# June 6, 2025

## 2025 Retail Electric Provider Workshop

| Agenda Item | Presenter |
|---|---|
| Breakfast & Registration | All |
| Executive Welcome | Robert Goodge |
| Electric Market Operations Update | Toni Bean & John Hudson |
| A Powerful Safety Reminder | Joycelyn Johnson & Donovan Calvin |
| Meter Data Loading at ERCOT | Kelly Brink |
| Kahoot & Break | All |
| Emergency Preparedness & Response | Treemonisha Smith & Matt Lanza |
| Resiliency Update | Mythili Chaganti |
| Kahoot & Break | All |
| CRIP Update 2025 | Richard Beasley |
| Kahoot & Lunch | All |
| CenterPoint Energy Enhanced Outage Communication Strategy | Stephenie Howard & Roderick Batteaux |
| ERCOT Retail Market Updates | Kathy Scott |
| Regulatory Update | Jim Lee & Joymesha Jones |
| Closing Remarks | Lee Doehring |
| NASA Self Guide Tour | All |

# Executive Welcome

2025 Retail Electric Provider Workshop

**Robert Goodge**

**Vice President Meter to Cash**

CenterPoint® Energy


# Electric Market Operations Update

**Toni Bean**
Director Electric Market Operations

**John Hudson**
Director Customer Billing

CenterPoint Energy

# A Powerful Safety Reminder:

**Joycelyn Johnson**

**Texas Gas Safety Core Team**

CenterPoint Energy

# Safety Is More Than a Procedure

"At CenterPoint Energy, safety is not just a checklist—it's a core value that lives in every action we take."

- Safety shapes our culture and training.
- Every employee plays a role in protecting lives.
- Winter Storm Uri reminded us of the critical importance of safety—even in routine moments.

# The Human Side of Safety

"Behind every system, policy, and standard are real people."

- Daily work carries real risks, especially for front-line workers.
- A colleague's serious injury during a routine check is a powerful reminder: there is no such thing as 'routine.'
- Every decision matters.

# Meter Data Loading at ERCOT

**Kelly Brink**

Data Loading and Aggregation

# Daily transaction processing on average

## 867_03 TX Set EDI

- 300,000 NIDR
- 1,300 IDR

## AMS LSE data

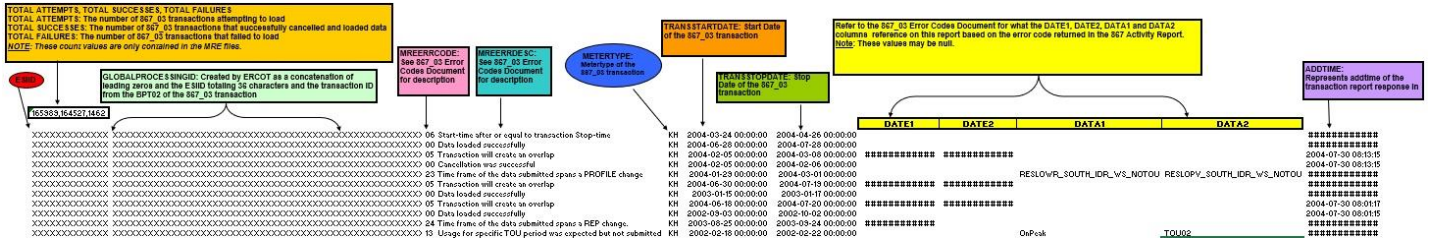
- 9.1M

## EPS (ERCOT Polled Settlement ) data

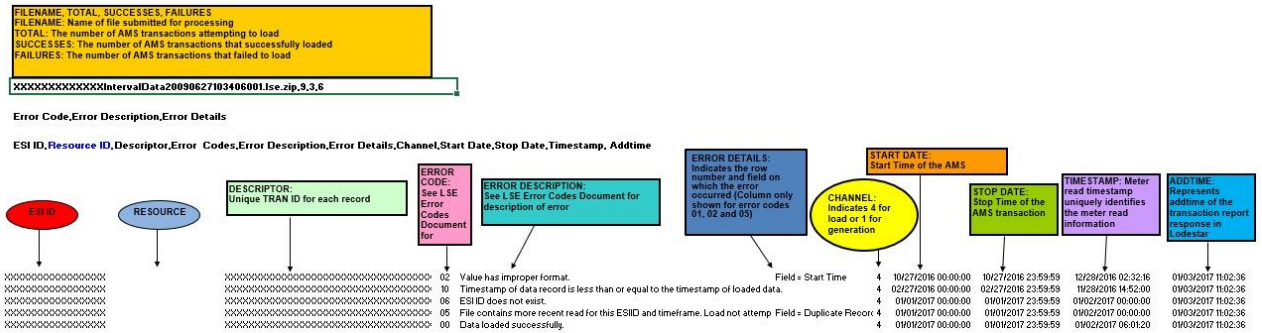
- 2,500

# 867_03 IDR/NIDR Activity Report

- Data loading runs once per day at 3pm
- Includes information regarding both successful and failed loading attempts
- Created daily provided data is available for loading
- Recipients of the report are the MRE and the LSE DUNS from the N1SJ loop of the 867_03 transaction
- Posted to ERCOT's MIS



# Interval Data LSE Activity Report




- Data loading occurs hourly
- Includes information regarding both successful and failed loading attempts
- Report is created per file submitted
- Recipients of the report are MREs only
- Posted to ERCOT's MIS

# Related Extracts

## ESIID Service History and Usage Extract

- Provides Market Participants (MP) ESIID level data that ERCOT uses in Market settlement as well as the data needed to perform shadow settlements

## IDR Supplemental Extract

- Provides Market Participants their IDR required interval data loaded at ERCOT systems via 867_03 transactions

## AMS Interval Data Supplemental Extract

- Provides Market Participants their AMS interval data loaded at ERCOT systems. Contains the fifteen-minute interval data for ESIIDs that have Advanced Meters installed at the premise

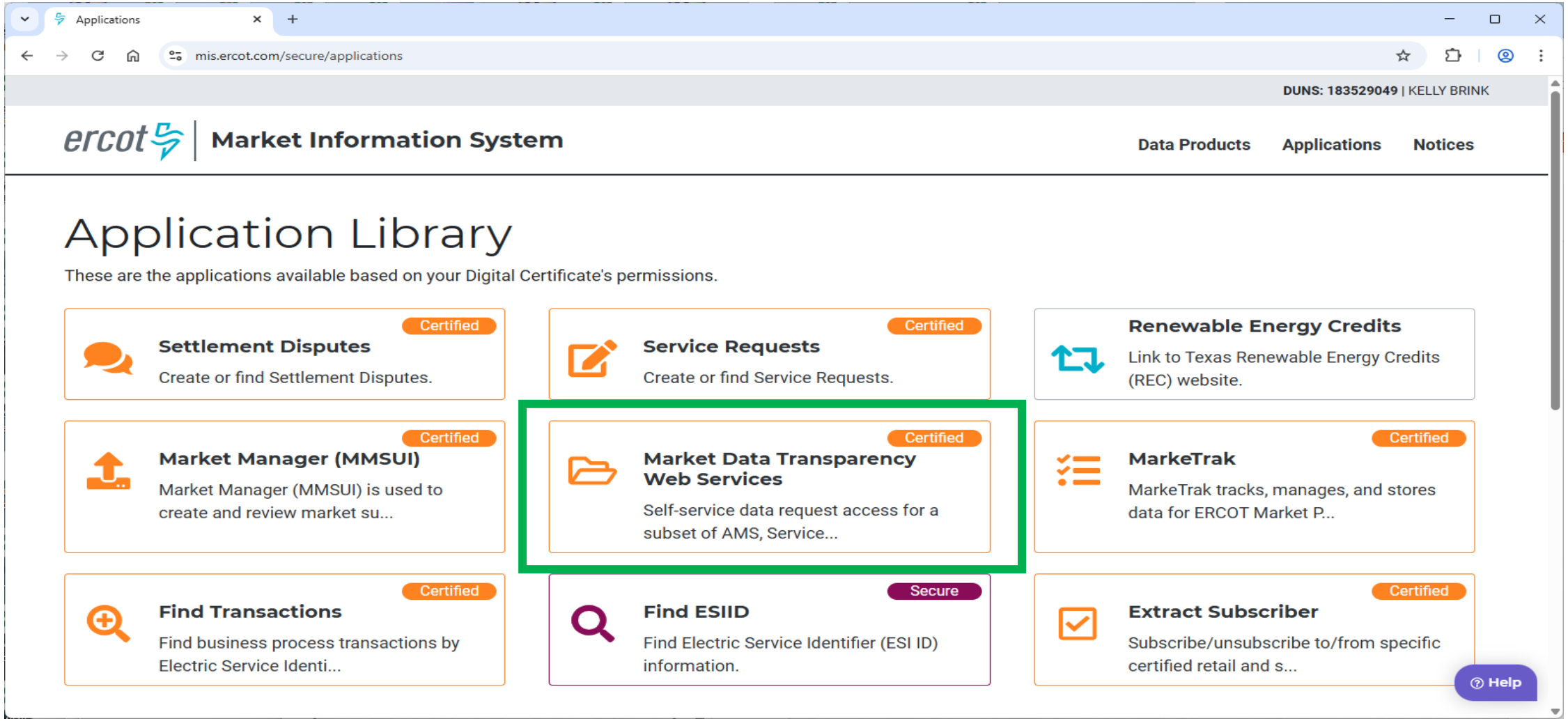
## Resource ID Extract

- Provides Market Participants with data related to generation resources, other ERCOT polled settlement meters and TDSP read Resource IDs

# Extracts:  Additional Information

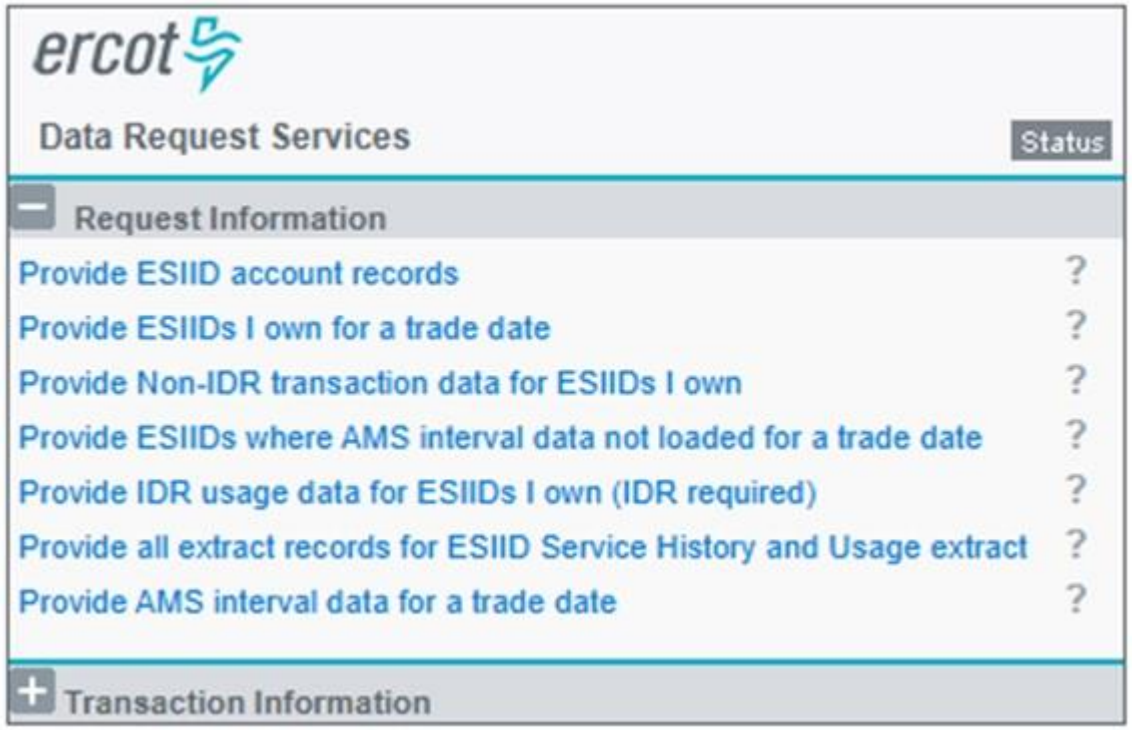
- Extract data is available approximately 4 days after the data arrives at ERCOT
- All extracts mentioned run for the same intervals (i.e. same ~24 hr window)
- Must subscribe to each extract to receive
- Company level subscribe/unsubscribe
- Extract output produced daily for owners of data if data was modified
- Posted to MIS for 30 days
- Support protocols NP11.2.2(3)(a), NP11.2.2(3)(b), NP 10.12.3(a)

# Market Data Transparency Web Services



# Market Data Transparency Requests

- Provides data for specific ESIIDs on demand
- Output is posted to ERCOT's MIS under 'Market Data Transparency'
- Can only access data you own
- Output posted for 30 days




# Emergency Preparedness & Response

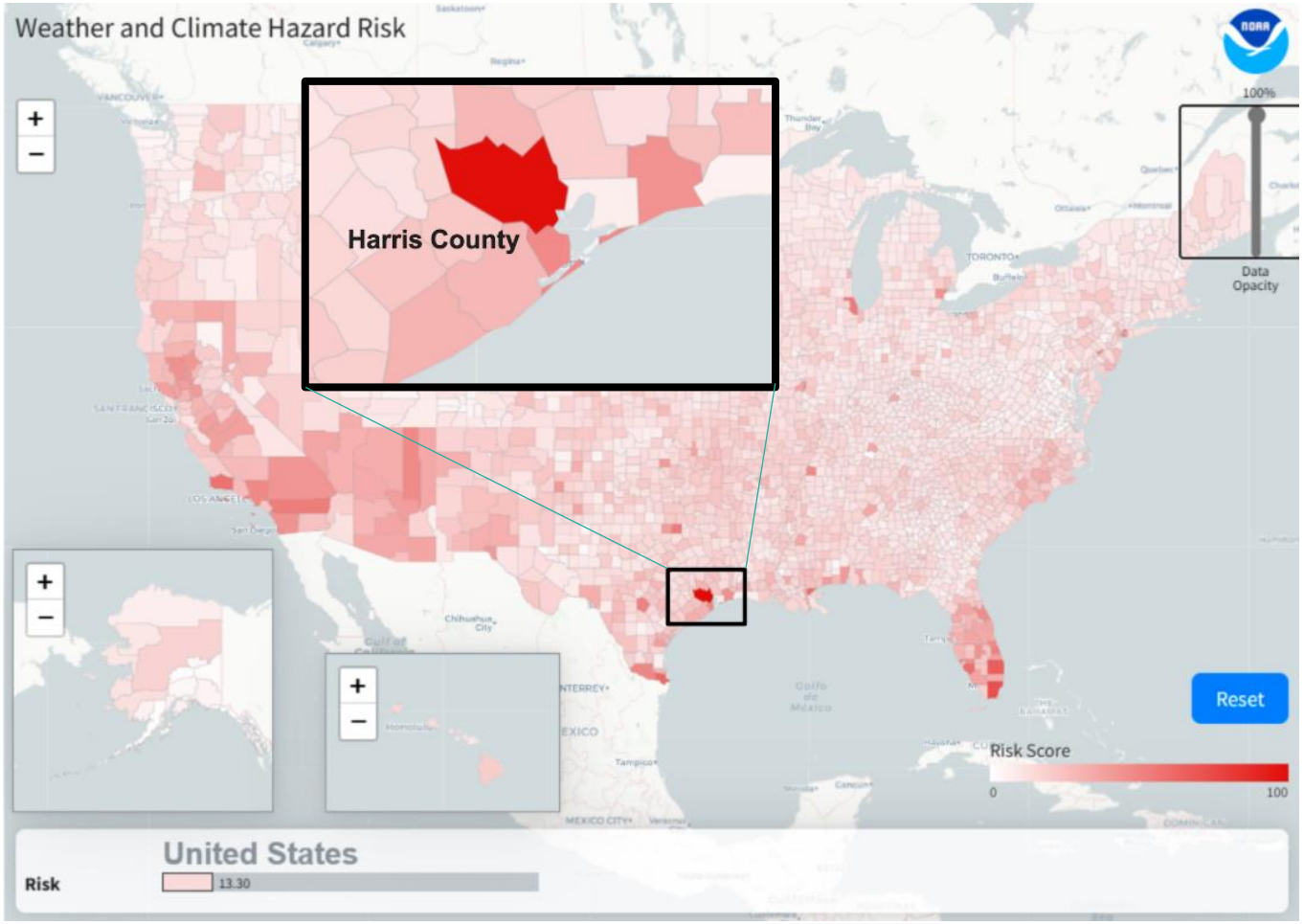
**Treemonisha Smith**
Manager, Emergency Planning

**Matt Lanza**
Manager, Meteorology

CenterPoint® Energy

# Our commitment to Greater Houston: Building the most resilient coastal grid in the country.

# Extreme Weather Threats: High Risk




*National Oceanic and Atmospheric Administration*

- **Greater Houston has the highest weather/climate hazard risk in the country**
- Harris County has more high-risk zones than any other county (per FEMA)
- Densest customer base coupled with densest urban vegetation along the coast

# Preparing the Incident Management Team

Establish fully trained and qualified Incident Management Team to manage all emergencies in Command, Control and Coordination.

**1**

### Introductory Level Online FEMA Courses

- **ICS 100** – 2 hours
- **ICS 200** – 4 hours
- **ICS 700** – 3.5 hours
- **ICS 800** – 3 hours
- **CNP EP&R Intro** – 1 hour

**2**

### In-person FEMA Courses and Bootcamp

- **ICS 300** – 3 days
- **Position specific** – 2 days
- **Bootcamp**

**3**

### Experienced Level In-person Participation Evaluation and Testing

- **Functional Exercise 1**
- **Functional Exercise 2**
- **Full Scale Exercise**

**Training provided and delivered by FEMA and emergency experts, including Hagerty and URTA**

# Emergency Preparedness in Action

## Actions we're taking to prepare for the 2025 hurricane season and enhance how we respond to extreme weather events.

**100+** **Weather stations** installed to enhance situational awareness and storm preparation

**750+** **Employees** completed Federal Emergency Management Agency (FEMA) trainings

**14+** **Meetings and exercises** with local officials and emergency response partners to strengthen coordination and test our emergency response plans

**21** **Emergency backup generators** being donated and installed in strategic community locations

# Pre-Staging Key Resources

Strategically positioning key equipment, materials and mutual assistance resources to be able to respond as safely and as quickly as possible.

**25k+** **Mutual assistance frontline workers** available to support

**30+** **Pre-identified areas** throughout service area to stage frontline workers

**21** **Wind-resistant containers** to store key materials to quickly repair weather-related damage

**20** **Category 3 trailers** to support field command posts

# Leveraging AI and New Technologies

Data aggregation & visualization

neara

Palantir

High-resolution & damage assessment modeling

technosylva

Weather sensors

Climavision

High-resolution cameras

meteomatics

Resource & crew management software

PANO

Urbint

# Full Scale Exercise

This exercise is part of a series of emergency preparedness actions we're completing ahead of the 2025 Hurricane Season.

