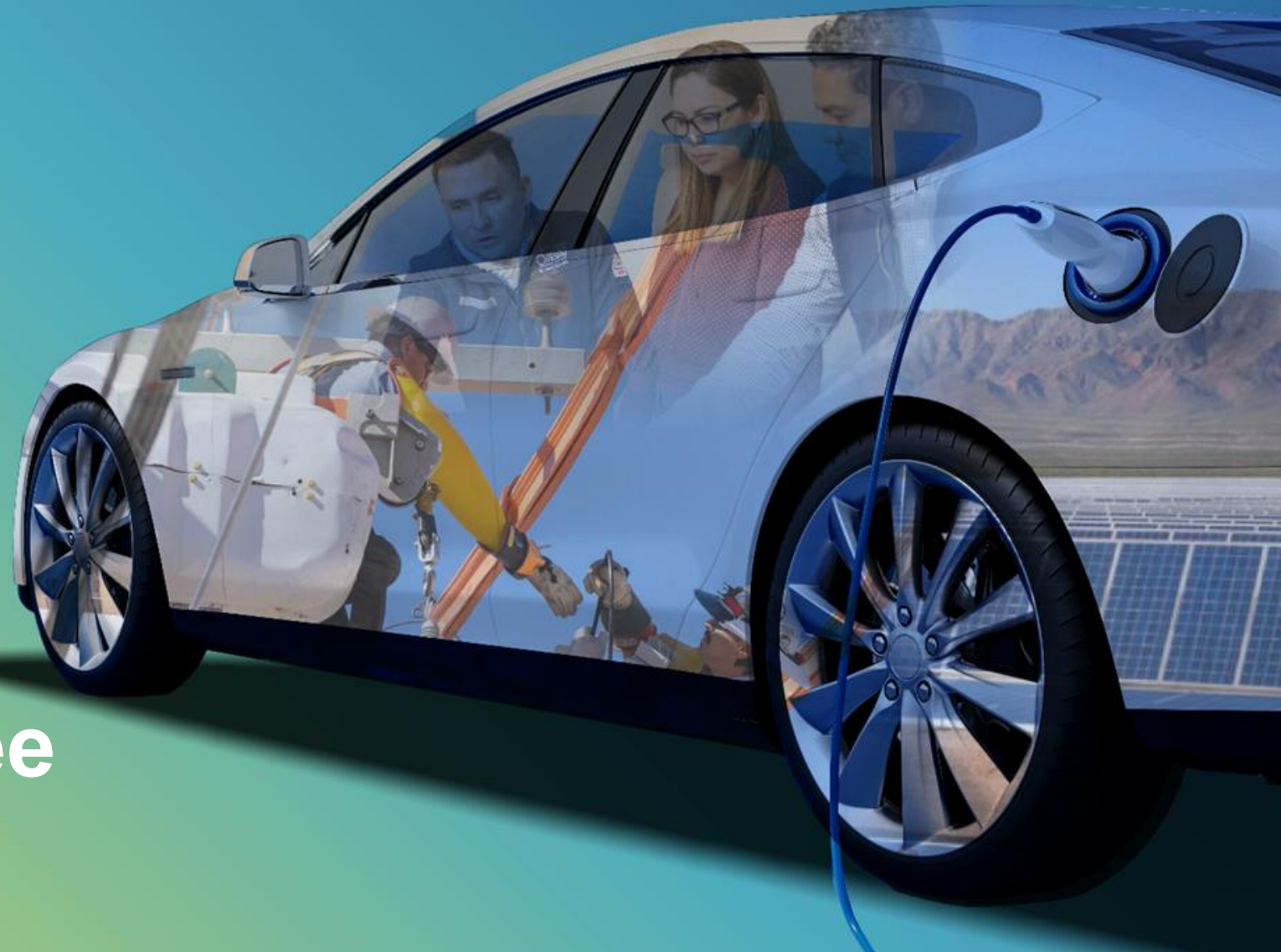




El Paso Electric



# Water and Natural Resource Committee

Chairperson – Kristina Ortez

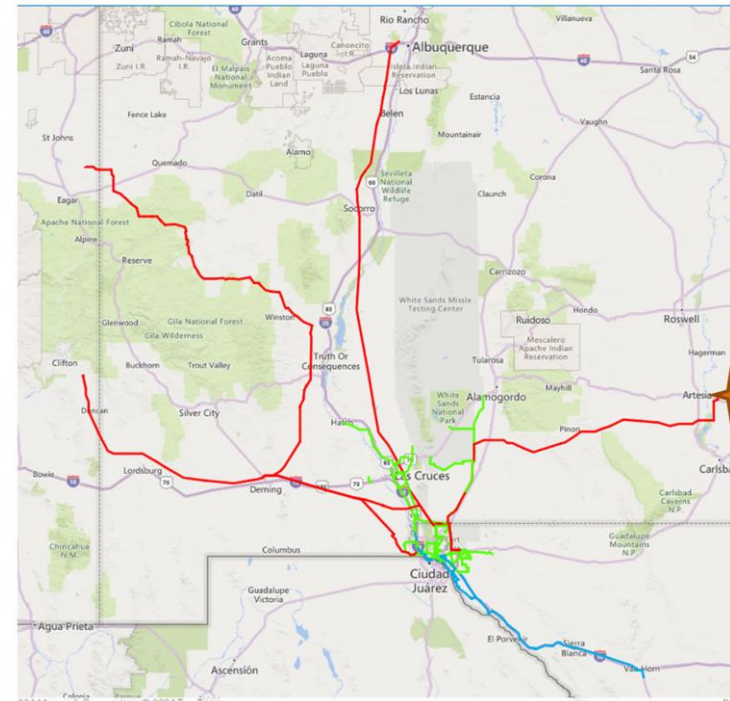
July 13, 2026

# Driving Reliability and Resiliency through Grid Mod

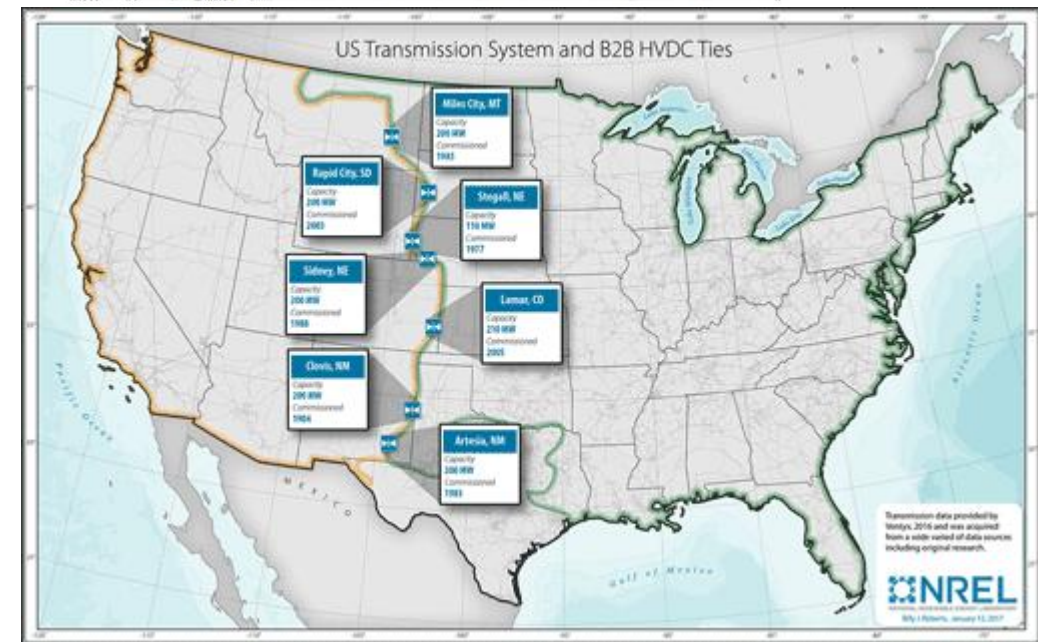


# Eddy County HVDC Project

- **Eddy Co. HVDC Tie was placed into service in 1983.**
  - Joint project between EPE and PNM
  - SPS Xcel has been Operator of Tie since 1983
- **Eddy Co HVDC Tie provides connection between two asynchronous grids.**
  - Eddy Co. HVDC connects the Western Interconnection to the Eastern Interconnection.
  - There are seven (7) HVDC ties that connect these two asynchronous grids together.
- **Eddy Co HVDC Tie imports power from SPS Xcel**
  - Tie has been derated to 105MW due to age.
  - Tie typically flows from East to West and is used for system reliability during summer months.



