

ERCOT Retail 101



**Greetings
and
Introductions**

- WebEx Training Tips
 - Windows
 - Buttons
- Attendance
- Questions / Chat



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& audio capabilities**

PROTOCOL DISCLAIMER

This presentation provides a general overview of the Texas Nodal Market and is not intended to be a substitute for the ERCOT Protocols, as amended from time to time. If any conflict exists between this presentation and the ERCOT Protocols, the ERCOT Protocols shall control in all respects.

For more information, please visit:

<http://www.ercot.com/mktrules/nprotocols/>

Topics in this course include:

1

Retail Market Responsibilities

2

Market Rules

3

Retail Operations

4

Metering

5

Wholesale Settlement of Retail Load

6

Data Transparency and Availability

7

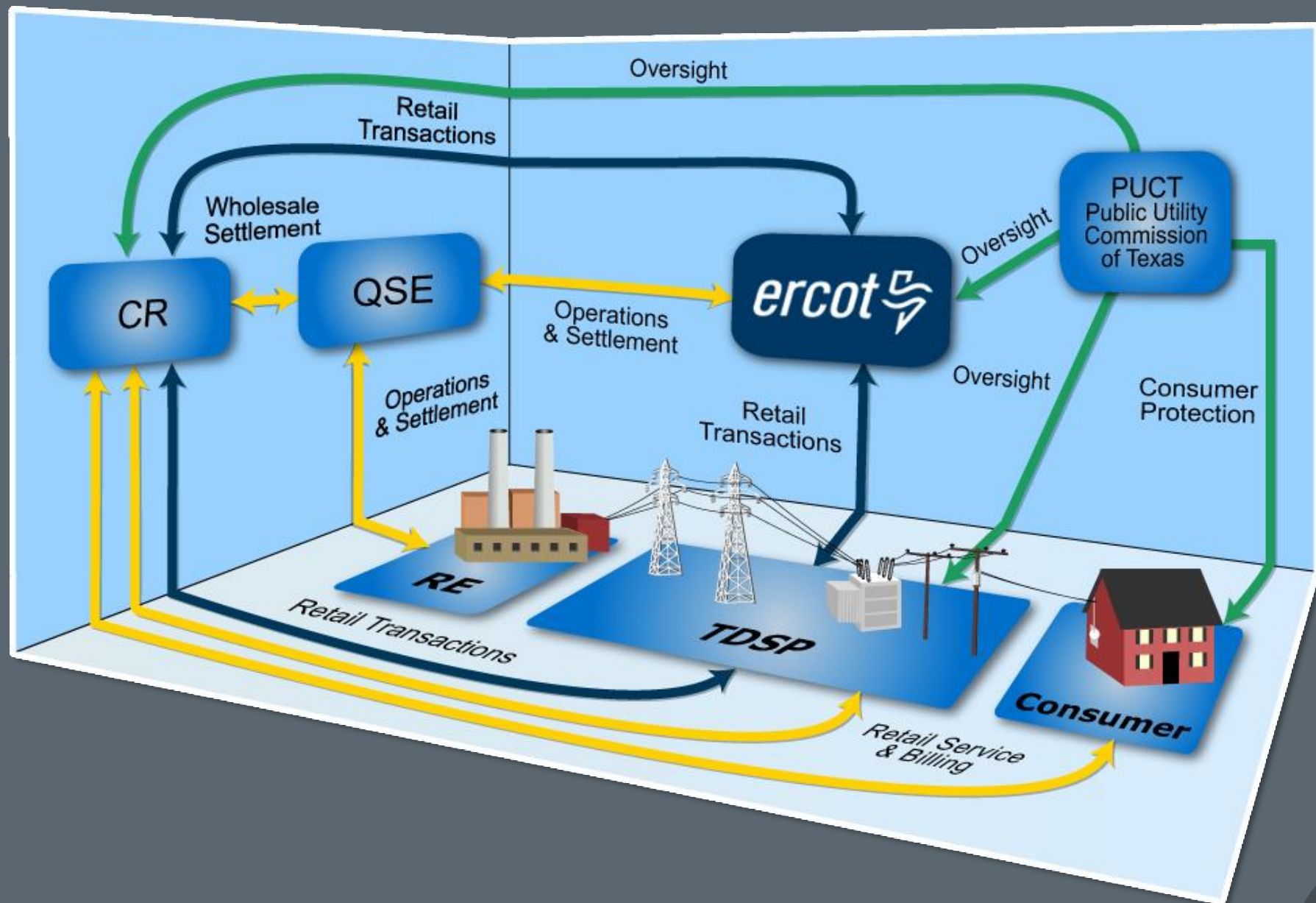
Issue Resolution

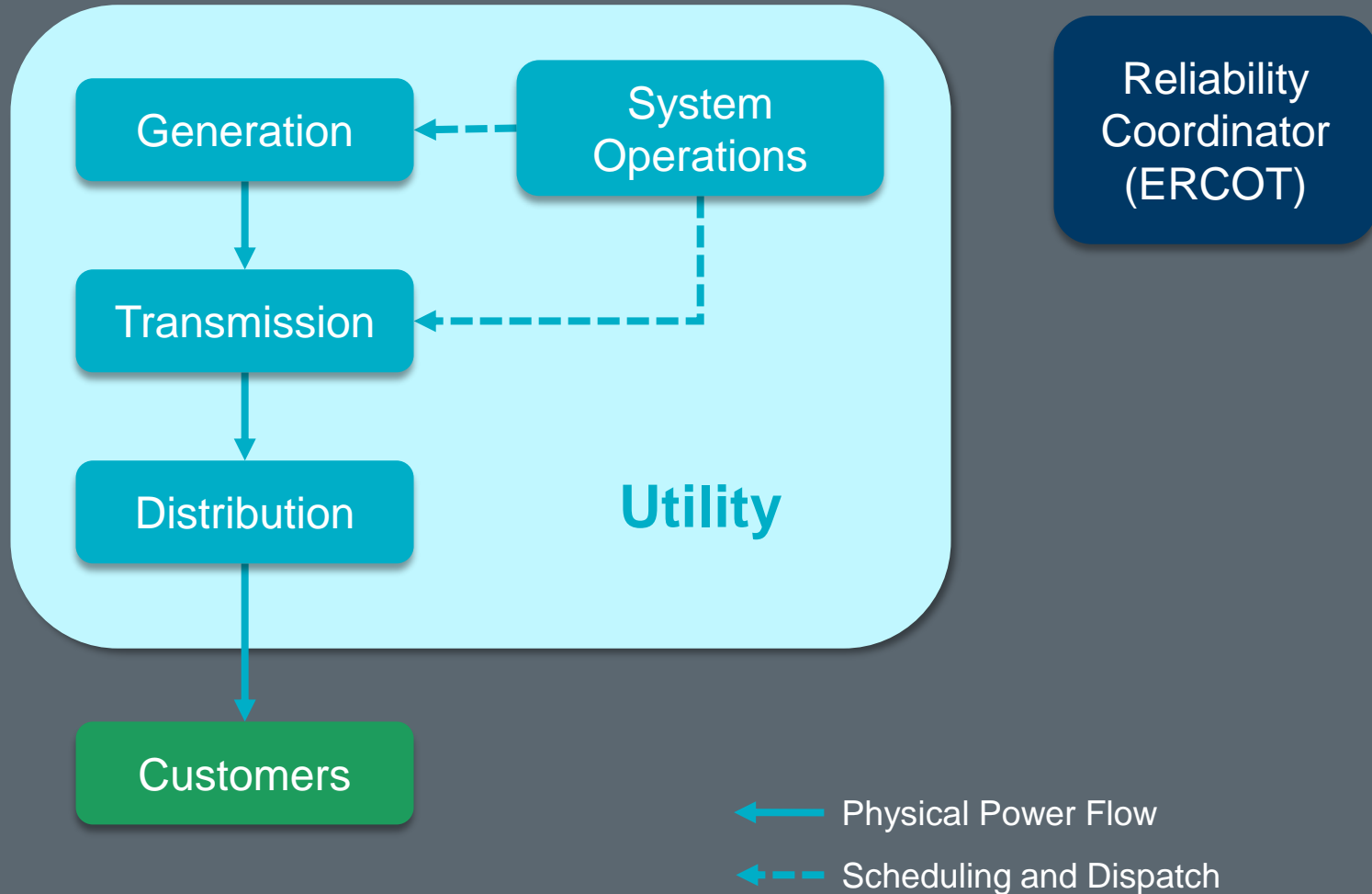


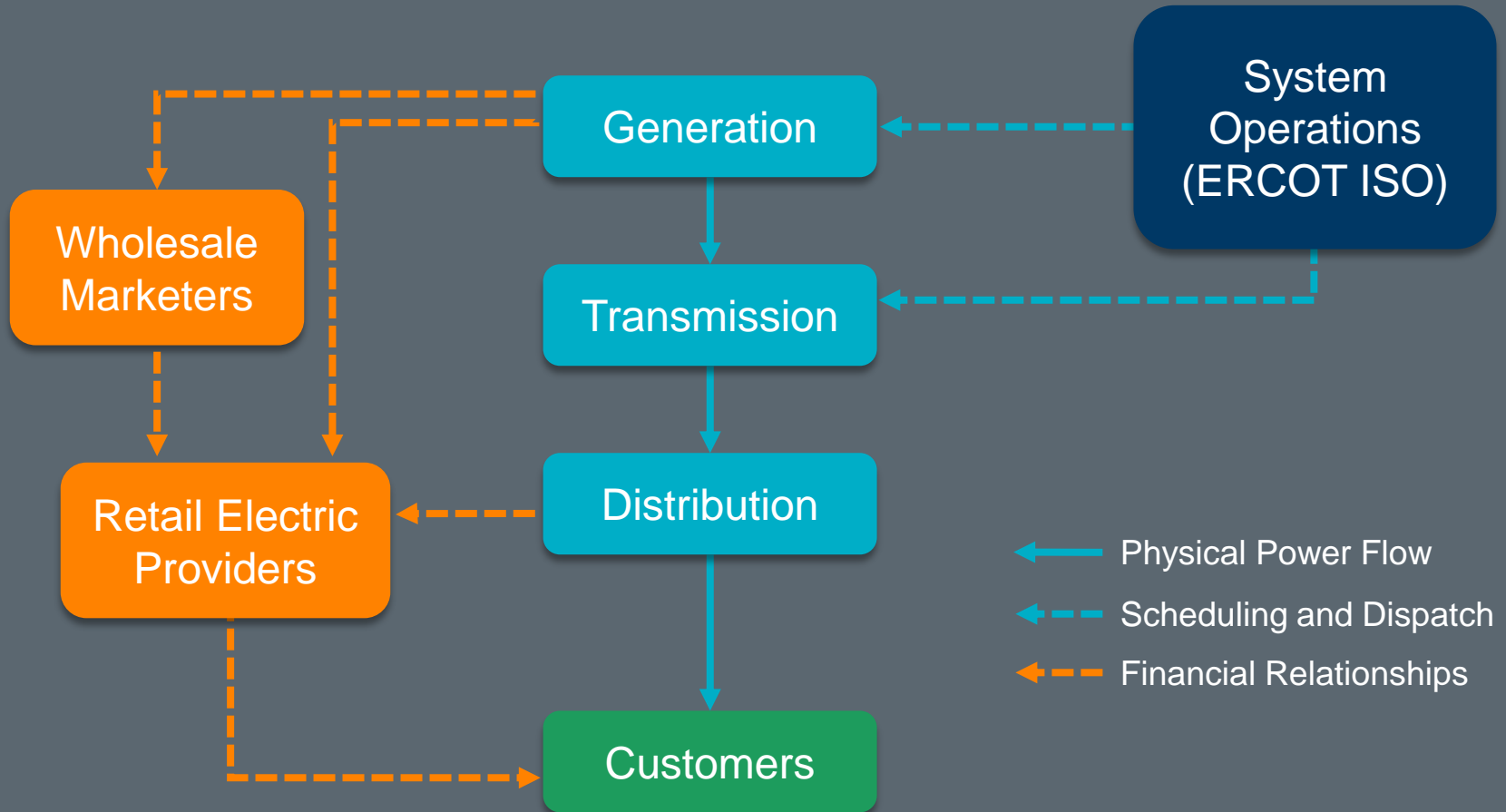
Module 1

Retail Market Responsibilities











Public Utility
