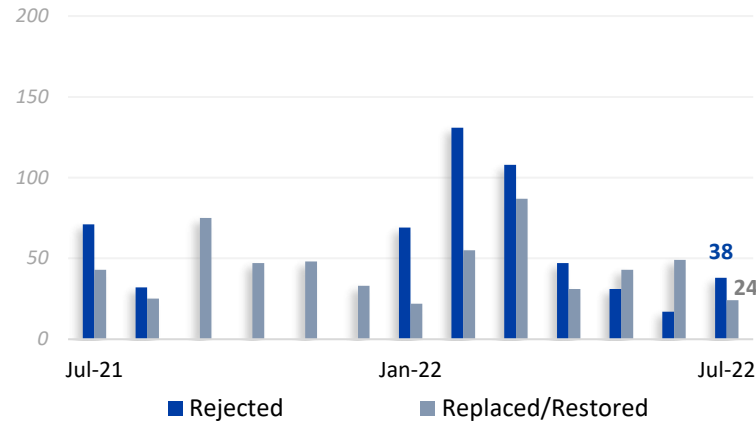# Distribution Maintenance

Pole Testing & Treatment (PTT)

Poles Inspected & Treated

2021 YTD: Inspections - 36,764, Treated - 28,717
2022 YTD: Inspections - 28,594, Treated - 22,859
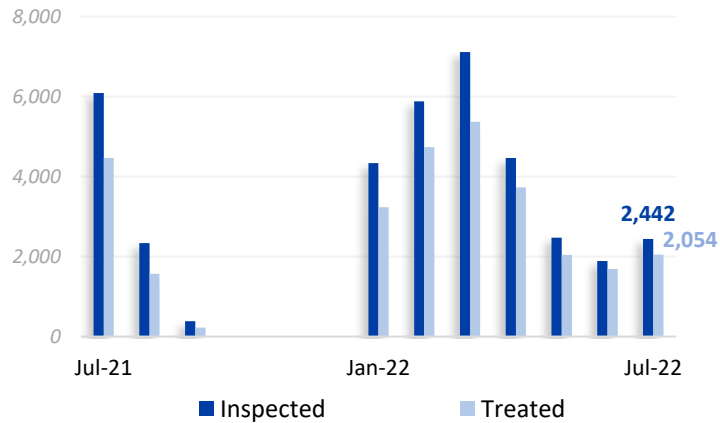
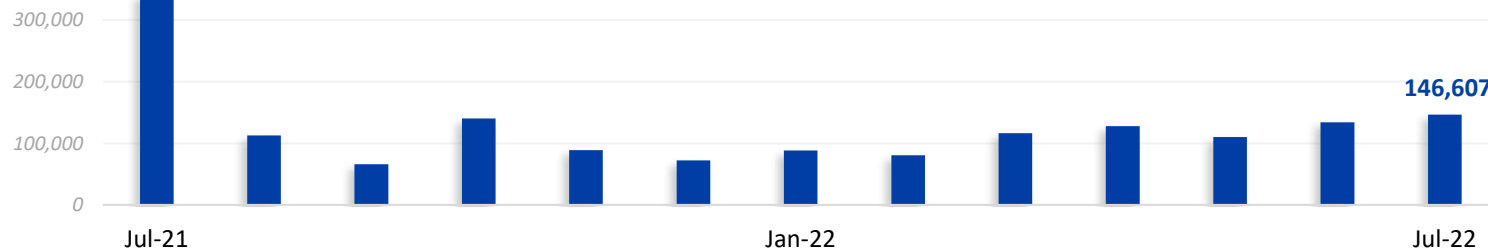**Poles Rejected & Replaced/Restored**

2021 YTD: Rejected - 594, Restored - 605
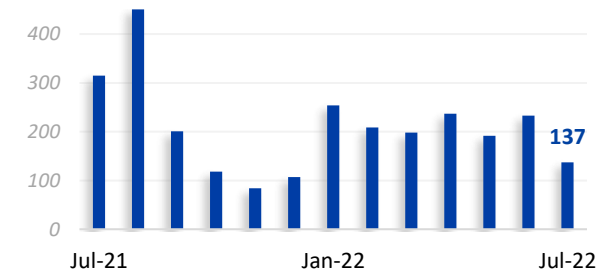2022 YTD: Rejected - 441, Restored - 311

Vegetation Management

Vegetation Pruned (Ft.)