Eddy HVDC Tie



Transmission data provided by NREL, 2016 and was acquired from a wide variety of data sources including original research.  
NREL  
817 | Denver, January 13, 2017

# Project Scope & Benefits

- **EPE to construct new technology HVDC to replace existing tie.**
  - New tie will be Voltage Source Converter technology and rated at 200MW.
- **New technology provides:**
  - Continuous AC voltage regulation
  - Black-start capability
  - Fast dynamic response to changes in power
- **Project will have following impacts to the Eastern & Western Regions:**
  - Increased import capability for load growth and extreme events
  - Reliability, resiliency, and grid strength enhancement
  - Bi-Directional transfer capability
- **Filing CCN in New Mexico and anticipate filing in Texas**
- **Anticipate in-service 2031**



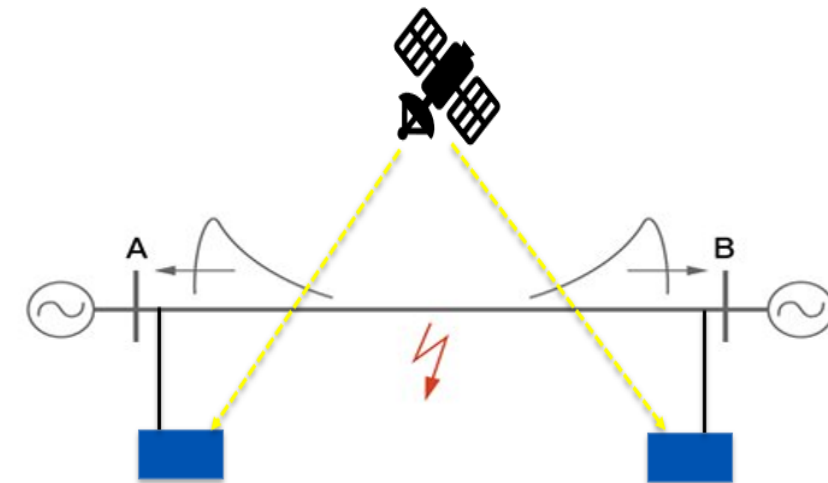
# EPE's SMART Grid Lab

- Lab contains all of EPE's standard conventional protective relays.
- Lab is used for training purposes, verifying and testing new protection & control schemes, and R&D. A current project is the development of a digital substation which will replace copper cabling with fiber.
- Lab facilitates technology collaboration between various departments (Protection, Metering, Telecommunications, OT, Substation and Distribution).



# EPE's Traveling Wave Protection

- Protective relays use traveling wave theory to identify and trip for faults.
- Traveling wave relays can trip at speeds as fast as 1-8ms to mitigate damage from faults.
- Traveling wave relays can estimate the fault location to within 300m (1000 feet) facilitating personnel deployment to the fault location.
- Fault location is automatically sent to EPE grid operator allowing dispatch to correct location and awareness of system state.
- All EPE 345kV lines will have traveling wave relay protection schemes installed within the next three years.



# EPE's Automated Substation Load Restoration Scheme

- Automated load restoration scheme is being implemented at all new EPE Substations.
- Scheme automatically restores customers when a loss of a power transformer occurs at substation.
- Scheme can restore power in less than 1 minute if loading algorithms denote sufficient capacity on second transformer.



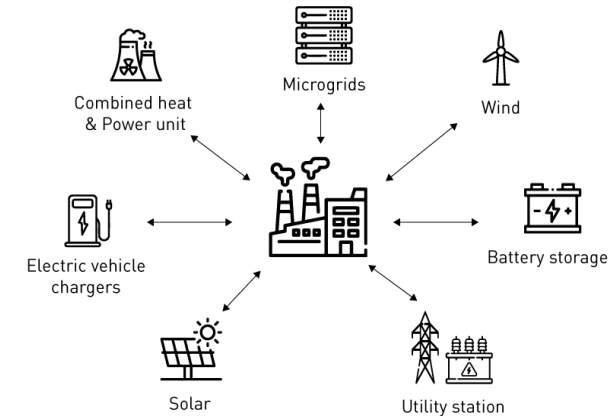
# Advanced Distribution Management System