Commission of Texas



Electric Reliability
Council of Texas



Qualified
Scheduling Entity



Load Serving
Entity



Competitive
Retailer



An Electrical Cooperative or Municipally Owned Utility who has chosen **NOT** to opt in to retail competition.

Opt-In

An Electrical Cooperative or Municipally Owned Utility who has chosen to opt in to retail competition.

REP

Entities that sell electric energy to retail Customers in the areas of Texas where the sale of electricity is open to retail competition.

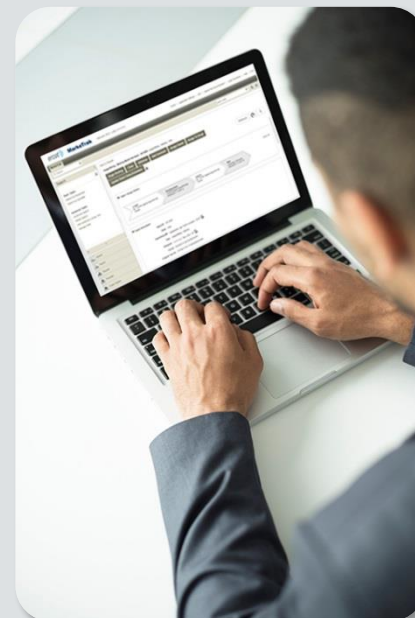
Retail Electric Provider or Opt-In Entity



Service Retail Customers



Negotiate Competitive Contracts



Submit Electronic Transactions

Meet Financial Responsibilities



Buy electricity at wholesale



Pay TDSPs for delivery costs



Pay and/or dispute invoices



Invoice retail Customers for their usage

Investigate Customer Switching Issues

CRs work with TDSPs and other CRs to resolve inadvertent gains and losses.



A Competitive Retailer Must:



Register with the PUCT



Register with ERCOT



Complete Flight Testing through FlighTrak



Be represented by a Qualified Scheduled Entity

Every CR Must Be Represented By a QSE

Choose one



OR

Become one





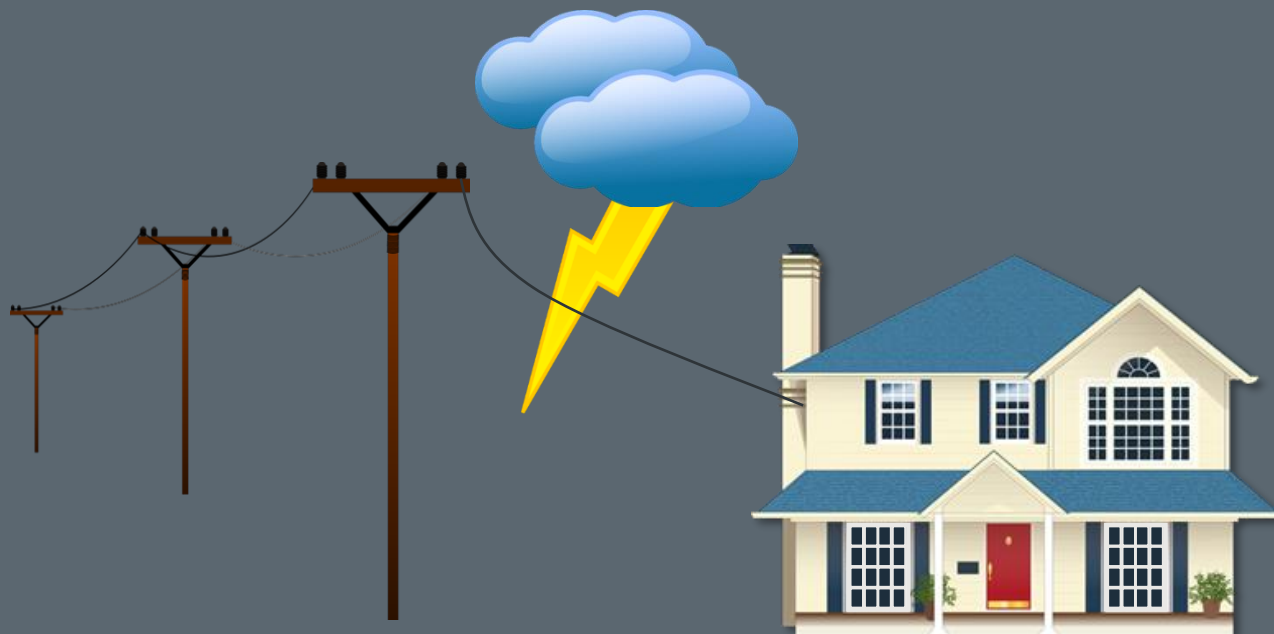
**Physical System
Operations**



**Retail System
Operations**

Physical System Operations

- Maintain reliable transmission and distribution system
- Connect Customer Premise to ERCOT grid
- Resolve power outages



Retail System Operations

- Create, Manage and Maintain ESI IDs
- Facilitate Service Order Requests from CRs
- Provide usage data for Settlement billing
- Investigate customer issues



The Anatomy of an ESI ID

10 xxxxx zzz .. zz

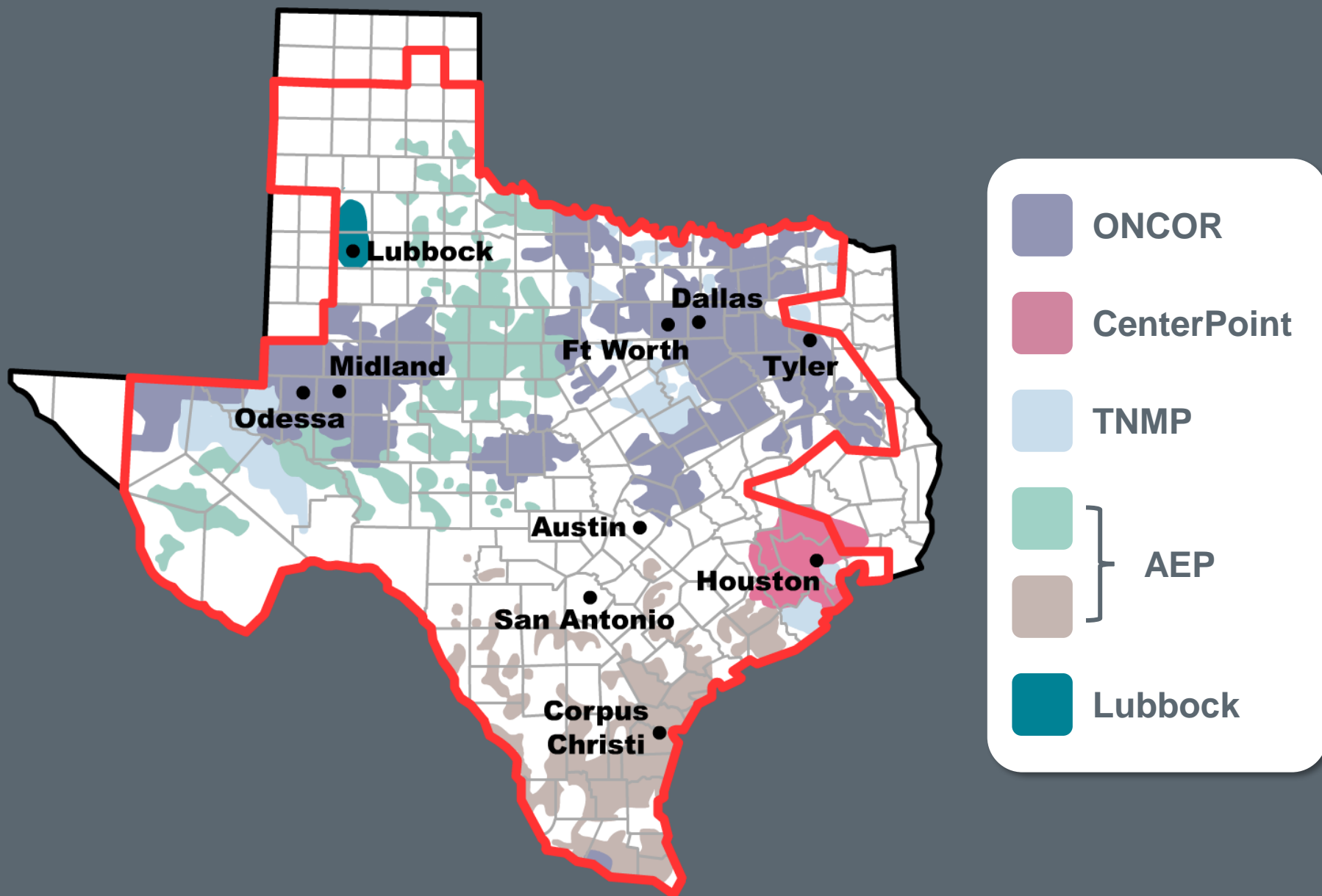
Where	
10	Electric industry prefix
xxxxx	Five-digit DOE code for TDSP
zzz .. zz	Up to 29 alphanumeric characters assigned by TDSP

The Anatomy of an ESI ID

10 **XXXXXX** ZZZ .. ZZ

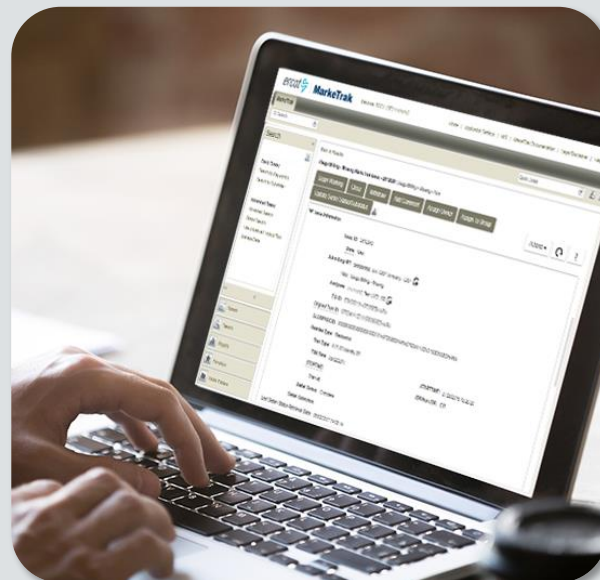
DOE Number	TDSP Name
20404	AEP TX North
03278	AEP TX Central
08901	CenterPoint
13830	Nueces Electric Coop
44372	Oncor Electric Delivery
40051	Texas New Mexico Power (TNMP)
17699	Oncor/SESCO
11292	Lubbock Power & Light

