CenterPoint Energy

Welcome to

CENTERPOINT ENERGY'S 2023 COMPETITIVE RETAILER WORKSHOP

May 10, 2023

Opening Remarks & Introductions

Meet The Team

Agenda

Safety Share – ARC Demo
Leadership Update
CRIP Pulse Check
Competitive Retailer Survey Results*
Texas SET Version 5.0 Release
IDR to AMS Project Updates
Regulatory Update*
15 Minute Break
Emergency Operations Plan Update
Distributed Generation Update*
Galveston Foundation
Closing Remarks & Wrap-up*
Lunch

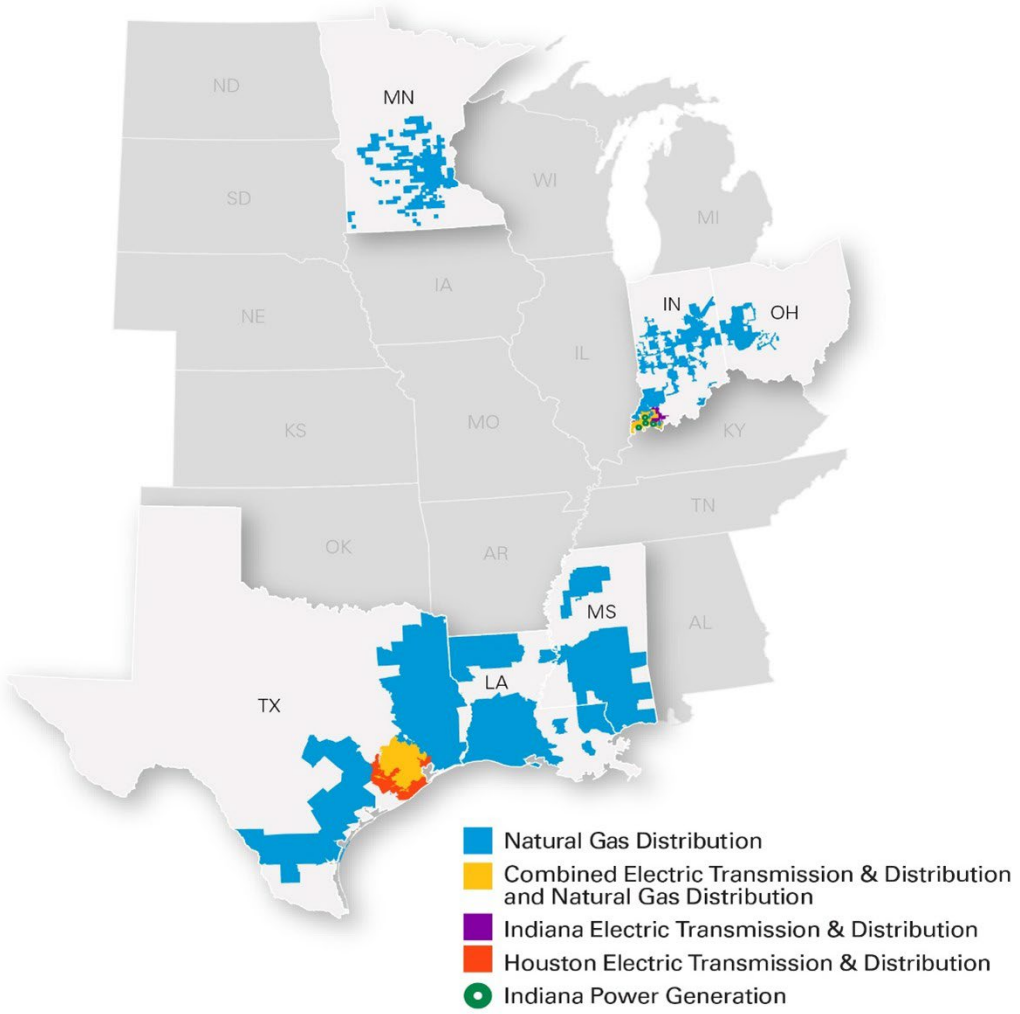
Safety Share – ARC Demo

2023 Competitive Retailer Workshop

Leadership Update

Presented by: John Hudson – Director, Houston Electric Market Operations

Who We Are



Electric Transmission & Distribution and Power Generation

approximately

2.9 million

METERED CUSTOMERS

2 states

Natural Gas Distribution

approximately

4.3 million

METERED CUSTOMERS

6 states

Competitive Energy Businesses

Project activity in more than

20 states

Our Focus

- 2023 is expected to be another pivotal year for CenterPoint Energy, led by the continued execution of our **long-term growth strategy** and focus on our **core utility businesses to benefit our customers**.
- We have set clear priorities to **invest in the safety, reliability and resiliency of our electric and natural gas systems** to drive industry-leading growth, while also advancing the transition to a cleaner energy future.
- We remain committed to **growing our utilities** and optimizing the advantages of this growth for our customers, shareholders and communities.
- Guided by our values of **Safety**, **Integrity**, **Accountability**, **Initiative** and **Respect**, we are unified in our collective purpose to energize everyday life and make the pursuit of progress possible.

Our Value Proposition

Sustainable Growth for Shareholders

Sustainable Resilient, and Affordable Service for Customers

Sustainable Positive Impact on our Environment

We expect to continue to deliver on the following 10-year value proposition

- **Achieving** our industry-leading long-term annual non-GAAP earnings per share (non-GAAP EPS) growth target of 8% through 2024 and 6-8% through 2030[1]
- **Growing** our dividends per share in line with non-GAAP EPS growth over that same period
- **Investing** in a $43 billion capital program[2] supporting safe, reliable and resilient electric and natural gas systems
- **Funding** our growth with no external equity issuance planned through 2030[3] by efficiently recycling capital
- **Fully exited** unregulated midstream investment; where over 95% of our earnings are now from regulated utility operations
- **Progressing** toward our milestones to achieve our industry-leading net zero goals for our Scope 1 and certain Scope 2 emissions by 2035, which is approximately 15 years ahead of our dual-fuel peers' average[4]
- **Maintaining** a healthy balance sheet
- **Striving** to keep rates affordable for our customers through operations and maintenance (O&M) expense discipline coupled with strong and consistent customer growth[5]

1. Refers to non-GAAP EPS annual growth rate for 2022A-2030E
2. Refers to 10-year capital plan from 2021A-2030E
3. Not including small issuances through employee incentive plan and employee savings plan
4. Peer group includes operators owning large scale generation, including CMS, AEE, D, DTE, DUK, LNT, PPL, SO, WEC, XEL as of Analyst Day 2021
5. Internal projection through 2030

Diversity, Equity and Inclusion

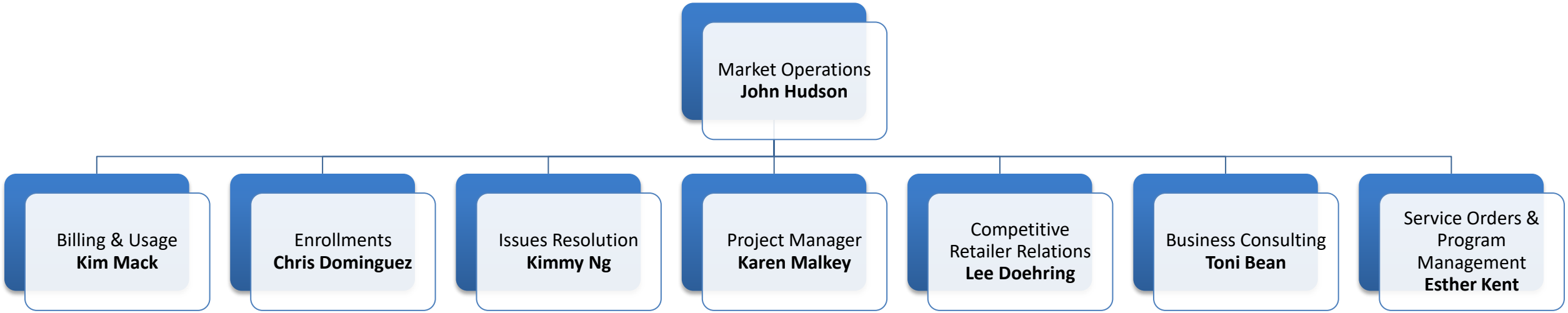
DIVERSITY, EQUITY & INCLUSION

- At CenterPoint Energy, **we are committed to advancing diversity, equity and inclusion** to support our colleagues, customers, contractors, suppliers and community members, regardless of race, gender, color, sexual orientation, age, religion, or physical or mental disability, so they have an equal opportunity to thrive.
- **Diversity, equity and inclusion are core to who we are, what we do, and how we do it.** We believe that diversity, equity and inclusion are critical components of our long-term business strategy, serving as cornerstones of our service, performance and growth.
- We strive to find ways, big and small, to appreciate the **value in our differences**. It is through the energy of many where we unlock the potential of our company and workforce while, at the same time, support our quest to learn better, listen better and do better every day.

Commitment to the Community

- CenterPoint Energy recognizes that our success, as well as the success of our customers, neighbors and stakeholders, is connected to the vibrancy of our communities.
- In 2022, our employees volunteered more than **86,000 hours** valued at more than **$2.5 million** according to the Independent Sector.
- More than **$16 million** was donated by the CenterPoint Energy Foundation to support nonprofit organizations and causes where we live and work through more than **400 grants**.

Electric Market Operations – Who We Are



Transaction Management

- Transaction Processing

Total Transactions Processed – 2,142,023,512

Origin & Volume

- LodeStar Extended (LSE) Records – 2,018,236,942
- Monthly Billing Records – 36,875,827
- Inbound EDI Transactions from the Market - 6,744,683
- Outbound EDI Transactions to the Market - 80,166,060

- Exception Handling

Total Exceptions Worked – 400,661

Origin & Volume

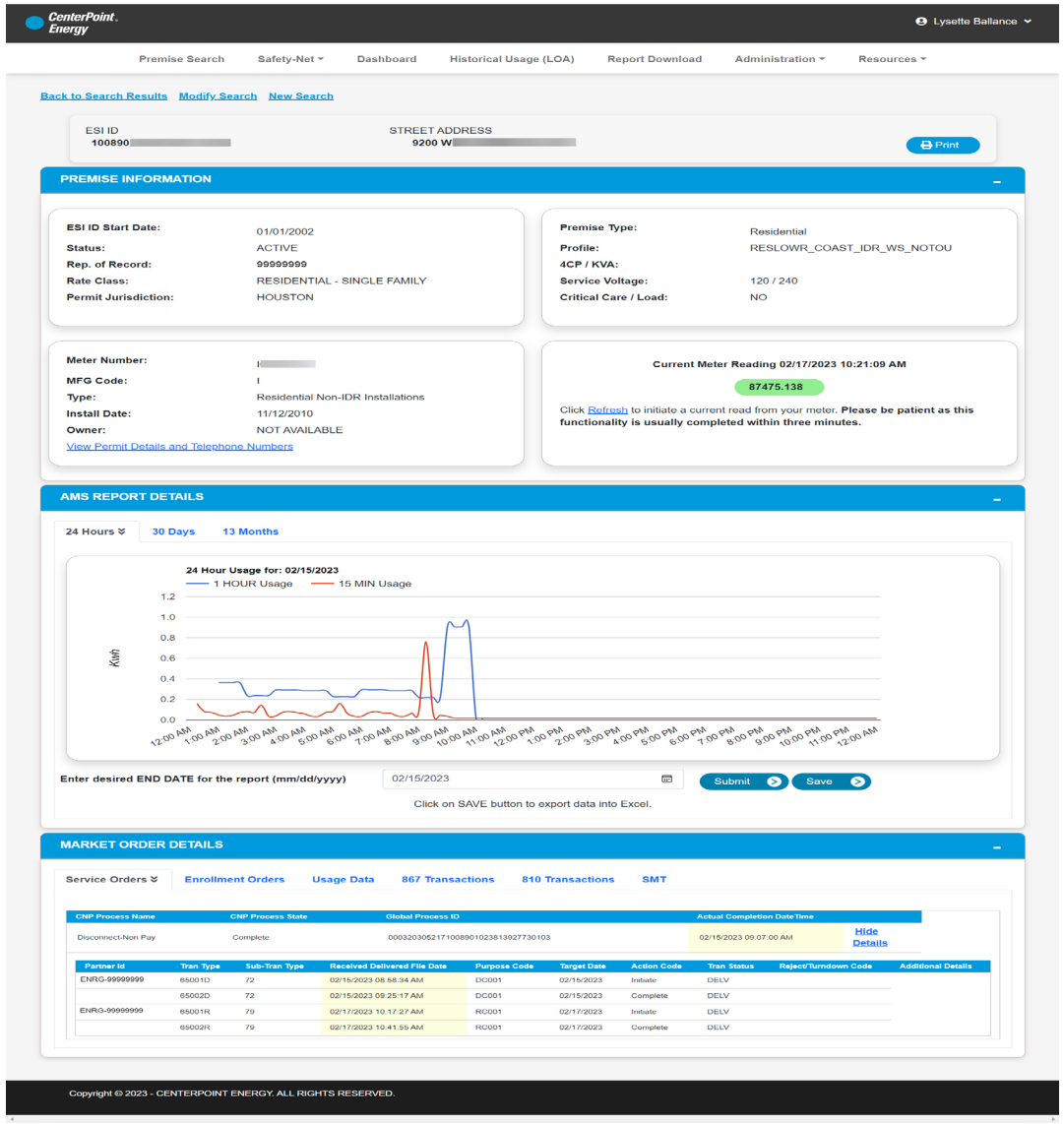
- MarkeTrak - 50,522
- Smart Meter Texas (SMT) Sync Records – 144
- Advanced Metering System (AMS) – 2,446
- Transaction Management Hub (TMH) – 169,919
- SAP – 177,630

2023 Competitive Retailer Workshop

CRIP Pulse Check

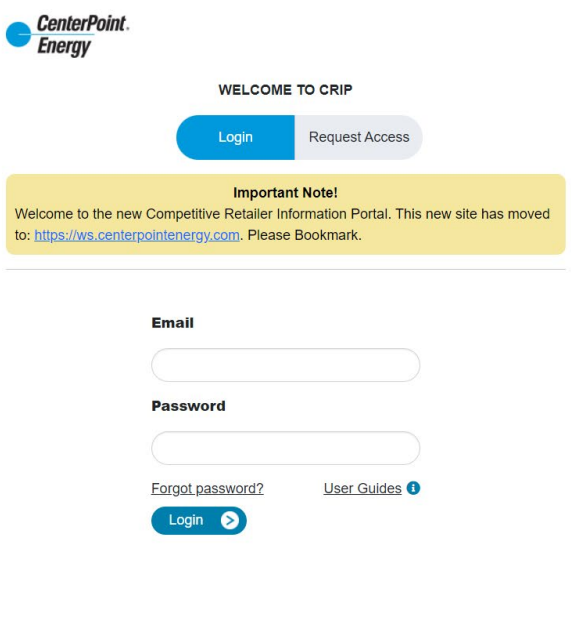
Presented by: Richard Beasley, Sr. Account Manager

CRIP Yesterday and Today



Pulse Check - How are we doing?

- Transition from old CRIP to New CRIP
- Safety-Net
- Administration
- CR Training (In-Person and/or Online)
- Survey – Opportunity to share desired CRIP enhancements.