## SCENARIO

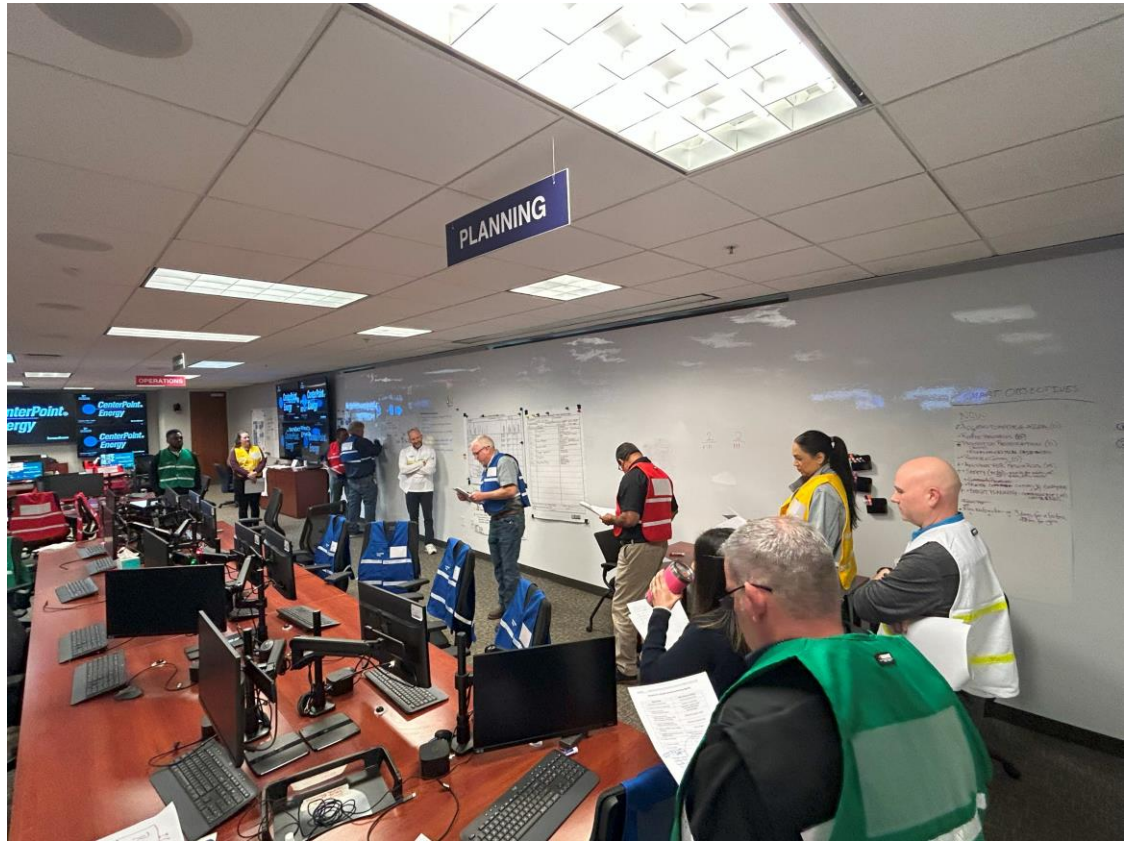
**Simulating Category 3 Hurricane event** to strengthen coordination and improve our emergency plans

## PARTICIPANTS

**200+ CenterPoint team members** participating in exercise

## STAKEHOLDERS

**50 state and local officials and community partners** are joining us to at our Emergency Operations Center



# Greater Houston Resiliency Initiative

To address extreme weather risk, we are building the most resilient coastal grid in the country.


**July 2024 – August 2024**

40+ immediate actions to improve resiliency, communications and partnerships

**September 2024 – June 1, 2025**

Additional actions to prepare for 2025 hurricane season

**June 1, 2025 – December 31, 2025**

Tailored actions during hurricane season to address potential storm impacts

**January 1, 2026 – December 31, 2028**

Systemwide resiliency plan actions to address future extreme weather

# GHRI: Early Completion of Phase 2

| Resiliency Actions (July 2024 – June 2025) | Complete As of May 22, 2025 | Target By June 1, 2025 |
|---|---|---|
| Installing stronger, more storm-resilient poles | 26,470 POLES | 26,000 POLES |
| Installing automation devices capable of self-healing | 5,159 DEVICES | 5,150 DEVICES |
| Clearing hazardous vegetation near power lines | 6,018 MILES | 6,000 MILES |
| Undergrounding power lines | 417 MILES | 400 MILES |

# Year-Round Preparedness Communications

# In-Event: Proactive Multi-Channel Approach

**Outage Tracker**

CenterPointEnergy.com/OutageTracker

**Dedicated Emergency Event Website**

CenterPointEnergy.com/ActionCenter

**Daily Calls, Texts, or Emails about Event Status**

CenterPointEnergy.com/PowerAlertService

**Daily Operational Briefings**

**Social Media Channels**

**Radio and Local News**

# Improving Customer Communications

## Direct-to-Customer Communications

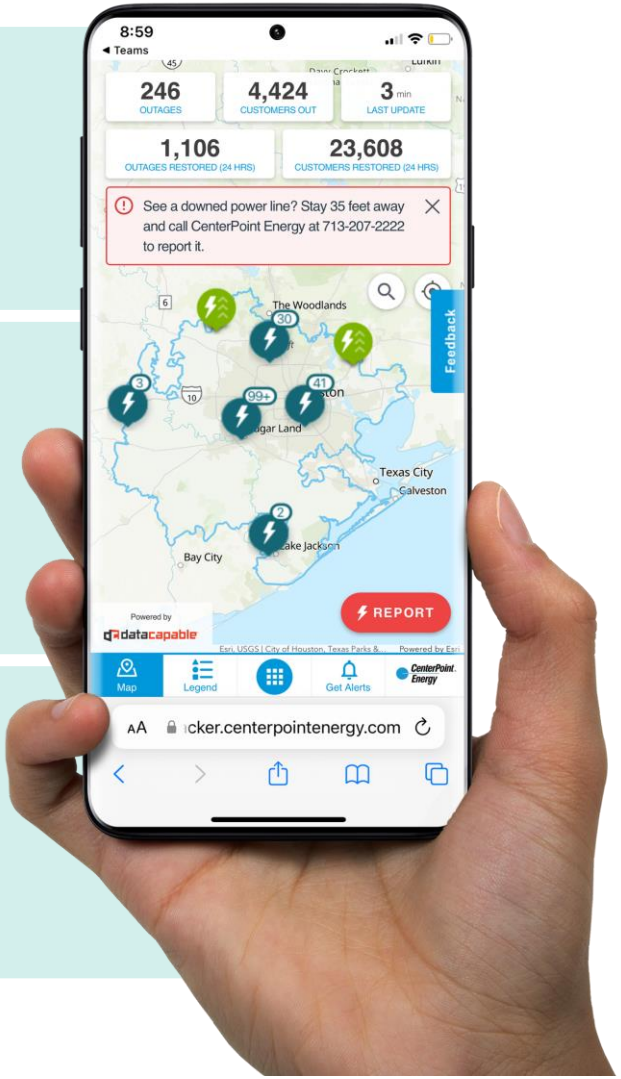
- Year-round customer safety and preparedness campaign
- Tailored outreach to Critical Care Residential customers
- Real-time updates via social media

## Community Outreach Events

- Hosting and presenting at emergency preparedness events across 12-county Greater Houston area
- Sponsoring largest hurricane preparedness event in Texas
- Holding webinars in Spanish, Mandarin and Vietnamese

## Outage Tracker Improvements

- Cloud-based Outage Tracker with premise-level info
- Spanish-language Outage Tracker
- Mobile/web-based ability to report hazards



# How We Communicate: Power Alert Service®

Sign up today to receive timely, specific updates about your power.

- **Get alerted within minutes of a power outage** by phone call, text* or email.
- **Receive daily updates** before, during and after weather events.
- **You can add family and friends** to receive alerts for your location.

Scan the QR code to sign up for **Power Alert Service®** or visit **CenterPointEnergy.com/PowerAlertService**

*There is no fee for Power Alert Service®, but if you select SMS/text messaging notifications, standard text messaging fees charged by your carrier may apply

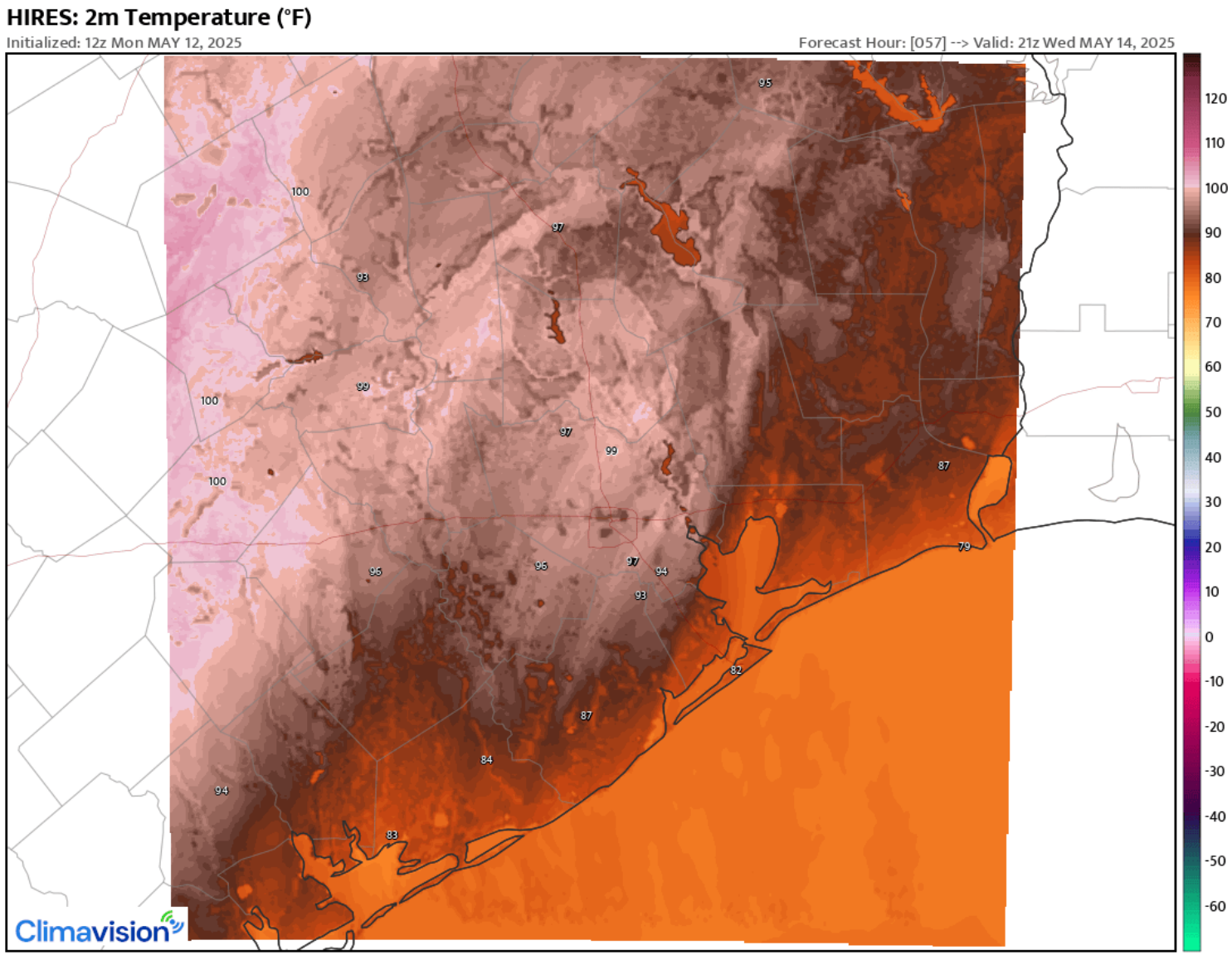
# Our commitment to Greater Houston: Building the most resilient coastal grid in the country.

CenterPointEnergy.com/PowerAlertService

# Meteorology at CenterPoint

- CNP hired in-house meteorologist in November 2024; second meteorologist onboarding soon.
- Internal weather forecast toolkit grew astronomically in last 7 months, with access to new models and data. Additional tools to come.
- Meteorology is firmly embedded within Emergency Preparedness and Response but interfaces with many groups across the company.
- Group will continue to grow and become more advanced over time.

# Climavision




- Climavision providing CenterPoint access to their high-resolution model platform.
- Climavision has developed a 670 meter resolution model focused over Houston that we also have access to.
- Most high-resolution models available are 2-3 km resolution, so this gives us a tremendous tool.
- Weather station data from our 100+ sensors will be ingested into the model to improve it over time.
- Data from the tool will also be utilized for temperature forecast inputs throughout the company.
- Will be our primary tool for thunderstorm forecasting.



Prepared by: Matt Lanza
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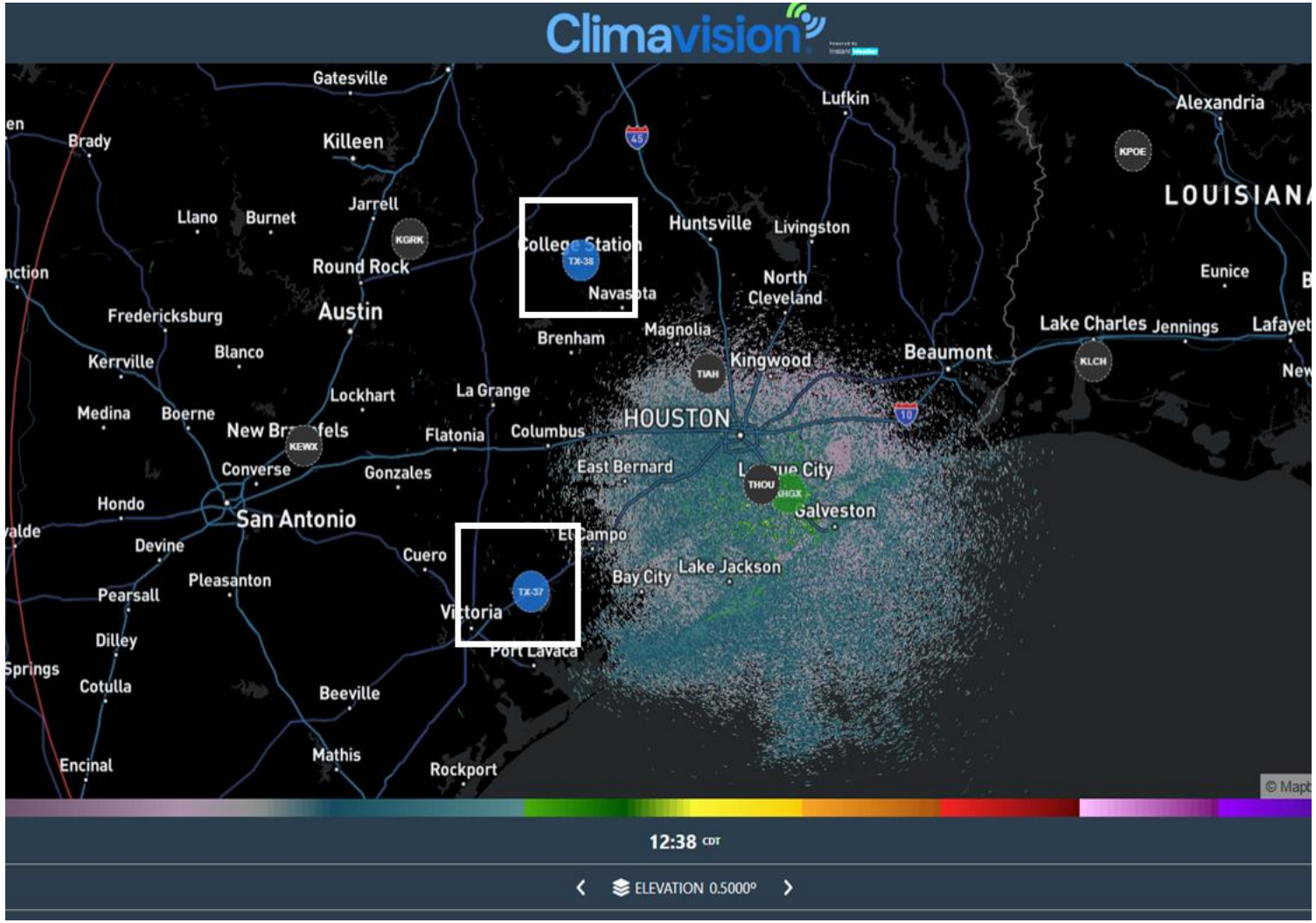
# Climavision




- Climavision also providing access to their radar platform for situational awareness.
- We also have access to their proprietary radars located near El Campo and College Station to beef up radar coverage on the west and north side of our territory.



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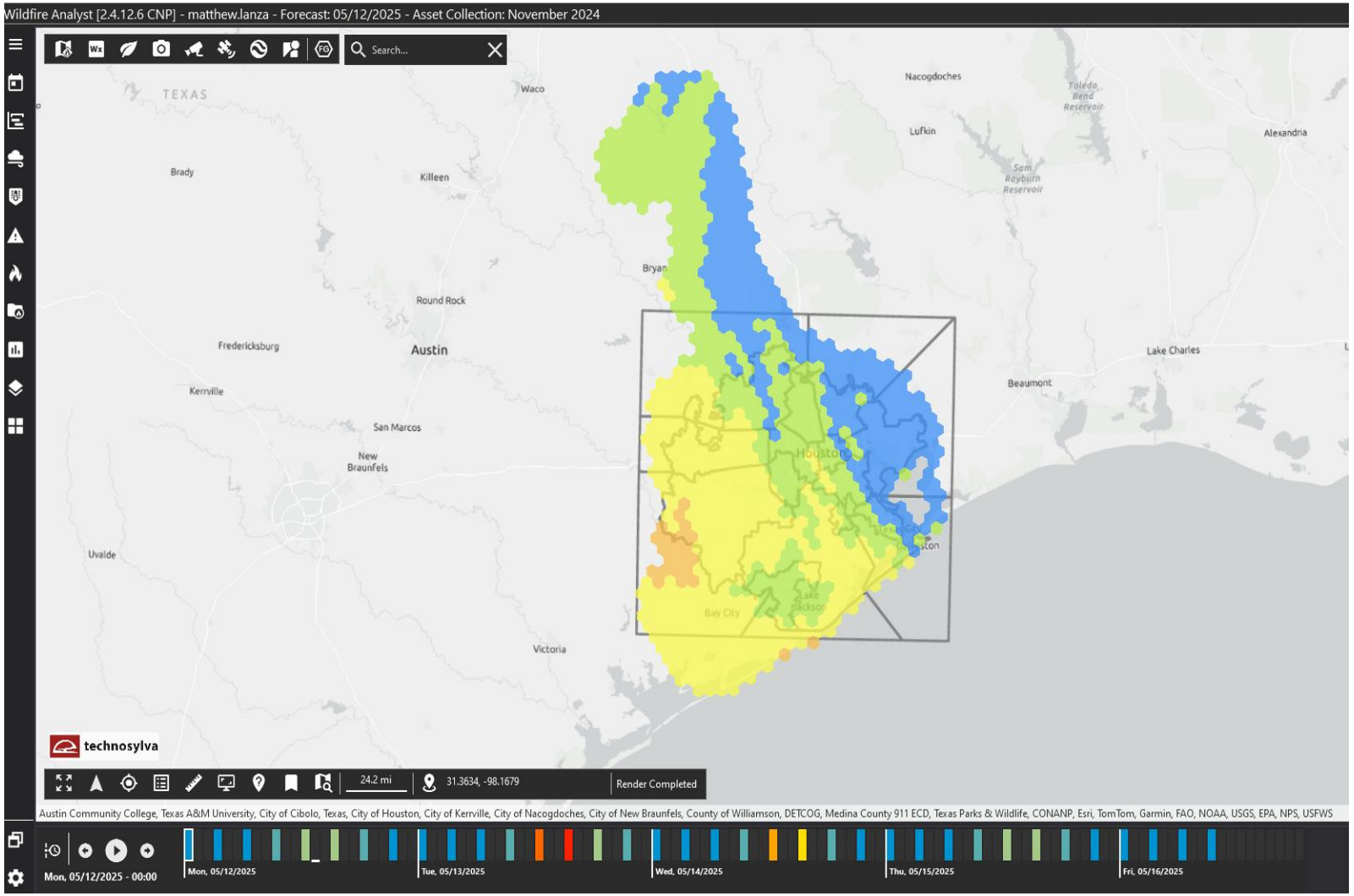
# Technosylva




- **FireRisk and FireSim are tools for use by the company to help understand daily wildfire risk and potential impacts.**
- **Tool is based on a high resolution weather model with high resolution analysis of fuels and infrastructure to determine areas at highest risk on a daily basis.**
- **Tool will expand to go beyond wildfires this summer.**