Where are the competitive meters





Physical System Operations



Retail System Operations

ERCOT Duties



Process retail transactions



Collect and distribute meter data



Establish profiles for all ESI IDs



Act as registration agent



Provide account management

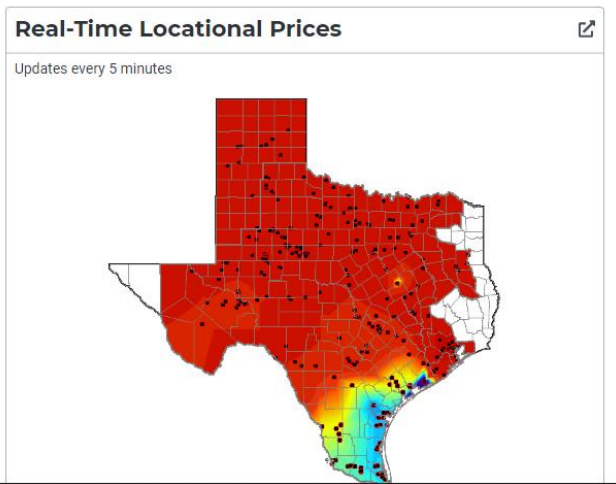
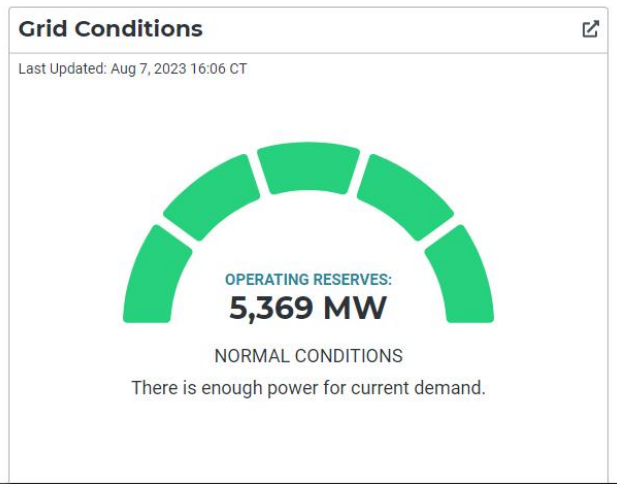
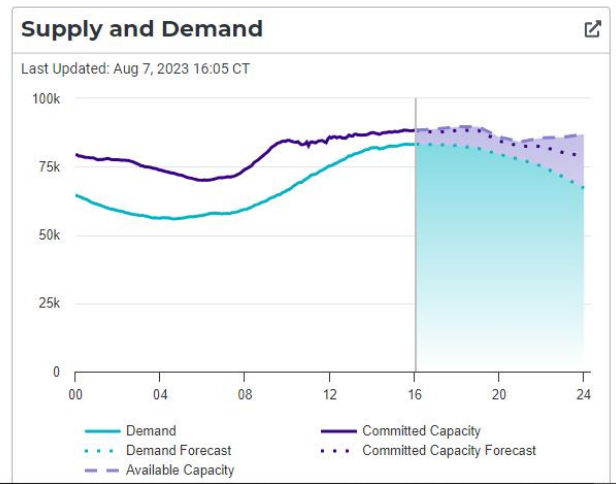


Home > Market Participants

Market Participants

Cyberstrike™ LIGHTS OUT registration now open

[View Details](#)





Matching

QSE

LSE

CR

TDSP

RE

PUCT

Responsible for making sure customers are protected and everyone follows the rules

The participant responsible for settling with ERCOT

Services customers in competitive areas

Manages poles, wires, meter reads and ESI IDs

Owns and operates the generators

General term for entity providing power to end-use customers



Module 2 Market Rules





Public Utility Regulatory Act
(PURA)



PUCT Substantive Rules



ERCOT Protocols
and Market Guides



Public Utility Regulatory Act (PURA)

- Defines the Public Utility Commission of Texas (PUCT)
- Amended by Senate Bill 7 in 1999
- PUCT and ERCOT responsible for determining specifics
- Continues to evolve



Public Utility Regulatory Act
(PURA)



PUCT Substantive Rules



PUCT Substantive Rules

- Implement PURA requirements:
 - Customer protection rules
 - Standard terms and conditions (Tariffs) for utilities
- Electric Substantive Rules are contained in [Chapter 25](#)
- Refer to [PUCT Website](#) for complete rules



Search PUCT

Home

Consumer

Industry

Rules & Laws

Filings

Agency

Español

[Rules and Laws](#) › Chapter 25 - Electric



Electric Substantive Rules

Chapter 25 Rules

[COMPLETE SET OF CHAPTER 25 RULES](#)

Proposed New:

[§25.510](#)

[§25.510 PLAIN LANGUAGE DESCRIPTION](#)

[§25.511](#)

[§25.511 PLAIN LANGUAGE DESCRIPTION](#)

Proposed Revisions:

[§25.195](#)

[§25.195 PLAIN LANGUAGE DESCRIPTION](#)

Rule	Description/Explanatory Information	Effective
25 TOC	Chapter 25 Table of Contents	02/08/24
Subchapter A General Provisions		
§25.1	Purpose and Scope of Rules.	03/12/03
§25.2	Cross-Reference Transition Provision.	05/07/98
§25.3	Severability Clause.	03/12/03

Customer Protection Rules (Part 1)

<u>§ 25.471</u>	General Provisions of Customer Protection Rules	<u>§ 25.478</u>	Credit Requirements and Deposits
<u>§ 25.472</u>	Privacy of Customer Information	<u>§ 25.479</u>	Issuance and Format of Bills
<u>§ 25.473</u>	Non-English Language Requirements	<u>§ 25.480</u>	Bill Payment and Adjustments
<u>§ 25.474</u>	Selection of REP	<u>§ 25.481</u>	Unauthorized Charges
<u>§ 25.475</u>	General REP Requirements and Information Disclosures to Customers	<u>§ 25.482</u>	Prompt Payment Act
<u>§ 25.476</u>	Renewable and Green Energy Verification	<u>§ 25.483</u>	Disconnection of Service
<u>§ 25.477</u>	Refusal of Electric Service	<u>§ 25.484</u>	Electric No-Call List

Customer Protection Rules (Part 2)

<u>§ 25.485</u>	Customer Access and Complaint Handling	<u>§ 25.492</u>	Non-Compliance with Rules or Orders
<u>§ 25.487</u>	Obligations Related to Move-In Transactions	<u>§ 25.493</u>	Acquisition and Transfer of Customers from one REP to Another
<u>§ 25.488</u>	Procedures for a Premise with No Service Agreement	<u>§ 25.495</u>	Unauthorized Change of REP
<u>§ 25.489</u>	Treatment of Premises with No Retail Electric Provider of Record	<u>§ 25.497</u>	Critical Load, Critical Care and Chronic Condition Customers
<u>§ 25.490</u>	Moratorium on Disconnect on Move-Out	<u>§ 25.498</u>	Prepaid Service
<u>§ 25.491</u>	Record Retention and Reporting Requirements	<u>§ 25.500</u>	Privacy of Advanced Metering System Information



Public Utility Regulatory Act
(PURA)



PUCT Substantive Rules



ERCOT Protocols
and Market Guides



ERCOT is responsible for ...

Protocols

Outline the procedures and processes used by ERCOT and Market Participants.



[Home](#) > [Market Rules](#) > Protocols - Nodal

Protocols - Nodal

The Protocols outline the procedures and processes used by ERCOT to develop and maintain the current set of Protocols as well as requests for changes and clarification of the current set of Protocols.

IN THIS SECTION

[Current Protocols - Nodal](#)

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- Archives - Zonal**
- PUCT Directives**
- [Southern Cross Transmission](#)
- [Real-Time Co-Optimization](#)

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- [Commercial Operations Market Guide](#)
- [Data Transport Guides](#)
- [Load Profiling Guide](#)
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- [Planning Guide](#)
- [Resource Registration](#)
- [Glossary](#)
- [Retail Market Guide](#)
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- [Texas Standard Electronic Transaction Guides](#)
- [Verifiable Cost Manual](#)
- [Inactive Market Guides](#)

- Pilot Projects**
- [30-Minute Emergency Response Service - Completed](#)
- [Fast Responding Regulation Service - Completed](#)
- [Weather-Sensitive Emergency Response Service - Completed](#)
- System Changes**
- [System Change Requests](#)
- Compliance in ERCOT**
- Business Practice Manual**
- Other Binding Documents**
- [Other Binding Documents List](#)
- [Other Binding Documents Revision Requests](#)
- Key Priorities**
- [Battery Energy Storage](#)

The current set of Protocols is available in the current set of Protocols.