Developing Enhancements

- Re-Read (Service Order Tab)
- 810_02 Transaction Charge Breakdown
- Permit Information (Requirements/Status)
- Current Weather Update (Dashboard)
- Multiple ESI-ID Entry – Safety-Net

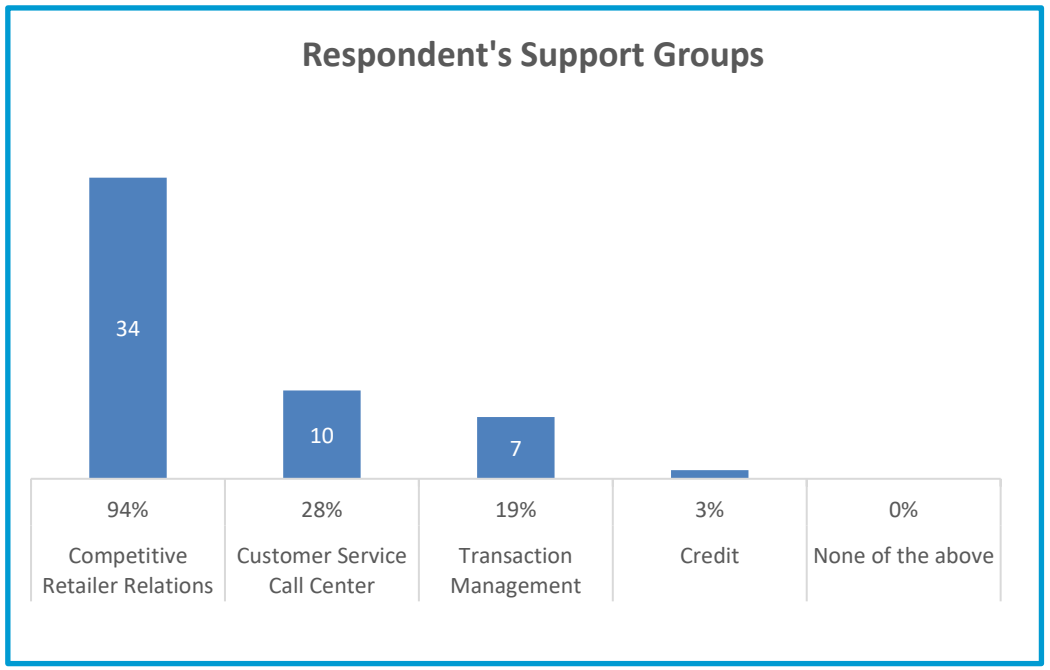

Any
Questions

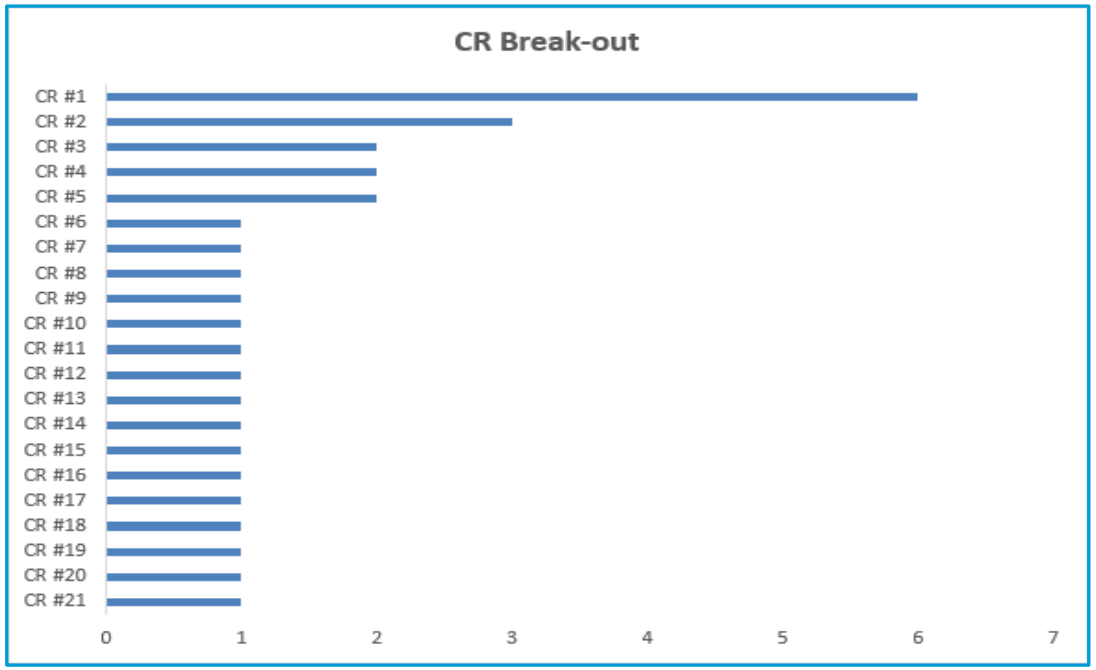
Competitive Retailer Survey Results

Presented by: Phil Suter & Kevin Kulhanek, Senior Account Managers

Methodology

This was a 35-question online survey fielded in February 2023 with the primary contacts from our Texas Electric Competitive Retailers, The survey contained comprehensive breakouts evaluating our Competitive Retail Relations Group, Transaction Management, Credit and Customer Service.

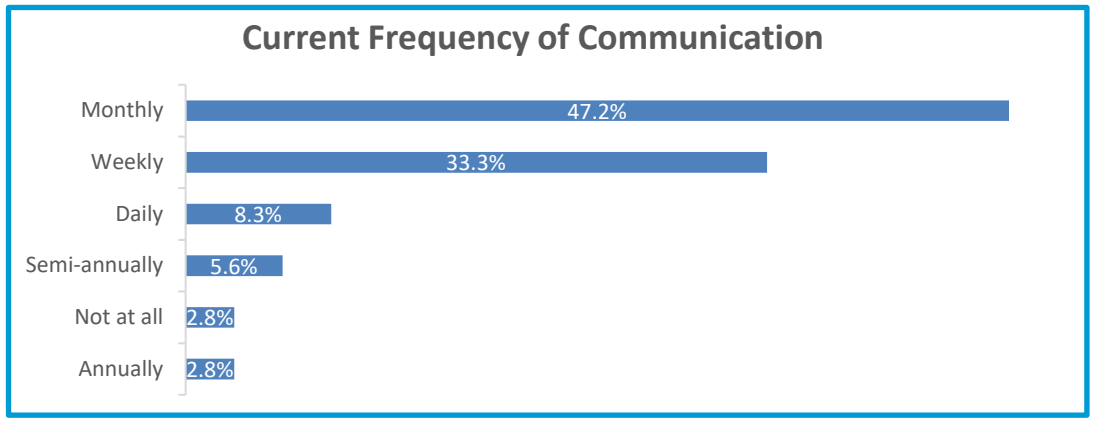


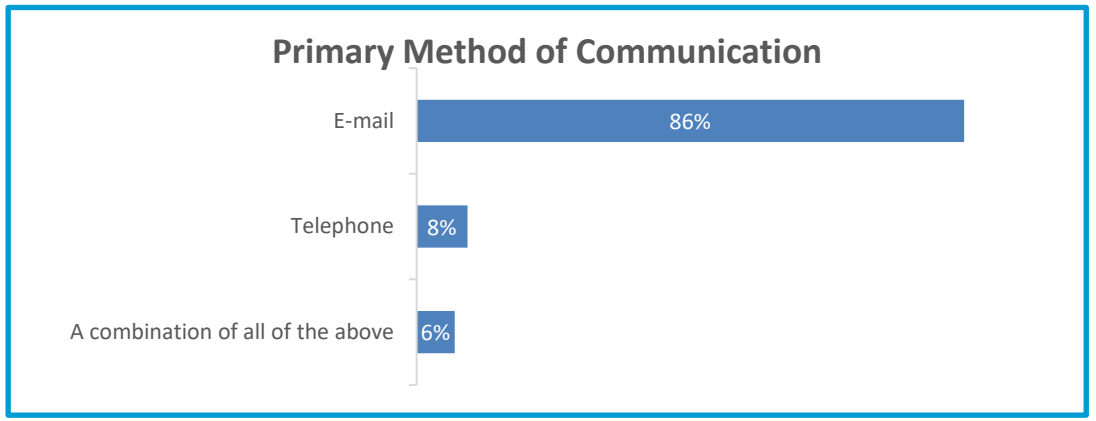


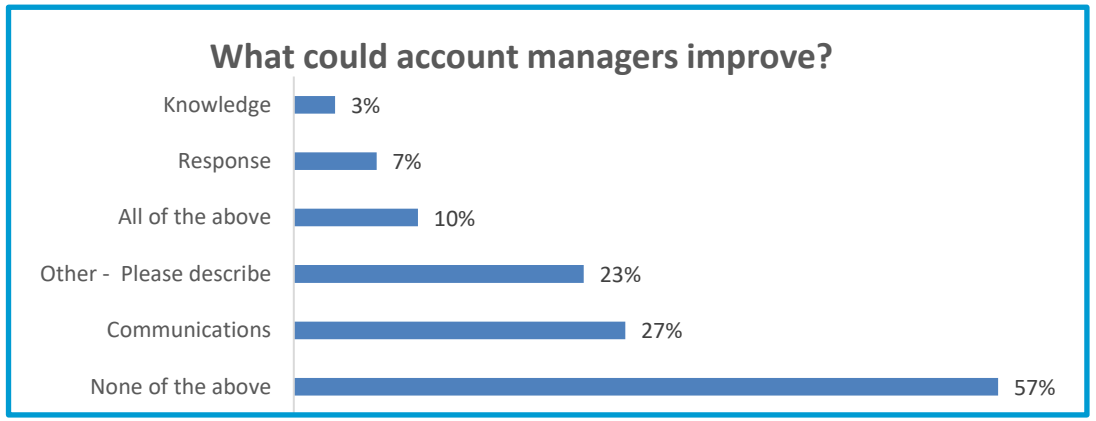
Objective: The objective is to measure satisfaction and effectiveness of various internal processes such as; *account manager performance, *communications, *transaction management, *Call Center interactions, and general performance.

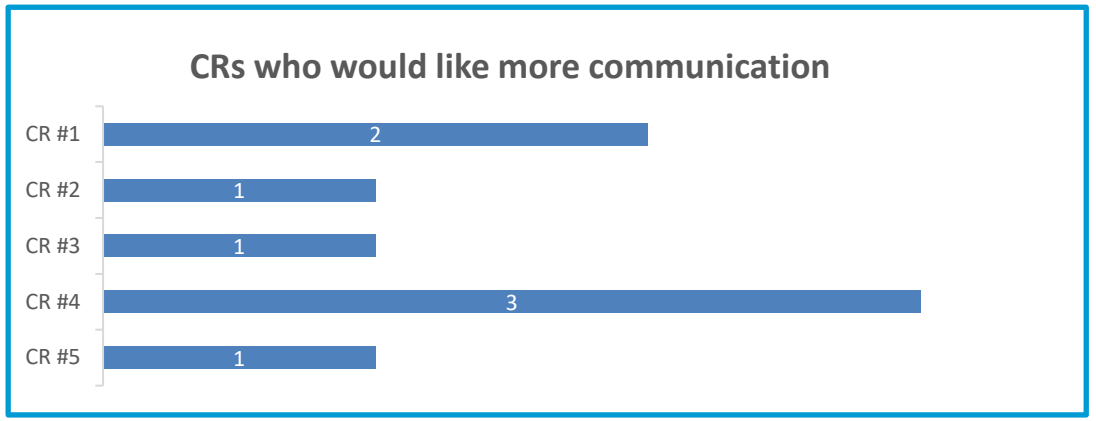
Account Managers Communications - Insights Overview

30% of respondents said that they would like to see more frequent communications.







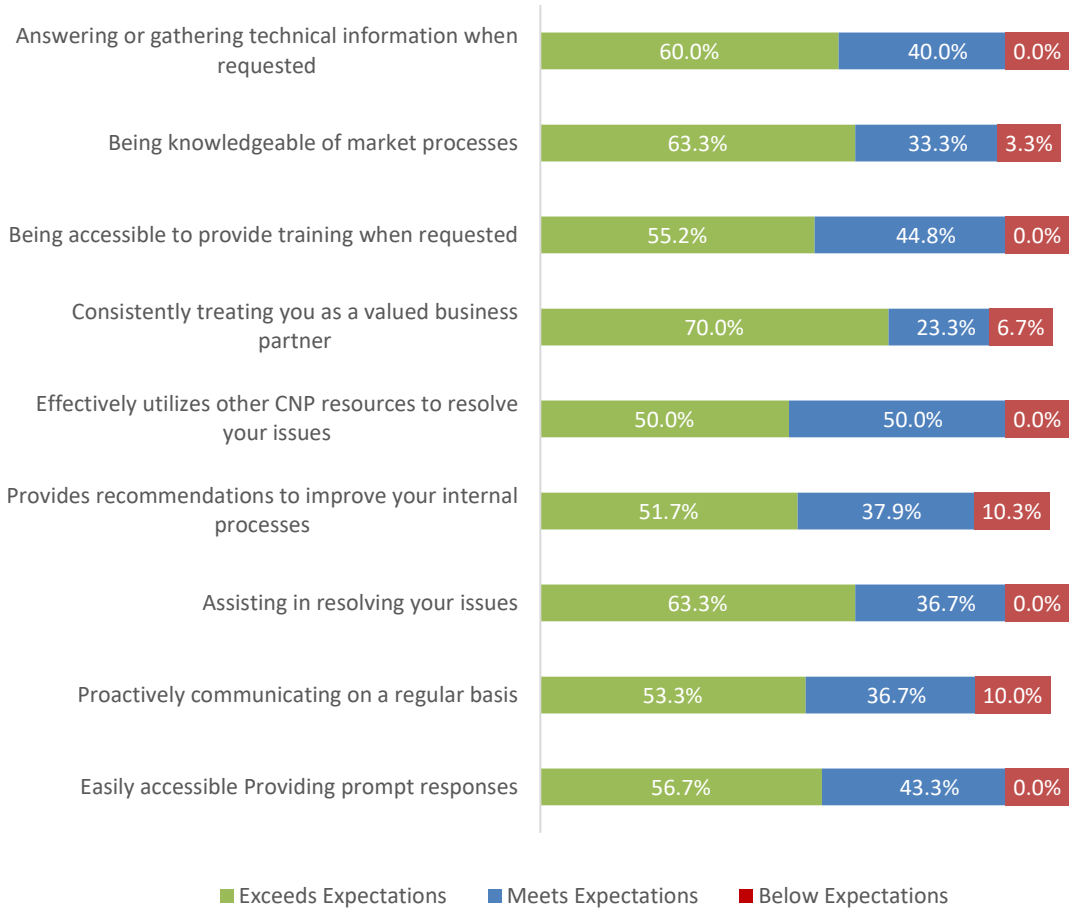


Respondent's Comments

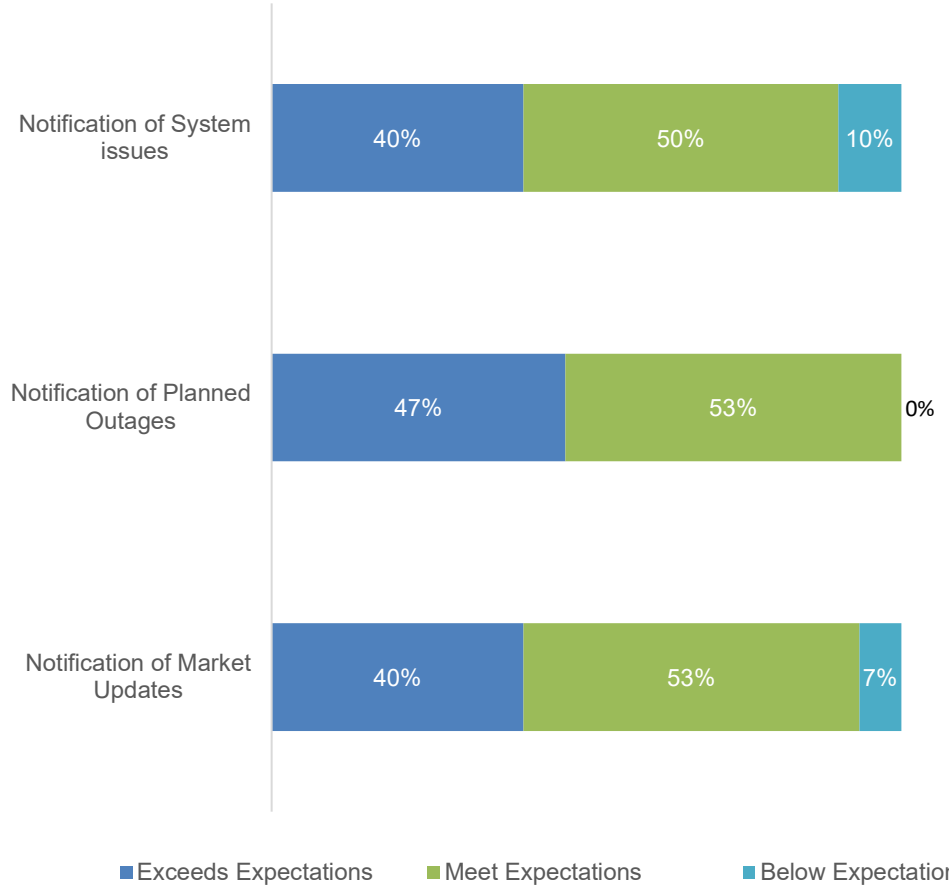
- "More timely and complete communication so the Reps know how to pivot with customer communications or mitigating processes."
- "We should have more face time, but I can also do better to set that time to meet."
- "Relationship Building."
- "Very good job of communicating when issues arise but would like to see more proactive communication and relationship building. Opportunities to improve and enhance the relationship by understanding our needs and working through solutions."
- "We have a positive relationship with our account manager. I think CNP has done a better job recently being proactive about communications. That's important for planning and being able to set customer expectations."