2021 YTD: 2,363,557 ft.   Jul. Locations Worked: 1,114   Jul. Poles Cleared: 475
2022 YTD: 804,246 ft.   Jul. URD Clearings: 345

URD Pad Restorations
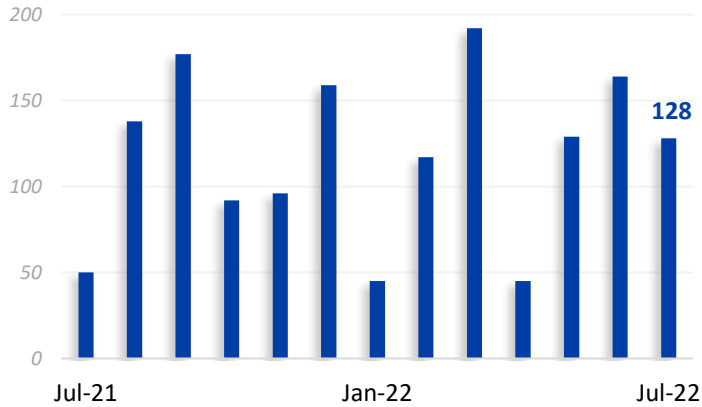
2021 YTD: 605
2022 YTD: 311

5

Distribution Maintenance
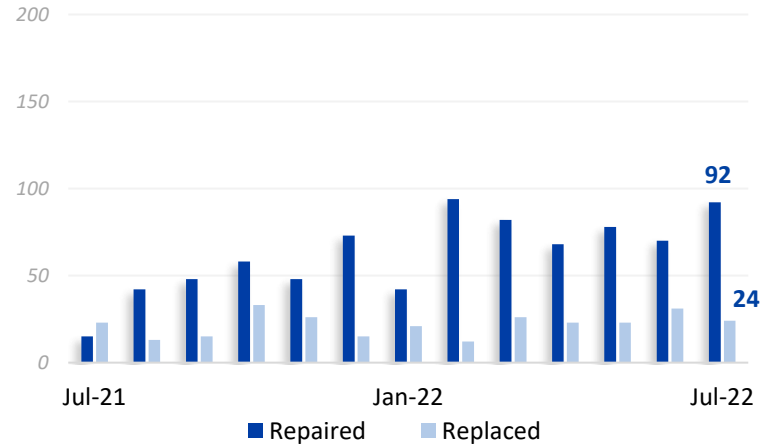
Technical Services