- EPE currently working on ADMS project, it will be the core of Distribution Grid Modernization
- **ADMS components**
  - OMS – manage outage response
  - SCADA – interfaces with field devices such as line reclosers
  - DMS – engineering interface for modeling and switching
  - Advanced Applications – FLISR and VVO
  - DERMS – manage distributed energy resources

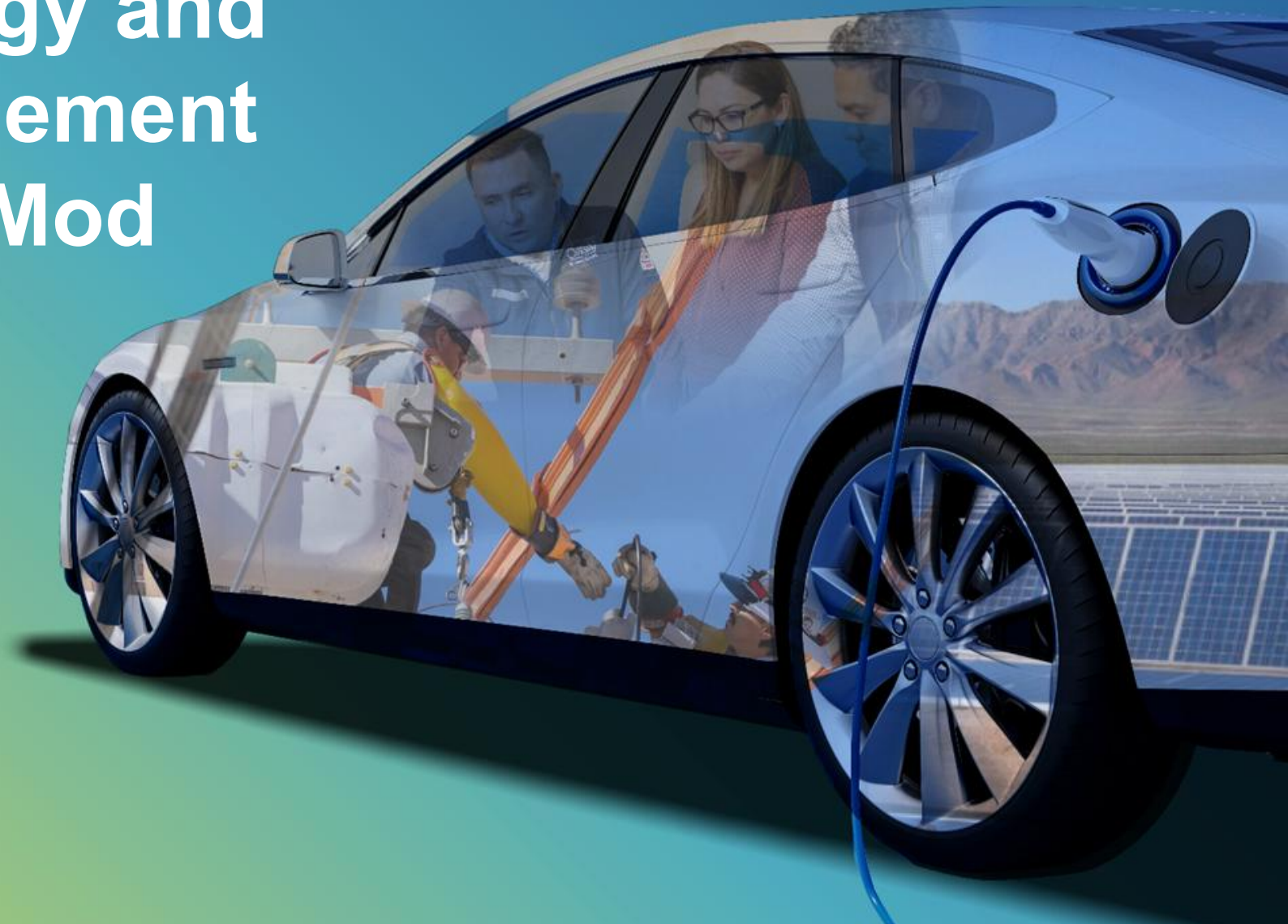


# Advanced Distribution Management System

- Fault Locate Isolate Service Restoration (FLISR) will be incorporated into new ADMS system.
- EPE is working on replacing on all TX and NM feeder relays with latest technology and incorporating DNP SCADA communications with new relays.
- Will be able to synchronize substation automation and ADMS FLISR to shorten outage restoration.