CR Survey Results

Account Manager Performance



Market Communications



Contact Center - Insight Overview

Where we could improve:

- “50% of the time I am able to speak with a Customer Service agent who is friendly, knowledgeable and willing to help. 50% of the time the agent that takes my call does not understand what I am asking and will say anything in an effort to end the call.”
- “Consistency and timeliness.”
- “Sometimes we have to call two or three times to get an answer - every time we call it's a different answer altogether. Kevin - our account manager, always has to step in and help - he is available and ready to assist; however, the customer service line could do a better job.”
- “Train all agents on how to create a new esiid number using an existing BP number.”

What we do well:

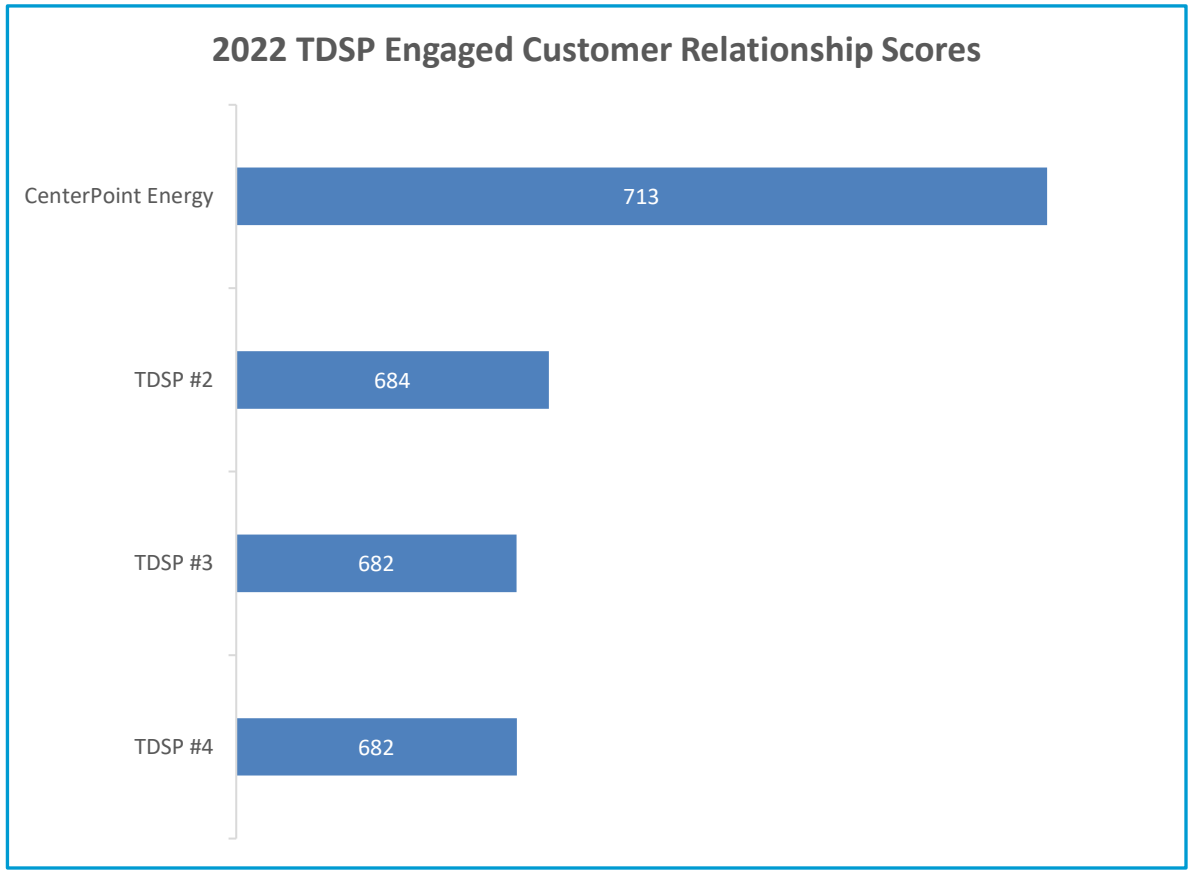
- “CenterPoint Customer Service **agents are able to provide real time information about the status of MVI, MVO, disconnect or reconnect** on an AMSM meter which is helpful.”
- “**Willingness to take feedback and make appropriate changes**.”
- “Have not encountered too many issues with **Holding time**”
- “We enjoy working with Richard Beasley when we have issues.”

Survey Background

- CenterPoint subscribes to the Utility Trusted Brand and Customer Engagement studies performed by Escalent for both the residential and business segments, also referred to as the ***Cogent Syndicated*** study.
- Escalent recognizes "customer champions" for utilities that score highly based on their **Engaged Customer Relationship (ECR) index**, an index that measures customer loyalty and satisfaction.
- The study measures the ECR of customers based on a company's performance in three key areas:
  - *Brand Trust* (Customer Focus, Company Reputation, Communication Effectiveness, etc.),
  - *Service Satisfaction* (Safety/Reliability, Billing/Payment, Customer/Field Services) and
  - *Product Experience* (Design Features, Benefits Awareness, Usage Performance).

TDSP Performance Survey Results

From a *customer* experience perspective, how does CenterPoint Energy as a Texas TDSP perform in relation to its Texas TDSP peers?



- CenterPoint Energy – TDSP residential customers are significantly more likely to be aware of utility support of local causes compared with the other TDSPs' customers, and those customers gave CenterPoint higher Brand Trust scores.
- CenterPoint Energy – TDSP is the top performer in the Design Features Index, significantly outperforming the other TDSPs across four of the six attributes, and customers report programs are easy to use and perform as promised.
- CenterPoint Energy is Best in Class among TDSPs for Safety & Reliability despite having the most reported outages; improved outage communications, specifically tied to a higher frequency and accuracy of Estimated Time of Restoration (ETR) notifications, has likely contributed to this improved performance.

Questions & Answers

2023 Competitive Retailer Workshop

Texas SET Version 5.0 Release

Presented by: Kathy Scott, Lead Specialist Regulatory Affairs

Texas SET v5.0 Supporting Key Documents

- Nodal Protocol Revision Request **(NPRR)1095**, **Texas SET v5.0 Changes**
  - **http://www.ercot.com/mktrules/issues/NPRR1095#keydocs**
- Retail Market Guide Revision Request **(RMGRR)169, Texas SET v5.0 Changes**
  - **http://www.ercot.com/mktrules/issues/RMGRR169#keydocs**
- System Change Requests (SCRs):
  - **817 - MarkeTrak Revisions Aligning with Texas SET V5.0**
  - **823 -** ERCOT's "**County Name**" Mass System updates of all active ESI IDs – **TDSPs to ERCOT for TX SET v5.0 Go-Live**.
- **T**exas **S**tandard **E**lectronic **T**ransaction (SET) **C**hange **C**ontrols – (**23* Approved or Pending Approval for v5.0 Implementation**):

Texas SET v5.0 Retail Market's Process Improvements

- ***Creates new IA (Inadvertent) and CR (Customer Rescission) attributes*** added to CRs' Move-In and TDSPs' Response transactions along with new Reject codes for the following criteria:
  - Requested MVI Date is greater than "**150**" Days in the past.
  - Leapfrog "**LFG**" or Move-Out "**MVO**" competing already scheduled or completed
  - **Important:** With v5.0 implementation this will be **the ONLY mechanism in which an Inadvertent Gain Move-In will be accepted with a Backdated Requested Date.**
- ***Continuous Service Agreement (CSA) changes*:**
  - Creates new **CSA Service Start and CSA Service End Dates (DTM) for CSA CRs** to provide ERCOT with CSA contract period. Ensures CSA CR relationships ends based upon these dates to eliminate charges for future CSA MVIs after contract termination period.
  - Creates validation at ERCOT that allows only the CSA CR to send an 814_24 Move-Out that includes the By-pass code of REF~2W.
- ***Creates new TDSP Construction Hold Pending (CHP)*** from TDSP to CR

Texas SET v5.0 Retail Market's Process Improvements Cont.

- ***Creates new County Name attribute*** for TDSPs to provide as part of the ESI ID's Service Address:
  - NOAA-Texas-County-Names---TX-SET-v5-0-FR-4-1-Updated-03-01-23
  - **SCR823** was created to support Mass "***County Name"*** flat file updates by ERCOT
- Joint TDSPs ***created 44 new*** **Metered** ***Service Type (MSL)*** attributes that, if known, will be provided in the 814 transaction to the REP of Record for example:
  - **M01** - House
  - **M02** - Apartment
  - **M11** – Government Emergency Housing (FEMA) – another Harvey Lessons Learned
  - **M25** - Water Well
- ***"County Name"*** and "***Metered Service Type"*** will be added to the TDSP(s) ESI ID Extract reports created and posted daily by ERCOT to ERCOT's MIS.

Texas SET v5.0 Retail Market's Process Improvements Cont.

- ***Additional Changes***:
  - Creates new ***Meter Cycle Change Request*** subtype
  - Creates new ***867 vs Sum of LSE Intervals – Dispute*** subtype
  - Modifies ***Switch Hold Removal*** subtype allows TDSPs to complete issue.
  - Redesigns ***AMS LSE – Dispute*** subtype to support various reasons for submission.
  - Clarifies ***Siebel Change*** subtype changing **Complete** to **Agree/Complete**
  - Creates new Validations based upon ERCOT's Scheduled or In-Review status:
    - ***Missing Enrollment Transaction*** subtype (Cancel, 867_04 or >5 days since 814_04/05 transmission)
    - **Switch Hold Removal** subtype (No Switch Hold exist or Switch Hold removal request from current ROR)
  - Creates new **drop-down list of complete unexecutable reasons** where necessary to increase efficiencies while allowing for better tracking and reporting.
  - Replacing **A13 (Other)** in 814 transactions or **T018 (Other)** in 650_02 transactions where volume analysis of same reject reasons warranted a specific code.
  - Removes ***ERCOT Use Only*** from ***Reject Codes*** allowing TDSPs and ERCOT's use. (i.e., **NFI**), CRs should find this helpful since these rejects are already in their systems.
  - Creates new Reject Reason for ERCOT and TDSPs' responses when name field contains a single comma or any other signal character punctuation.

Texas SET v5.0
(23) Supporting Change Control Documents

- **TXSETCC794:** Updates the Unmetered Service Type to be Optional for the TDSP when the information is unavailable when ESI ID created
- **TXSETCC798**: Updates the **814_24 Move-Out CSA By-Pass** and creates validation by ERCOT where only CSA CR can send this code.
- **TXSETCC809**: Requesting a new **TDSP Construction Hold Pending (CHP)** to help REPs identify the reason for potential Move-In delays
- **Hurricane Harvey Lessons Learned:**
  - **TXSETCC815**: Update the 650_01 Guide as a result of the market recommendations
  - **TXSETCC816**: Update the 650_02 Guide as a result of the market recommendations **TXSETCC817**: Update the 650_04 Guide as a result of the market recommendations
  - **TXSETCC818**: Update the 814_28 Guide as a result of the market recommendations

Texas SET v5.0
(23) Supporting Change Control Documents

- **TXSETCC819:** Clarifies REF~4P and REF~IX are not provided when NM109 is NONE or UNMETERED in the 814_20
- **TXSETCC821**: Adds new "**County Name"** data element to 814 transactions from TDSP to REP of Record.
- **TXSETCC827**: **Adds new Customer Contact information segment** for MVI and Switch transactions that allows TDSPs to communicate planned and/or unplanned outage(s) events to Customers.
- **TXSETCC828**: **Adds DTM Start and DTM End (DATE) segments to the 814_18** Establish/Delete CSA Request
- **TXSETCC829**: **Adds a new indicator to 814_16 MVI** transaction to indicate Inadvertent Gain/Loss "**IA"** and Right of Rescission "**CR"** sent to TDSP by the regaining REP.