Equipment Inspections

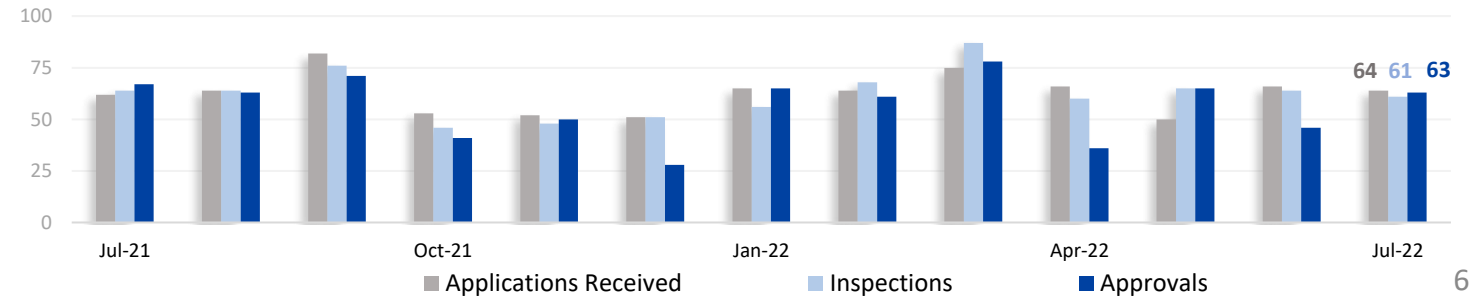2021 YTD: 766
2022 YTD: 820

Equipment Repaired & Replaced

2021 YTD: Repaired - 361, Replaced - 238
2022 YTD: Repaired - 462, Replaced - 160

Legend: ■ Repaired ■ Replaced

Pole Contacts

Applications Received & Permits Issued

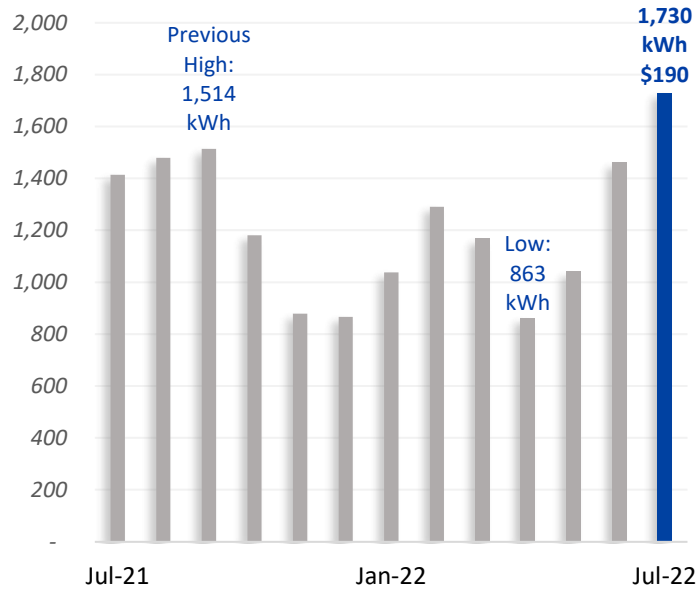2021 YTD: Received - 417, Inspected - 452, Approved - 447
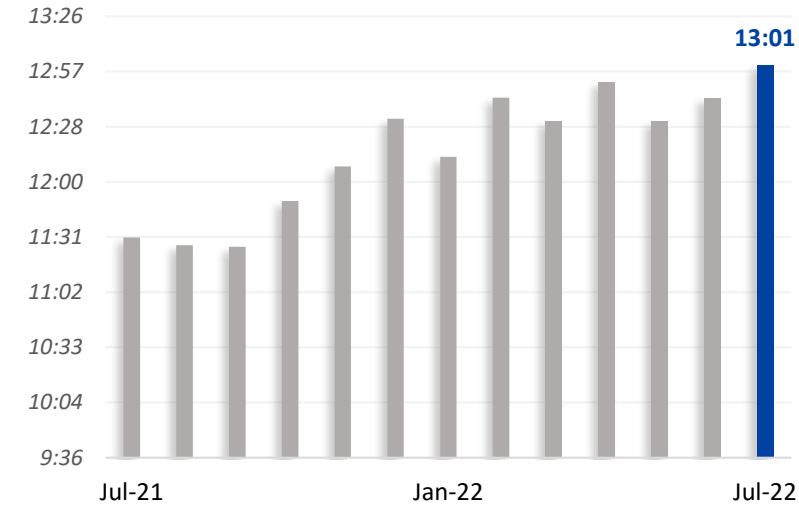2022 YTD: Received - 450, Inspected - 461, Approved - 414

Legend: ■ Applications Received ■ Inspections ■ Approvals

64 61 63

Distribution Maintenance

Vegetation Mgmt Strategy Recognized in T&D World Magazine

Member Relations

Average Residential Usage

Previous High: 1,514 kWh

1,730 kWh $190

Low: 863 kWh

Y-axis: 2,000 / 1,800 / 1,600 / 1,400 / 1,200 / 1,000 / 800 / 600 / 400 / 200 / -

X-axis: Jul-21 / Jan-22 / Jul-22

Member Contacts

Average Handle Time

Jul Phone Contacts:	25,236
Jul Office Contacts:	5,931

13:01

Y-axis: 13:26 / 12:57 / 12:28 / 12:00 / 11:31 / 11:02 / 10:33 / 10:04 / 9:36

X-axis: Jul-21 / Jan-22 / Jul-22

Contact Types
2021: 419,277 Contacts

Main Contact Types	Jul. Totals	
Service Request	10,368	32%
Payment	6,623	20%
Billing Inquiry	4,927	15%
Payment Arrangement	2,222	7%
Account Update	1,660	5%
Autopay Deposit Waiver	967	3%