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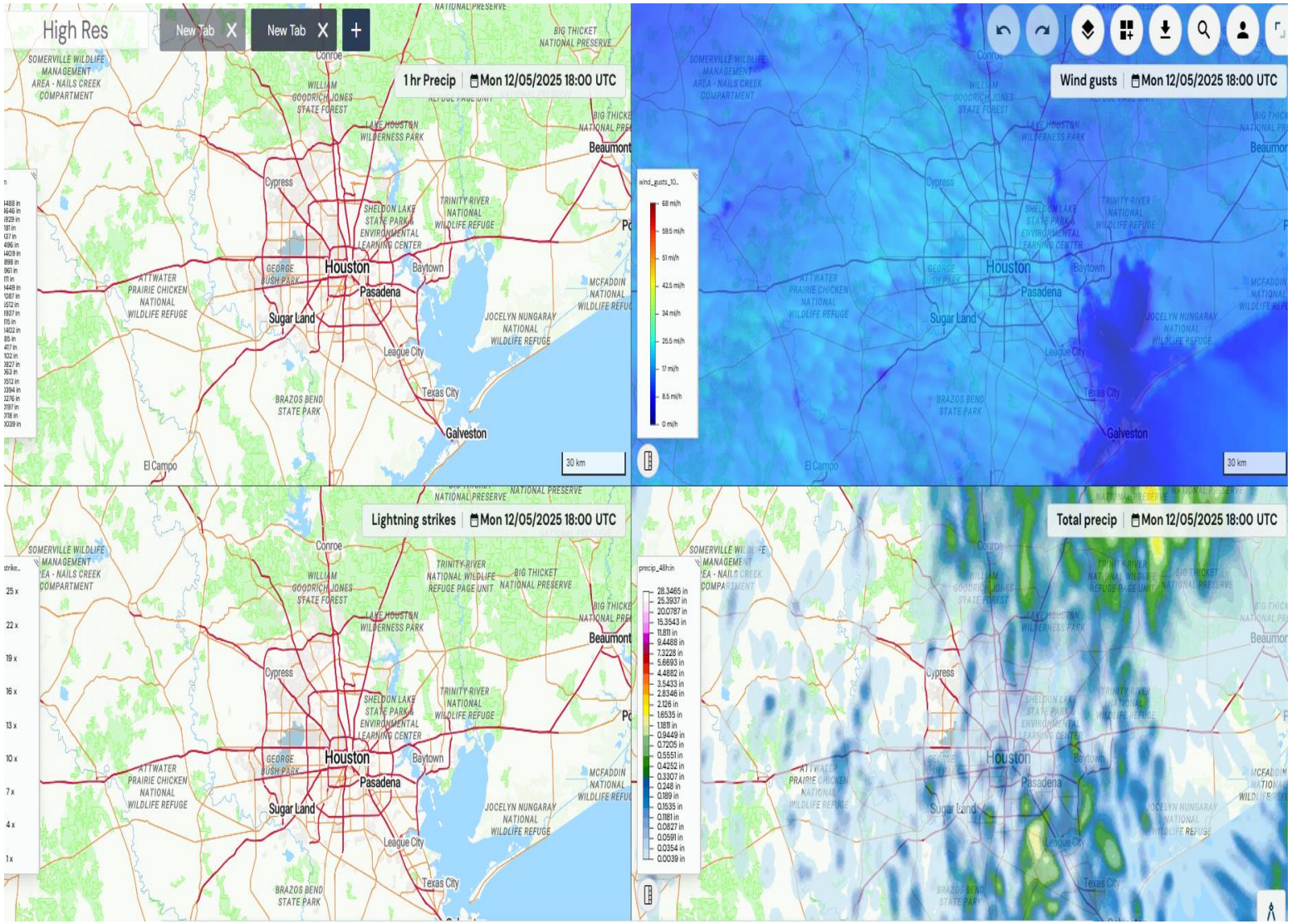
# Meteomatics




- A 1km resolution weather model meant as a “sanity” check on other modeling.
- Will be utilized to compliment other tools in the arsenal.
- Will likely be utilized as part of an “ensemble” of high resolution weather modeling tools.



Prepared by: Matt Lanza
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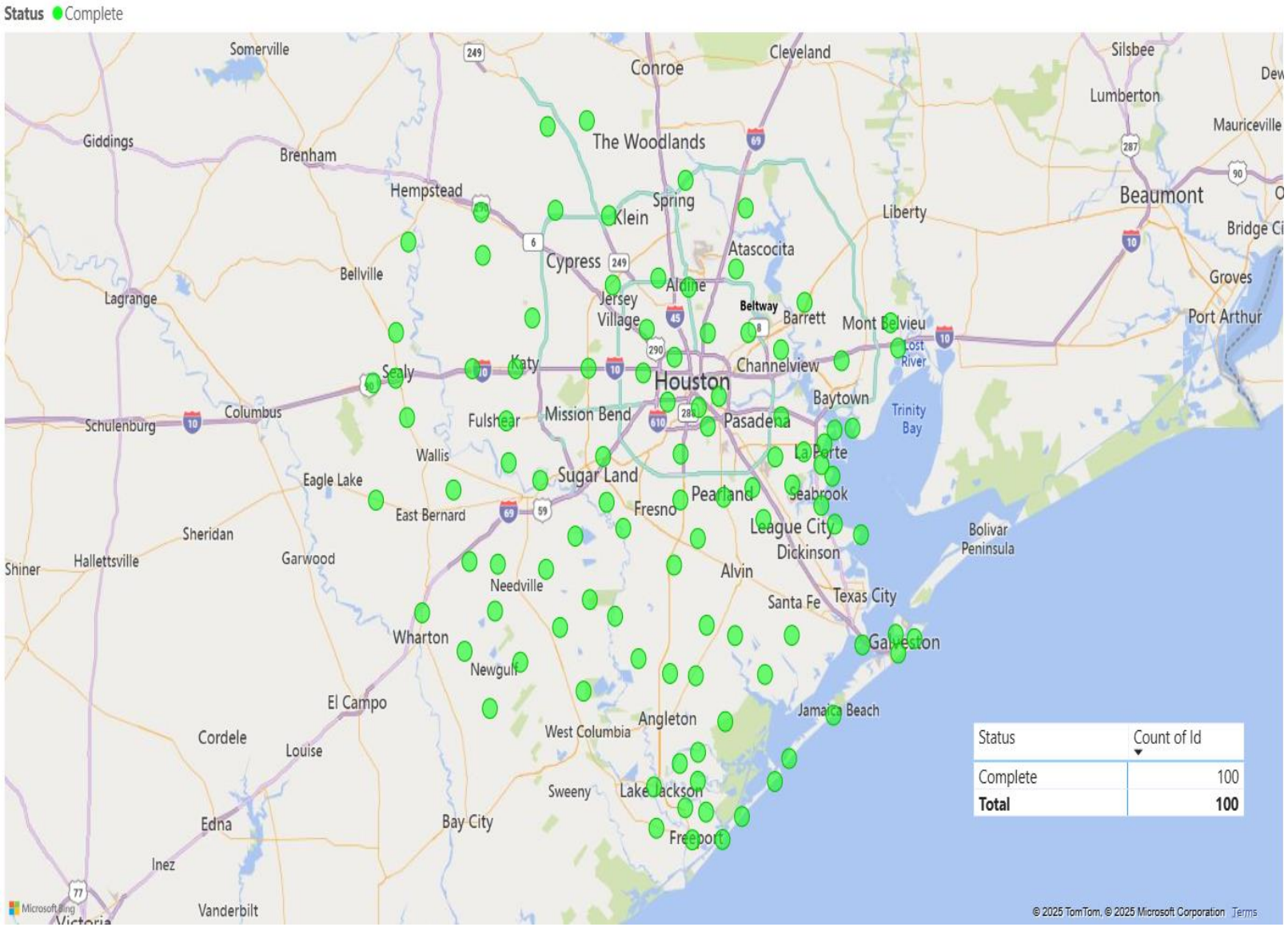
# 100 Weather Stations




- 100 weather stations installed as part of the GHRI.
- Weather stations will be used to help us monitor weather in real-time across the whole service territory.
- Stations will also be used as inputs to high resolution models for improved forecasting.
- Station weather data publicly available via Synoptic data or NOAA observation sites.
- Additional weather stations likely to be installed later in 2025 and 2026.



Prepared by: Matt Lanza
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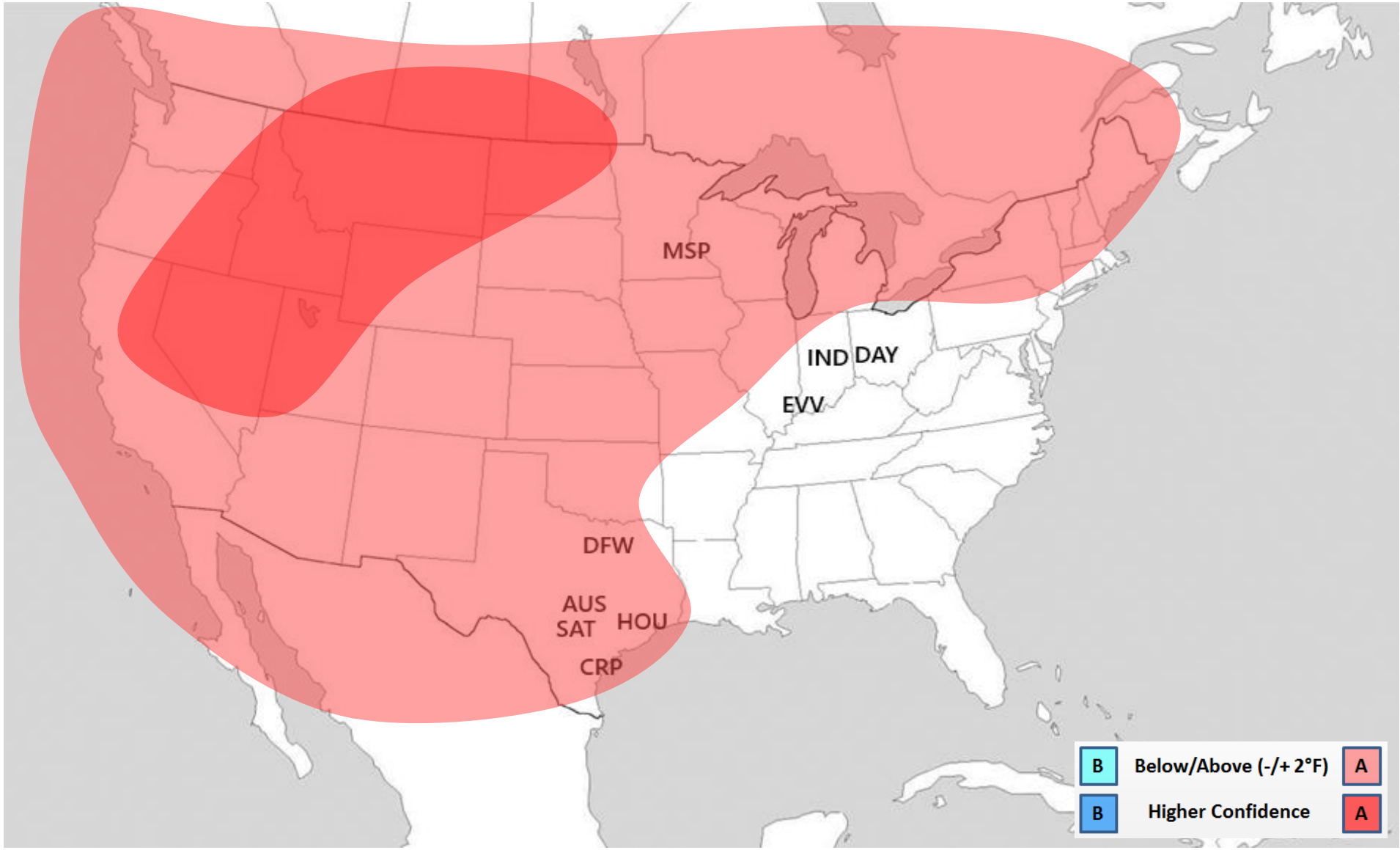
# Summer Outlook (June-August)




- Summer is expected to be hotter than normal nationally. Our territories may be mixed.
- Texas should be hot but probably not to the levels of 2022 or 2023 and more like last summer.
- Indiana and Ohio may have the lowest risk of strong heat.
- Rainfall should be below average overall, with some risk for the Houston area to be near or above normal.



Prepared by: Matt Lanza
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# Hurricane Season Outlook

**Overall:** The 2025 Atlantic Hurricane season is expected to be slightly more active than usual. We currently expect about 19 named storms, 8 hurricanes, and 4 major hurricanes, very close to that expected by Colorado State University. The underlying data supporting the forecast is somewhat under these values, but given the still exceptionally warm water of the Atlantic Basin, and the expectation of no El Niño this summer, an above normal forecast seems more realistic than a below normal one.

| 2025 Hurricane Season Outlook | Named Storms | Hurricanes | Major Hurricanes | Accumulated Cyclone Energy (ACE) |
|---|---|---|---|---|
| CNP Internal Forecast | 19 | 8 | 4 | 140 |
| Colorado State University | 17 | 9 | 4 | 155 |
| The Weather Company | 19 | 9 | 4 | -- |
| NOAA | Coming soon | | | |
| Last Year | 18 | 11 | 5 | 161.6 |
| 15-Year Normal | 17.2 | 7.9 | 3.4 | 129.9 |



Prepared by: Matt Lanza
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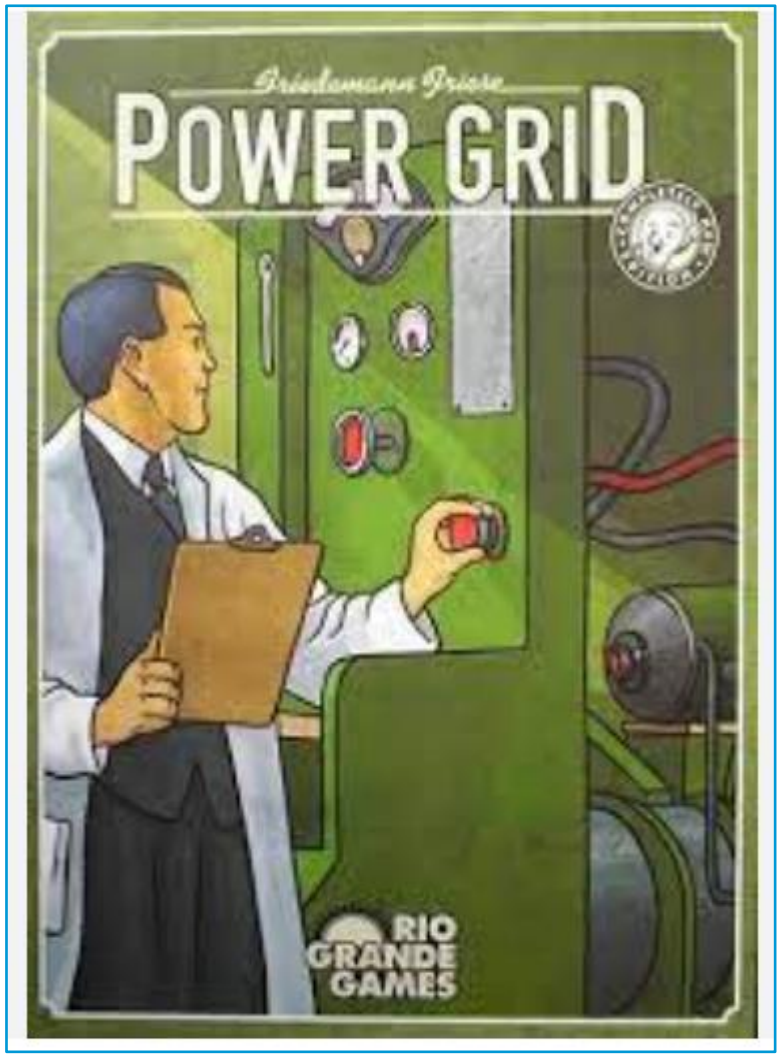
# Resilience Operations & Capital Delivery

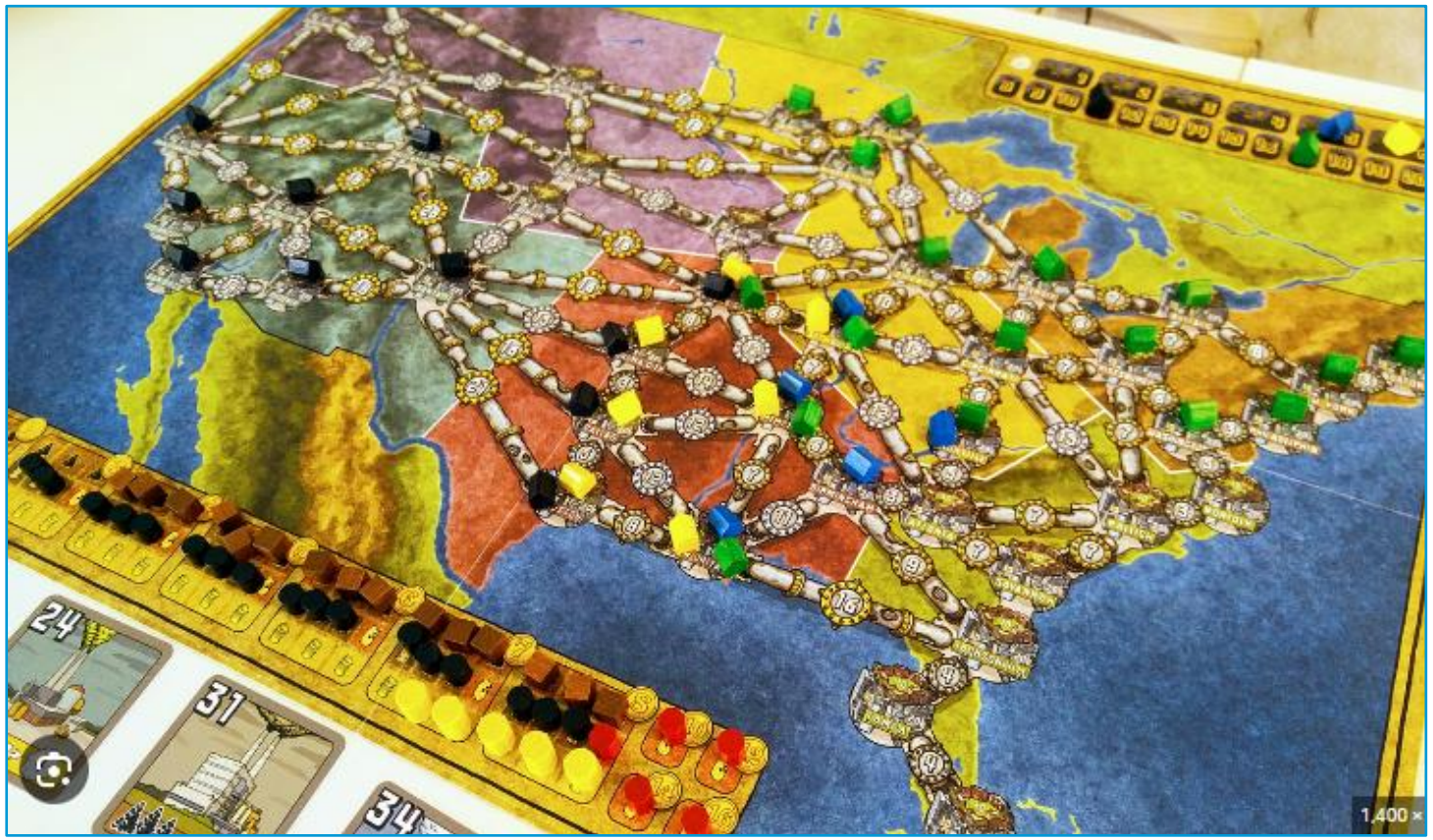
**Mythili Chaganti**

**Director High Voltage Delivery**

CenterPoint® Energy

# The Grid




**National Academy of Engineering ranks Electric Grid as the greatest achievement of 20th century**

*Source: National Academy of Engineering*

“Precision wired into a world of chaos”

“Built to tame the dark, the grid flickers at the whim of the storm”

“Our most logical machine lives on a borrowed time from an illogical sky”

*Source: IEEE PES Magazine*

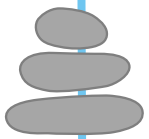
# Classic Elements of Nature & Resiliency

Resiliency Focused Actions:

Earthquake resistant structures/towers
Drought related soil movement stability for foundations – structures/towers, transformers