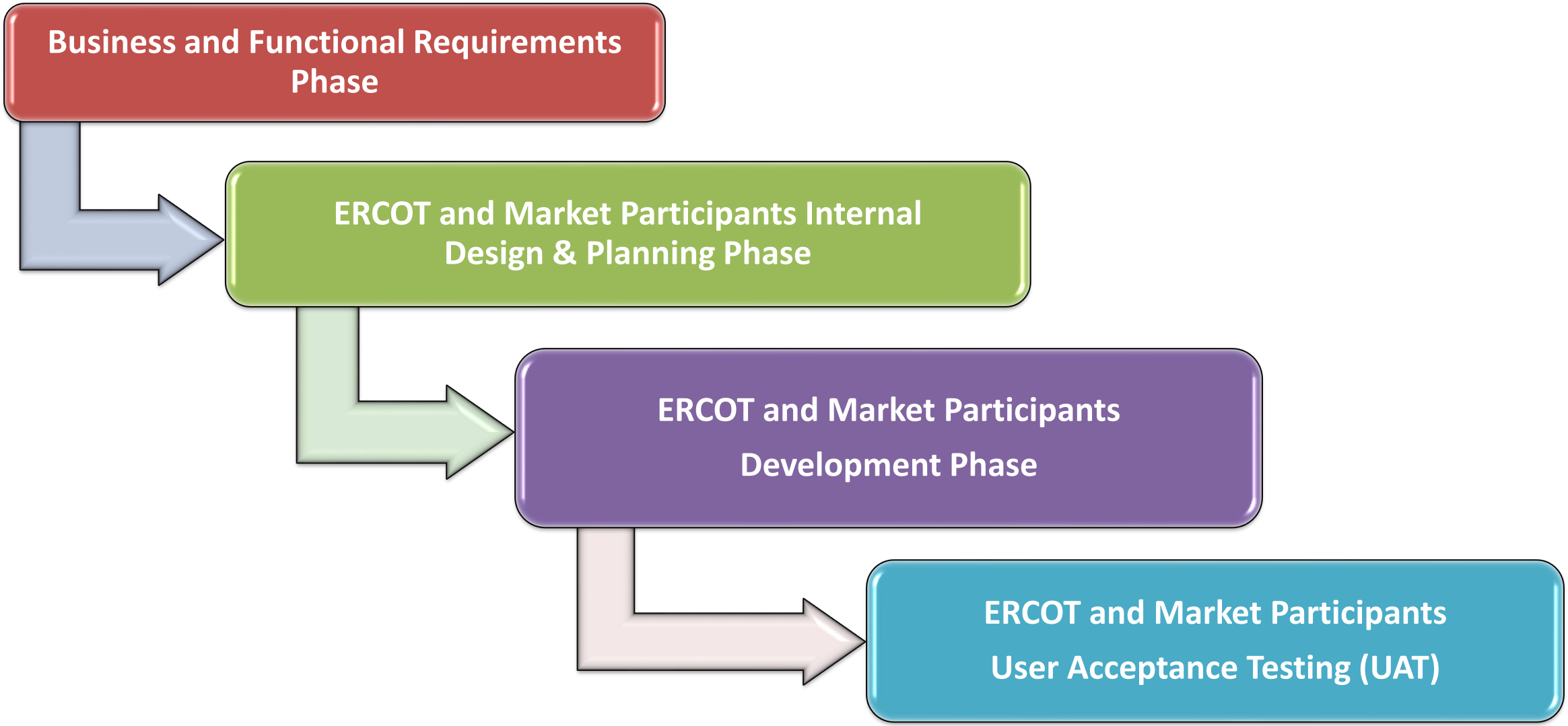
Texas SET v5.0
(23) Supporting Change Control Documents

- **TXSETCC830**: **Adds additional specific Reject Codes and Reject Reasons instead of an A13 Other** with Comments.
- **TXSETCC832**: To support Inadvertent Gain/Loss or Customer Rescission **adds 3 new Rejection Reasons**
- **TXSETCC833**: Adds **new Reject codes to the 814_19 by ERCOT** to support new CSA Start and End Dates.
- **TXSETCC834**: Adds **specific TDSP Unexecutable codes rather than just T018 - Other** for unapproved Distributed Generation equipment, Auto Transfer Switch or no signed Interconnection Agreement (IA) received
- **TXSETCC835**: Adds clarification to the **810_02 BIG07 Code 26** that the TDSP Invoice could include Miscellaneous Credits, as well as debts.

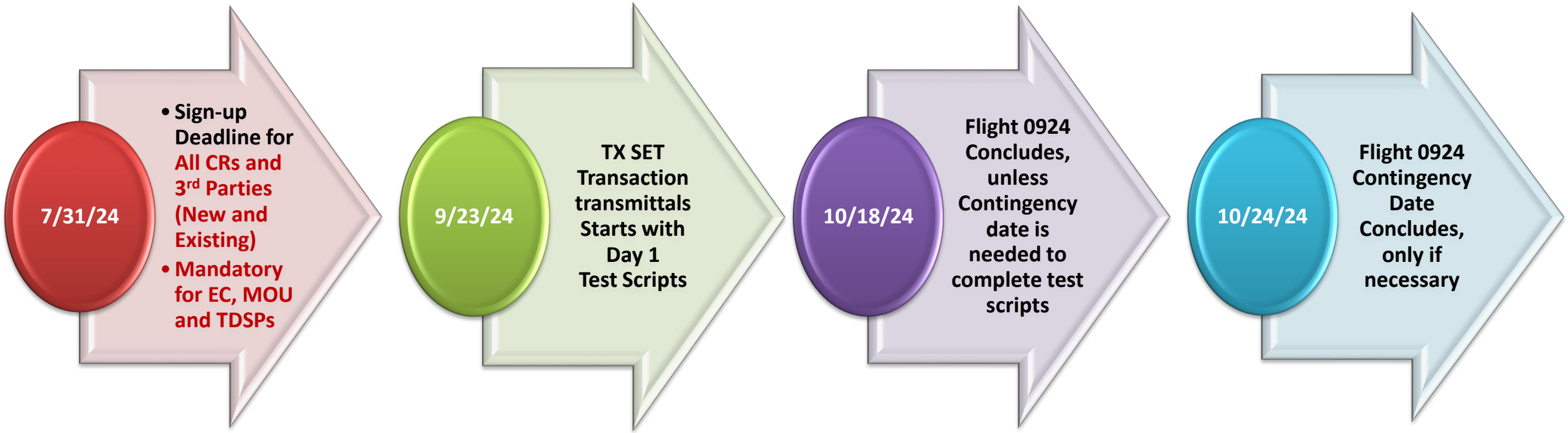
Texas SET v5.0
(23) Supporting Change Control Documents

- **TXSETCC836**: Adds **new Reject Code** for any transaction that contains only a comma or one character punctuation in the ESI ID(s) name field
- **TXSETCC837**: Updates the **814_25 to remove ERCOT Use Only** from the NFI reject code to allow TDSPs use.
- **TXSETCC838:** Updates the **814_19** to add the ASI02 of 001 (Change) and additional reject codes
- **TXSETCC840:** Updates the **814_18 and 814_19** Guides to be in line with Texas SET 5.0 Changes
- **TXSETCC842**: Updates the gray box for the **814_04 and 814_25** for the "**I2M - Invalid Second Move Out**"
- **TXSETCC843:** provides better clarification for the use of reject code "SOP" reject name and gray box – Pending Approval
- **TXSETCC844**: Removes "**I2M**" reject code from 814_04 – Pending Approval

Texas SET v5.0 Market Activities Anticipated through Q1 2024



Flight 0924 Dedicated to TX SET v5.0
Required Testing for ERCOT & all MPs



[Approved 2024 Test Flight Schedule]

Texas SET v5.0
Production Go-Live Weekend

ERCOT and MPs' System Conversion and Migration

Transition Kick-off : Friday, November 8, 2024

System Production Go-Live: Monday, November 11, 2024

Contingency (if needed)

ERCOT and MPs' System Conversion and Migration

Transition Kick-off : Friday, November 15, 2024

System Production Go-Live: Monday, November 18, 2024

Questions?


New automated processes, unique critical business datapoints, blended with a production Go-Live Date planned for mid-November will make Thanksgiving 2024 extra special for the Retail Market!

2023 Competitive Retailer Workshop

IDR to AMS Project Updates

Presented by: Kathy Scott, Lead Specialist Regulatory Affairs

June 8, 2021 ERCOT Board and PUCT Approved LPGRR068:

- With the Approval of **Load Profile Guide Revision Request (LPGRR) 068**:
  - **Would improve the accuracy of Initial Settlements** that occurs on Day 5 (Operating Day(OD)+ 4) by ERCOT by processing 15-minute interval usage data received daily from the TDSPs for an **AMS Metered Premise with a Peak Demand >/= 700kW/700kVA,** in addition;
  - Created **16 Load Profile as unique identifiers** that affirms to ERCOT and REPs of the Record that **Customer's ESI ID Peak Demand is eligible for 4CP Billing.**
    - **CenterPoint Energy's (2) New Load Profiles are:**
      - **BUSLRG_COAST_IDR_WS_NOTOU**
      - **BUSLRGDG_COAST_IDR_WS_NOTOU**

- **Wholesale and Retail Market Benefits**:
  - Eliminates **ERCOT's need to estimate 15-minute interval usage data during Initial, Final and True-Up Settlements** due to missing 867_03 Monthly IDR Usage transactions.
  - Allows **REPs of Record** to shadow settle 15-minute interval data based upon ERCOT's AMS Supplemental Interval Data Extract along with their receipt of TDSPs' LSE files delivered daily to SMT.
  - **Customers** have access to their daily 15-minute interval data on Smart Meter Texas (SMT) so they may manage their energy consumption and monitor their conservation efforts.

IDR to AMS Load Profiles Project Update:

Questions during previous IDR vs. AMS Workshops	CenterPoint Energy's Responses (Effective 04/04/2023)
Total Number of BUSIDRRQ Load Profiled ESI IDs?	4,846
Total Number of ESI IDs eligible to transition to BUSLRG?	2,277 (47.0% Approximately)
Total Number of ESI IDs eligible to transition to BUSLRGDG?	0
Total Number of ESI IDs remaining on BUSIDRRQ Profile?	2,569 (53.0% Approximately)

Why some BUSIDRRQ Profiles will not Change?

Questions during previous IDR vs. AMS Workshops	CenterPoint Energy's Responses
Under what scenarios for ESI IDs with an IDR Meter and Load Profile of **BUSIDRRQ will NOT** transition to **BUSLRG or BUSLRGDG?** Therefore, the 15-minute interval data REPs of Record currently receive today for these ESI IDs will continue to be available **only on the Monthly 867_03IDR details Usage transaction.** • **2,569 (approx.) will remain BUSIDRRQ**	• **Coincident Peak** • **Customers on Private Use communications' network or telephone lines** • **ERCOT Polled Settlement (EPS)** • **ERCOT is Meter Reading Entity (MRE)** where these IDR meters are read daily by ERCOT, and that 15-minute interval data is already processed daily by ERCOT for their settlements. • **Multiple Metered Premises** • **Subtractive Meters** • **Transmission Voltage**

BUSIDRRQ Transition to BUSLRG or BUSLRGDG Load Profile:

Questions from previous IDR vs. AMS Workshops	CenterPoint Energy's Responses
What will be provided to the Market for ESI IDs where Customer's Load: • **>/= 700 kVA** • **4CP Threshold previously met** • **Load Profile currently BUSIDRRQ** • **2,277 (approx.) will transition to BUSLRG**	• **Current population already has AMS Meters installed that capture kVAR channels, therefore, NO Meter exchange will be necessary.** • **Load Profile: BUSLRG or BUSLRGDG** **NOTE:** Load Profile changes must be completed on ESI ID Cycle Read Date **Daily 15-Minute Interval Data is sent to:** **ERCOT for Settlements** **Smart Meter Texas (SMT) for REP of Record & Customer** • **867_03 Monthly will contain 867_03IDR details (Historical 867_03IDR available)**

AMS Metered Premise Process for Customer Load < 700kVA:

Questions during previous IDR vs AMS Workshops	CenterPoint Energy's Responses

What will be provided to the Market for ESI IDs where Customer's Load is **< 700 kVA**?	• **Meter Type: AMS**
	• **Load Profile: BUSHI**
	  • **NOTE:** Load Profile changes must be completed on ESI ID Cycle Read Date.
	• **Daily 15-Minute Interval data is sent to:**
	  • **ERCOT for Settlements**
	  • **Smart Meter Texas (SMT) for REP of Record and Customer**
	• **867_03 Monthly Usage transaction contains Summary Level Data Only**

AMS Metered Premise Process for Customer Load >/= 700kVA:

Questions from previous IDR vs. AMS Workshops	CenterPoint Energy's Responses

What will be provided to the Market for ESI IDs where Customer's Load:
• **>/= 700 kVA**
• **4CP Threshold recently met**
• **Load Profile is BUSXXX**
	• **AMS Meter exchange required that captures kVAR channels**
	• **Load Profile: BUSLRG or BUSLRGDG**
	  • **NOTE:** All Load Profile changes must be completed on ESI ID Cycle Read Date.
	• **Daily 15-Minute Interval Data is sent to:**
	  • **ERCOT for Settlements**
	  • **Smart Meter Texas (SMT) for REP of Record & Customer**
	• **Following this Meter Exchange Monthly 867_03IDR details will be recording on a going forward basis.**

Load Profile after Move-Out (MVO) or Move-In (MVI) Completes:

Questions from previous IDR vs. AMS Workshops	CenterPoint Energy's Responses
What will be provided to the Market for ESI IDs where: • **Moved Out or new Move-In completed** • **4CP Threshold previously met** • **Load Profile is BUSLRG or BUSLRGDG**	• **AMS Meter capturing kVAR Channels previously installed, NO Meter Exchange will be necessary.** **Load Profile: BUSHI** **NOTE:** Load Profile changes must be completed on ESI ID Cycle Read Date. **Daily 15-Minute Interval Data is sent to:** **ERCOT for Settlements** **Smart Meter Texas (SMT) for REP of Record & Customer** **867_03 Monthly will contain 867_03IDR details (Historical 867_03IDR available)**

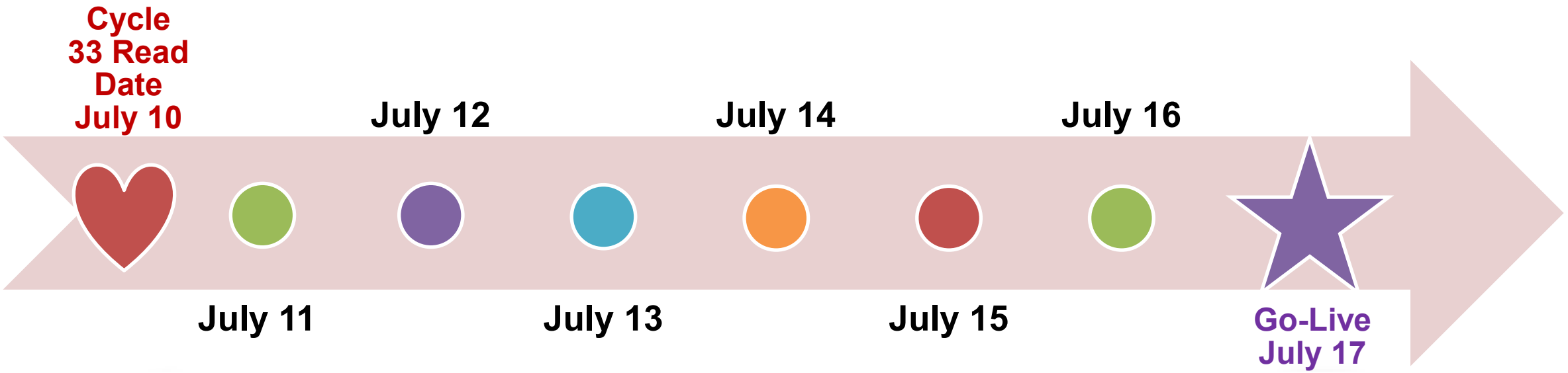
Current and Future Usage Data Availability

- **BUSIDRRQ, BUSLRG and BUSLRGDG Load Profiles:**
  - Monthly 867_03 with 15-minute interval data (IDR details) will apply to all three Load Profiles.
  - kVAR Interval data will be included with the Monthly 867_03IDR details for all three Load Profiles.
  - Historical Usage will continue to be taken from the Monthly 867_03IDR details and available for all three Load Profiles via the Competitive Retailer Information Portal (CRIP).
    - **NOTE**: If Meter needed to be exchanged to capture kVAR channels, **NO** historical usage data will be available prior to the exchange date.
  - 3rd Parties (Aggregators, Brokers, Non-ROR) Historical Usage accessibility for all three Load Profiles will be available with a completed LOA that is communicated via email to: Usage.Req@centerpointenergy.com
- **BUSLRG and BUSLRGDG Load Profiles:**
  - LSE files containing daily 15-minute Interval data will be communicated to ERCOT and Smart Meter Texas (SMT) for both BUSLRG and BUSLRGDG Load Profiles.

BUSLRG and BUSLRGDG Load Profiles Transition Plan and Production Go-Live

- **IDR to AMS Project Go-Live:** **Monday, July 17, 2023**
- **Transition Plan**:
  - Email Market Notice(s) to RMS Listserv providing IDR to AMS Project Go-Live information.
  - Email REP of Records - IDR to AMS Load Profile Report (spreadsheet) that includes:
    - List of REPs impacted ESI ID(s),
    - Load Profile Assignment: "**BUSLRG**" or "**BUSLRGDG**" and;
    - Load Profile Cycle Read Change Effective Date
  - Since all Load Profile changes **must** be effective with Cycle Read Date. If Cycle Read Date has recently occurred prior to July 17, 2023, then we will determine if we should use the prior Cycle Read Date as our effective date for "**BUSLRG"** or "**BUSLRGDG"** Load Profile change(s).
    - **Benefit**: We feel this will assist the Wholesale and Retail market by providing ERCOT with daily LSE files containing the 15-minute Interval data earlier instead of waiting until next month's Cycle Read Date.
  - After we receive ERCOT's acknowledgement that "**BUSLRG**" or "**BUSLRGDG**" Load Profile has loaded successfully in ERCOT's systems. CNP will start sending LSE files to ERCOT and SMT to backfill missing daily 15-minute interval data starting with the effective date of the Load Profile change for the impacted ESI IDs.