Paperless Enrollments

160,874

43% Accounts

+10,711 in 2022

Y-axis: 160,000 / 150,000 / 140,000 / 130,000 / 120,000

X-axis: Jul-21 / Jan-22 / Jul-22
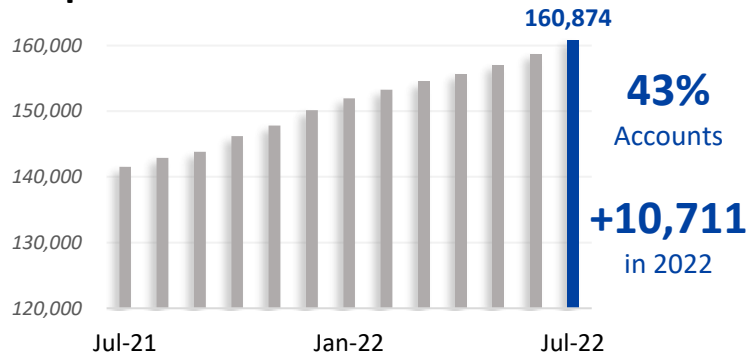
Collections
20 days with no collection activity due to high temp.

Remote Disconnects

Y-axis: 3,000 / 2,000 / 1,000 / -

151

X-axis: Jul-21 / Jan-22 / Jul-22

Aged Balances

$ 1,074,491

Y-axis: $1,000,000 / $750,000 / $500,000 / $250,000 / $0

X-axis: Jul-21 / Jan-22 / Jul-22
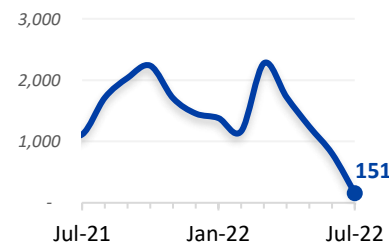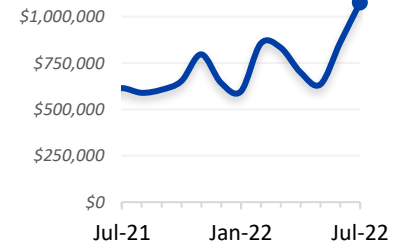
Energy Services
2021 YTD: Audits - 204, Insp. - 855
2022 YTD: Audits - 175, Insp. - 1,128