# Distributed Energy and Loadside Management through Grid Mod



# Residential EV managed charging



## Whole House EV Rate Rider (passive)

- Purpose: Customers schedule their EV charging during super off-peak hours
- Super Off-Peak: from 12:00 A.M. to 8:00 A.M.
- Monthly Bill Credit: averages from \$8 to \$20/month

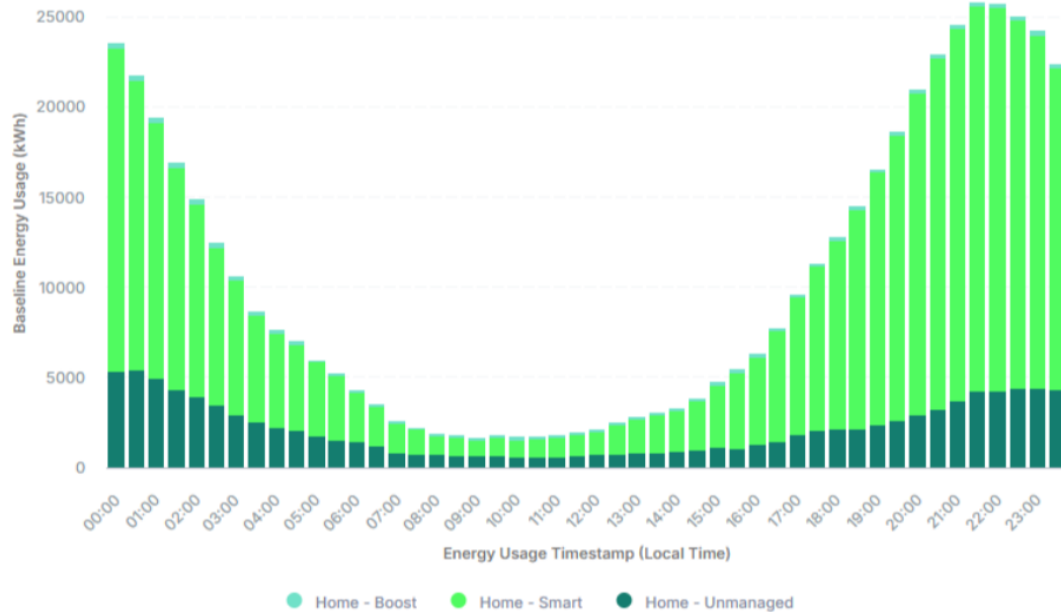


## EV Smart Rewards (active)

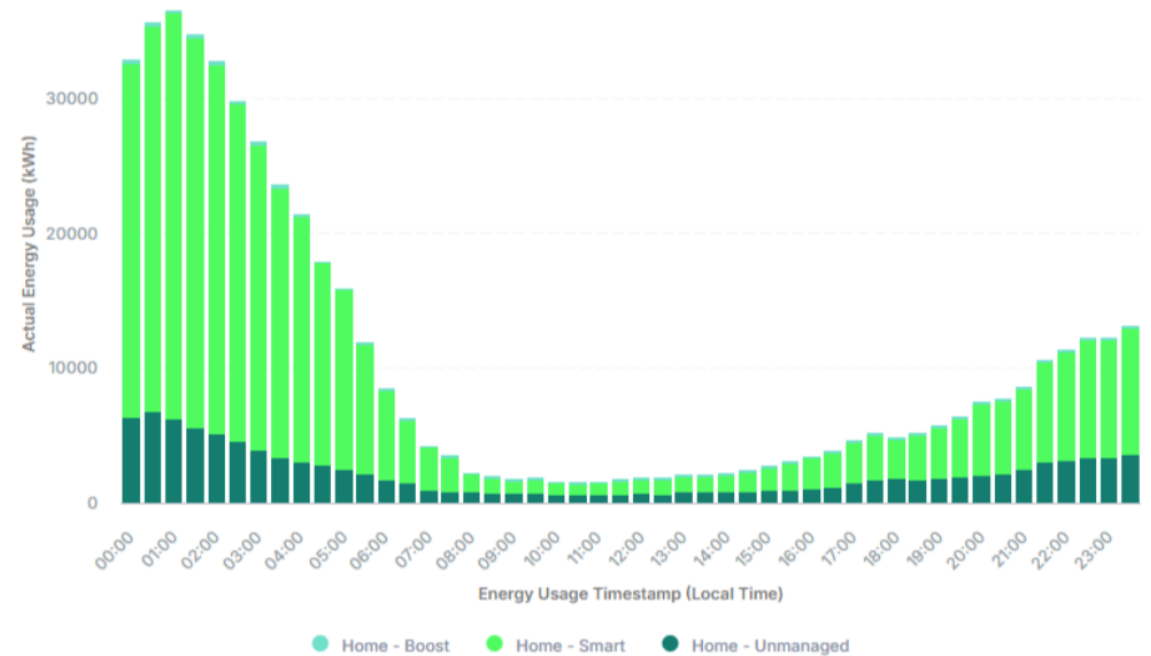
- Purpose: EPE schedules customers charging during off-peak hours, low carbon hours or DR events
- Venmo and PayPal Cash: \$125 for enrolling, \$50 annual incentive, and up to \$5/month for events