Transition and LSE Backfill Process Following July 17, 2023 Go-Live



Questions?

ERCOT Market Observation
After 23 Years Since Market Open

*With the addition of **new Load Profiles**, along with the future implementation of **Texas SET's v5.0** new functionality and process improvements will bring the Retail and Wholesale Markets even closer to **Perfecting the Customer Experience!***

2023 Competitive Retailer Workshop

Regulatory Update

Presented by: Jim Lee, Manager, ERCOT Regulatory Affairs

Topics

Regulatory Update

- CenterPoint Energy Regulatory Filings
- PUCT Rulemakings & Projects
- Legislative Activity

ERCOT Update

- Bridging Solution to Performance Credit Mechanism (PCM)
- ERCOT Aggregated DER (ADER) Pilot Program
- ERCOT System Administration Fee
- 2023 TAC Subcommittee Leadership

CenterPoint Energy Regulatory Filings

1. 2021 TEEEF – Tariff (Clean Copy) Filed April 10th; Docket 54796
   - Investment and related cost for the Company's investment in Temporary Emergency Electric Energy Facilities prior to 2022
     - Revenue requirement of $39M
     - Rates effective April 15, 2023
     - SAC04 code "MSC057"

2. TCOS #1 – Filed March 14th; Docket 54750
   - Investments and related costs for the period August 1, 2022 through January 31, 2023
   - Seeking approval of an adjusted annual wholesale TCOS revenue requirement of $556,479,647
   - First application in 2023 – per rule, Company may file an application no more than twice per calendar year

CenterPoint Energy Regulatory Filings (con't)

3. DCRF – Filed April 5th; Docket 54825
   - Investments and related costs for the period January 1, 2019, through December 31, 2022
     - Proposed rates effective September 1, 2023

4. 2022 TEEEF – Filed April 5th; Docket 54830
   - Investment and related cost for the Company's investment in Temporary Emergency Electric Energy Facilities
     - Revenue requirement of $188M
     - Proposed rates effective September 1, 2023
     - SAC04 code "MSC057"

Recently Completed PUCT Rulemakings

Docket

- 52287 – Power Alert Outage Criteria (Adopted 5/26/22)
- 52313 – Review of Statutory Definitions (Adopted 5/12/22)
- 52757 – Review of Chapter 25 – Rules Applicable to Electric Service Providers (Adopted 5/12/22)
- 53493 – Emergency Response Service (Adopted 8/4/22)
- 53401 – Electric Weather Preparedness Standards - Phase 2 (Adopted 9/29/22)
- 53169 – Review of Transmission Rates for Exports from ERCOT (Adopted 11/30/22)
- 53403 – Review of Chapter 25.101 - CCN Requirements (Adopted 11/30/22)
  - Certification Criteria, CCN requirements, Economic Transmission Projects
- 52796 – Review of Market Entrant Requirements (Adopted 4/6/23)

Current PUCT Rulemaking/Project Activity

Distributed Energy Resources

- 51603 – Review of Distributed Energy Resources
- 53911 – Aggregated Distributed Energy Resources (ADER) ERCOT Pilot Project (opened 07/28)
  - Texas ADER Task Force YouTube Channel
- 54224 – Cost Recovery for Service to DERs (opened 10/20)
  - Address policy regarding the applicability of delivery service rates to DESRs and CIAC (Contribution in Aid of Construction) policies for DERs seeking to interconnect to a distribution service provider's system
- 54233 – Technical Requirements and Interconnection Process for DERs
  - Update the frequency and voltage ride-through requirements for all DERs, to align with standards established in IEEE 1547-2018 and incorporate the standardized interconnection agreement and pre-screening studies provided by the collaborative efforts of the DESR providers and TDUs

Other

- 53404 – Power Restoration After Widespread Outages (TBD)
- 52509 – Review of Commission's Filing Requirements (TBD)

Legislative Activity

- 88th Texas Regular Legislative Session
  - Convenes every odd-numbered year for 140 days
  - 2023 session began Jan 10th and will adjourn Monday, May 29th
  - Total Bills Introduced: 7,992 (as of 4/19/23)
    - 2021: 6,927
    - 2019: 7,324

- Key Bills of Interest
  - SB 2012 – PCM Guardrails
  - HB 2555/SB 1111 – Resiliency
  - HB 2793/SB 1212 – DER
  - HB 3043/SB 1015 – DCRF Adjustment
  - HB 2973/SB 1075 – Temporary Emergency Electric Energy Facilities
  - HB 3095/SB 1519 – Residential Load Management
  - HB 3964 – Energy Efficiency Goals
  - HB1500/SB 1368 – Sunset Review
  - HB 1984/SB 1287 – Transmission Interconnection Cost Allocation (max MW allowance per interconnection)
  - HB 4438/SB 2013 – Infrastructure Protection (Cybersecurity)

ERCOT Update - Bridging Solution to the PCM

Background:

In late 2022, the PUCT Commissioners endorsed the Performance Credit Mechanism (PCM) as the PUCT-preferred solution to the ERCOT Wholesale Market Redesign. Recognizing that the PCM could not be implemented immediately, the PUCT instructed ERCOT to "evaluate bridging options to retain existing assets and build new dispatchable generation until the PCM can be fully implemented". *[PCM: PUCT Project 53298]*

** Note: While the PUCT instructed ERCOT to move forward with their analysis, the Legislature is still deciding whether the PCM is the ultimate solution.*

ERCOT & TAC Preferred Solution: Multi-step floor (or "adder"): 3,000 - 6,500MW @ $20/MWh & 7,000MW @ $10MWh

1. Aligns with PCM: The back-cast analysis for 2020 and 2022 indicates that by applying these floors **the total revenue increase would be in the $500M range**. While the analysis does not account for behavioral changes, this level of increase aligns with the additional average revenue PCM would provide (as calculated by E3).
2. Targeted to the right resources at the right time: The back-cast analysis for 2022 confirms that when applying these floors **the increase in revenue would be largely directed to dispatchable resources**. In the preferred scenario 80% of the revenue increase would be directed to dispatchable resources. **The floor prices are also having impact when ERCOT is seeing the greatest need for increased generator commitment**.
3. Helps address RUC: Applying a floor that kicks in initially in the 6500-7000MW range **provides a self-commitment incentive better aligned with conservative operations**. Adding multiple steps to the floor incorporates feedback provided by market participants, provides for tiering in the strength of the self-commitment signal, and provides some mitigation of risk for generators that self-commit.

- The proposed enhancement of price signals would have positive effects on retaining existing assets, adding new dispatchable generation, and reducing the frequency of RUCs for system capacity. Additionally, these ORDC (Operating Reserve Demand Curve) bridging options would have **minimal system changes and be quickly implementable** (estimated at approx. 4 months); fit within the existing market framework, from day-ahead through Settlement, including credit; and continue to be hedge-able by market participants through energy positions.

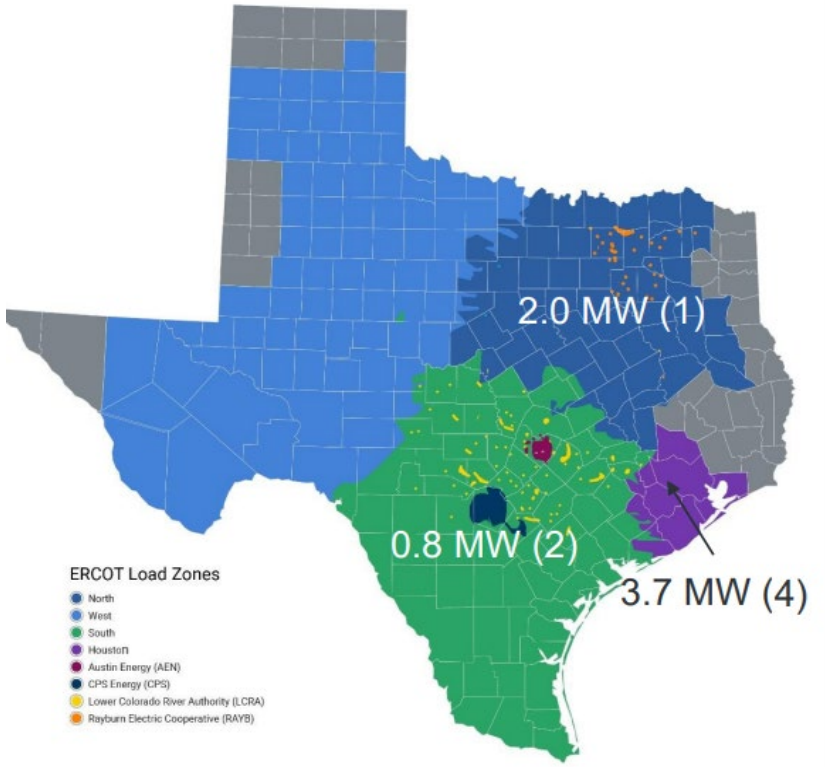
ERCOT Update – ADER Pilot Project

Background

In the Fall of 2022, the PUCT created the ADER Task Force to tackle issues related to aggregated DERs. The ADER Pilot Project was established in October 2022 to evaluate the participation of ADERs in the ERCOT wholesale market. Beginning in December 2022, prospective participants in the pilot have engaged with end-use customers, Distribution Service Providers (DSPs), and ERCOT staff to set up ADERs to aid in the evaluation.

ERCOT has accepted seven (7) Details of the Aggregation (DOTA) forms:

- Aggregated devices include synchronous generators, stationary batteries, and HVAC systems (Demand Response)
- All ADERs intend to provide Energy as well as Non-Spin
- ERCOT-wide Energy: 6.5MW
  - CNP: 3.7MW; 57% of ERCOT-wide participation
- ERCOT-wide Non-Spin: 2.2MW
  - CNP: 1.3MW; 59% of ERCOT-wide participation



ERCOT Update – SysAdmin Fee & 2023 TAC Leadership

- Changes to the ERCOT System Administrative Fee

  In June, the ERCOT Board will vote on ERCOT's 2024-2025 Biennial Budget Request, including the System Administration Fee (SAF) rate and the total authorized spending for 2024 and 2025.

  ERCOT management recommends the SAF rate increase to $0.71 per MWh, beginning January 1, 2024.

  - Current projections show the $0.71/MWh rate in effect from 2024-2027, with the next increase in 2028.
  - This represents a compound annual growth rate of 3.1% since the last increase in 2016 ($0.555 per MWh).

- 2023 TAC Subcommittee Leadership

  - **Protocol Revision Subcommittee (PRS)**
    Chair: Martha Henson, Oncor Electric Delivery
    Vice Chair: Diana Coleman, CPS Energy
  - **Retail Market Subcommittee (RMS)**
    Chair: Debbie McKeever, Oncor Electric Delivery
    Vice Chair: John Schatz, Luminant Generation
  - **Credit Finance Subgroup (CFSG) [created 3/31/23]**
    Chair: Brenden Sager, Austin Energy
    Vice Chair: Loretto Martin, Reliant
  - **Reliability and Operations Subcommittee (ROS)**
    Chair: Chase Smith, Southern Power Co.
    Vice Chair: Katie Rich, Golden Spread Electric Cooperative
  - **Wholesale Market Subcommittee (WMS)**
    Chair: Eric Blakey, Pedernales Electric Cooperative
    Vice Chair: Jim Lee, CenterPoint Energy

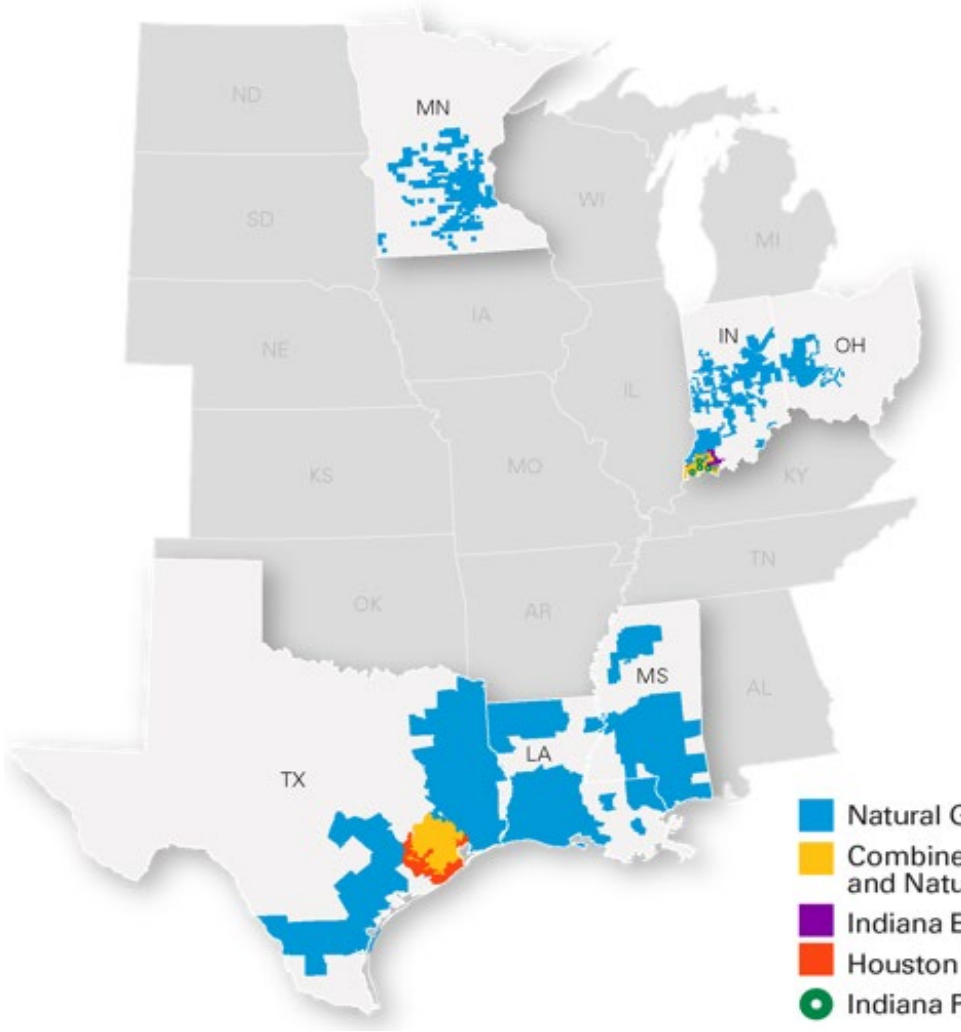

Q
A

2023 Competitive Retailer Workshop

Emergency Operations Plan Update

Presented by: Katie Anderson, Emergency Operations Coordinator

Where We Operate



Natural Gas Distribution, Electric Transmission & Distribution and Power Generation

nearly
7 million
gas and electric metered customers

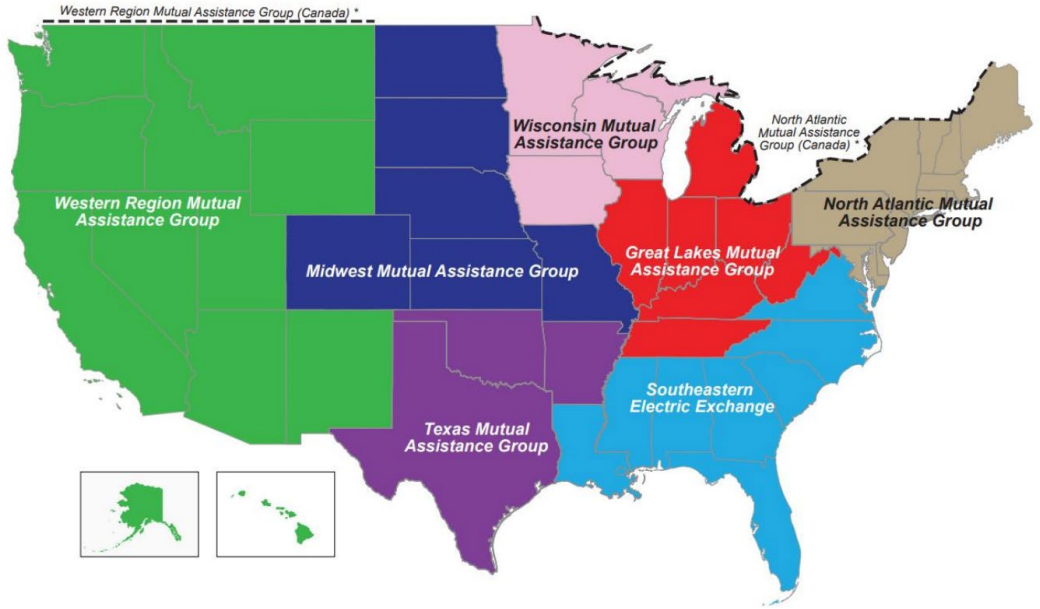
6
states

- Natural Gas Distribution
- Combined Electric Transmission & Distribution and Natural Gas Distribution
- Indiana Electric Transmission & Distribution
- Houston Electric Transmission & Distribution
- Indiana Power Generation