Resiliency Focused Actions:

Elevating substation control buildings & structures in flood zones
Water proofing substation transformers and switchgears
Flood detection and shut-off systems



Resiliency Focused Actions:

Physical and cyber attack protected substations, relaying equipment, & control buildings
Compound disaster awareness and preparedness

Resiliency Focused Actions:

Fire barriers for substation transformers and control buildings
Lightning protection for substation/transmission line assets
Heat and fire-resistant structures/towers

Resiliency Focused Actions:

Wind-resistant structure/tower designs
Undergrounding of lines in high-risk areas
Weather stations, real-time wind sensors

# Extreme Weather Events | Greater Houston Area

## History of Disasters in Greater Houston's Three-County Area (1980-2021)


**Note:** Data for FEMA disaster declarations only.

**Source:** Federal Emergency Management Agency (FEMA). Retrieved February 19, 2021

understanding HOUSTON

**40 disasters in 44 years with 11 alone in the last 10 years including the most recent ones in 2024 (Derecho & Beryl)**

# Case Studies

## Extreme Weather Events

### Resilience Actions

# Webster Definition

re·sil·ience
/rəˈzilēəns/

noun

noun: **resiliency**

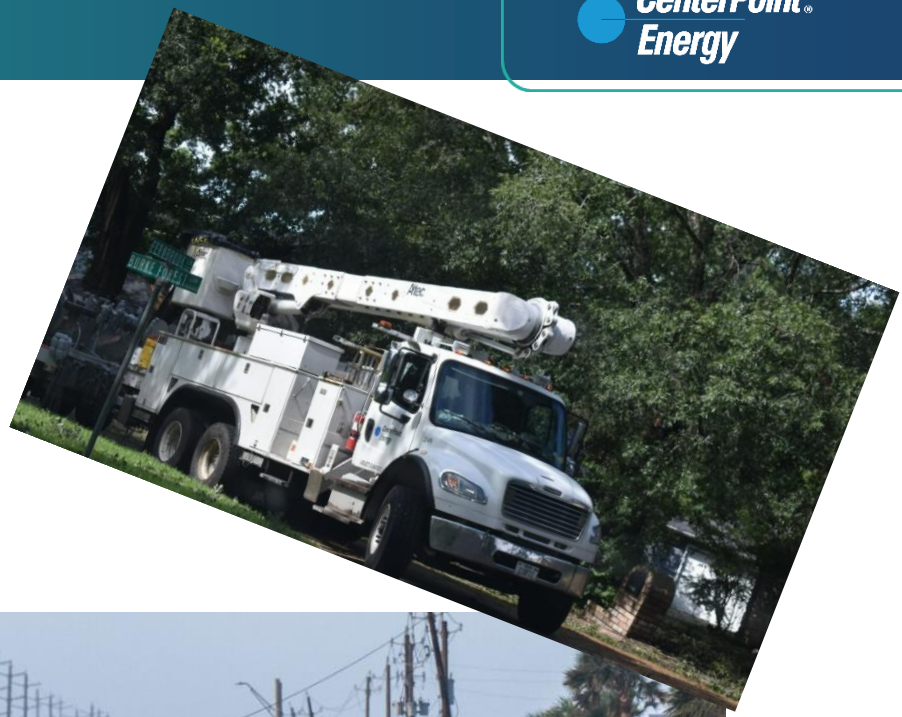
1. the capacity to withstand or to recover quickly from difficulties; toughness.

"the remarkable resilience of so many institutions"

# Comparison of Houston Area Storms

| Select Houston Area Storms | | | | | |
|---|---|---|---|---|---|
| **Storm Characteristics** | **Beryl** | **Derecho** | **Nicholas** | **Harvey** | **Ike** |
| Storm Landfall Date | July 8, 2024 | May 16, 2024 | Sept 14, 2021 | Aug 25, 2017 | Sept 12, 2008 |
| Sustained Wind Speed Reported at HOU* | 58 mph | 43 mph | 43 mph | 30 mph | 75 mph |
| Peak Gusts Reported at HOU* | 84 mph | 62 mph | 55 mph | 40 mph | 92 mph |
| Sustained Wind Speed Reported at IAH** | 62 mph | 40 mph | 33 mph | 25 mph | 56 mph |
| Peak Gusts Reported at IAH** | 83 mph | 62 mph | 51 mph | 36 mph | 82 mph |
| Weather Event Type | Wind | Wind | Water | Water | Wind |
| Storm Category at Landfall | 1 | - | 1 | 4 | 2 |
| Restoration Duration | 11 days | 7 days | 4 days | 10 days | 18 days |
| Resources Mobilized (approx.) | 15,000 | 6,700 | 5,000 | 10,000 | 12,000 |
| Peak Outage Count | 2.1M | 858,271 | 502,000 | 1.27M | 2.1M |
| Deaths in Houston Area | 42 | 8 | 0 | 89 | 112 |
| Houston Area Damage Cost (estimated) | $6.0B | $1.3B | $1.2B | $160.0B | $43.2B |

Note: *National Weather Service historical data recorded at William P. Hobby Airport
**National Weather Service historical data recorded at Houston Intercontinental Airport
Source: Publicly available data from the PUCT and confidential CenterPoint Documents.

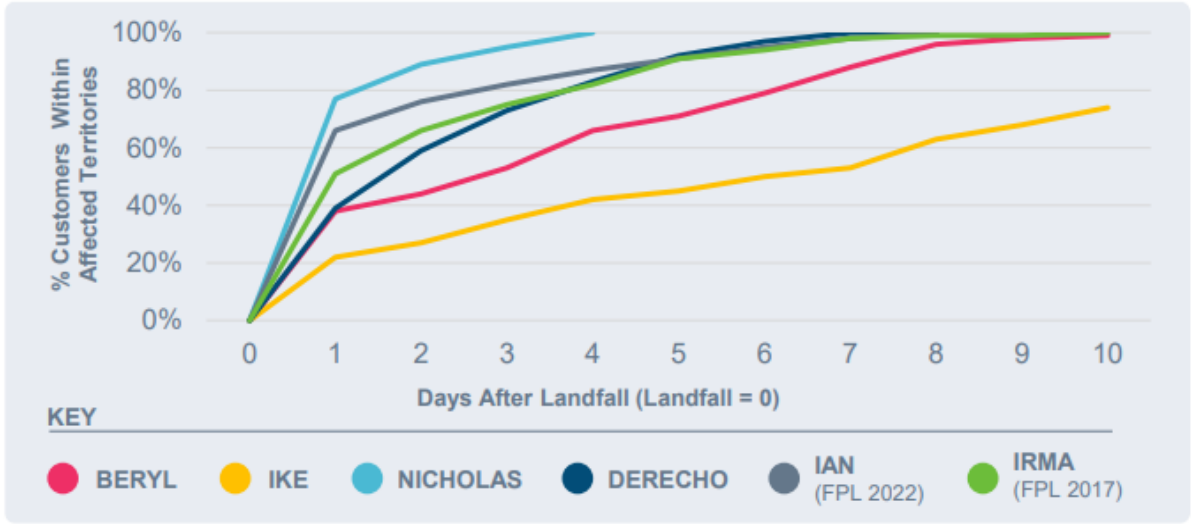


**Resilience investments on-going since 2000s**

# Comparison of Houston Area Storms

| Comparable Houston Area Storms | | |
|---|---|---|
| **Impact** | **Beryl** | **Ike** |
| Storm Landfall Date | July 8, 2024 | Sept 12, 2008 |
| Transmission Line Outages | 8% (31/389) | 31% (99/320) |
| Substation Outages | 2% (6/313) | 18% (49/267) |
| Customer Sub Outages | 8% (15/194) | 41% (56/137) |
| Customers Out at Peak | 75.0% (2.1/2.8M) | 90.5% (1.9/2.1M) |
| Transmission Structures Replaced[14] | 16 (.06%) | 60 |
| Transmission Structures Needing Repair[15] | 4 (.01%) | 82 |
| % Feeder Circuits Out | 75% | 88% |
| Distributions Poles Replaced | 3,025 | 8,500 |

Source: Publicly available data from the PUCT and confidential CenterPoint Documents.



Distribution Resilience

Substation Resilience

Transmission Resilience

**CenterPoint Energy invested $539 million in resilience programs since 2020**

# Key Initiatives

- New Design Criteria
- Advanced Grade Construction
- Distribution Automation
- Intelligent (smart) Grid Devices
- Strategic Undergrounding
- Inspection Programs
- Vegetation Management

**Distribution Grid Resiliency & Reliability Strategy**

CenterPoint Energy Houston Electric, LLC (CEHE) is invested in strengthening and hardening the grid. This document summarizes the new distribution design philosophies and existing resiliency and reliability initiatives recommended by a joint effort by grid resiliency committee and standards committee.

**Extreme Wind & Ice Loading Criteria** – All new distribution structures and replacements will be designed to applicable extreme wind speeds. Similarly, extreme ice loading design will anticipate up to a ½" radial ice on distribution structural designs across the system.

**Hardening for Cold Weather** – A special tangent pole for ice framing will be used in specified areas to reduce the risk of damage from galloping conductors.

**Improved Backfill Material for Strength** – Crushed limestone will be used as the backfill material for all hydro excavated new pole installations.

**Non-Wood Engineered Structures for Equipment Poles** – All major equipment including IGSDs, large three-phase banks, switches, terminal poles, capacitor banks, regulator racks, junction poles, and double circuit poles will be installed on engineered poles, such as non-wood material like fiberglass, ductile iron, and/or concrete.

**Philosophy for Substation Getaways & Freeway Crossings** – The first distribution section originating from a substation shall utilize underground construction and if overhead construction must be used, it shall utilize engineered, non-wood structures. In addition, all freeway crossings will utilize underground construction when it is applicable. If overhead construction must be used, it will be on concrete structures.

**Resiliency & Reliability Strategy Contd.**

**Existing Resiliency & Reliability Initiatives**

**Aging Infrastructure Life Extension & Replacement** – Obsolete **step-down transformers** on distribution overhead main and laterals will be evaluated and replaced. **URD loops** will be prioritized and remedied in the field.

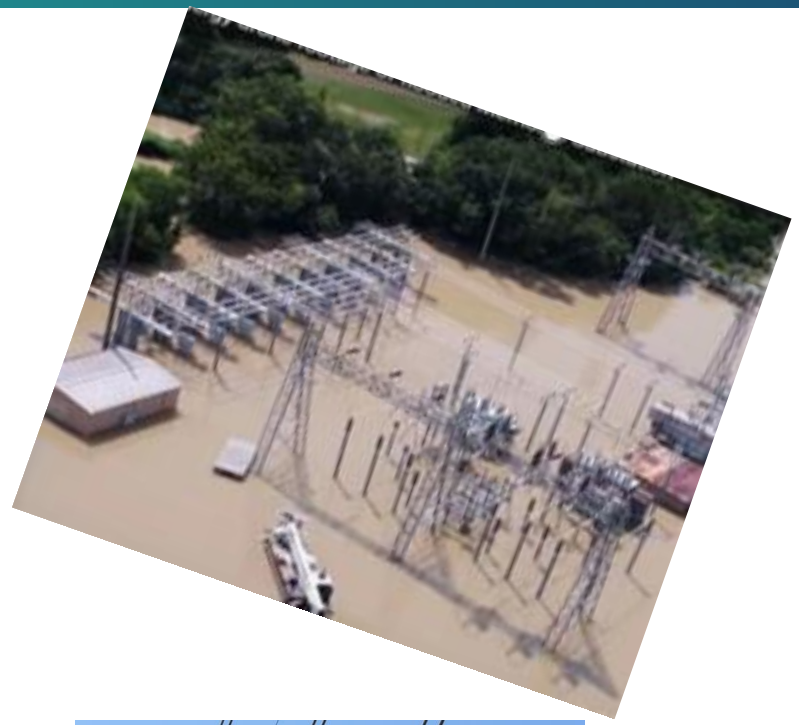
In addition, **aging cable** will be inspected and treated to extend the life of the cable.

The comprehensive ten-year cycle distribution **pole inspection and treatment programs** will continue. Additional bracing criteria will be developed and adopted to extend the life.

**Grid Modernization & Strategic Hardening** – Modern technology installations in the last decade like IGSD, AMS meters will be evaluated for expanded use of technology and enhanced functionality.
The entire distribution system circuits will be strategically targeted and prioritized to be re-built in the next 20 years based on criteria like system wide benefit and community/city outreach.

# Key Initiatives

- New Wind Design Criteria
- Elevated Substations
- Transmission Line & Substation Inspection Programs
- Substation Fire Protection
- Conversion of 69kV Substations & Transmission Lines
- Secure Substations
- Transmission Line Circuit Hardening



# Greater Houston Resiliency Initiative (GHRI)

# Systemwide Resilience Plan (SRP)

## A Commitment to a Resilient Grid

**Journey to 2030**

CenterPoint® Energy

**We are determined to learn the lessons from Hurricane Beryl and build the most resilient coastal grid in the country.**

# Greater Houston Resiliency Initiative (GHRI)

**COMPLETE**

**PHASE ONE**
**Immediate Actions**
July – August 2024

**UNDERWAY**

**PHASE TWO**
**Near-Term Actions**
September 2024 – June 1, 2025

**LONG-TERM RESILIENCY PLAN**

**PHASE THREE**
**Longer-Term Actions**
2026 – 2028

INVESTING APPROXIMATELY

**$5 BILLION**

in our Greater Houston infrastructure between 2026 and 2028

CenterPoint Energy

PHASE ONE

# Key Resiliency Actions

## TAKING ACTION NOW TO REDUCE OUTAGES

- Trimming or removing higher-risk vegetation
- Installing stronger and more storm-resilient poles
- Installing automated devices, known as trip savers

| Target | Complete |
|---|---|
| 2,000 POWER LINE MILES | 2,026 POWER LINE MILES |
| 1,000 POLES | 1,133 POLES |
| 300 DEVICES | 307 DEVICES |

*Data as of 8/31/24

CenterPoint Energy

## PHASE TWO
# Goals (September 2024 – June 1, 2025)

### STRENGTHENING
### Resiliency

- **Rebuilding and hardening the grid** with system upgrades and targeted undergrounding
- **Refining risk-based vegetation management** with predictive analytics model
- **Installing advanced automation** to support a self-healing grid

### IMPROVING
### Communications

- **Improving outage tracker** with premise-level status, hazard reporting and Spanish translation
- **Launching year-round community engagement** on preparedness and safety
- **Improving direct customer communications**

### STRENGTHENING
### Partnerships

- **Conducting joint storm preparedness exercises** with emergency management offices
- **Implementing storm management tool** to increase mutual assistance efficiency
- **Donating backup generators** to community centers

PHASE TWO

# Grid Improvement Actions

CenterPoint Energy

| | TARGET BY June 1, 2025 |
|---|---|
| Installing poles that can withstand extreme winds | **25,000** poles |
| Installing automated reliability devices to reduce outages | **4,500** devices |
| Installing Intelligent Grid Switching Devices (IGSDs) | **350** IGSDs |
| Trimming or removing higher-risk vegetation | **4,000** miles |
| Undergrounding power lines | **400** miles |
| Installing new weather monitoring stations | **100** stations |

It is projected that we will invest **$550M** in our infrastructure during Phase 2

# Phase Two – Ahead of Schedule Completion

## Near-Term Actions to Improve Resiliency

CenterPoint Energy

| | Completed | As of May 19, 2025 | Jun. 1, 2025 Target |
|---|---|---|---|
| Install new poles or replace existing wooden poles with stronger ones, including composite, capable of withstanding extreme winds (Coastal: 132 mph standard; Inland: 110 mph standard) | ✓ | 25,370 poles | 25,000 poles |
| Install automated reliability devices to reduce sustained interruptions in major storm events and reduce restoration times | ✓ | 4,505 devices | 4,500 devices |
| Install Intelligent Grid Switching Devices (IGSDs) | ✓ | 354 IGSDs | 350 IGSDs |
| Trim or remove vegetation from distribution line miles with higher-risk vegetation across our system | ✓ | 4,018 miles | 4,000 miles |
| Undergrounding of power lines | ✓ | 417 miles | 400 miles |
| Install new weather monitoring stations | ✓ | 100 stations | 100 stations |

**Calculated reduction of outages by over 125 million minutes annually**

# Phase Two: Emergency Preparedness

We are taking action to prepare for the 2025 hurricane season and enhance how we respond to extreme weather events.

**100+** **Weather stations** installed to enhance situational awareness and storm preparation

**750+** **Employees** completed Federal Emergency Management Agency (FEMA) trainings

**14+** **Meetings and exercises** with local officials and emergency response partners to strengthen coordination and test our emergency response plans

**21** **Emergency backup generators** being donated and installed in strategic community locations

# Phase Three | Systemwide Resiliency Plan (SRP) 2026-2028

Building the stronger, more resilient, self-healing grid of the future.

**Proposing $5.75 billion investment in targeted, cost-effective systemwide resiliency actions**

**Key benefits:**

- Reducing outages by **1.3B minutes** into 2029
- Strengthening resiliency by **30%**
- Expanding system capacity
- Saving **~$50M** per year in storm costs
- Avoiding **500K+** outages in a Beryl-like storm

**Plan strengthens resiliency against a wide range of extreme weather:**

- Storms and hurricanes
- Wind events, like derechos
- Flooding
- Extreme temperatures
- Tornadoes
- Wildfires
- Winter Storms

# Resiliency Improvements by 2029

**Automation Devices** capable of self-healing on 100% of lines serving the most customers

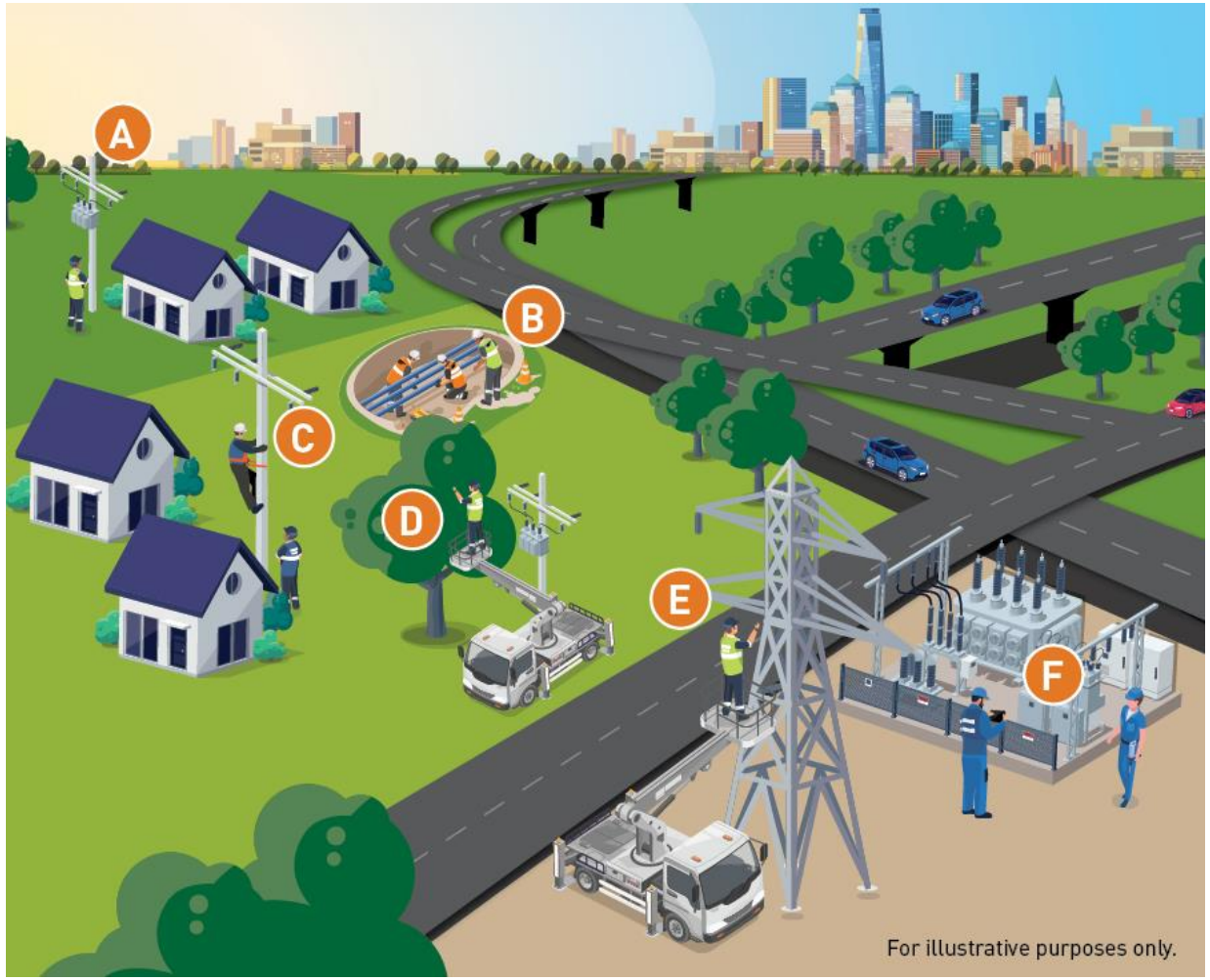
**Undergrounding** over 50% of the system and modernizing 34,500 underground spans

**130,000 Stronger Distribution Poles** to withstand stronger storms and winds

**Clearing Hazardous Vegetation** across 100% of power lines on an industry-leading, three-year cycle

**2,200+ Stronger Transmission Towers** upgraded to withstand extreme weather

**99% of Substations raised** above the 500-year flood plain



# Customer Support Programs

**211 Texas/United Way Helpline:**
Dial 2-1-1 for a free, confidential service, available 24/7 in multiple languages, that can help your family prepare for and during emergencies.