# Active EV managed charging program

- Successfully shifting home EV charging to super off-peak hours (midnight to 8 a.m.)



Baseline load shape (without managed charging)



Actual load shape (with managed charging)

# North Loop Battery Energy Storage System (BESS) Project

- EPE first ever distribution level Battery Energy Storage System.
- 8MW 32MWh System connected to 13.8kV feeder in Clint TX.
- Peak shaving and voltage support capabilities for area.
- Total cost approximately \$13M



# Grid Mod through Distributed Battery Program

*Transforming Customer-Sited Batteries into Grid Assets*

## Program Overview

- Partnership with Base Power to deploy residential battery systems across EPE's TX service territory
- EPE-owned battery assets operated as a coordinated Virtual Power Plant (VPP)
- 6 MW deployed to date, with a target of 9.9 MW by October 2026

## Grid Modernization Objectives

- Enhance reliability in capacity-constrained areas
- Support peak demand management and load shifting
- Increase grid flexibility through dispatchable distributed energy resources
- Establish a scalable foundation for future DERMS and VPP integration
- Demonstrate an alternative to traditional infrastructure upgrades





# Distributed Battery Program

## Customer Benefits

- Battery system installed at no cost for a period of 10 years
- Backup power during outages
- Participation incentive:
  - \$250/battery
- No impact to the electric bill

# El Paso Electric Residential Load Management — “Energy Wise” Smart Thermostat Program

Executive Summary | Smart Thermostat Demand Response | Data as of 07/10/2026

## Program Overview

Energy Wise is EPE’s residential smart-thermostat demand response (Load Management) program serving Texas and New Mexico.

- Customers earn incentives /rewards for allowing brief, automatic thermostat adjustments during peak-demand summer events. (\$25 for enrolling and \$25 for participating in all summer events)
- Supports Ecobee, Google Nest, Emerson/Sensi & Honeywell thermostats.
- Typical event: 2-hour window, 4–6 PM MDT, on high-temperature / tight-generation days.
- Events are dispatched using Uplight/AutoGrid Flex DERMS

## Customer Enrollment by State (enrolled devices, peak season)

State	2025	2026	YoY
Texas	12,445	15,512	+24.6%
New Mexico	4,681	5,340	+14.1%
<b>Total</b>	<b>17,126</b>	<b>20,852</b>	<b>+21.8%</b>

## Savings & Participation by Year and State

Year / State	Events	Avg Demand Redux / Event (kW)	Energy Savings (kWh)	Avg Part. Rate
<b>2025 – Texas</b>	9	11,304	191,110	~62%
<b>2025 – New Mexico</b>	9	4,504	76,390	~67%
<b>2026 – Texas*</b>	3 of 4	12,088	72,529	~59%
<b>2026 – New Mexico*</b>	3 of 4	4,357	26,141	~61%

*\*2026 summer season in progress (4th event 07/09/2026 pending). 2025 combined avg peak reduction ≈ 15,809 kW; 2026 to date ≈ 16,445 kW. Enrollment shown from targeted/enrolled devices in event files; verify against Power BI “YTD Thermostat Enrollment Summary.” Program details: [epeenergywisesavings.com](http://epeenergywisesavings.com).*

## Key Takeaways

- Combined avg peak demand reduction grew from ~15,809 kW (2025) to ~16,445 kW (2026 YTD) — a resilient dispatchable summer resource.
- Enrollment up ~22% YoY across both states, driven by Texas growth (+24.6%).
- Participation rates hold steady at ~60–67% per event, confirming reliable, repeatable curtailment.