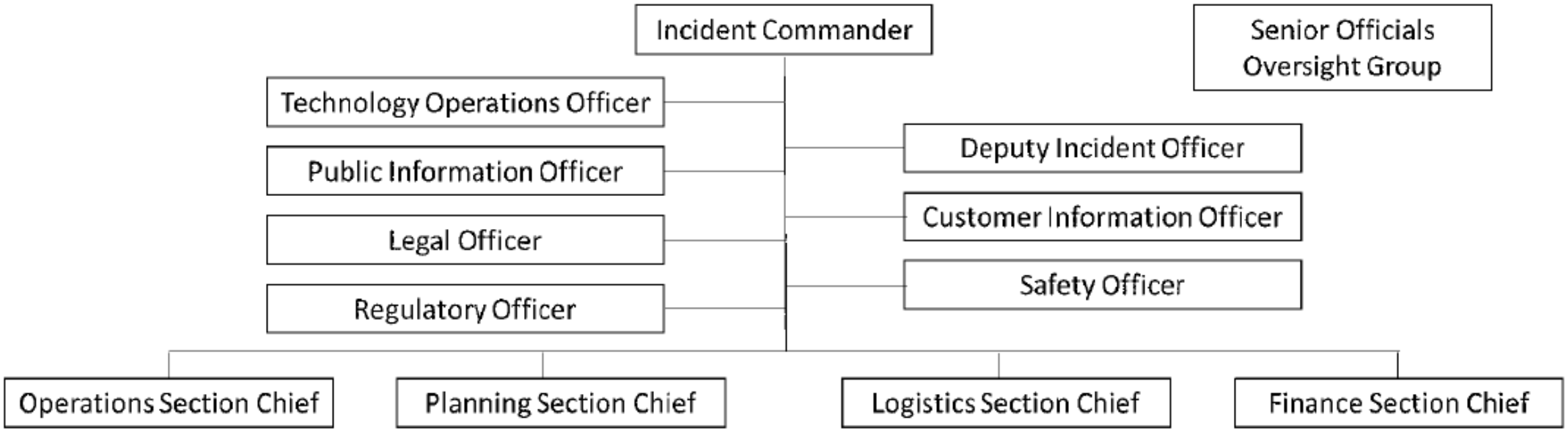
General EOP Process

- CenterPoint Energy maintains strong engagement and leadership in industry-lead best practices committees, regional mutual assistance groups, and industry trade associations that coordinate collaboration between public and private groups
- Adoption of FEMA's Incident Command System into CenterPoint Energy's EOP
- Scope:
  - Coordinate 5 Command Centers
  - 12 Service Centers
  - 12 plus staging sites
  - 15,000 Mutual Assistance and Contractors
  - Support the restoration of up to 2.5 million customers in our 5,000 square-mile electric service footprint
- Electric operations manages the execution of the EOP restoration activities, and the Incident Command ensures all support functions and communications are engaged to support restoration

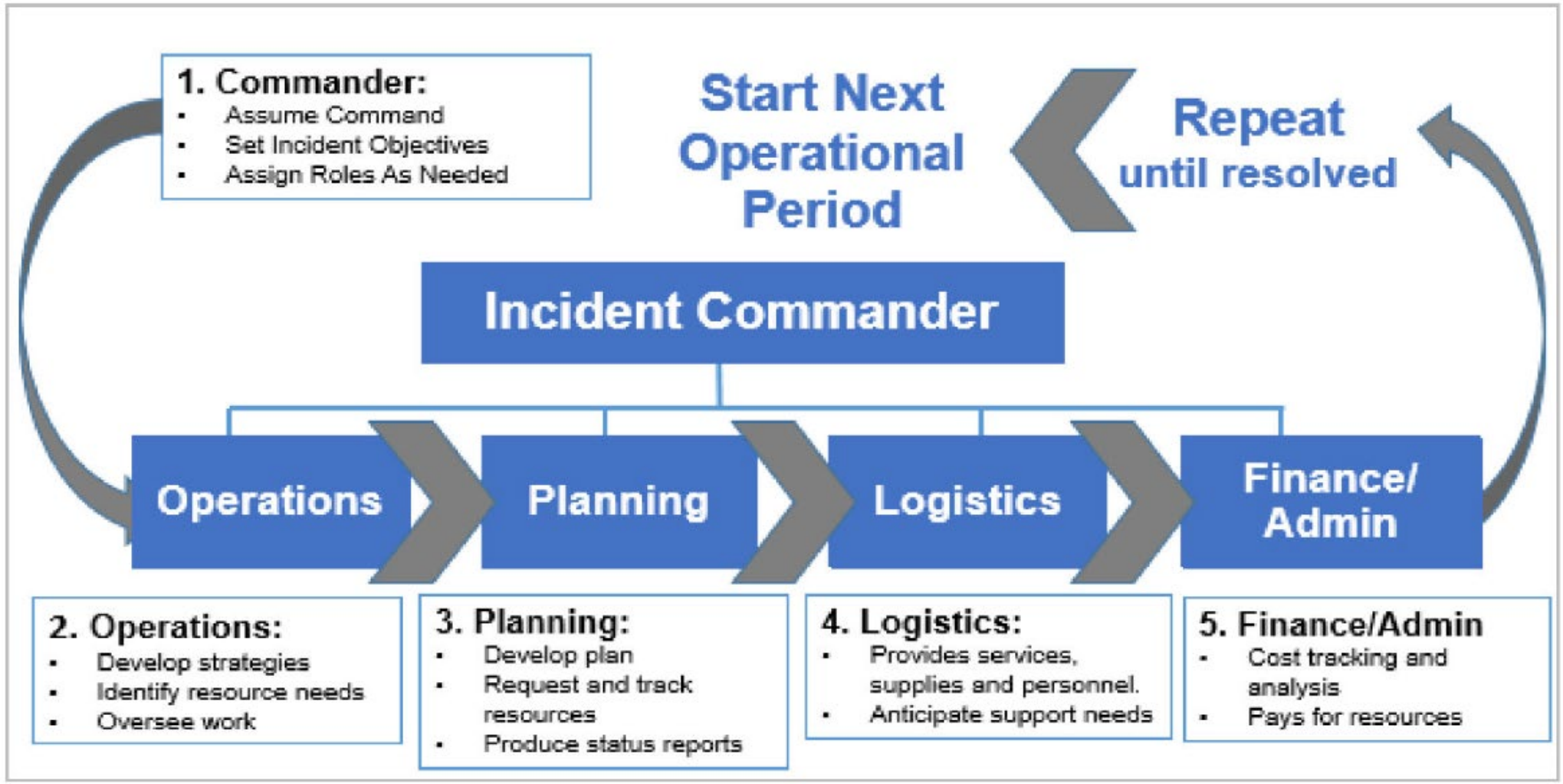
Regional Mutual Assistance Groups



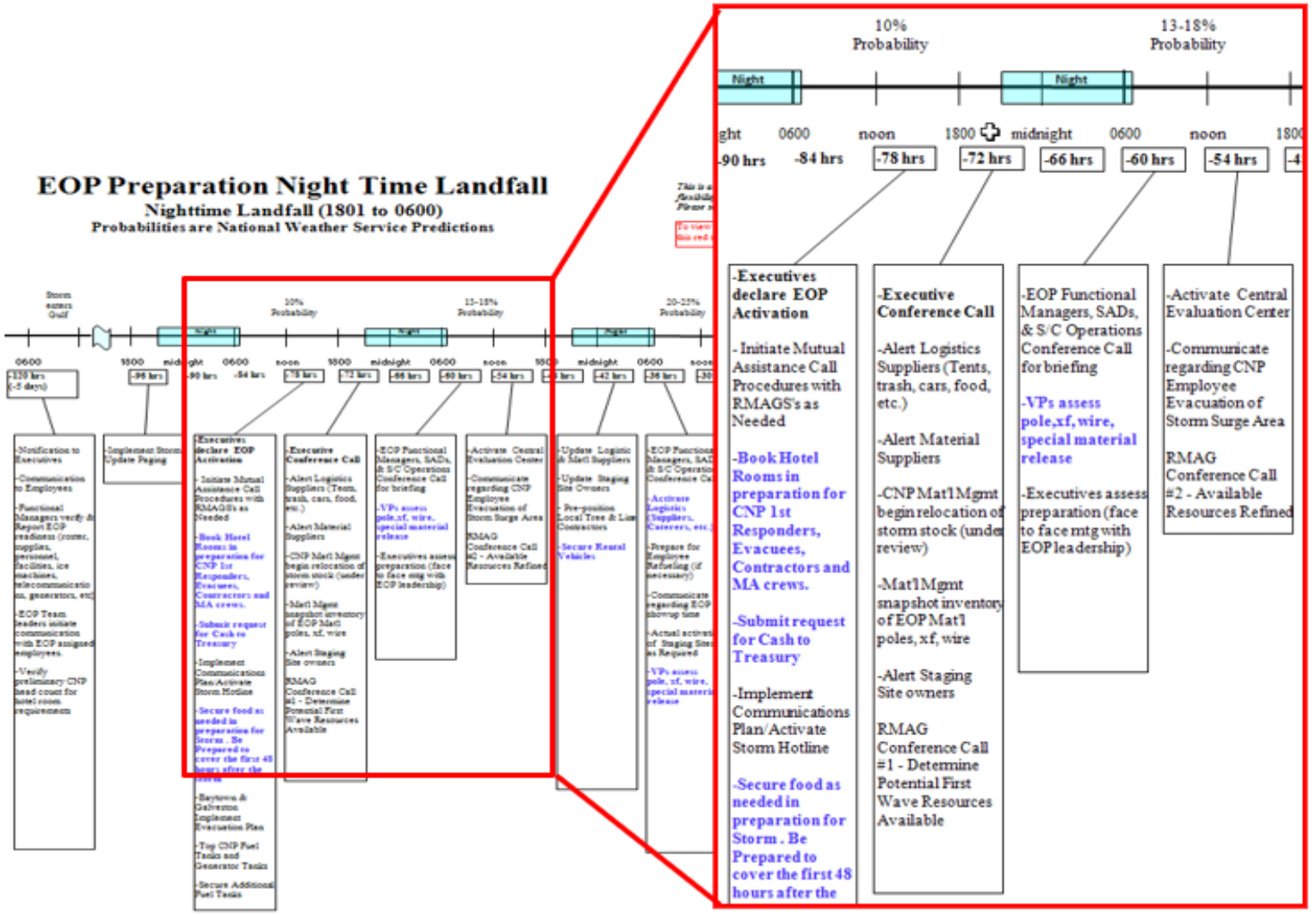
Incident Command Structure Organization



Incident Action Planning by ICS



Activating the Emergency Operating Plan



Restoration Process

- Goal – restore power to critical facilities first then the largest number of people in the shortest amount of time safely and efficiently

- Approach
  1) Energize all electric distribution facilities that did not sustain damage
  2) Simultaneously assess damage
  3) Repair facilities from substation out based on Priority
  4) Repair individual service that were not able to accept service

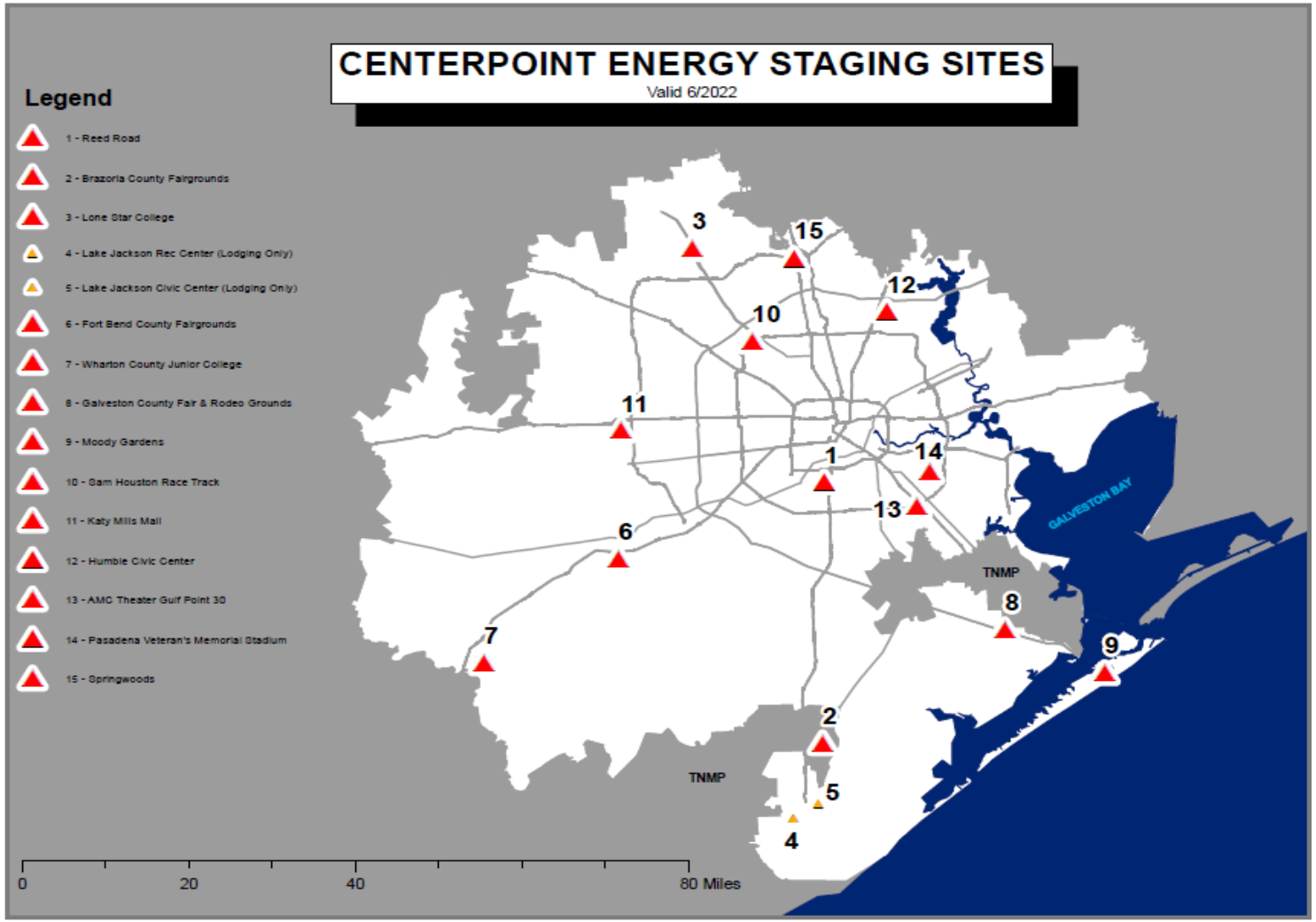
Actual EOP Events

- Hurricane Nicholas, September 2021
  - Made landfall as Category 1
  - 500k customers lost power
  - 5 days to restore power
- Hurricane Ike, September 2008
  - Made landfall as Category 2
  - 2.1 million customers lost power
  - 18 days to restore power
- Hurricane Rita, September 2005
  - Made landfall as Category 3
  - 719,000 customers lost power
  - 6 days to restore power
- Hurricane Alicia, August 1983
  - Made landfall as Category 3
  - 750,000 customers lost power
  - 16 days to restore power