**State of Texas Emergency Assistance Registry Program:**
Sign up to let local emergency responders know if you or a loved one require extra assistance in an emergency.

**Disability Rights Texas:** For those with a disability, you can get assistance preparing for and recovering from disasters and emergencies.

**To learn more about important resources, visit:**
**CenterPointEnergy.com/ActionCenter**

# How Customers Can Prepare

- [ ] Create a plan and prepare an emergency kit
- [ ] Charge your everyday devices
- [ ] Cover windows and secure doors and outdoor items
- [ ] Ensure generators are working properly
- [ ] Make a plan for your pets
- [ ] Sign up for PowerAlertService® for updates
- [ ] Keep gas service on at the meter to maintain proper pressure

If you smell gas, leave the area immediately.
Call 1-888-876-5786 and we will send a trained technician.

# CRIP Update 2025

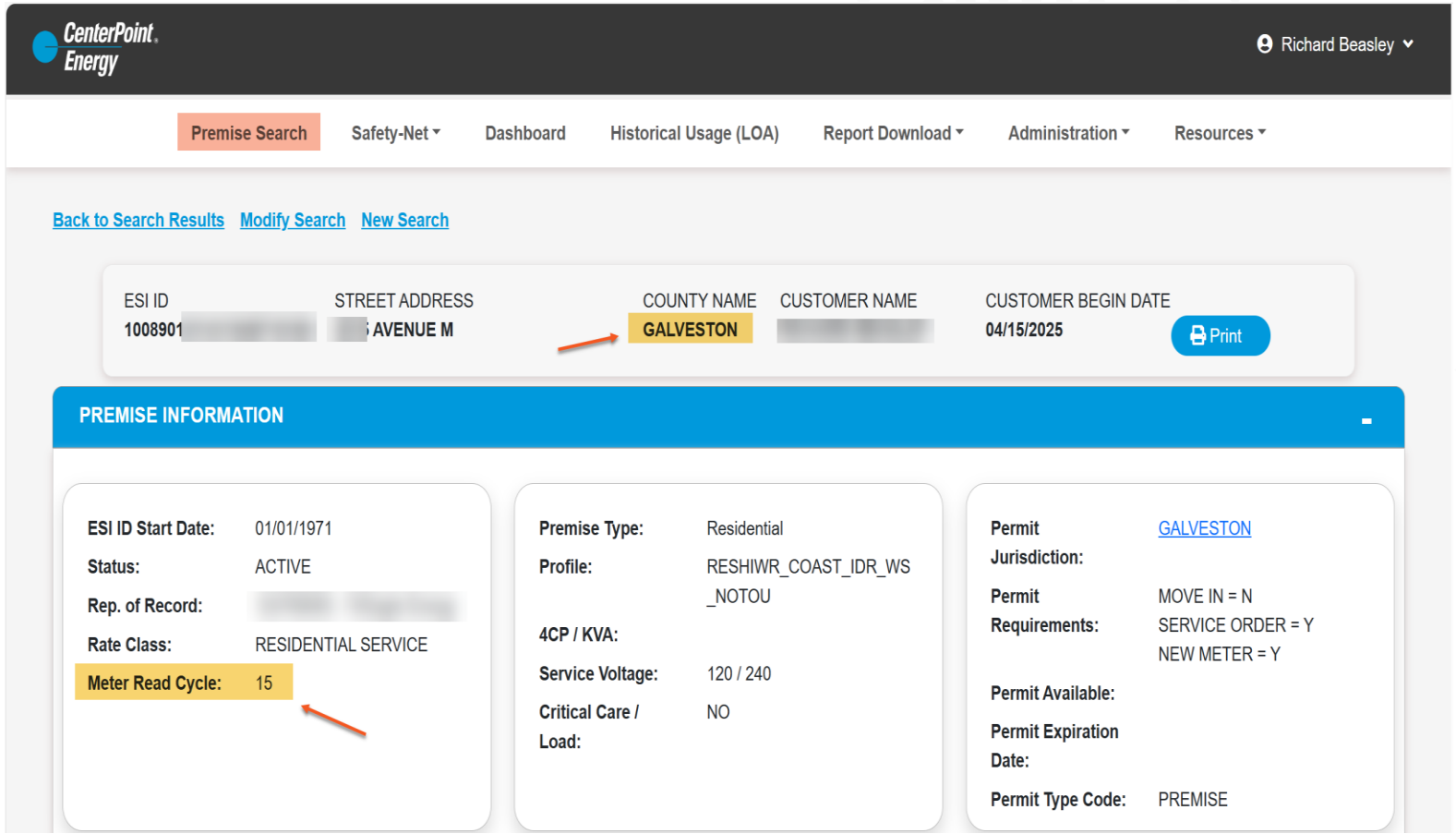
**Richard R. Beasley**

**Lead Account Manager**

CenterPoint® Energy

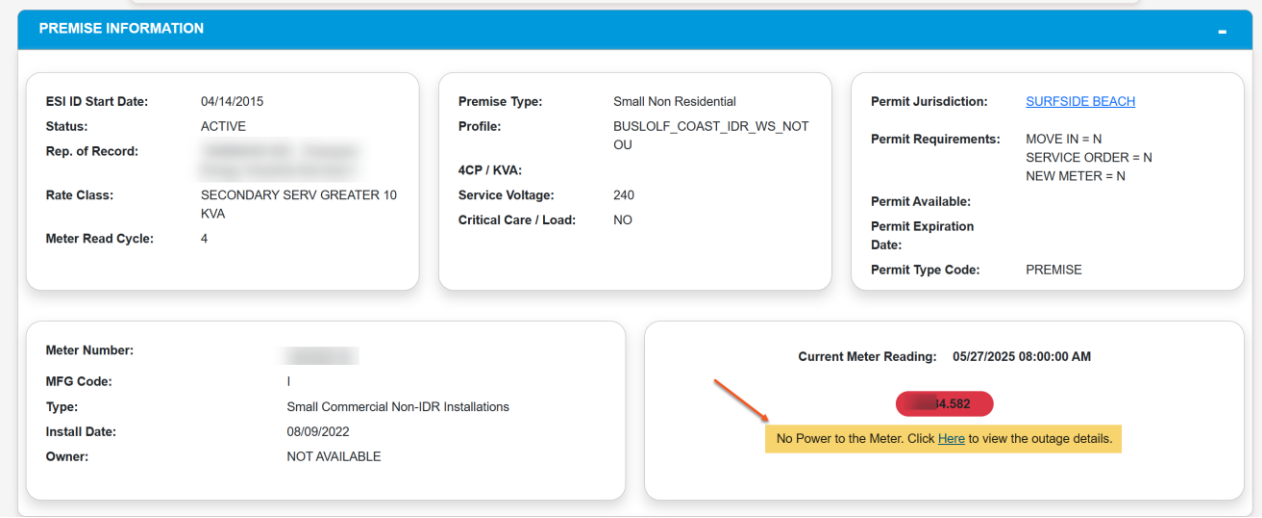
# Added Enhancements

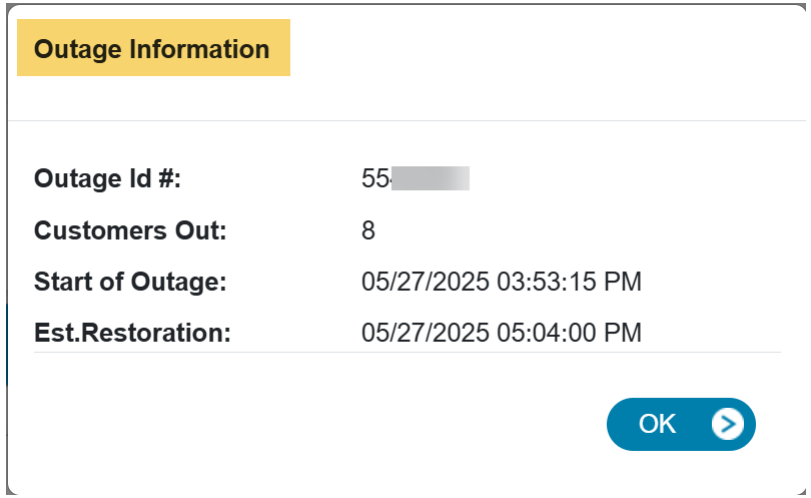
- **Premise Details**
  - County Name
  - Meter Read Cycle



# Added Enhancements

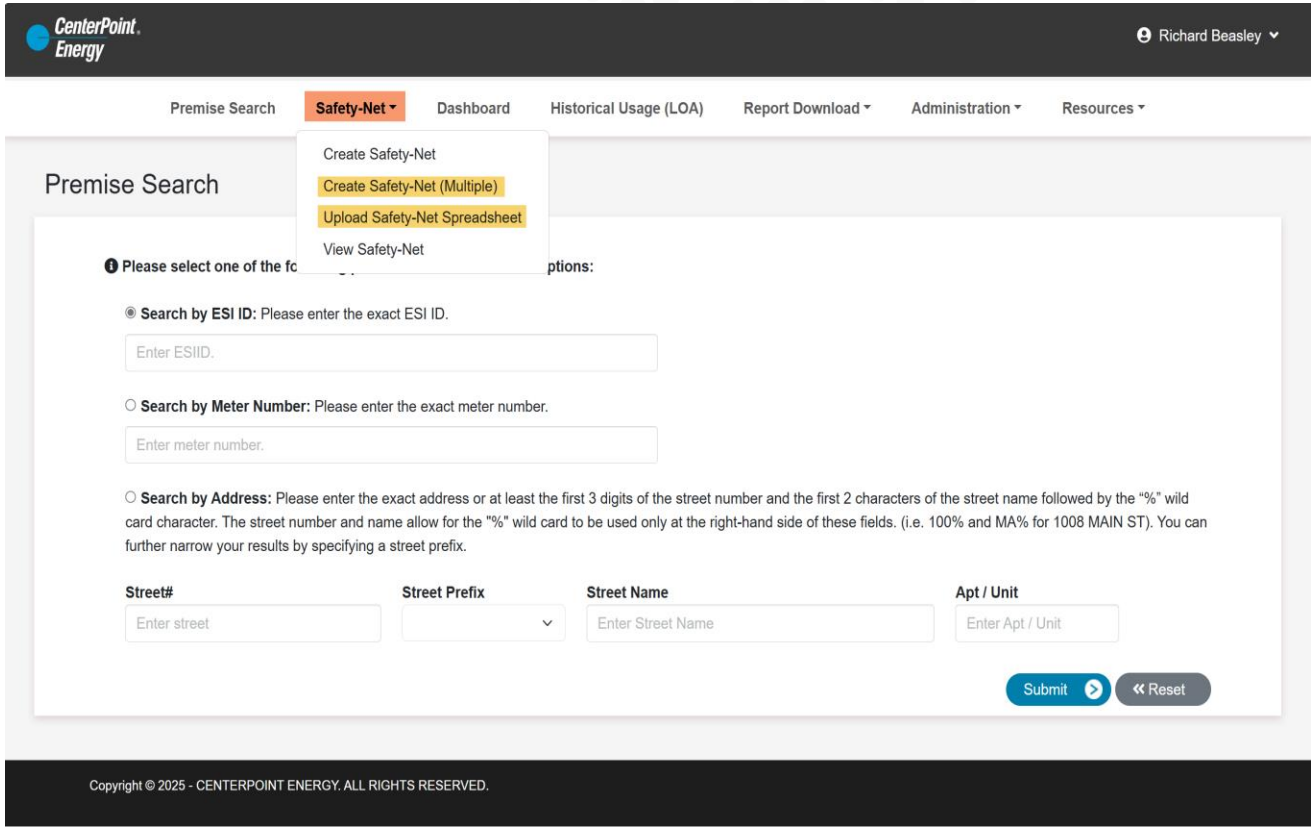
- **Premise Details**
  - **Meter Status - On Demand Read with Power Indicator**



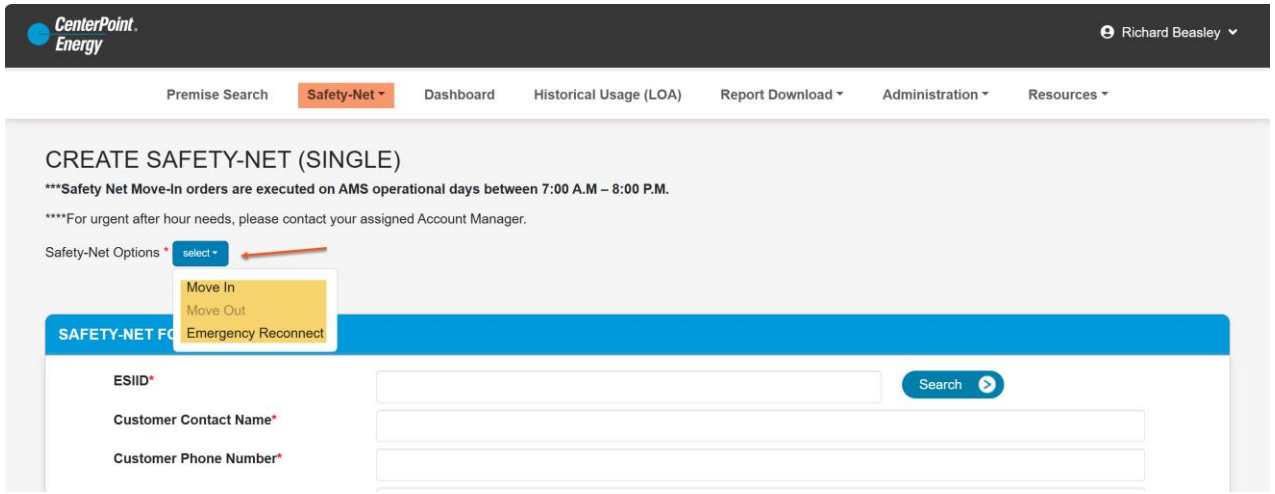
# Added Enhancements

- **Safety-Net**
  - Create Safety-Net (Multiple)
  - Upload Safety-Net Spreadsheet

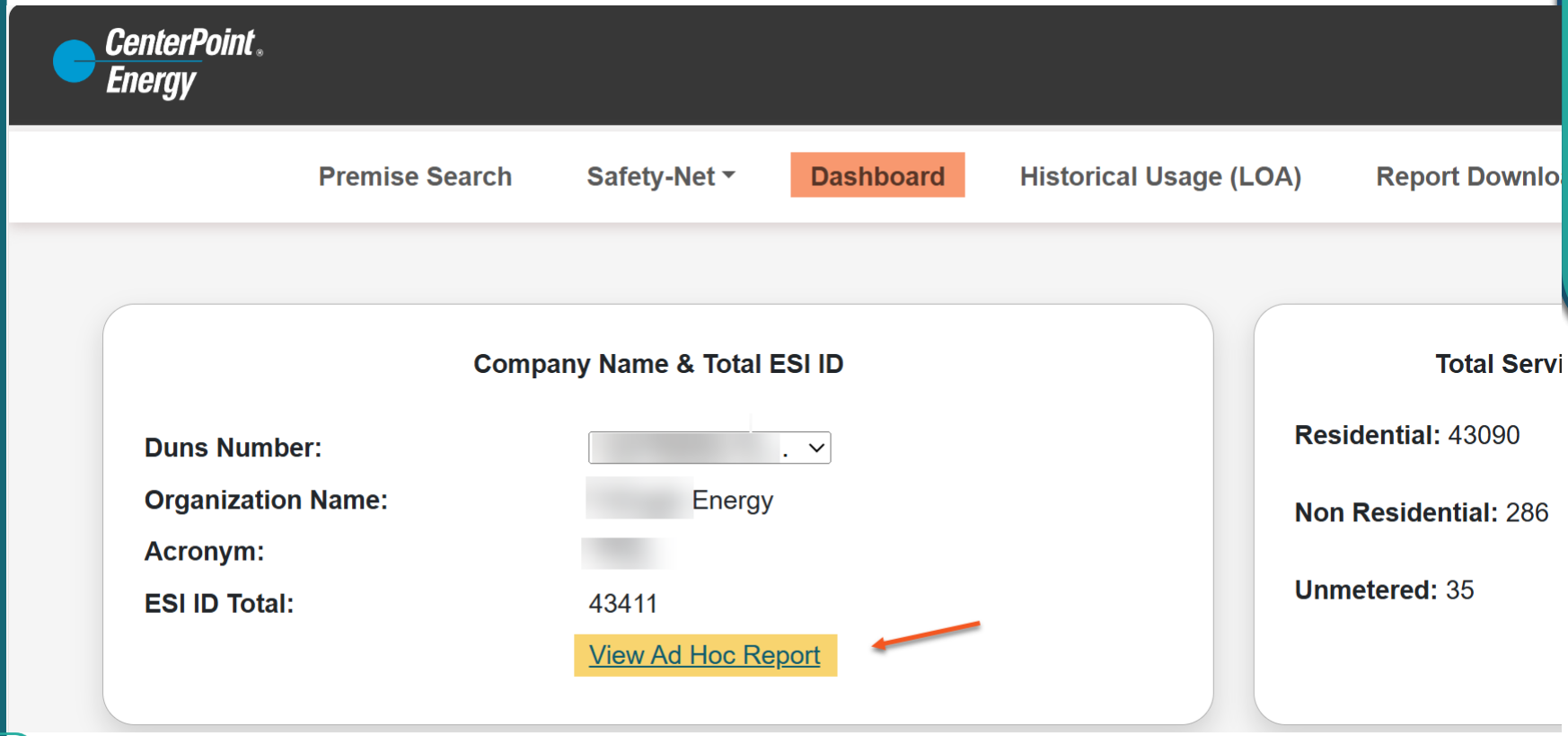


# Added Enhancements

- **Safety-Net**
  - **Emergency Reconnect**
    - Create Safety-Net (Multiple)
    - Upload Safety-Net Spreadsheet