138

55

Y-axis: 225 / 200 / 175 / 150 / 125 / 100 / 75 / 50 / 25 / -

X-axis: Jul-21 / Jan-22 / Jul-22
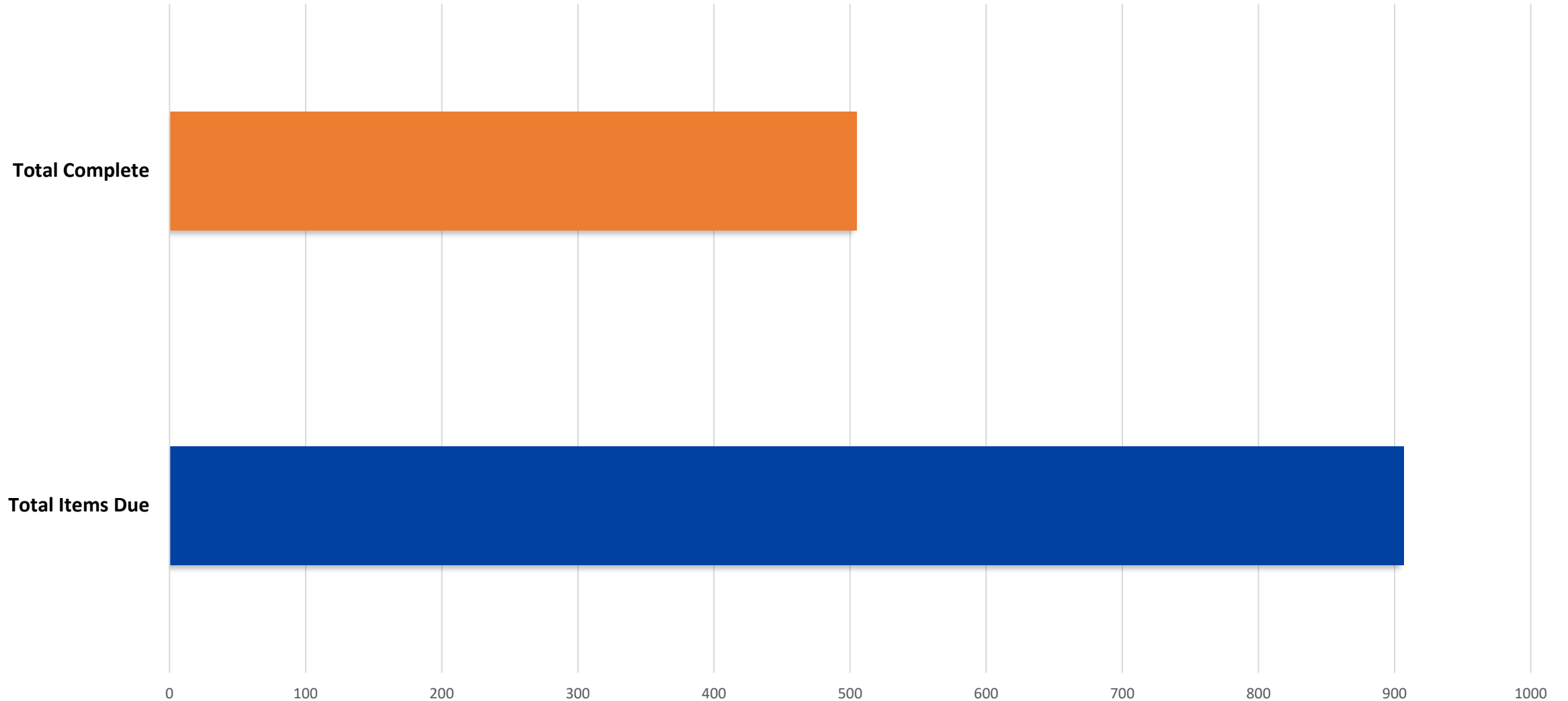
■ Audits   ■ Inspections

Substation & Transmission Maintenance

2022 Itemized Maintenance By Equipment
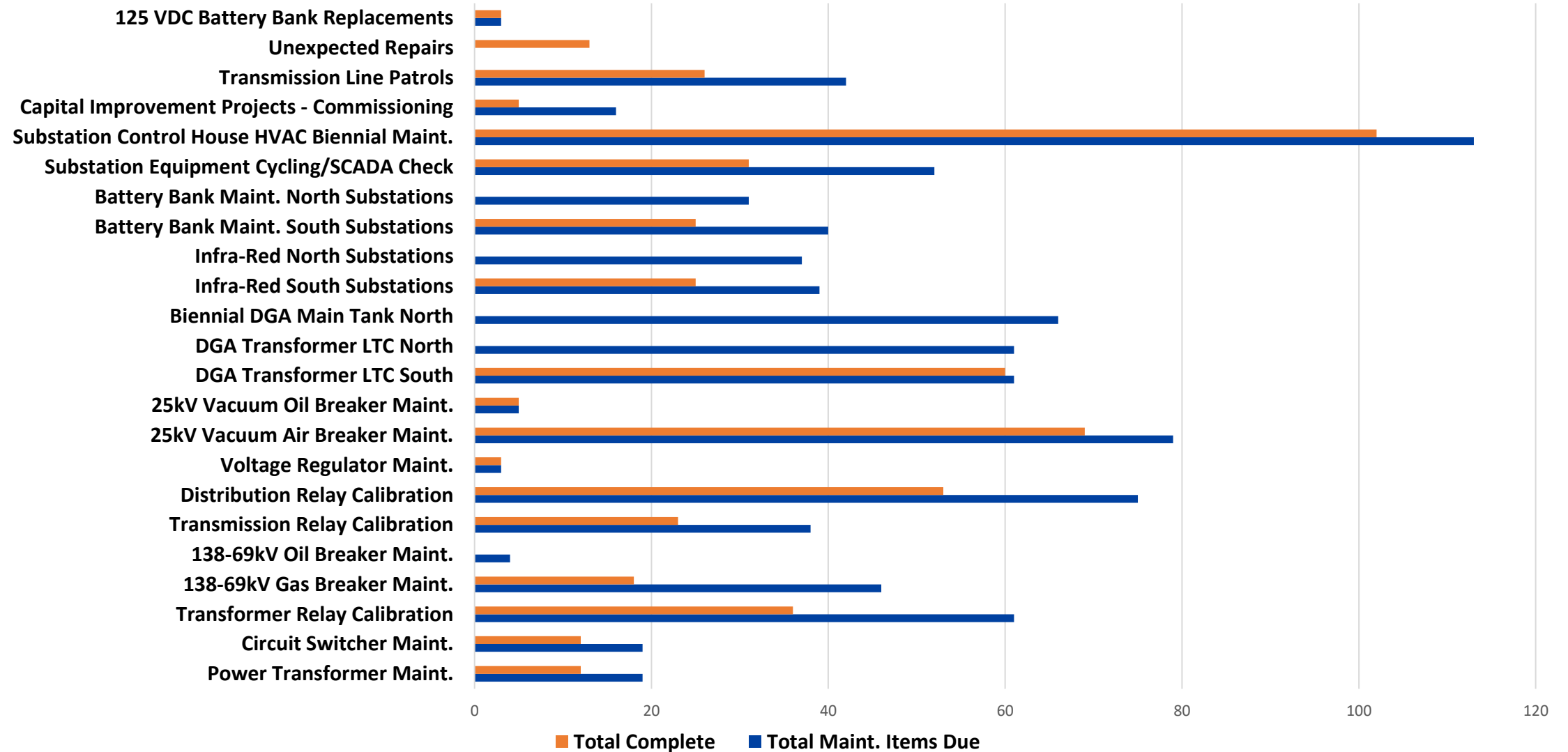
2022 Substation & Transmission Maintenance
Overall Status Year-to-Date