Hurricane Ike Logistics Support

- More than 1 million gallons of fuel for 7,000 vehicles
- 2 million lbs. of ice
- 94,000 hotel room nights
- 5,000 + cots system-wide
- More than 11,000 mutual assistance crews from 35 states and Canada
- 8,500 out of more than 1 million wood distribution poles
- 300,000 ft. of wire & cable out of approximately 140 million ft.
- 4,000 transformers out of 400,000
- 860,000 meals

Staging Site Locations



Staging Site – Katy Mills Mall

Staging Site Planning Overlay

New CNP Outage Tracker

CenterPoint Energy

Outage Tracker

Find address or place

REPORT AN OUTAGE | GET ALERTS

OUTAGE OVERVIEW

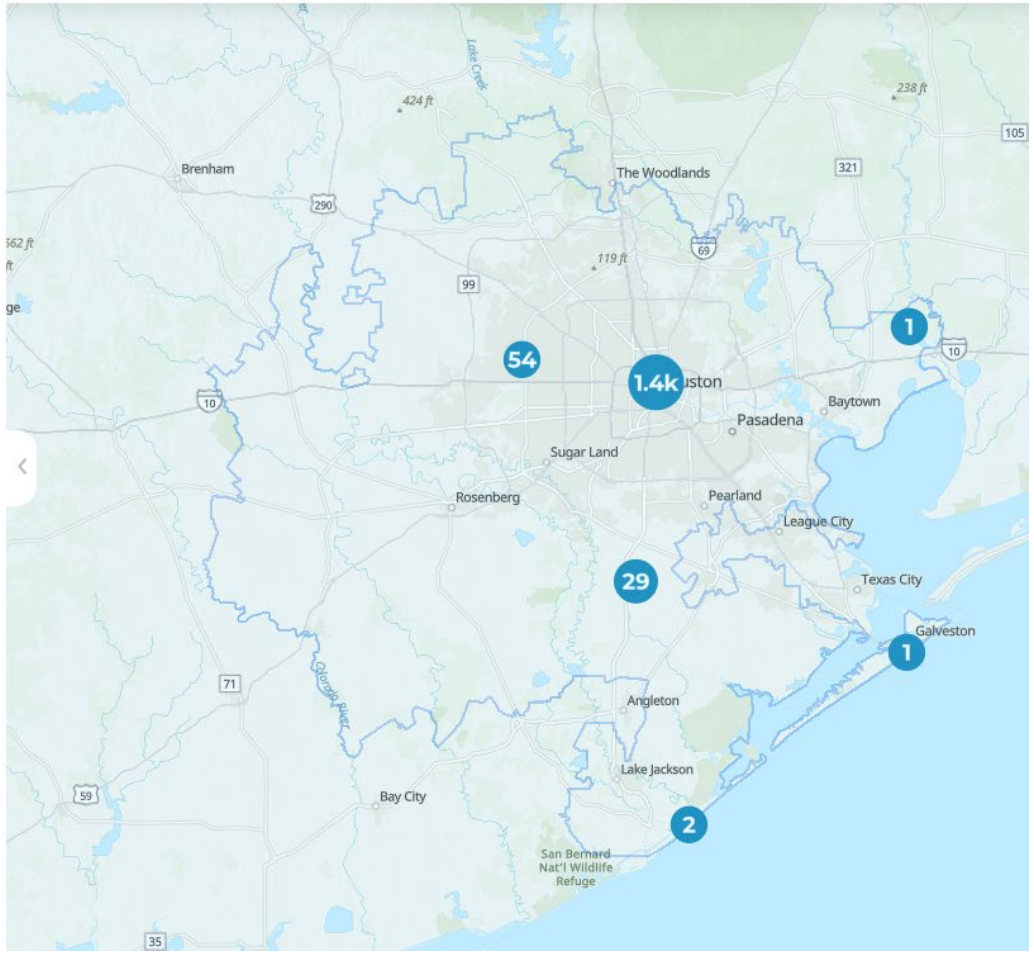
Note: Data relates to visible area on the map.

1511 Customers affected	30566 Customers restored past 24 hrs
108 Active outages	491 Outages restored past 24 hrs

(Updated 05:42 PM. Updates every 5 minutes.)

SYSTEM STATUS

Normal business operations



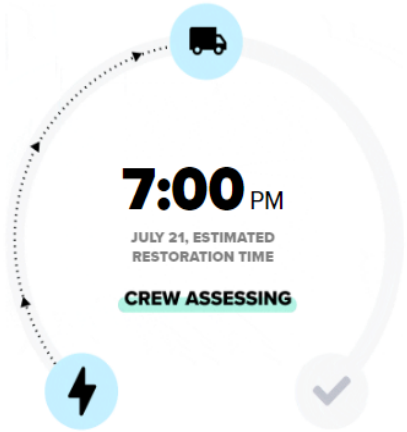
OUTAGE DETAILS

July 21 @ 4:57 PM
Outage reported

1
Customers affected

Outage circles represent estimated locations for outages and show the estimated number of customers without power in the vicinity of the circle.

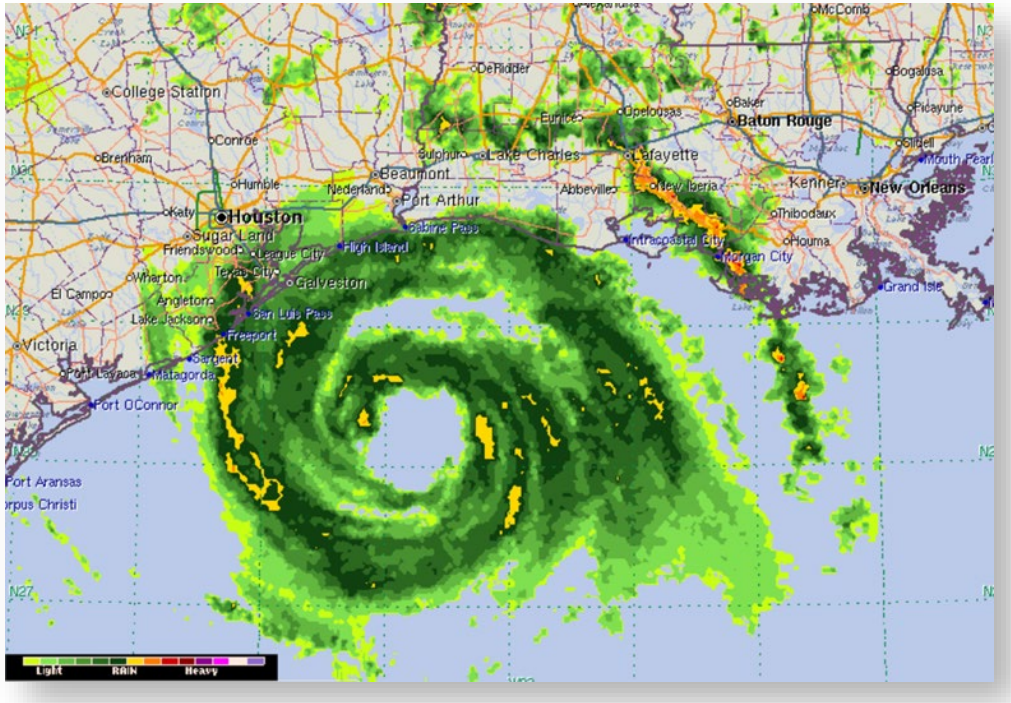
RESTORATION TRACKER



Power Alert Service

June 1st Drill - Hurricane June

- Day 2 Drill
- Category 5 Hurricane
- ~2 Million Outages
- Heaviest impacted areas:
  - Galveston
  - South Houston
  - Baytown
  - Bellaire
  - Brazoria
- Tree and pole down damage. Major Flooding to Downtown, Medical Center, Baytown, Galveston and South Houston



June 1st Drill - Hurricane June Settings

- On Monday 5/30/22 around 9pm a severe EF3 tornado struck just west of Dayton, OH
- Anticipated ~5,000 distribution resources and ~2,000 vegetation were requested.
- Total of 3,000 Distribution and 1,025 VM will be arriving over next two days on property to support restoration.
- CenterPoint had to utilize resources from both Southeast Electric Exchange and Midwest Mutual Assistance Groups.
- 45 direct injects plus approximately 27 more given to Operations this morning
- Staging sites will be opened at the following locations (simulated):
  - Sam Houston Racetrack (GPT)
  - Lone Star Community College (CYP)
  - Reed Rd. (BEL)
  - Butler Stadium (SUG)

June 15th Staging Site Drill

- Testing Turn-Key Vendor Staging Site
- 200+ CenterPoint Employees Consisting of:
  - Staging Site Managers
  - Operations Managers
  - Hotel Coordinators
  - Security Coordinators
  - Logistics Coordinators
  - Resource Check-In Coordinators
  - Operations Data Support
  - Technology Operations
  - Crew Spokespersons
  - Pole Depot

Mobile Command

Corporate Communications & Gas Operations

FORTS Units


CenterPoint Energy
CenterPoint Energy

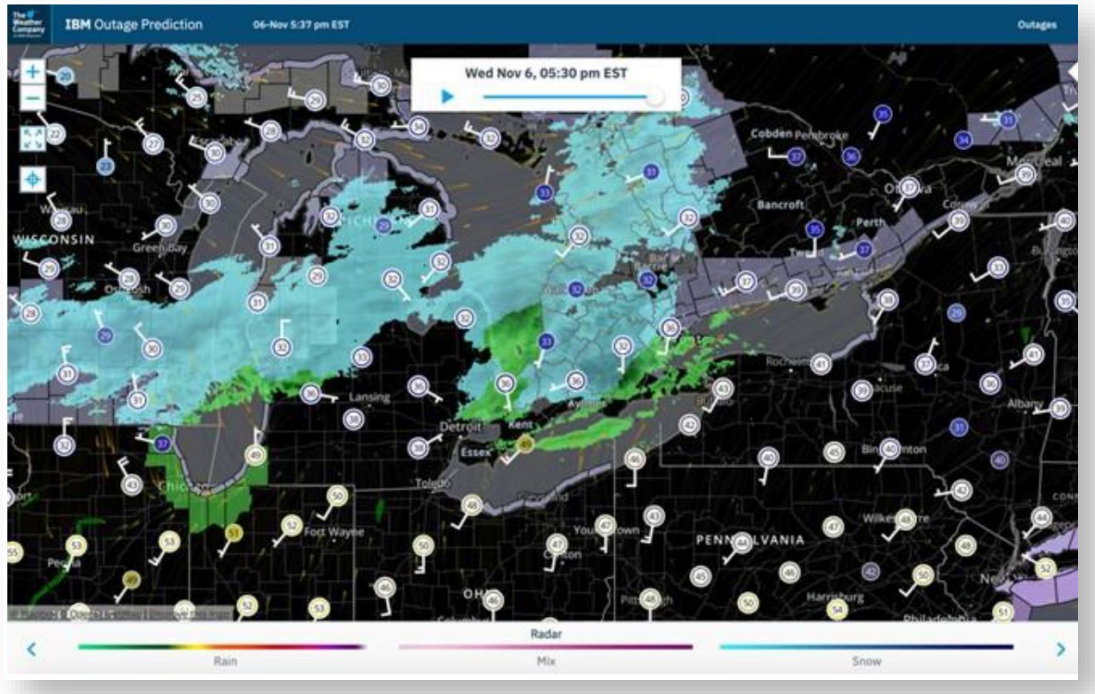

CenterPoint Energy
CenterPoint Energy
2733
272


CenterPoint Energy
ICE
ICE
ICE


MOBILE OPERATIONS
CenterPoint Energy

2023+ Preparations

- Self Contained Restoration & Staging Sites
  - Lessons learned from COVID
- Weather Prediction Damage Modeling
  - Merge asset data with weather forecasting modeling
- Digital Mutual Assistance
  - Remote onboarding
  - App to communicate with crews
  - Dashboarding resources needs



Questions & Answers

2023 Competitive Retailer Workshop

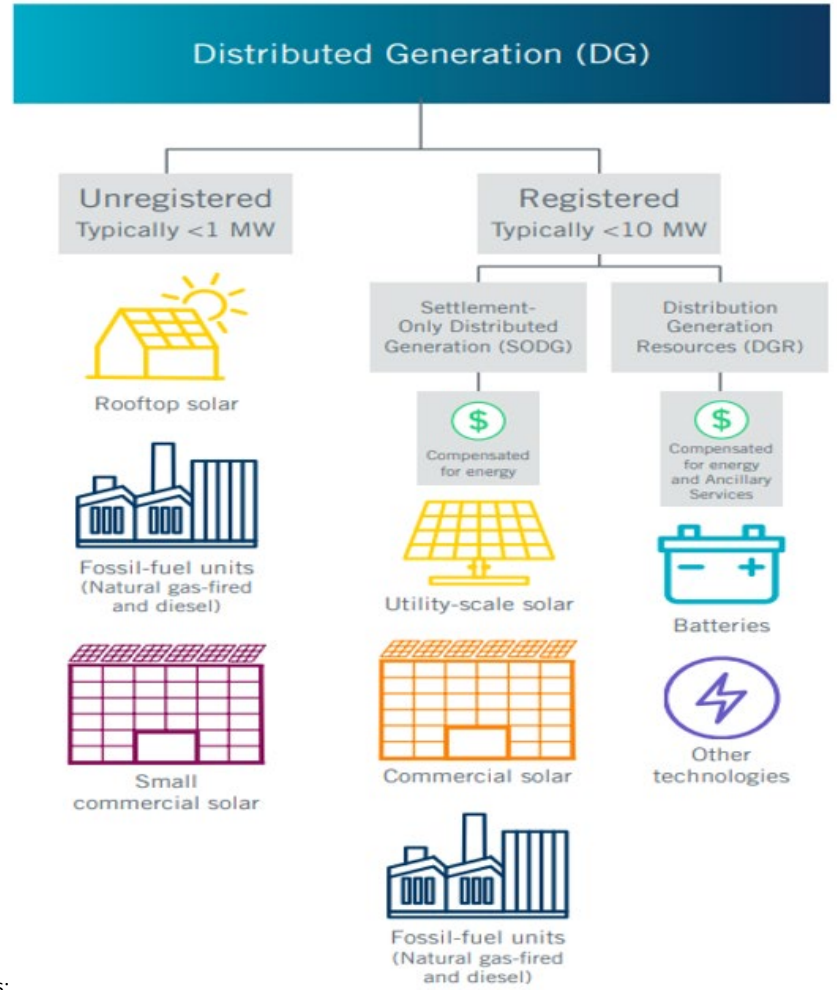
Distributed Generation

Presented by: Mythili Chaganti & Gustavo Silva

Glossary of Key Terms

Acronym	Long Form	Definition
DG	Distributed Generation	*Electric generation that feeds into the distribution grid, rather than the bulk transmission grid, on the utility side of the meter, or on customer side [1]*
DER	Distributed Energy Resource	*Behind a meter resource on customer premises or connected to a utility distribution system. This includes renewable energy, connected devices like demand response, energy efficiency, battery storage, electric vehicles and their supply equipment [2]*
DESR	Distributed Energy Storage Resource	*An energy storage resource that is distribution system connected generation or system-connected energy resource utilized for the purpose of storing electricity [3]*
ADER	Aggregate Distributed Energy Resource	*A resource consisting of multiple individual metered sites/premises connected at the distribution system level that has the ability in aggregate to respond to ERCOT Dispatch Instructions [3]*
UDG	Unregistered Distributed Generation	*Rooftop solar, gas and diesel generators not registered with ERCOT where customers may be compensated by their REP (systems typically less than 1 MW) [3]*
SODG	Settlement-Only Distributed Generation	*Self-dispatched solar, gas and diesel resources registered with ERCOT (systems that are 1MW or greater and inject into the grid are required to register w/ ERCOT) [3]*