# Added Enhancements

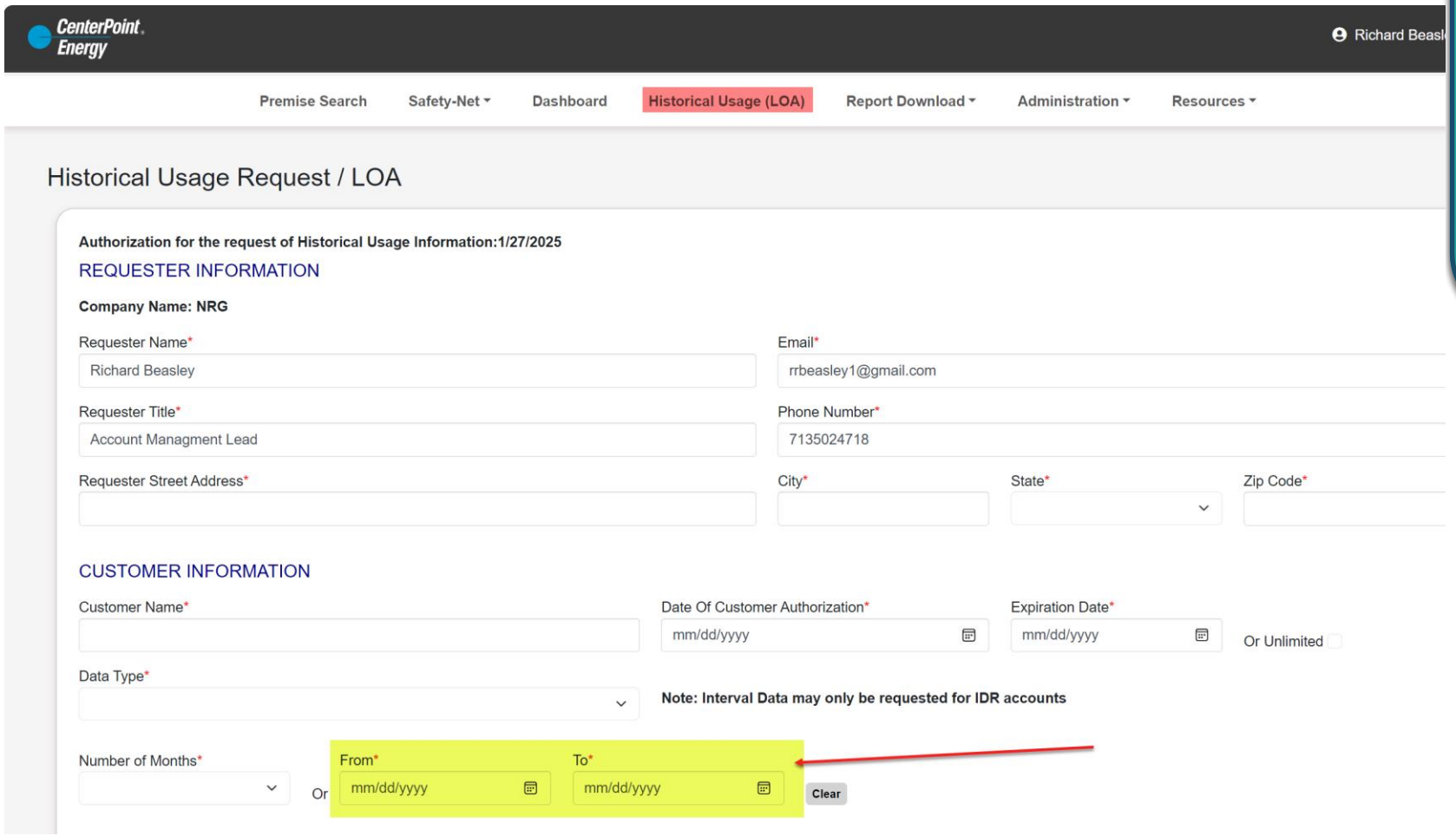



## Key Takeaways:

- **Dashboard**

  **Ad Hoc Report Additions**
  Billing Cycles, Load Profiles, Critical Care Expiration Dates, County Name, PAS Enrollment

# Added Enhancements



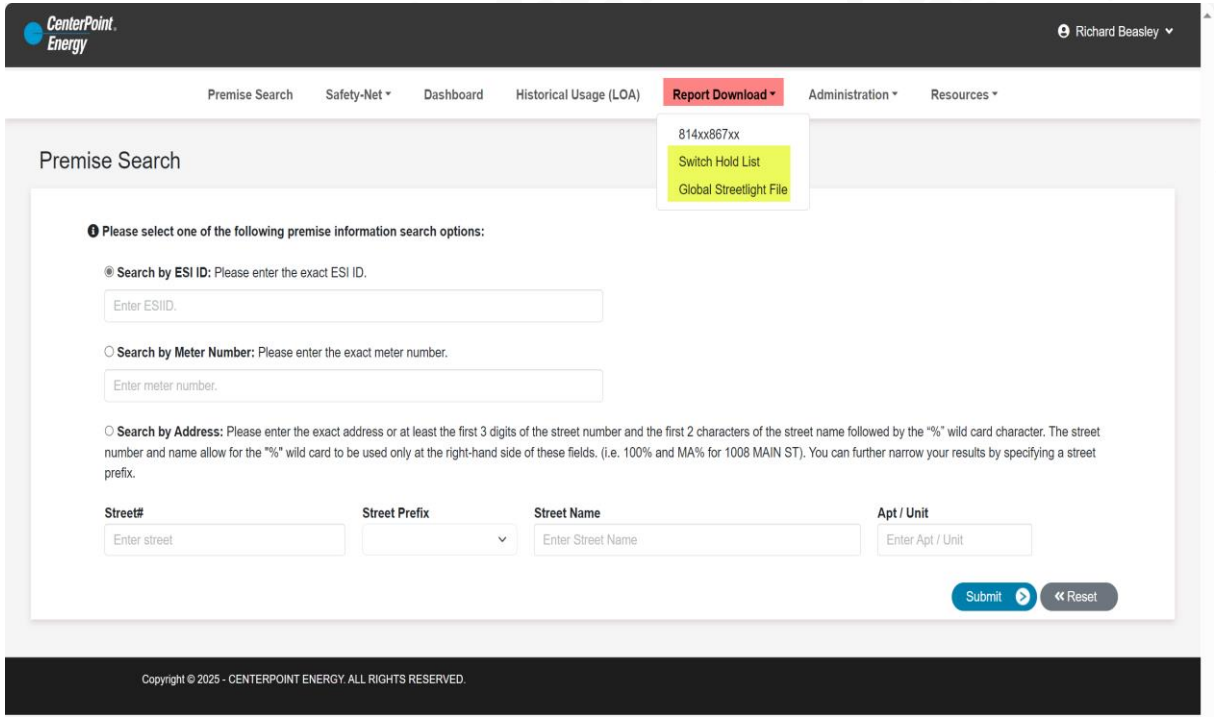

## Key Takeaways:

- Historical Usage (LOA)

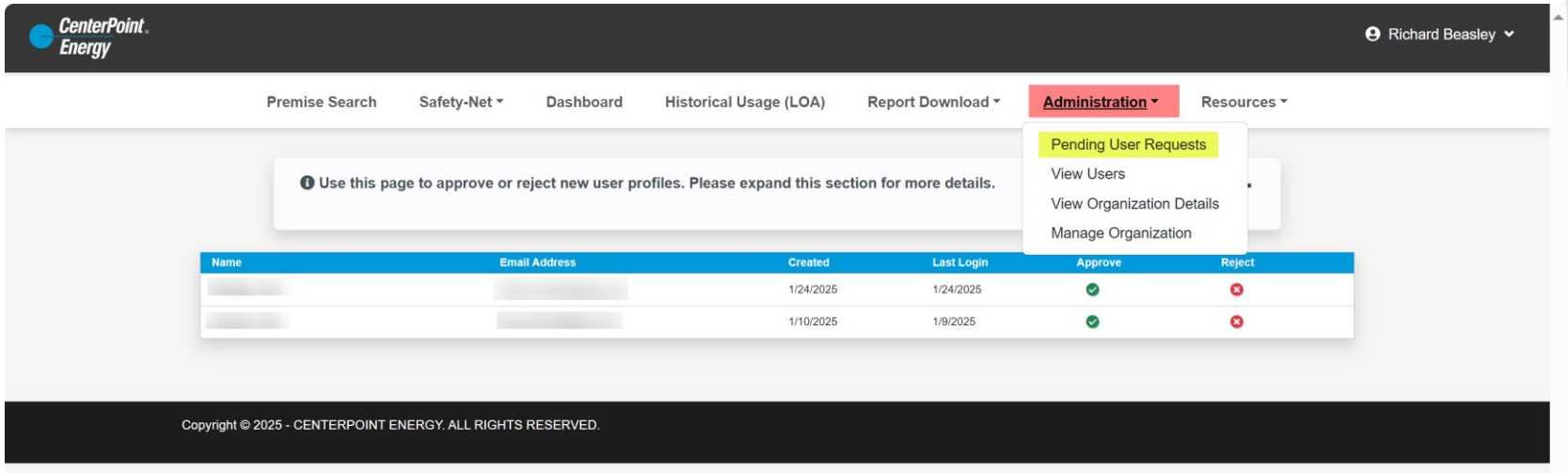
  **Date Range Option with Summary Screen View Option**

# Added Enhancements

- **Report Download**
  - **Switch Hold List**
  - **Global Streetlight File**



# Added Enhancements

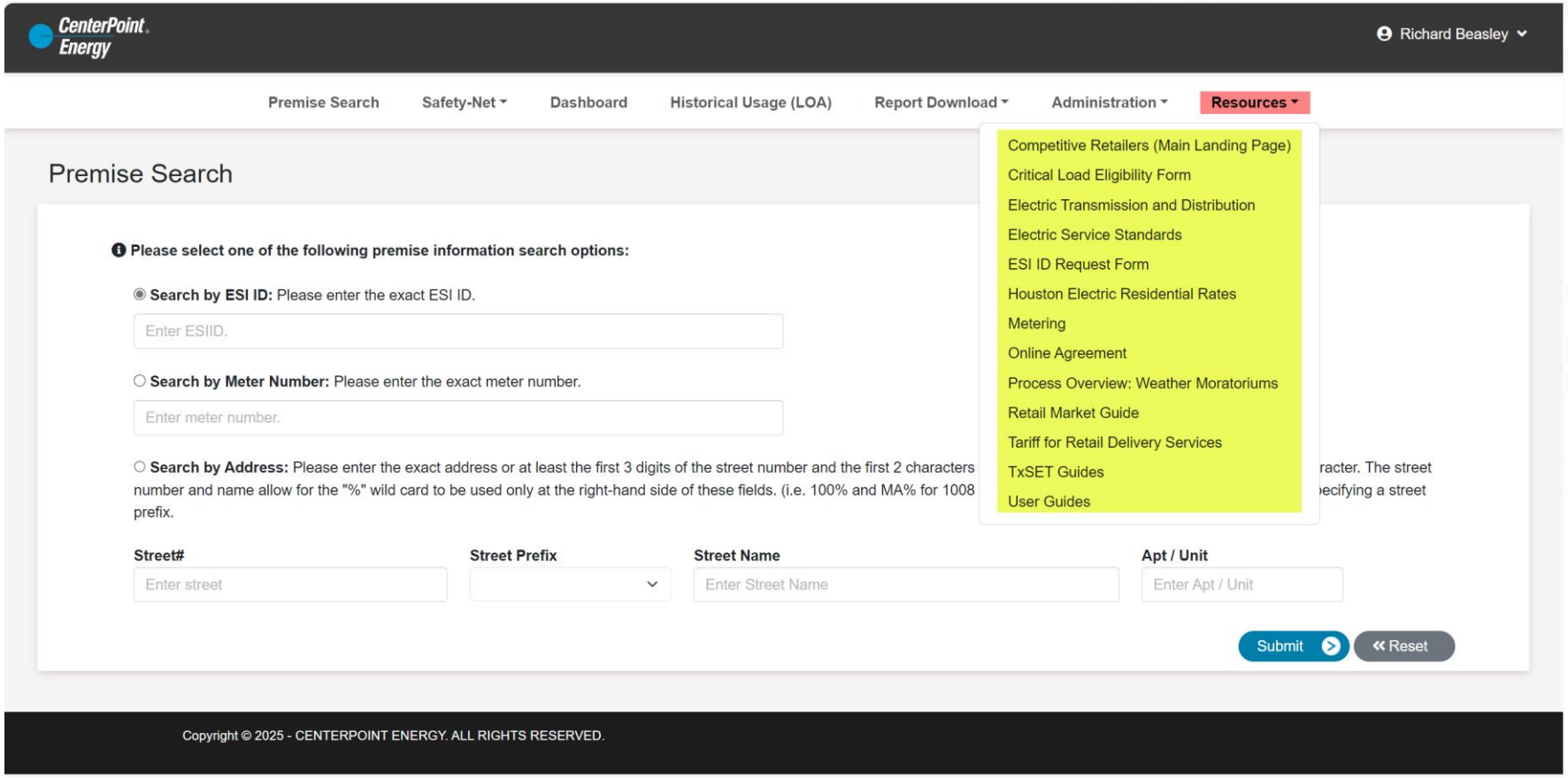



## Key Takeaways:

- **Administration**
  - **Single Sign-On (SSO)**
  - **Pending User Requests**

# Added Enhancements

- **Resources**

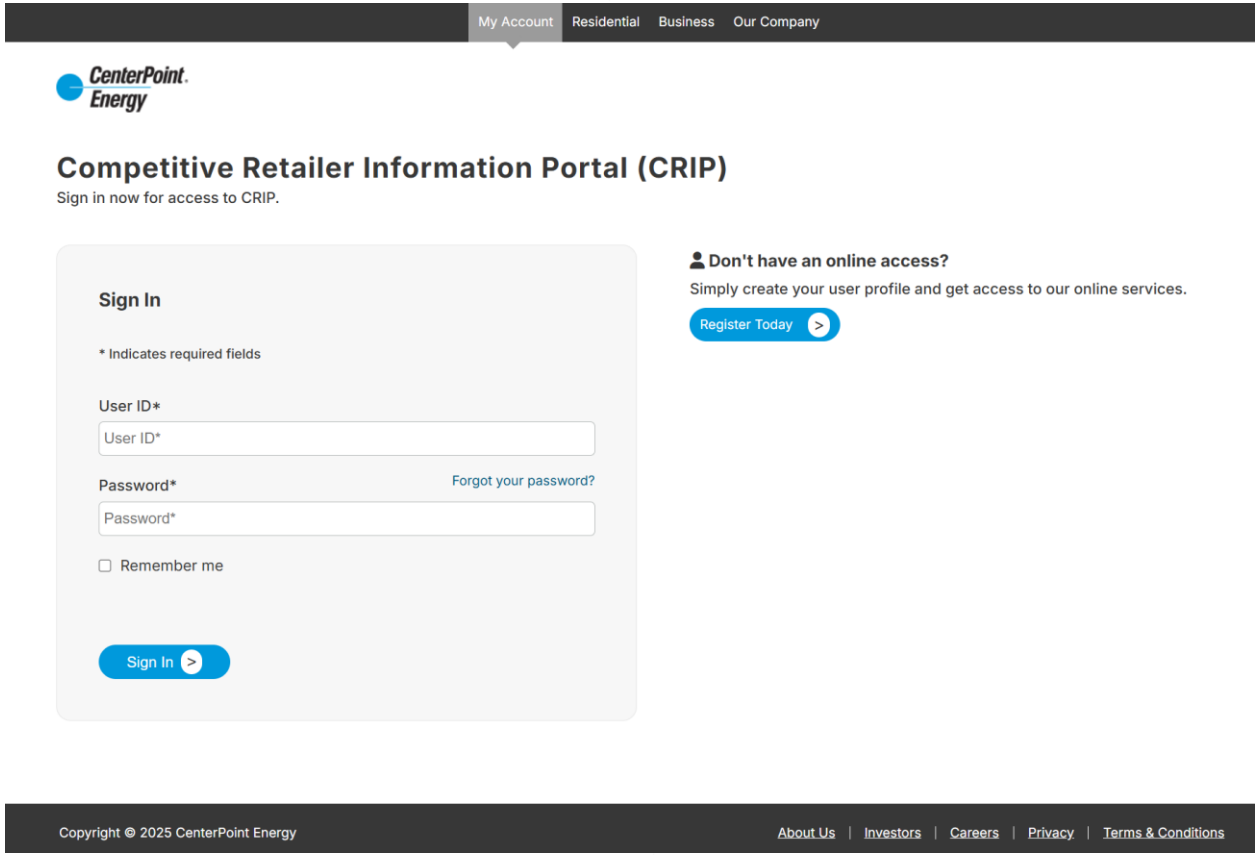


# Developing Enhancements

- Ability to submit Emergency Reconnect and MVO Safety-Net Upload Spreadsheet
- View 90-Day Enrollment and Service Order History
- Premise Search – Radio Button Smart Search Capability
- Adding more resource links in the Resource link
- Adding the SAC04 Codes to the 810 Breakdown of Charges View
- Adding the Billing Period to the 810 Breakdown of Charges View

# CRIP Training Opportunities

- On-site visit
- Teams meeting
- One on One or Team development sessions
- Contact your assigned account manager to schedule



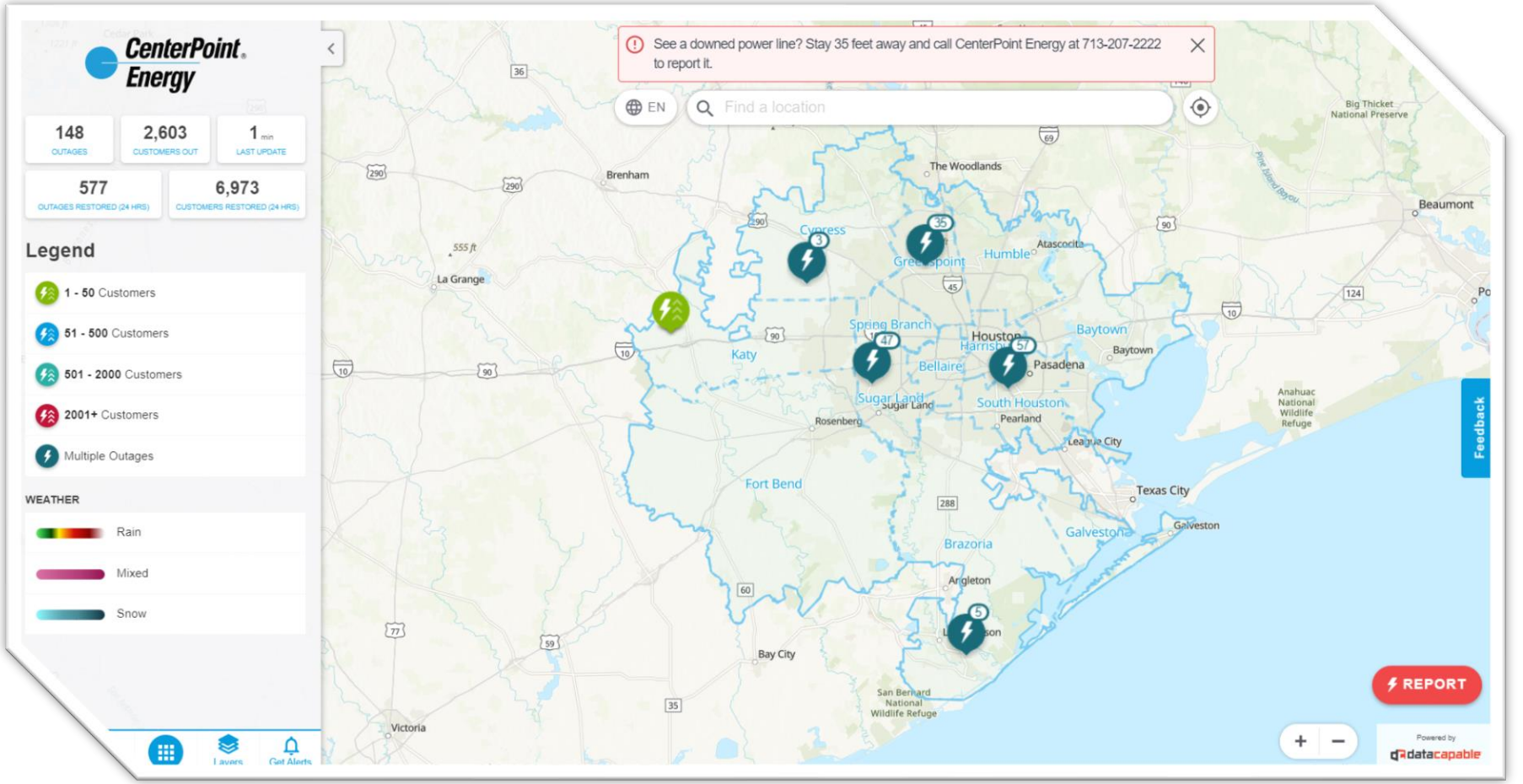
# CenterPoint Energy Enhanced Outage Communication Strategy