Substation Engineering Projects
Overall Status

Project	Project Phase	Description	Completion Date	Percent Complete
WS - BH Remote Ends	Construction	Upgrade line protection relay panels	May 2022	100%
GB T4 Transformer Relay Panel Replacement	Construction	Upgrade T4 transformer panel from electromechanical to digital relays	May 2022	79%
CC T1 Total Breaker Addition	Engineering	Add total breaker to T1 transformer for reliability	Oct 2022	65%
KY T1 Upgrade	Engineering	Upgrade T1 transformer	Nov 2022	43%
138 kV Breaker Replacements	Engineering	Replace four end-of-life oil circuit breakers with SF6 breakers	Dec 2022	51%
Substation Satellite Clock Installations	Construction	Install satellite clocks at substation for time synchronization to relays	Jan 2023	69%
BR Bus Upgrade	Engineering	Upgrade bus to double-bus double-breaker	Apr 2023	38%
SJ T3 Addition	Engineering	Add third power transformer	Jun 2023	37%
LH T4 Addition	Engineering	Add third power transformer	Jun 2023	72%
BU T1 Upgrade	Engineering	Upgrade T1 transformer	Aug 2023	60%
HE Substation	Engineering	Construct new substation	Sep 2023	100%
Mobile Substation Upgrades	Engineering	Upgrade circuit switchers and relay protection on three mobile substations	Oct 2023	29%
JN Substation Upgrade	Engineering	Upgrade T1 transformer and add line breakers (AEP)	Oct 2023	23%
MF - TP - CV Remote Ends	Engineering	Upgrade line protection relay panels	May 2024	13%

Planning Engineering Projects
Overall Status

Project	Completion Date	Percent Complete
Load Projections Study	Jan 2022	100%
UFLS Study	May 2022	100%
4CP Study	May 2022	100%
Summer Contingency	Jun 2022	100%
Regulator Settings	Jun 2022	95%
Capacitor Settings	Jul 2022	85%
Antler Battery Study	Aug 2022	98%
CIP Study	Aug 2022	60%
Mock UFLS Study	Nov 2022	0%
Winter Contingency	De 2022	0%
20 Year Plan	Jan 2023	10%
2 Year System Protection Coordination Review	Jan 2024	60%

Transmission Projects

Projects Completed:

- **WS – BH – LA** line upgrade *(Cedar Park)*:
  - 5.25 miles, rebuild existing 138 kV line to 440 MVA capacity.
  - Completed and energized on June 30, 2022.

Projects in Engineering:

- **MF – TP – CV – FS – RU** *(Oak Hill)*:
  - 15.41 mi., construction contract awarded, to begin Sep. 2022.