Related Content

On this site

- [Protocol Revision Requests](#)
- [Protocol Revision Subcommittee](#)

List of Protocols

Sections	Description
1-2	Construction and Definitions
3-8	System Operations and Wholesale Markets
9-11	Settlement & Billing; Metering; Data Aggregation
12	Market Information System (MIS)
13	Transmission & Distribution Losses
14	Renewable Energy Credit Trading Program
15	Customer Registration
16	Market Participant Registration & Qualification
18, 19	Load Profiling & TX SET
20	Alternative Dispute Resolution Process
21	Revision Request Process



ERCOT is responsible for ...

Protocols

Outline the procedures and processes used by ERCOT and Market Participants.



Market Guides

- Based upon the ERCOT Protocols
- Detailed reference documents

Protocols - Nodal | PowerPoint - All Documents | ercot.com/mktrules/nprotocols | MIS LOG IN | Search



- About ERCOT
- Services
- Committees and Groups
- Market Rules**
- Market Information
- Grid Information
- Market Participants

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- [Fast Responding Regulation Service - Completed](#)
- [Weather-Sensitive Emergency Response Service - Completed](#)

System Changes

- [System Change Requests](#)

Compliance in ERCOT

Business Practice Manual

Other Binding Documents

- [Other Binding Documents List](#)
- [Other Binding Documents](#)
- [Revision Requests](#)

Key Priorities

- [Battery Energy Storage](#)

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- [Protocol Revision Subcommittee](#)

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[Operations Messages](#)

[Project Status](#)

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Retail Market Guide Overview

Sections	Description
1-2	Purpose; Definitions; Acronyms
3	Retail Market Guide Revision Process
4-5	PUCT & ERCOT
6	RMS Working Groups
7	**Market Processes**
8	Municipally Owned Utilities & Co-ops
9	Appendices

Protocol And Market Guide Update Process

- Created and edited by Market Participants
- Changed from time-to-time by Revision requests
- Changes approved by ERCOT Board of Directors or appropriate committee

The screenshot shows the ERCOT website's 'Nodal Protocol Revision Requests' page. The page title is 'Nodal Protocol Revision Requests' and it includes a navigation menu with 'About ERCOT', 'Services', 'Committees and Groups', 'Market Rules', and 'Market Information'. The main content area is titled 'Nodal Protocol Revision Requests' and contains a list of pending requests. Below is the table of these requests:

Issue	Title
NPRR956	Designation of Providers of Transmission Additions
NPRR981	Day-Ahead Market Price Correction Process
NPRR1058	Resource Offer Modernization for Real-Time Co-Optimization
NPRR1067	Market Entry Qualifications, Continued Participation Requirements, and Credit Risk Assessment
NPRR1070	Planning Criteria for GTC Exit Solutions
NPRR1084	Improvements to Reporting of Resource Outages and Derates
NPRR1085	Ensuring Continuous Validity of Physical Responsive Capability (PRC) and Dispatch through Timely Changes to Resource Telemetry and Current Operating Plans (COPs)
NPRR1088	Applying Forward Adjustment Factors to Forward Market Positions and Un-applying Forward Adjustment Factors to Prior Market Positions
NPRR1089	Requiring Highest-Ranking Representative, Official, or Officer of a Resource Entity to Execute Weatherization and Natural Gas Declarations
NPRR1092	Reduce RUC Offer Floor and Remove RUC Opt-Out Provision
NPRR1095	Texas SET V5.0 Changes
NPRR1096	Require Sustained Six Hour Capability for ECRS and Non-Spin
NPRR1097	Create Resource Forced Outage Report
NPRR1098	Direct Current Tie (DC Tie) Reactive Power Capability Requirements
NPRR1099	Managing Network Operations Model Resource Nodes
NPRR1100	Emergency Switching Solutions for Energy Storage Resources
NPRR1102	ERCOT Discretion for Adjusting Non-Interval Data Recorder (NIDR) Backcasted Load Profiles



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Protocols - Nodal

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*Approves all changes
to Market Rules*

PUCT

*Advised by
Stakeholder Groups*

Board
Of
Directors

*Makes policy
recommendations*

Technical
Advisory
Committee
(TAC)

Retail Market
Subcommittee
(RMS)

Reliability
Operations
Subcommittee
(ROS)

Wholesale
Market
Subcommittee
(WMS)

Protocol
Revision
Subcommittee
(PRS)

Retail Market
Subcommittee
(RMS)

Working Groups

Profiling (PWG)

Texas Data Transport &
MarkeTrak Systems (TDTMS)

Texas SET

Task Forces

Retail Market Training (RMTTF)



Module 3

Retail Operations



Retail Transaction:

A Communication that enables and facilitates retail business processes in the deregulated Texas Electrical Market.

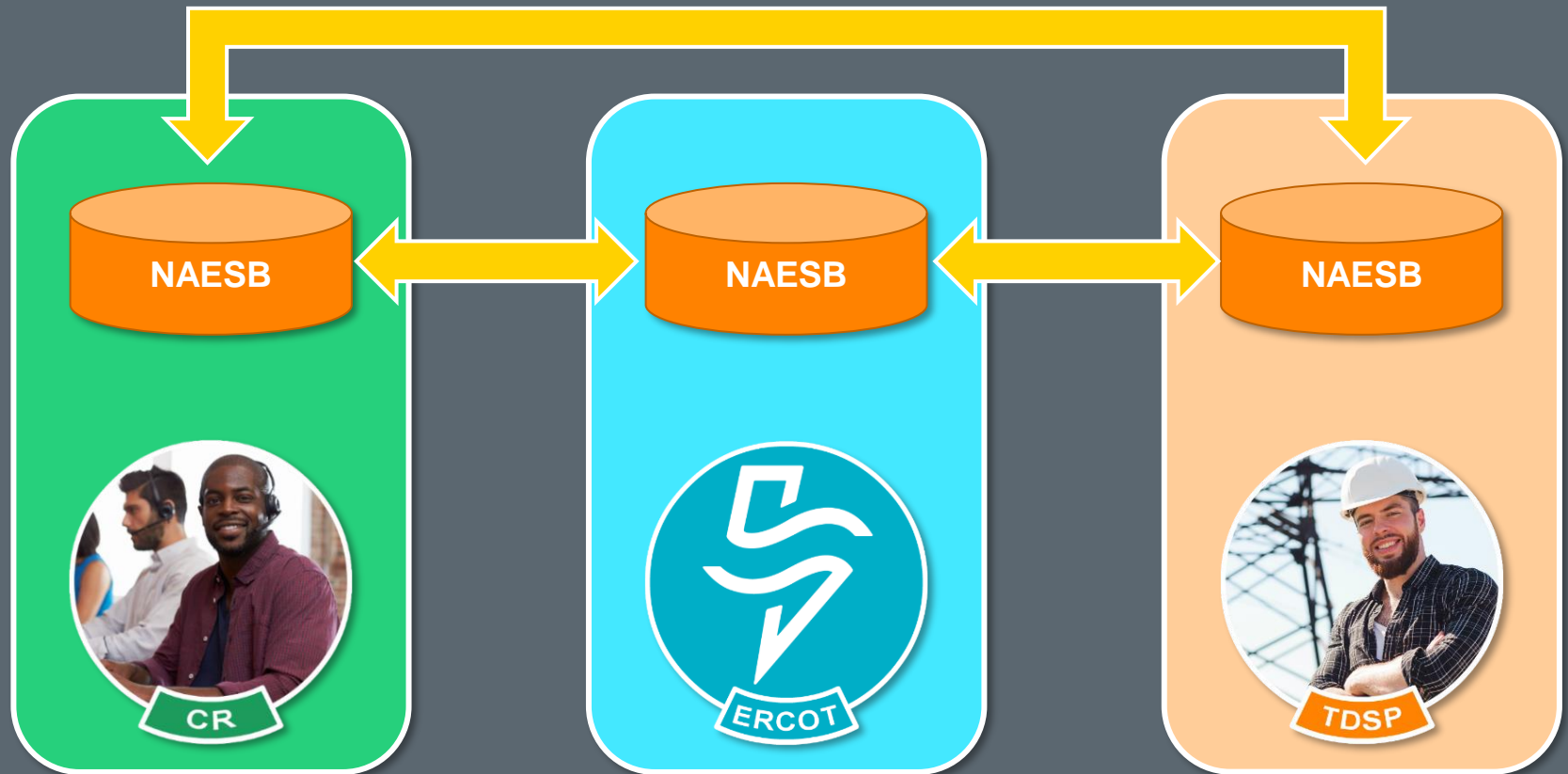
- Involves REPs, TDSPs and ERCOT
- Electronic Data Interchange (EDI) format, based on ANSI ASC X12 Standards