**Stephenie Howard**
Vice President, Customer Strategy & Platform Development

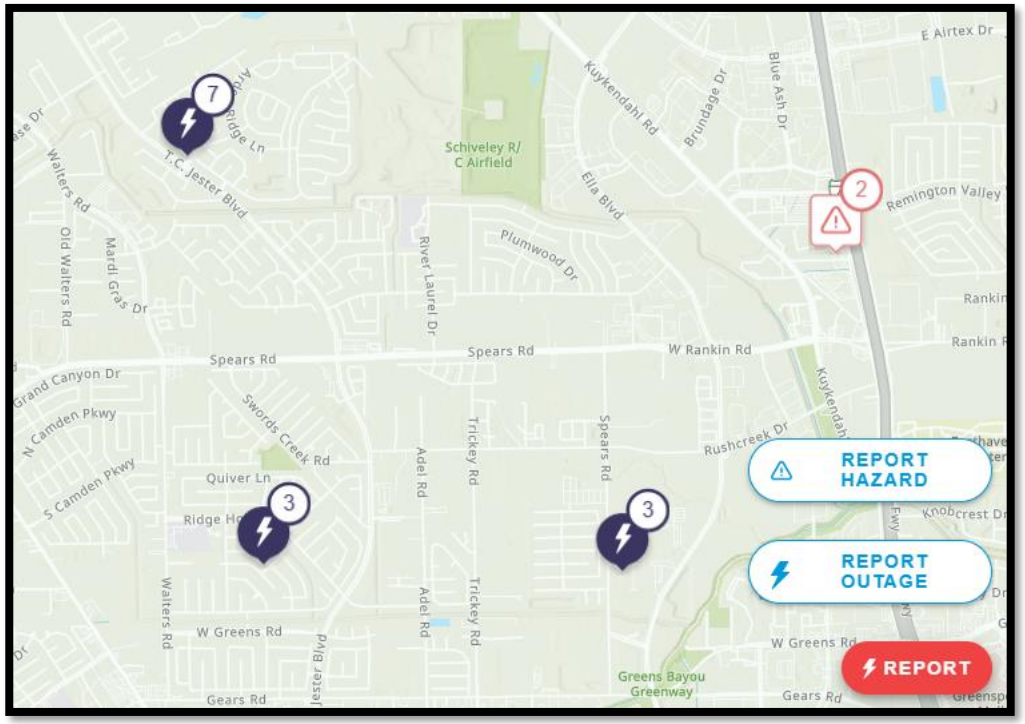
**Roderick Batteaux**
Manager, Customer Service Product

CenterPoint Energy

# Outage Tracker



# Outage Tracker – Hazard Reporting




- Report Hazard Online
  - Downed poles
  - Downed lines
  - Equipment burning
  - Mandatory picture attachment
- Approved hazards show on internal map
- Audience
  - OEMs
  - Key Account Managers

# Power Alert Service

**With PAS, customers can:**

- Receive relevant phone calls, text and/or email updates about electric outages.
- Know the status of a power outage whether they are home or away.
- Add additional contact information to help keep friends and family informed.

**Electric customers in CenterPoint Energy's Houston electric footprint can sign up for PAS by:**

1. Logging into their online account, My Account, or register for an account by visiting, CenterPointEnergy.com/MyAccount.
2. Follow the on-screen prompts to link an electric account using the 8-digit electric meter number.
3. Select "Sign up for Power Alert Service" to enroll in phone call, text and/or email alerts.
   Cellphone users will not receive outage alerts via text until the user replies to the initial "Confirmation required" text message as instructed. Each added mobile contact will need to do the same to complete the enrollment process.
4. Verify or update contact information.

| Outage Message | Crews Onsite Message | Power Restored Message |
|---|---|---|
| *We are aware of a power issue at or near 123 Main St. that is currently affecting approximately 1,234 customers. We estimate that we will complete our repairs by 5:00 p.m. Please note the actual time required may vary based on the nature of repairs needed, crew availability, or during severe weather events. We apologize for the inconvenience and appreciate your patience as our crews work to complete the repairs as quickly and safely as possible.* | *Repair crews are assessing the power issue at or near 123 Main St. We will update you with additional information about the status of these repairs as it becomes available.* | *Outage repairs at or near 123 Main St. have been completed. Our crews determined that the problem was caused by system reliability work. If you are still without service, please check your circuit breakers. If that doesn't resolve the problem, please visit CenterPointEnergy.com/PowerOut to report the outage and we will work to get your power restored. We appreciate your patience and apologize for any inconvenience.* |

# Power Alert Service

**Notification Types** (One-to-One)

- Outage (*at or near* Address/Impacted Count/ETR)
- Join the Conversation
- Crew Assessing
- ETR Updates/Expirations
- Restoration (Cause)
- Pre-Outage**

**Blast Communications** (One-to-Many)

- Customer Segmentation
  - All PAS registered
  - Active outages
  - By Service Center
  - By Equipment ID (Circuit/Fuse)
  - Custom List

**Power Alert Service Features**

| | Phone | Email | Text |
|---|---|---|---|
| Automatic Un-Planned Outage Notifications with Estimated On-Time | ✓ | ✓ | ✓ |
| Automatic Planned Outage Notifications with Estimated On-Time | ✓ | ✓ | ✓ |
| Crew Assessment Notifications | ✓ | ✓ | ✓ |
| Estimated On-Time Update Notifications | ✓ | ✓ | ✓ |
| Estimated On-Time Expiration Notifications | ✓ | ✓ | ✓ |
| Pre-Event / Storm Blast Messages | ✓ | ✓ | ✓ |
| Blast Messages to all active outages | ✓ | ✓ | ✓ |
| Blast Messages to all customers | ✓ | ✓ | ✓ |
| Service Center Specific Blast Messages | ✓ | ✓ | ✓ |

# Power Alert Service

**Enrollment Channels** (5 max per channel)

- Text
- Email
- Phone

**Ways to Enroll****

- Online via website/MAO
- IVR
- Contact Center Agent
- Auto Enrollment
  - Email
  - Phone (landline)

# Power Alert Service

Power Alert Service (PAS) Two-Way Restoration Confirmation Feature

- The PAS team has rolled out a pilot for allowing customers the ability to respond via text to confirm restoration based on an unsuccessful meter ping upon  outage case closure. When a customer confirms they are still without power, a new outage case is created in the system.

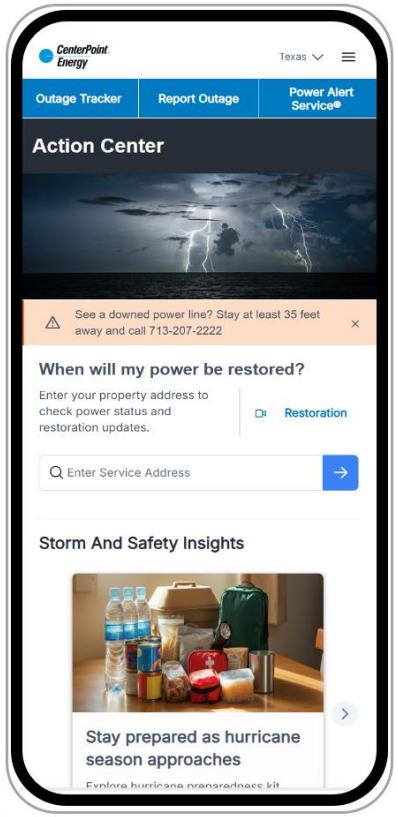
# Action Center

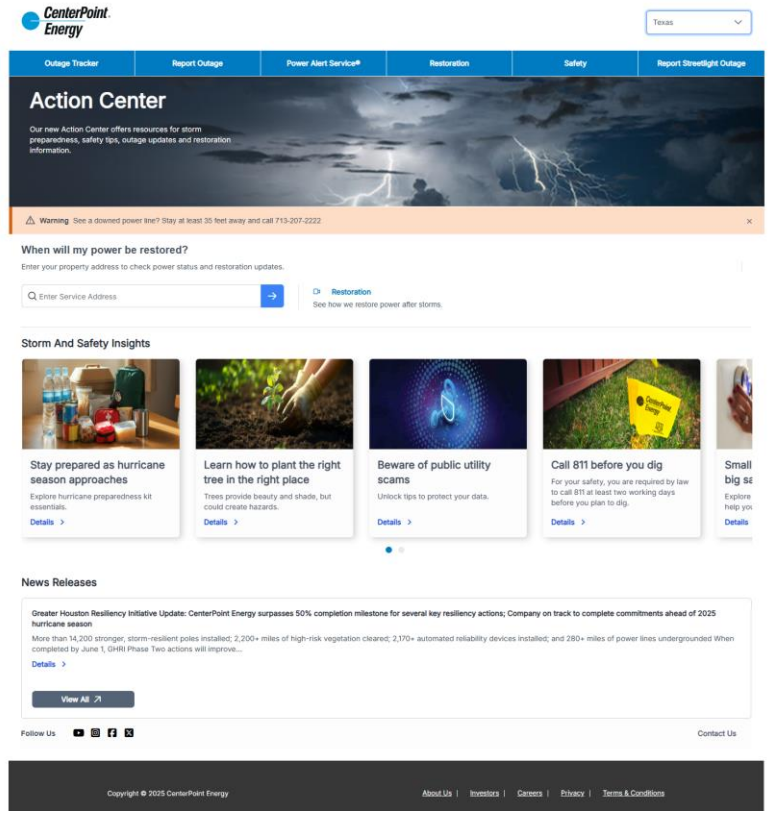
**1.Centralized Hub:** Consolidate various web content areas into a single hub for storm-related traffic.

**2.Mobile-First Design:** Ensure optimal performance and user experience on mobile devices.

**3.Dedicated Platform:** Create a separate site from www.centerpointenergy.com to prevent storm/event traffic from impacting the main site and other service areas.

**4.Immediate Content Updates:** Develop the site to allow new content to post with minimal delay.



# Market Notices

**NOTICE DATE:** April 21, 2025

**NOTICE TYPE:** Informational

**SHORT DESCRIPTION:** Storm Restoration Status

**INTENDED AUDIENCE:** Retail Electric Providers

**LONG DESCRIPTION:** ....., **please reference the table below.**

**ADDITIONAL INFORMATION:**

Please inform your customers .....

**Yellow =** Updated since last notice

White = No new updates

| **Market Call** | |
|---|---|
| **Date and Time** | |
| **TEAMs** | |
| **Restoration Status** | |
| **Approx. # of customers currently without power** | |
| **Approx. Peak # of customers without power** | |
| **Projected date that the majority of customers will be restored** | |
| **Mutual assistance personnel engaged** | |
| **Most recent press release** | |
| **Customer Communications** | |
| **Outage map status** | |
| **Estimated time of restoration available?** | |
| **Power Alert Status** | |
| **Contact Center - Service Request Line Status** | |
| **Contact Center - New Construction Line Status** | |
| **Contact Center – CR Hotline Status** | |
| **Outage Reporting Tools**<br>**(Please share with your customers)** | |
| **Outage Tracker** | |
| **Power Alert Service** | |
| **Action Center App** | |
| **Metering Status**<br>(During a customer's power outage, interval and daily data may be estimated until power is restored, and the gap retrieval process replaces the estimated data with actual data, if available.) | |
| **LSE data delivery status to ERCOT and Smart Meter Texas** | |
| **867_03 and 810_02 EDI delivery** | |
| **Gap retrieval status**<br>**(Gap retrieval is the automated process that attempts to reconcile missing intervals by obtaining actual intervals from the meter once power** | |

# Proposed Solution

**Preferred linked option:**

- **CenterPoint Energy Electric**
- **Phone** (713-207-2222 or 800-332-7143)
- **Action Center** (Link to https://actioncenter.centerpointenergy.com


# 2025 CenterPoint Energy Competitive Retailer Workshop:

# ERCOT Retail Market Updates

**Kathy Scott**

**Lead Specialist Regulatory Affairs**

**June 6, 2025**

CenterPoint® Energy

# Retail Market Subcommittee (RMS)

- The Retail Market Subcommittee (RMS) **serves as a forum for issue resolution relating to retail market matters that directly affect Market Participants, ERCOT Market Rules, Protocols and ERCOT.**
- The RMS is also **responsible for monitoring Public Utility Commission (PUCT) rulings as they apply to Retail Markets and Retail Market Participants** and ensuring that PUCT requirements are reflected in the Retail Market Guides, ERCOT Protocols and Texas Standard Electronic Transactions (Texas SET).
  - Send an email to this group: **rms@lists.ercot.com** or **Subscribe** to this email list.

# Reporting, Recommendations and Voting:

**Profile Working Group (PWG)**
https://www.ercot.com/committees/rms/pwg

**Retail Market Training Taskforce (RMTTF)**
https://www.ercot.com/committees/rms/rmttf

**Retail Market Subcommittee (RMS)**
https://www.ercot.com/committees/rms

**Texas Data Transport & MarkeTrak Working Group (TDTMS)**
https://www.ercot.com/committees/rms/tdtms

**Texas Standard Electronic Transaction Working Group (TX SET)**
https://www.ercot.com/committees/rms/txset

# TX SET v5.0 Production Implementation 11.11.24

- ***Added two new codes:***
  - ***"IA" (Inadvertent Gain) and "CR" (Customer Rescission) were* added** to:
    - CRs' **814_16** Move-In Request and CRs' **814_05** Move-In Enrollment Response transactions,
    - ERCOT's **814_03** Enrollment Response transaction**,** and
    - TDSPs' **814_04** Enrollment Response transaction.
- ***Added three new TDSP "reject codes":***
  - CR's MVI Requested Date is greater than "**150**" Days in the past.
  - Leapfrog "**LFG**" or Move-Out "**MVO**" transaction scheduled or completed
- ***Critical: A backdated "Inadvertent Gain" or "Customer Rescission" 814_16 Move-In (MVI) must include either the "IA" or "CR" code to be accepted by the TDSP(s). If not, TDSP(s) will reject your Move-In.***

# TX SET v5.0 Production Implementation 11.11.24

- ***Added "County" name to the TX SET transaction(s) requiring TDSPs*** to provide this beneficial information as part of all ESI ID's Service Address.
  - **Market Consensus Source of Data**:
    - **NOAA-Texas-County-Names---TX-SET-v5-0-FR-4-1-Updated-03-01-23**
- With the addition of "**County**" name, CNP will communicate Weather Moratorium(s) by assigned "**County**" instead of applying the moratorium to apply to our entire "Service Territory".
  - **Example**, if the National Weather Service (NWS) activates an Extreme Weather Emergency for "**Harris**" **county only**, CNP will reject or unexecute 650_01 Disconnect for Non-Payments (DNPs) for "**Harris**" **county ESI ID(s)** while continuing to accept and execute DNPs for ESI ID(s) in our remaining 11 counties, if applicable.
    - **RMGRR183, Competitive Retailer Information Portal (CRIP) and Weather Moratorium Updates,** currently going through ERCOT's governance process, includes this process change.

# TX SET v5.0 Production Implementation 11.11.24

- ***Added 44 new* Metered *Service Type (MSL) List*** that are an "**optional**", meaning that the **TDSPs may provide these** "**MSL**" code(s) to the REP of Record in the 814_04 Enrollment Response and/or the 814_20 ESI ID Maintenance transactions, some code examples:
  - **M01** – House
  - **M02** – Apartment
  - **M11** – Government Emergency Housing (FEMA) (Harvey Lessons Learned)
  - **M25** – Water Well
  - **M36** – Church Facilities
- CNP's business decision, make the "**Metered Service Type"** (**MSL**) "**required" instead of "optional"** by providing these Premise specific descriptions for all metered ESI IDs:
  - **NOTE**: CNP's exception is IDR or BUSIDRRQ Load Profiles where more than one meter exist for the same ESI ID.
    - **814_20 ESI ID Maintenance transaction, we will include only (1) "MSL"** segment identifying the primary type of service being metered.
    - **814_04 Enrollment Notification Response transaction, we will not include the "MSL" segment**. This would apply only in the event that an ESI ID has more than one assigned meter.

# TX SET v5.0 Production Implementation 11.11.24

## Additional Functionality Implemented by the Retail Market:

- Added Continuous Service Agreement "***(CSA) Start and End Dates"*** to minimize incorrect CSA CR assignments as a result reducing incorrect CSA CR's financial liability
- Created ***new "CHP"*** status code for "***TDSP Construction Hold***"
- Replaced generic catch-all reject code "**A13 Other**" with "**(28) Specific Reject Reason**" code
- **MarkeTrak Enhancements** included new Subtypes, Stronger Validations and added "Complete Unexecutable" Drop-down reasons predominately used by the market.

## ERCOT and Retail Market Training Taskforce (RMTTF) Upcoming Schedules:

- **ERCOT Retail 101 Training (WebEx Only): Wednesday, June 18, 2025**
  - **Registration is Required by ERCOT: Retail 101**
- **TX SET Instructor Led Training (In-Person Only): Wednesday, June 25, 2025**
  - **Location: 1925 W. John Carpenter Fwy. Irving 75063 (Vistra's Office)**
  - **Class: 8:30 AM - 5:00 PM**
  - **Registration is Required by ERCOT: Texas SET Standard Electronic Transactions**

# Project 56736 PUCT Staff's update to RMS (04.01.25):

- **Scope of revisions to TAC §25.88 Staff is evaluating**
- Implement HB 1500 §24 (88th Legislature),
  - **Texas Utilities Code Section 39.168 – Retail Sales Report**
- "**Retail Sales Report**"
  - Provide a definition for 'affiliates" of a REP
  - Expand "competitive market indicators"
    - Affiliate relationships
    - Customer turnover
    - Product offerings
  - Modernize and streamline filing requirements
    - No more physical filings
    - Combine similar filings at one place/

# PUCT Staff Contacts for Project 56736:

- Lucy.Considine@puc.Texas.gov
- Zachary.Dollar@puc.Texas.gov
- Iliana.DeLaFuente@puc.Texas.gov

PUC.TEXAS.GOV

# Therefore, the Retail Market Needs:

- Your **Participation**
- Your **Knowledge**
- Your **Work-Related Experiences**
- Your **Problem-Solving Abilities**
- Your **Work Ethic**
- Your **Partnership**
- Your **Dedication to rolling-up your sleeves to getter DONE!**


# 2025 CenterPoint CR Workshop: Regulatory Update

**Jim Lee**
Manager, ERCOT Regulatory Affairs

**Joymesha Jones**
Senior Analyst, Regulatory & Rates

June 6, 2025

CenterPoint Energy

# Topics

1. CEHE Regulatory Proceedings
2. CEHE Transmission & Distribution System Resiliency Plan (Dkt. 57579)
3. ERCOT Load Forecasting & Transmission Planning
4. ERCOT Texas 765-kV Strategic Transmission Expansion Plan (TX 765 STEP)

# 2024 CEHE Base Rate Proceeding - Docket 56211

- CEHE Filed: March 6, 2024; PUCT Final Order: March 13, 2025
- Rate decrease of $0.48 per residential customer using 1,000kWh per month
- Tariff and new rates are effective as of April 28, 2025
- Rider RRC -- Rate Reduction Credit: One-time refund of $5.2 million to retail & wholesale customers per Settlement Agreement
  - Refund will be for 2 months – starting August 1, 2025; ending September 30, 2025
  - SAC04: RRR006

| RATE_CLASS | PER UNIT CHARGE | BILLING_UNIT |
|---|---|---|
| Residential Service | ($0.000215) | Per kWh |
| Secondary Service Less Than or Equal to 10 kVA | ($0.000334) | Per kWh |
| Secondary Service Greater than 10 kVA | ($0.062308) | Per Billing kVA |
| Primary Service | ($0.036335) | Per Billing kVA |
| Transmission | ($0.018329) | Per 4CP kVA |
| Lighting Services | ($0.004550) | Per kWh |

# CEHE Residential Rates – as of April 28, 2025

| | | | | |
|---|---|---|---|---|
| 1 | Base Customer | Current | $2.110000 | Per Customer |
| 2 | Base Meter | Current | $2.790000 | Per Meter |
| 4 | Base Distribution | Current | $0.023240 | per kWh |
| 5 | TCRF | Current | $0.015769 | per kWh |
| 6 | DCRF | Current | $0.000000 | per kWh |
| 7 | EECRF | Current | $0.000930 | per kWh |
| 15 | NDC | Current | $0.000013 | per kWh |
| 19 | TEEEF | Current | $0.002392 | per kWh |
| 21 | RCE | Current | $0.000048 | per kWh |
| 22 | IRA | Current | $0.000000 | per kWh |