- **DS – RU Relocation** *(Oak Hill)*:
  - On hold pending direction from developer and resolution of complaint filed at PUCT.

- **LV – NL – LA Transmission Overhaul** *(Cedar Park and Liberty Hill)*:
  - Coordinating with Substation Design for cut-in to HE Substation.
  - Structural analysis confirmed need to upgrade to meet NESC District loads.

- **SA – FC** *(Canyon Lake)*:
  - Raise crossing over Canyon Dam discharge channel, material and poles ordered.
  - U.S. Corp of Engineers granted extension of permit for existing facilities through Jan. 2023.

- **MK – HN** *(Oak Hill)*:
  - Respacing shield wire and conductor to reduce outage vulnerability during extreme weather, material and poles ordered.

- **ML – HT** *(Kyle)*:
  - Rebuild of single circuit section, material and poles ordered.
  - Railroad signal mitigation study – ongoing.

19-Ton Pole Project

Oak Hill District raised a large, 70 ft. concrete pole:

- 2 months to design and approve construction.

- 6 weeks to manufacture.

- 5 weeks to prep site and complete construction.

- Crews worked overnight and coordinated traffic stoppage to place and set the pole.

BCRUA Line Project

PEC was asked to provide power for a deep-water intake project for the Cities of Leander and Cedar Park involving:

- 155 wood poles

- 37 steel poles

- 25 miles of double circuit 795 conductor

To meet critical dates and to address potential water supply concerns, PEC was asked to reduce a 12-mo. construction schedule into 8 mo.:

- 3 PEC crews and 2 contract crews were able to safely and successfully complete the project in 8 mo.

- Project was recognized by NRECA for National Linework Appreciation Day in April.

NEWS

Photo Gallery: Celebrating Lineworkers

Published	Author	Share
April 11, 2022	NRECA	f 𝕏 in

6 of 22 ◄ ►

Pedernales Electric Cooperative's Ronnie Taylor was tasked with leading and completing a critical construction job consisting of setting 192 poles and installing 25 miles of double-circuit 795 conductors. The project will help provide water to some of the fastest-growing areas in Texas. Ronnie's team was asked to take a 12-month project and condense it into eight months, which they accomplished—and accomplished safely. (Submission By: Jason Murray; Photo By: Evan Bradfield)

Throughout April, NRECA is celebrating lineworkers by highlighting the men and women who help keep the lights on in homes across America.

AMI Distribution

- Junction exchanges for TWACs meter upgrades are complete.

- Exchanges in the Eastern territory remain on hold due supply shortages:

  - Estimating receipt of additional residential 2S AMI meters in early 1st quarter, 2023.

  - Closely monitoring the current inventory combined supply of AMI and TWACs available through June 2023 to cover new growth and service repairs.

- Specialty meter exchanges (polyphase AMI) are substantially complete:

  - Polyphase meters are for commercial and industrial locations, 2S AMI meters are for residential locations.

  - All large power meter exchanges are complete.

  - Other meters in targeted areas exchanged across the Eastern territory.

  - Remaining polyphase meters will be exchanged with future residential meter exchanges.

Western Territory - TWACs Upgrades
- Junction Exchanges: 100%
- Meters exchanged: 6,887
- Letters & Emails: 6,633
- Member Complaints: 8

Eastern Territory - 2S AMI Exchanges
- Liberty Hill District: 100%
- Cedar Park: 40%
- Meters Exchanged: 121,000
- Letters & Emails: 166,000
- Member Opt-Outs: 54

Specialty AMI Exchanges
- Liberty Hill: 2,144
- Junction: 68
- Kyle: 1,963
- Oak Hill: 1,748
- Marble Falls: 509
- Canyon Lake: 217
- Bertram: 159
- Cedar Park: 259

Facilities

Cedar Park Access	The Cedar Park access road to Anderson Mill has been completed.
Dripping Springs Storage Yard	The new fence has been installed and a portion of the base material has been installed.
Johnson City	Installed generators at the Mailroom, the Haley Rd gate, and at fuel pumps.
Junction	Finalizing design and obtaining bids for yard renovations, pending substation design.
Leander Development	Building construction is in-progress and on schedule.
Marble Falls	Finalizing design and obtaining bids for yard renovations.

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