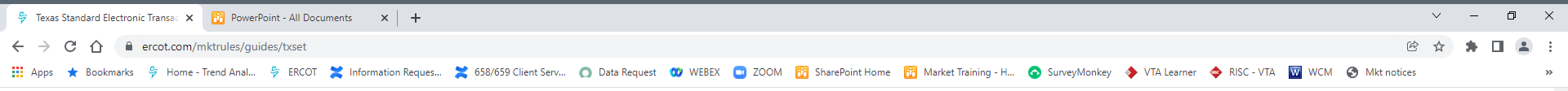
Retail Transactions Are Defined By TX SET Implementation Guides

- Developed and maintained by TX SET Working Group
- Protocol Section 19
- Implementation Guides





North American Energy Standards Board (NAESB)
Common communications protocol



[Home](#) > [Market Rules](#) > [Market Guides](#) > Texas Standard Electronic Transaction Guides

Texas Standard Electronic Transaction Guides

Information on each Texas Standard Electronic Transaction (Texas SET) used by the competitive retail electric market is available in this section. Implementation guides, retail market processes for transactions and Texas SET proposed and adopted changes can be found below.

IN THIS SECTION

[Texas SET Swimlanes](#)

Find the current swimlanes, which outline the business process lifecycle for retail transactions.

[Texas Standard Electronic Transaction Issues](#)

Locate current and past Texas SET issues, including those new, under review or closed.

[Texas SET Change Controls](#)

New and Pending (Under Review) Change Controls, those that have been Approved for future Texas SET versions, as well as all Withdrawn and already Implemented Change Controls.

[Current Texas SET Implementation Guides](#)

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Key Documents

[Change Control Log](#)

Oct 5, 2021 - xlsx - 176.8 KB

This contains a log of all change controls submitted

[TXSET Change Control Dispute Form](#)

Jul 23, 2015 - doc - 38.5 KB

[Texas SET Change Control Form](#)

Feb 11, 2011 - doc - 36.5 KB

Form to be completed only by Texas SET Working Group

[Texas SET Issue Form](#)

Sep 30, 2010 - doc - 43.5 KB

Form to submit a request regarding an issue to ERCOT

[Transaction Names Inventory V5.0](#)

Oct 21, 2021 - xls - 57 KB

Texas SET Transactions - Version 5.0

Related Content

On this site

[Texas SET Working Group](#)

[Market Coordination Team for Texas SET Version Release 4.0](#)

Transaction Families

Request, Response, Maintenance for
Enrollments, Drops, Switches, Maintenance &
Request Consumption

814_XX

Interval, Non Interval, Reads & Usage Data
Historical and Monthly Activity

867_XX

Reject Response to 810 or 867 Data

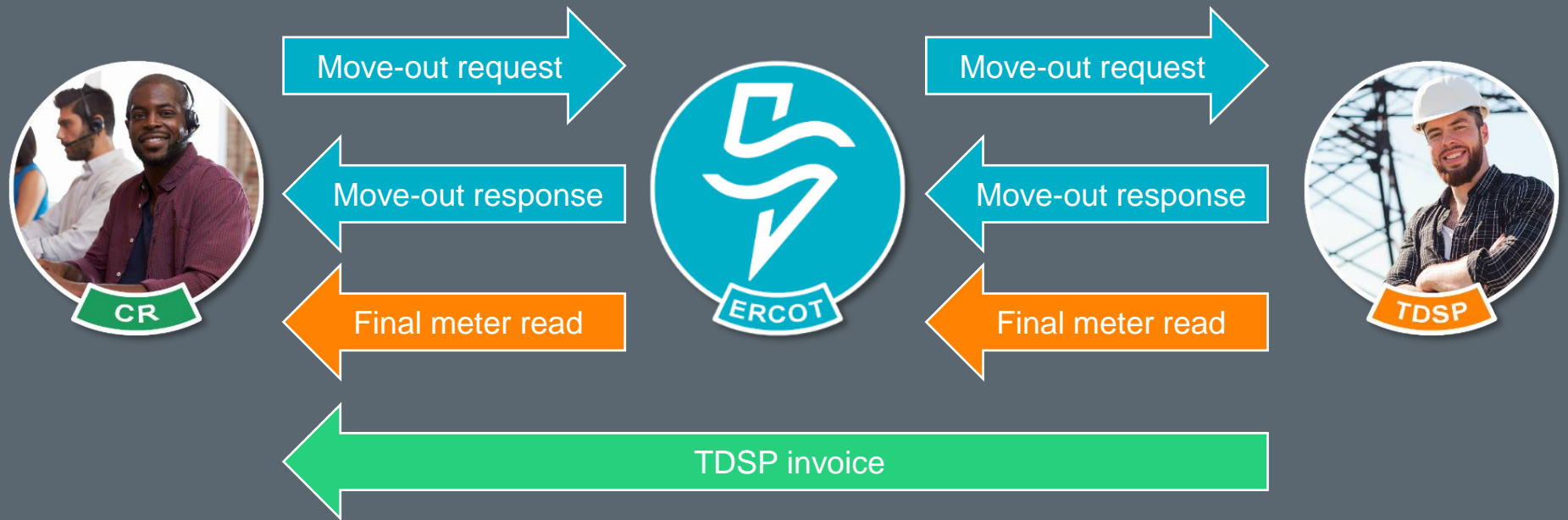
824_XX

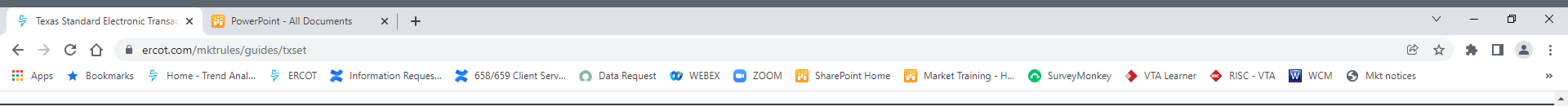
Transaction Families	
Statement, Settlement, Wire Charge Invoices	810_XX
Payment and Advice through Bank	820_XX
Maintenance Service Order - Work Orders, Meter Config. Details, Outage Notification	650_XX
Reject Response to 810 or 867 Data	824_XX

More detailed description in Protocol Section 19

Market Process

A series of retail transactions that must occur in a particular sequence





[Home](#) > [Market Rules](#) > [Market Guides](#) > Texas Standard Electronic Transaction Guides