- Cumulative Rates

| Fixed Charges | Volumetric Charges |
|---|---|
| $4.90... | $0.042393 |

Bill @ 1000 kWh

$47.29

Res

Completed:

- Transmission Cost Recovery Factor (TCRF) – effective 3/1/25
- Energy Efficiency Cost Recovery Factor (EECRF) – effective 3/1/25
- Nuclear Decommissioning Charge (NDC) – effective 4/28/25 (w/ Base Rate Proceeding)
- Base Rate Proceeding – effective 4/28/25
- Transmission Cost of Service (TCOS) – effective 4/28/25 [non-residential]

Pending:

- DCRF – Docket 57775 – Awaiting PUCT approval
- TEEEF – Docket 57980 – Awaiting Open Meeting Scheduling (addresses Large TEEEF units – LifeCycle/CPS Energy/ERCOT)
- TEEEF 2 – Docket 58107 (addresses Small TEEEF units)

# CEHE Transmission & Distribution System Resiliency Plan (2026-2028) - Docket 57579

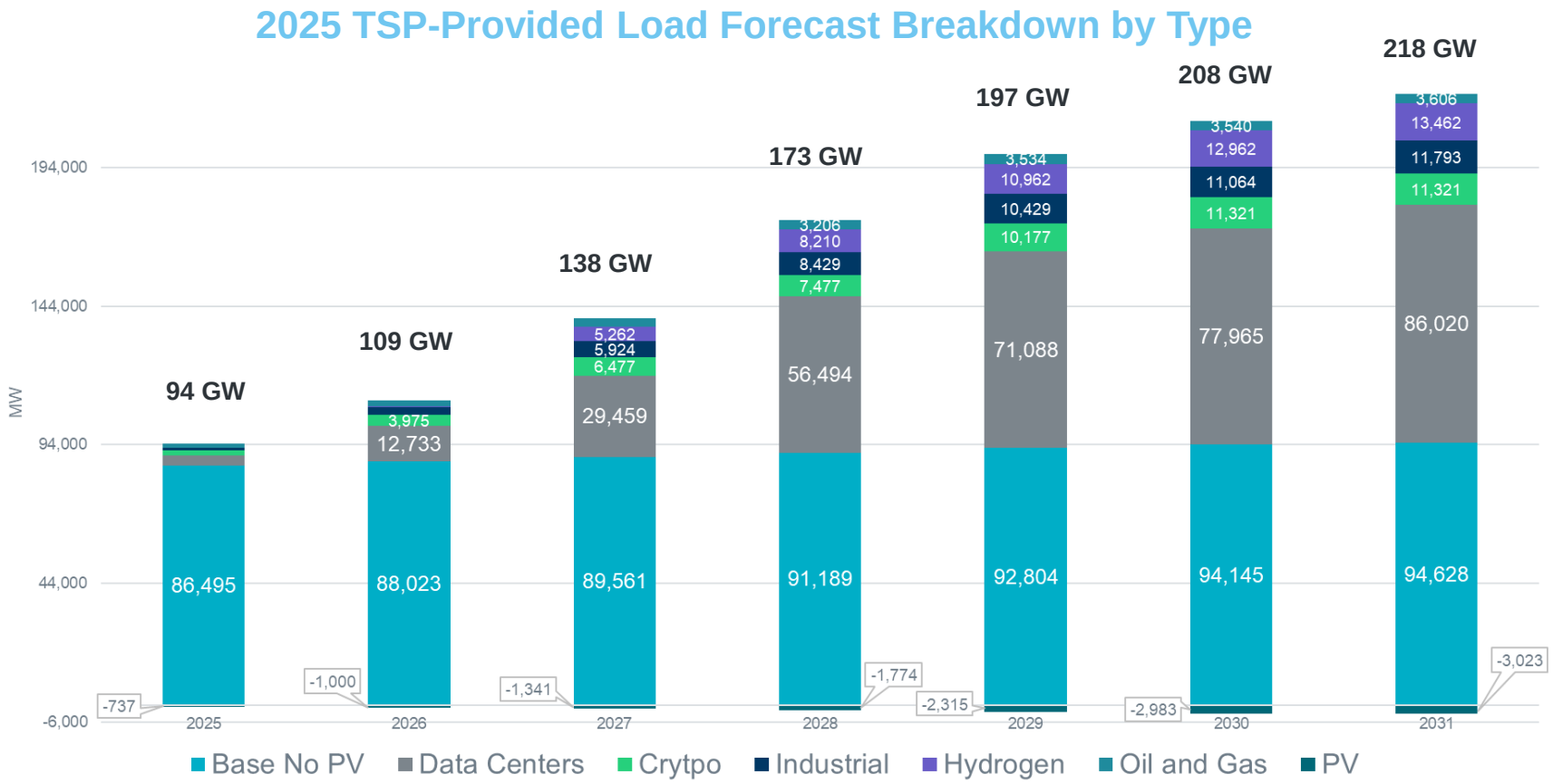
- CEHE filed on January 31, 2025; Final Order deadline September 16, 2025
- System Resiliency efforts are focused on protecting transmission & distribution infrastructure from extreme weather conditions and to reduce system restoration costs and outage times for customers
- Requesting ~$5.75 billion investment over 3 years

| Resiliency Event Category | Estimated Capital (million) | Estimated O&M (million) | Estimated Total (millions) | 3-Year CMI Savings (millions) |
|---|---|---|---|---|
| Extreme Wind (9) | $3,864.6 | $148.1 | $4,012.7 | 1,055.7 |
| Extreme Water (4) | $91.6 | None | $91.6 | 11.0 |
| Extreme Temperature (Freeze) (3) | $53.5 | $2.6 | $56.1 | 5.3 |
| Extreme Temperature (Heat) (10) | $1,207.2 | $37.2 | $1,244.4 | 183.1 |
| Physical Attack (2) | $37.4 | $0.1 | $37.5 | 42.7 |
| Technology & Cybersecurity (5) | $79.5 | $13.5 | $93.0 | N/A |
| Situational Awareness (7) | $209.5 | $9.2 | $218.8 | 10.8 |
| **Total (39)** | **$5,543.3** | **$210.7** | **$5,754.0** | **1,309** |

Total Estimated Resiliency Measures:
$5.543B in Capital and $210M in incremental O&M

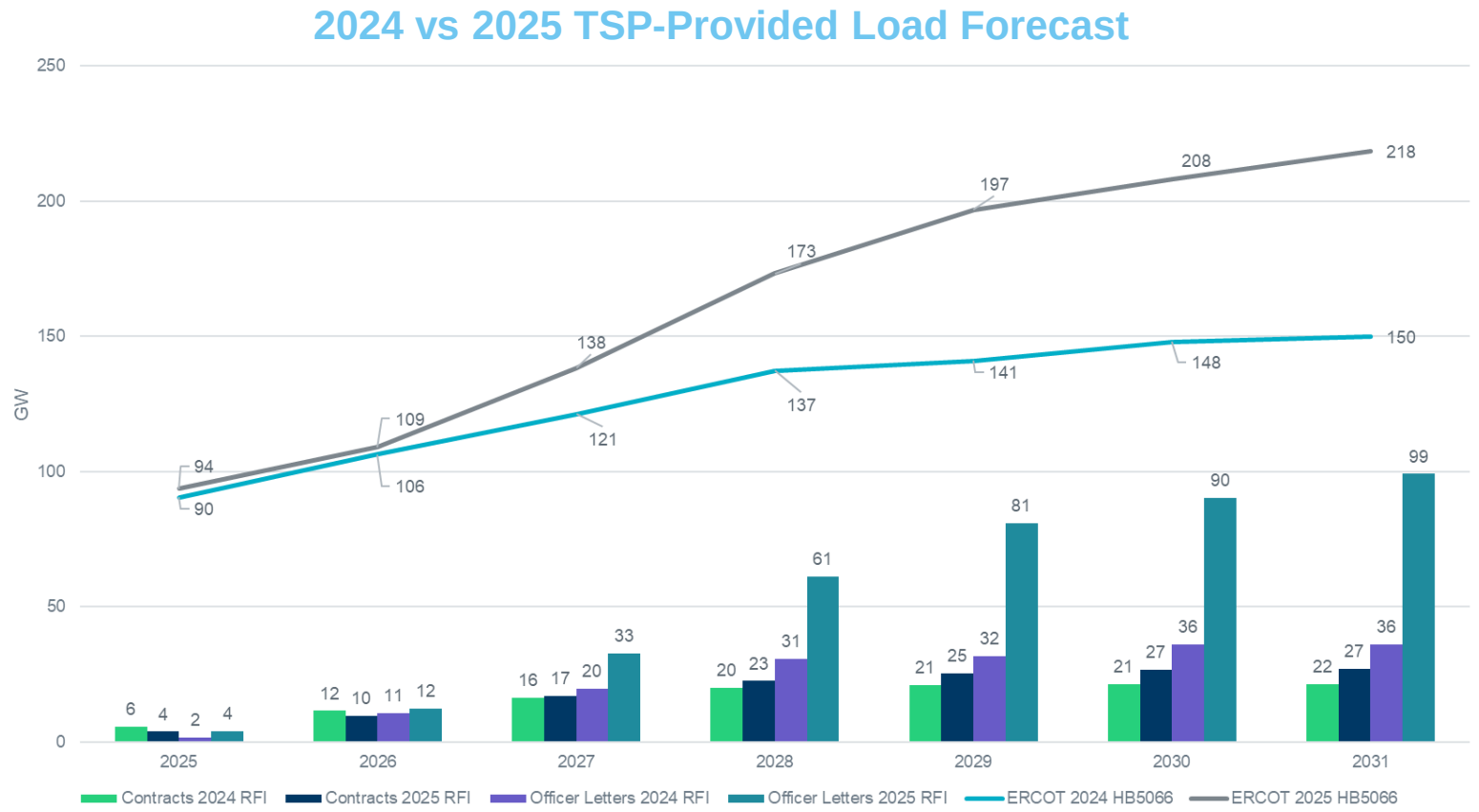
# ERCOT: Load Forecasting & Transmission Planning

Texas continues to see huge exponential growth in electricity demand throughout the state. The TSP load forecasts (aka Officer Letter Loads) highlight the impending wave of load growth and the need for an enhanced and expanded Transmission system to efficiently and effectively serve the electricity demand across ERCOT.



# ERCOT: Load Forecasting & Transmission Planning

Upon passage of NPRR1180 and PGRR107, TSPs were able to submit Load forecasts to ERCOT supported by either an executed interconnection agreement, an independent 3rd party load forecast deemed credible by ERCOT, or a letter from a TDSP Officer attesting to such load without a signed IA. The delta between 2024 and 2025 can be attributed to future Data Center load growth.



# ERCOT: Load Forecasting & Transmission Planning

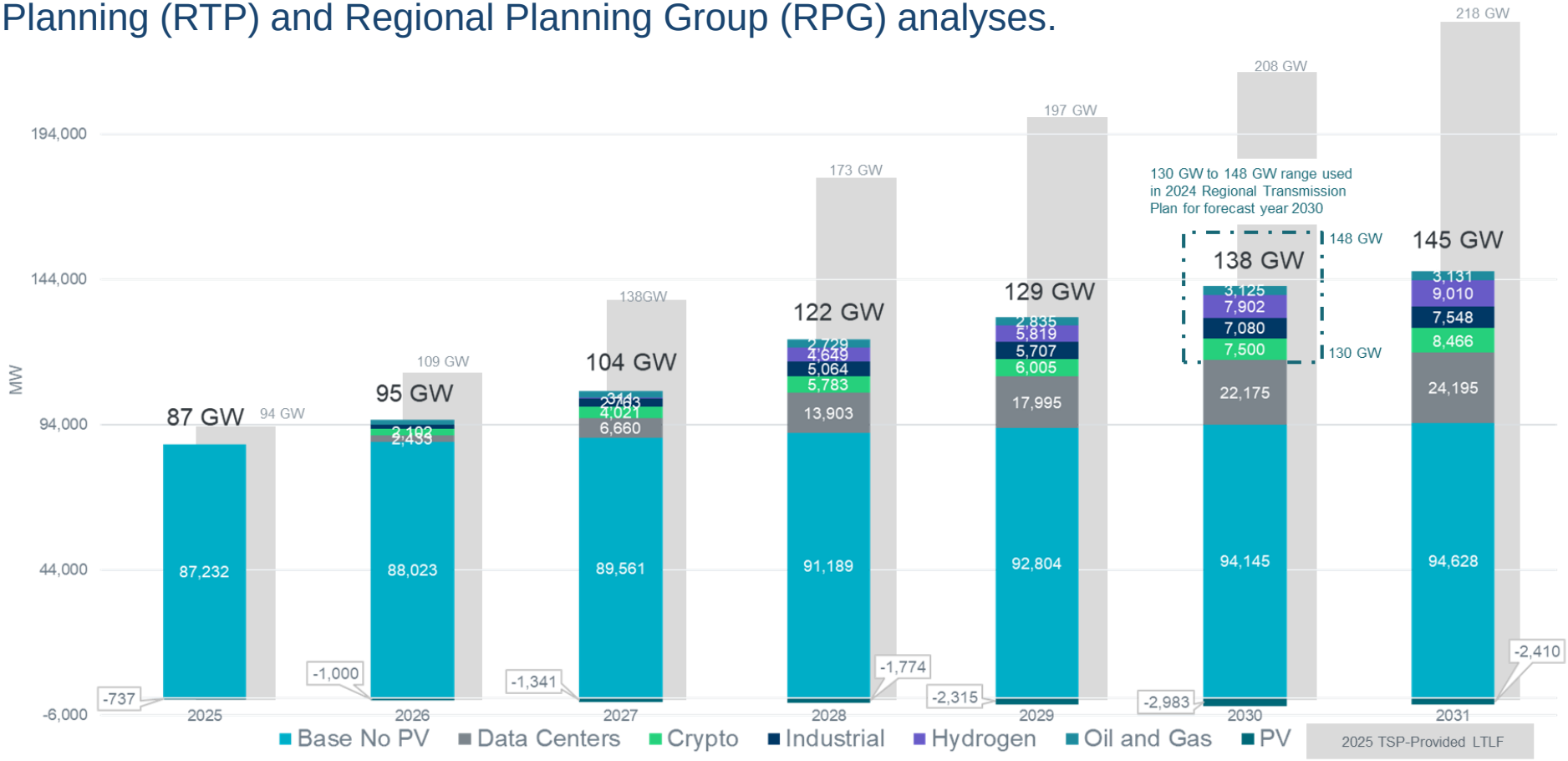
For ERCOT to incorporate the various forecasts into resource adequacy and outage coordination analyses, ERCOT developed their own ERCOT Adjusted Load Forecast. To separately address Transmission Planning needs, ERCOT is contemplating a supplemental ERCOT Adjusted Transmission Forecast to be applied to Regional Transmission Planning (RTP) and Regional Planning Group (RPG) analyses.

**TSP-Provided Load Forecast**

- Signed contracts, Officer Letter Loads, and accredited 3rd party forecasts based on the in-service dates and MWs that the TSPs provided

**ERCOT Adjusted Load Forecast –**

- All new Data Center Load reduced to 49.8% of request
- Then Officer Letter Load reduced to 55.4% of request



# ERCOT: Growth Forecasts + Transmission Expansion = TX 765kV STEP

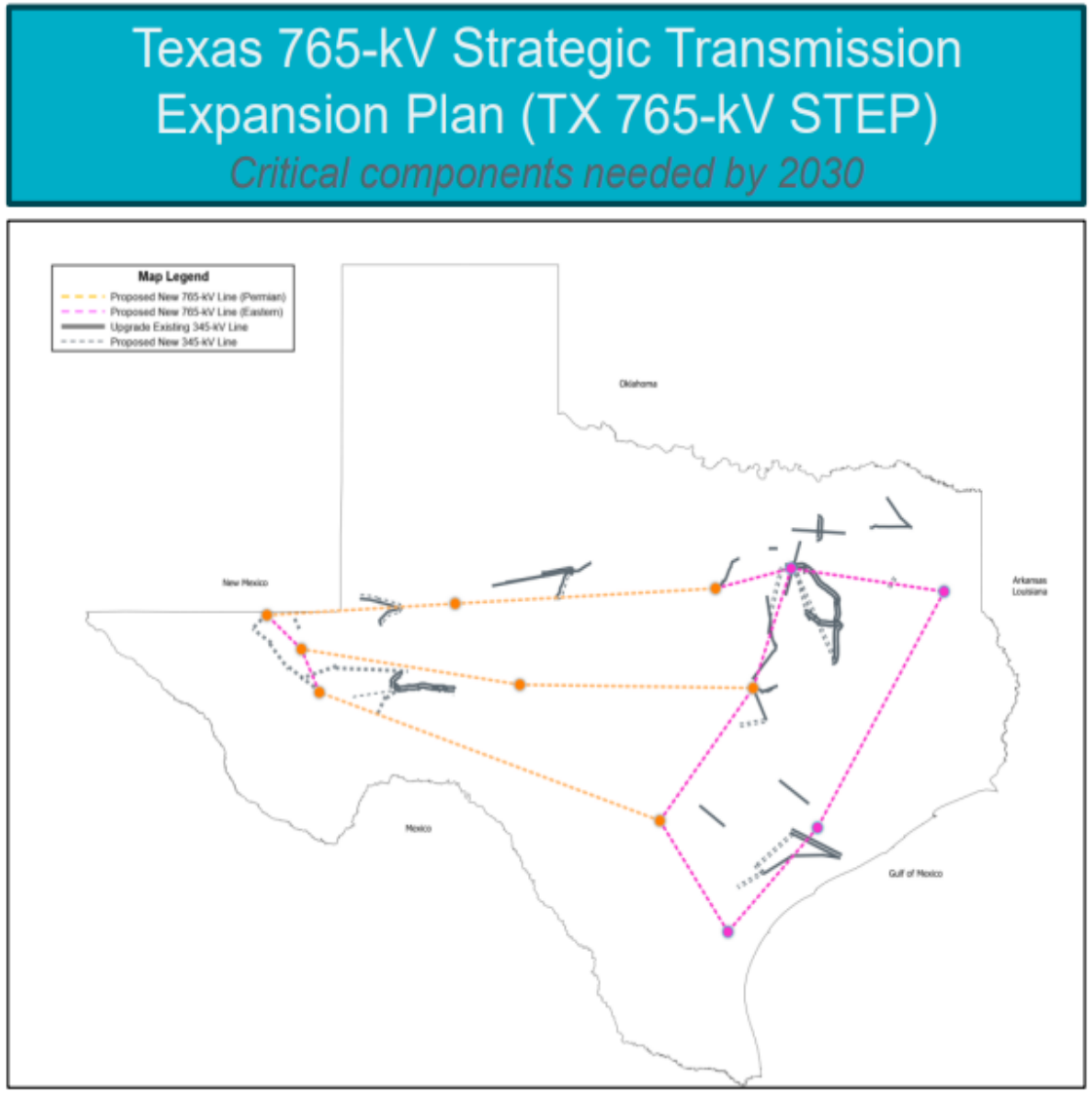
Triggered by the transmission needs in the Permian Basin (#55718) and coupling the new growth forecasts with the current utilization of transmission capacity, availability and performance, ERCOT is evaluating the future of the state-wide extra high voltage transmission system.

The result: Texas 765-kV Strategic Transmission Expansion Plan (TX 765-kV STEP).

The Permian Basin 765kV import paths (yellow) were approved by the PUCT in April 2025 with continued discussions for the remainder of the TX 765kV STEP proposal (magenta) taking place amongst the TSPs, ERCOT and PUCT.

Benefits of 765-kV include:

- Increased transfer capability to load centers
- Flexibility in generation resource siting
- Lower line losses
- Lower congestion costs
- Outage Coordination Capacity
- Potential exit strategies for some current Generic Transmission Constraints (GTCs)



# Closing Remarks

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