For simplicity, we refer to the system as DER



Sources:
[1] www.ferc.gov, Energy Policy Act of 2005
[2] www.misoenergy.org, DER Glossary Revised 2021
[3] www.ercot.org, Nodal Protocol Requiring Revision 1016

Timeline of DER Adoption

Federal, State, & Industry Milestones

20th Century

- Public Utility Regulatory Policies Act (PURPA) 1978
- Energy Policy Act 1992
- REC Program in TX 1999

2000 to 2010

- TX Deregulation 2000
- IEEE 1547 – 2003
- **Energy Policy** Act 2005

2010 to 2020

- Industry Technological Advancements
- IEEE 1547 – 2018
- Increased **Consumer Awareness**

2020 to Date

- PUCT - **ADER Task Force**
- **FERC Order 2222 (ADER)**
- **Infrastructure Reduction Act 2022**
- **EPRI** – DSO Roadmap

CEHE Growth & Application Milestones

1990's

- Avg. **20** inquires per year
- Manual paper application
- Tracked in **Excel**

2000 to 2010

- Avg. **160** inquiries per year
- Manual paper applications
- Tracked in **SharePoint**

2010 to 2020

- Avg. **1000-3000** inquiries per year
- Manual/EMS Web Portal
- Tracked in **SharePoint**

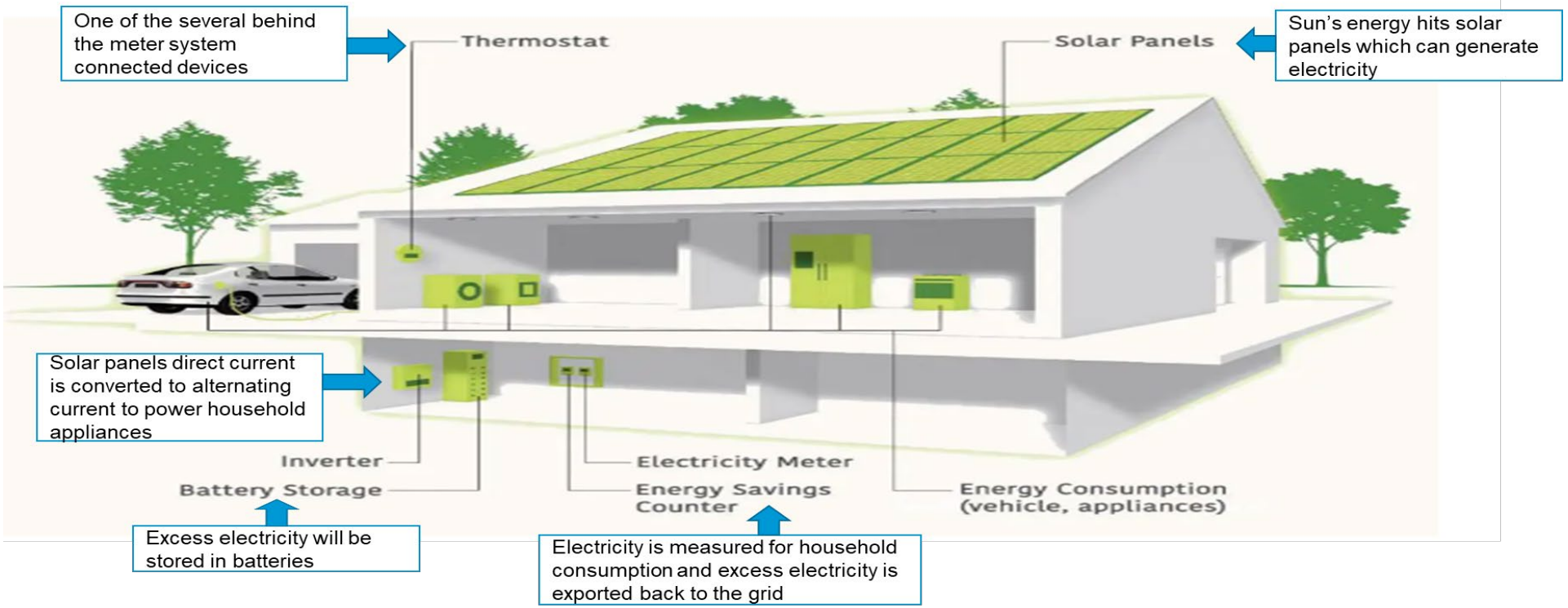
2020 to Date

- Average **10K to 20K** inquiries per year
- **Eliminate manual entries/eTrack**
- Improved analytics & tools
- Improved customer experience *(i.e. DER, EV, ATS, EE portal)*

Fuel Source & Technology

These are the different fuel sources and types of generation technology that are installed on CenterPoint Energy's distribution grid.

Technology / Fuel Source	Synchronous			Induction			Inverter		
	Diesel 153.44 MW	Natural Gas 255.05 MW	Landfill Gas 13.38 MW	Hydro 0.112 MW	Natural Gas 1.00 MW	Landfill Gas 1.46 MW	Wind 64.38 MW	Solar 322.63 MW	Battery 25.73 MW
Renewable Y			DER	DER		DER	DER	DER	DER/DESR
Renewable N	DG	DG	DG		DG	DG			DGR/DESR



DER Team Overview

- DER Team handles both large-scale and small-scale distributed energy resource applications
  - Large scale defined as greater than 500kW of generation
  - Small scale defined as less than 50kW
  - Systems in between 50kW and 500kW are evaluated to determine classification
- Primary purpose is to ensure all DER projects are safe for grid interconnection and meet all relevant PUCT requirements and CNP specifications

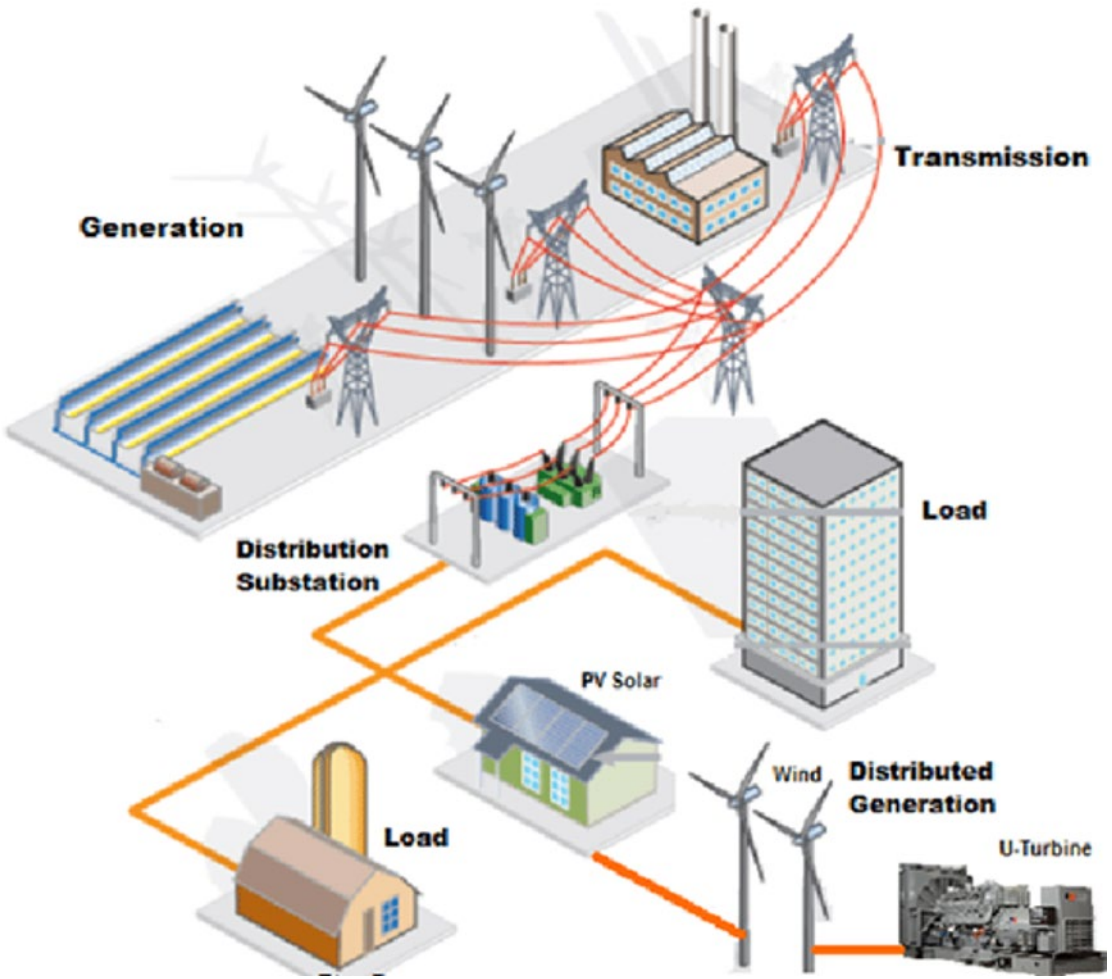
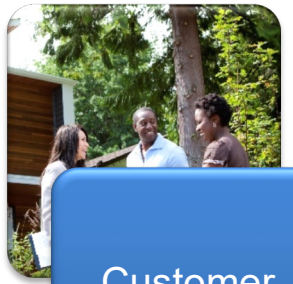
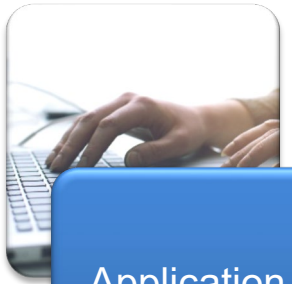


Photo Courtesy: UNT, Solar Power and the Electric Grid, Energy Analysis (Fact Sheet)

Interconnection Application Overview



Customer Inquiry



Application Created

CNP Design Review

Construction

CNP Final Review

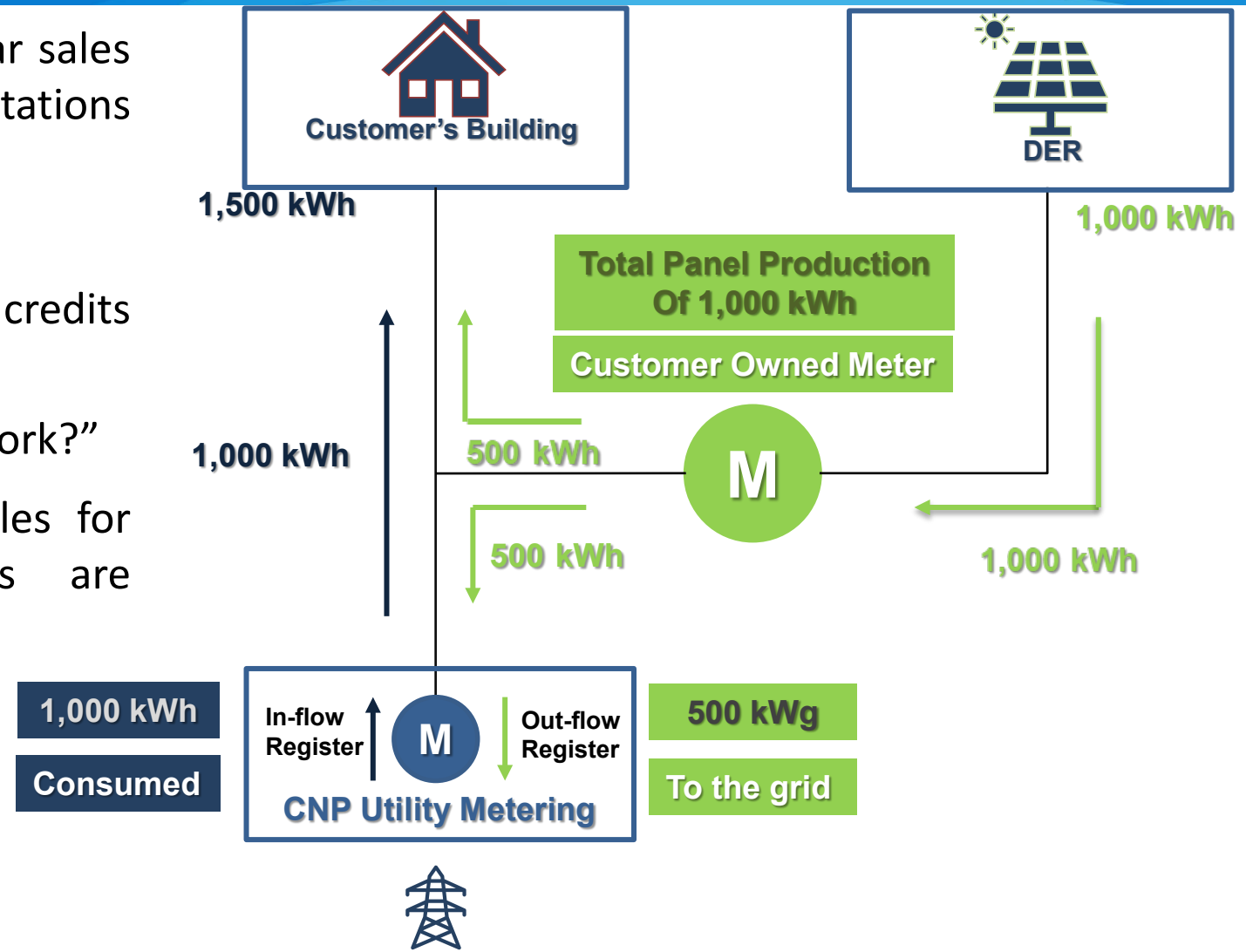
PTO Issued

After PTO Issued

- Customers are emailed the signed interconnection agreement and PTO documents
- The meters are remotely programmed to capture and provide the kWh and kWg (hours consumed, and excess hours generated)
- Customers can sign-up to a solar buy-back program
- Load Profile request is submitted to ERCOT

Frequent Customer Concerns

- Many customers are approached by solar sales teams that often set unachievable expectations like:
  - Zero-dollar electric bill
  - The ability to make a lot of money off credits provided by solar panels
  - Buy-back programs – “How do they work?”
- Customers are confused about the roles for which REPs, TDSPs, and installers are responsible



Questions & Answers

2023 Competitive Retailer Workshop

Galveston Historical Foundation

Presented by: Mark Scibinico, Port Captain/Director of the Galveston Historic Seaport

Closing Remarks & Wrap-up