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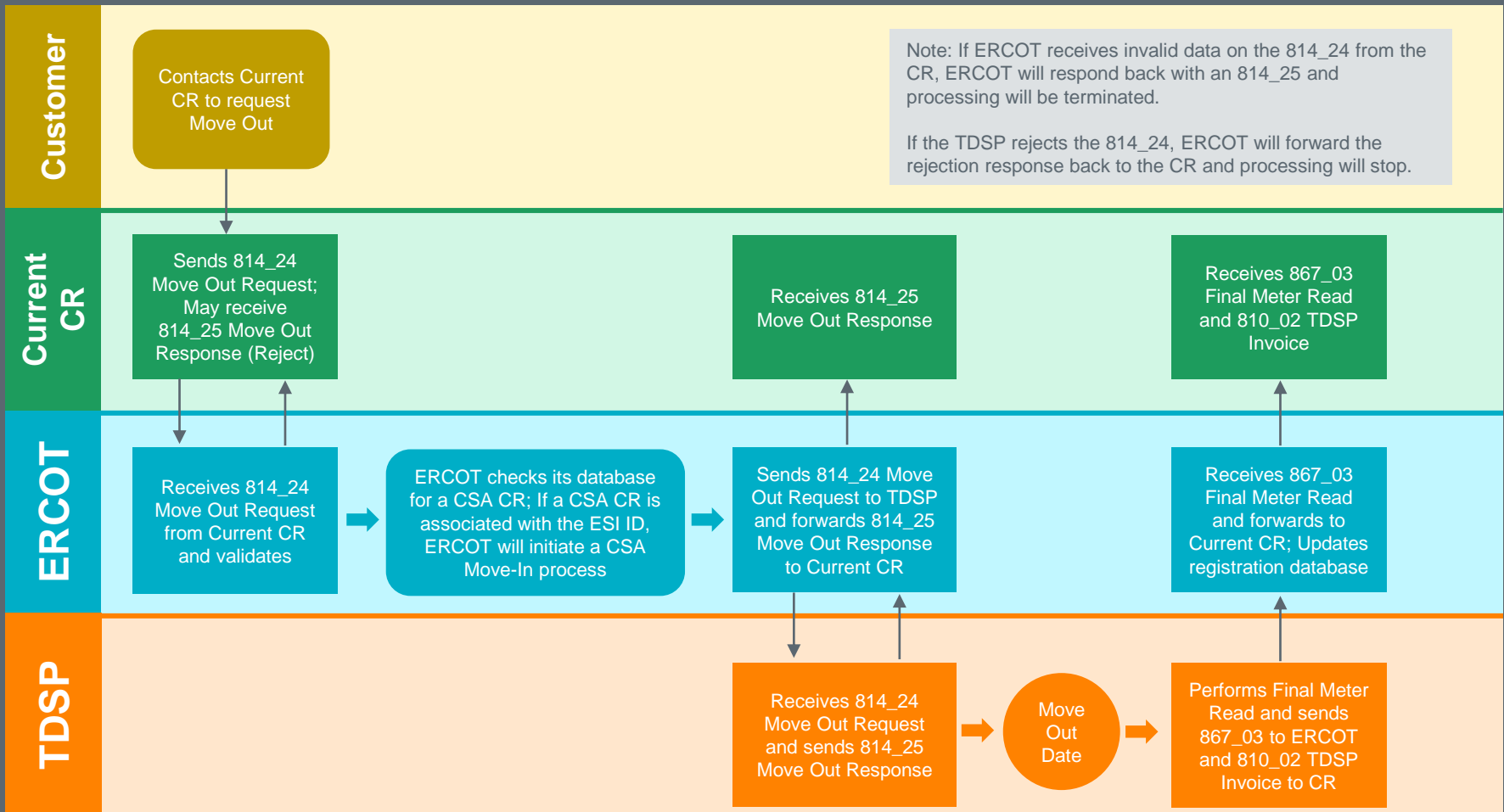
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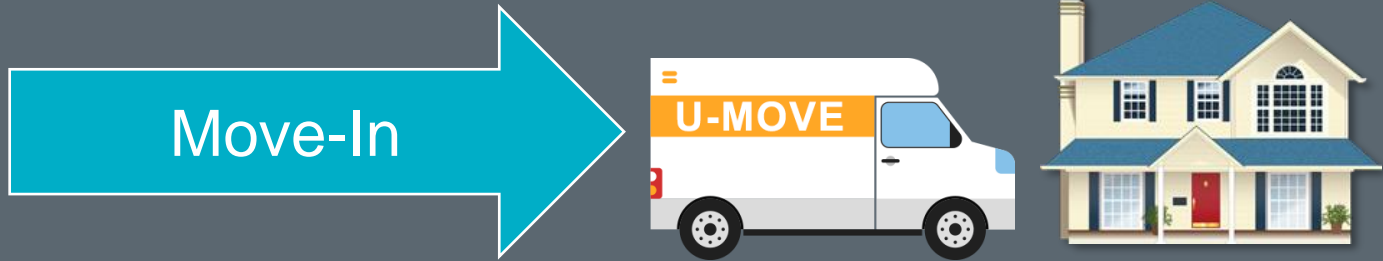
Texas SET Transactions - Version 5.0

Move Out

Scenario: Customer Initiated Move Out No CSA Associate with ESI ID

Transactions: 814_24, 814_25, 867_03, 810_02







Customer Decides to Select a New CR

- ?** Who does the customer call
- ?** What does the CR do
- ?** Who has to know ... Who does this
- ?** What does the TDSP do
- ?** Does anything else need to be done



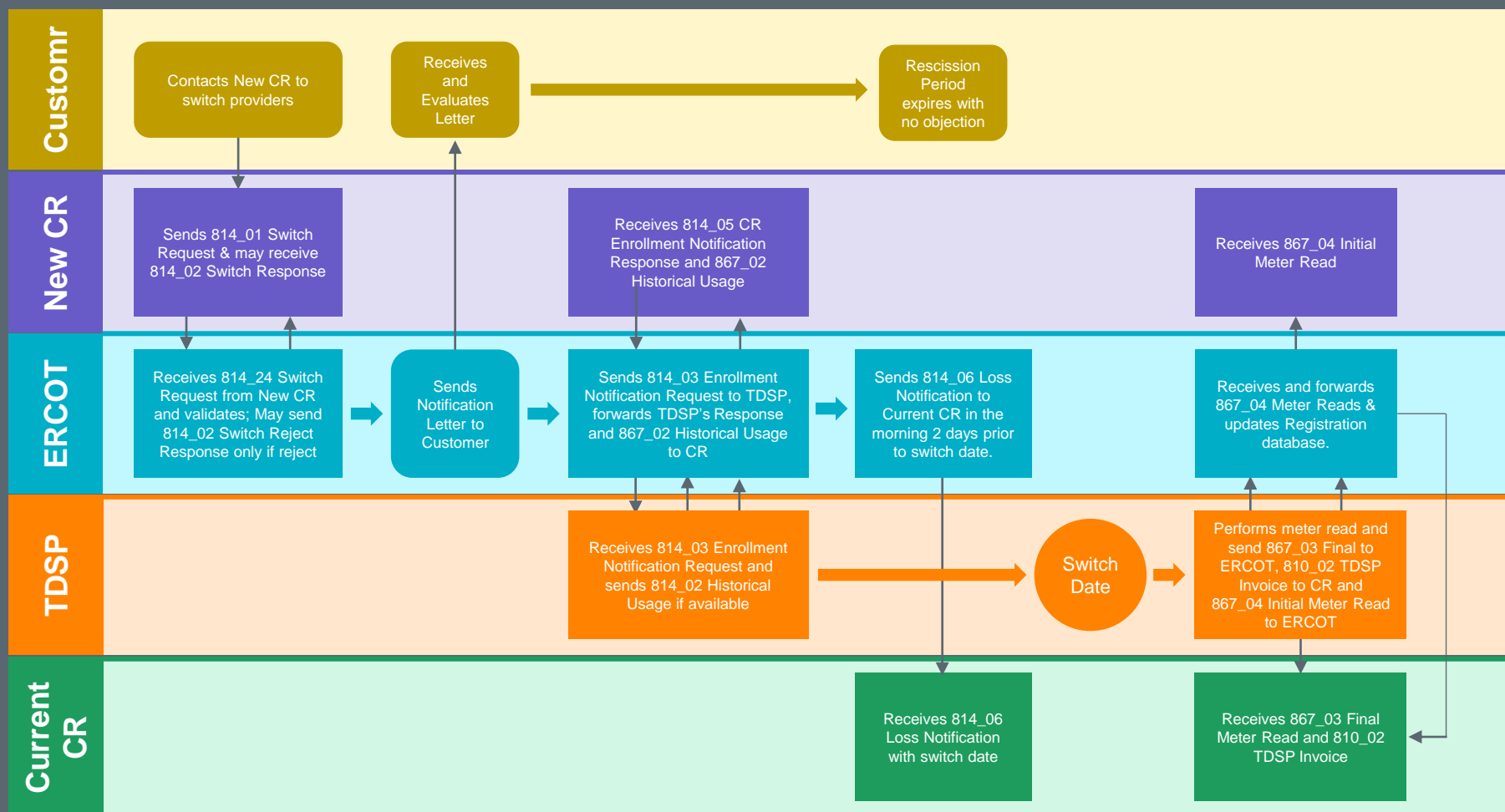
Transaction Type		From				To			
		ERCOT	Old CR	TDSP	New CR	ERCOT	Old CR	TDSP	New CR
Switch Request									
Enrollment Notification Request									
Enrollment Notification Response									
CR Enrollment Notification Response									
Loss Notification									
Final Usage									
Initial Meter Read									