# Creation Energy: EPE and Creation have partnered on a 250-home demonstration project in New Mexico



- Creation is an El Paso based residential energy company that installs, finances, and operates residential solar, storage, and smart energy systems
- Unique business model
  - Focused on new home construction for repeatability and cost efficiency
  - Long-term partnership with electric utility to help solve utility resource requirements and optimize the power grid
- Because the Creation system serves as utility resource, homeowners receive less expensive electric bill, back up power, and EV ready home at zero cost, with no ongoing maintenance requirements.
- Three-year evaluation process (including the NM public IRP process) has proven the solution is a cost-effective resource

# Customer Transparency and Options through Grid Mod



# Advanced Metering Infrastructure (AMI) Benefits

- Immediate Stop/Start Service Capability.
- Reduced disconnect/reconnect fees.
- Historical bill comparisons
- Bill forecasts
- Review of energy usage
- Green Button Connect – use third party tools
- Improved outage response times
- Operational efficiencies
- Theft detection
- Power Quality Analysis – high/low voltage, broken neutral, phase imbalance



# EPE is Focused on Simplifying Our Service

## AUTOPAY

### Set it and forget it

- Free enrollment from your checking account.
- Choose a maximum draw amount for peace of mind.
- Built for customers with multiple accounts or locations.
- On-time payment, every cycle — no late fees, no follow-up.

## PAPERLESS BILLING

### Invoices the moment they're ready

- Receive each invoice by email as soon as it's available.
- No post office delays, no lost mail, no clutter.
- Faster routing to AP and easier digital recordkeeping.
- Pairs perfectly with Autopay to fully automate billing.

# Flexible options for Bill Payment

## PAYMENT ARRANGEMENT

### Spread out a past-due balance

- Split your past-due balance into manageable installments.
- Typical term: 3–6 months.
- Stay on service while you catch up.

## PAY PLAN

### Short extension on what's due

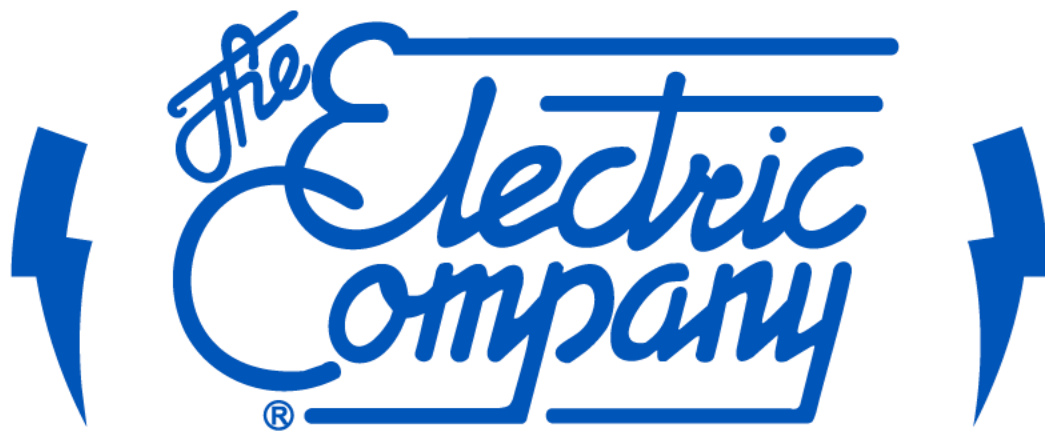
- Extra time to pay the current balance due.
- Typical extension: about two weeks.
- Best when you just need a short bridge to payday.

## BRIGHT HEARTS

### Payment matching when you fall behind

- Community-funded matching program from EPE.
- Designed for customers who have fallen behind.
- Helps stretch your payment further toward your balance.

TRANSFORMING THE



**El Paso Electric**

ENERGY LANDSCAPE