Switch

Scenario: Customer Switch, No Customer Objection

Transactions: 814_01, 814_02 (Reject Only), 814_03, 814_04, 814_05, 814_06, 867_02, 867_03, 810_02, 867_04



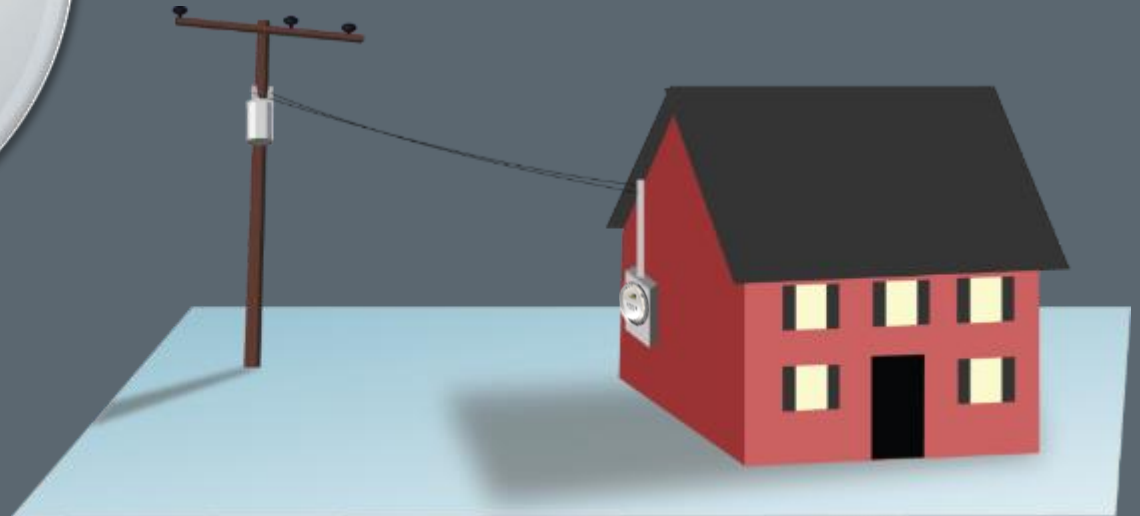


Module 4 Metering



Meter:

A device that measures electrical usage over a period of time.



What are we measuring?

WATTS = (Current) x (Voltage)

Ex: 100 W Light bulb

Energy = Watt-Hours

Ex: (10) x (100 W Light bulbs for 1 Hour)
= 1000 WHr (or 1 kWh)

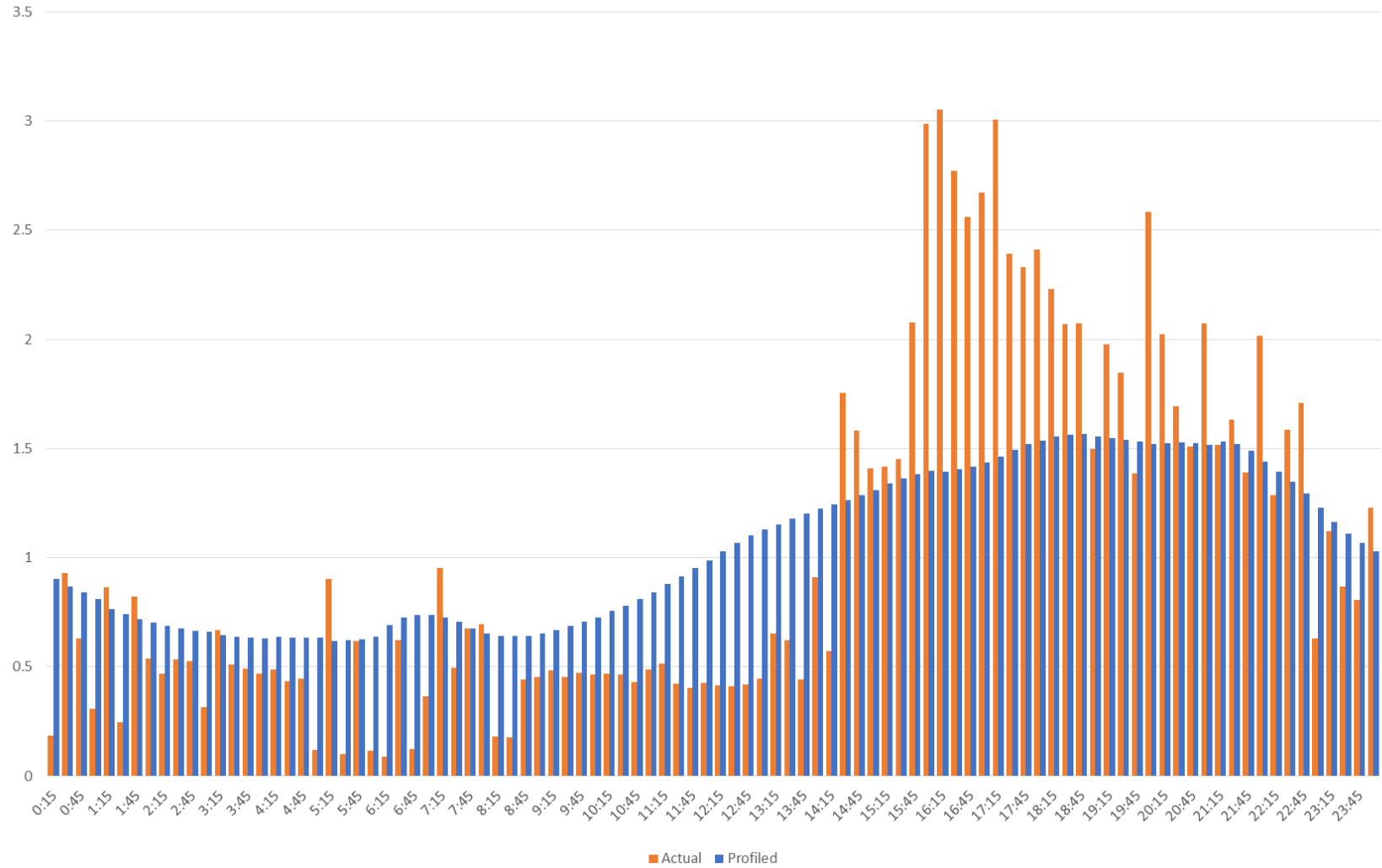


Non-IDR/Scalar/Analog Meter Characteristics

- “Traditional” Meter
- Scalar measurement for an entire month
- Data must be shaped for Wholesale Settlement
- Manual field activities



Profile vs Actual





Non-Interval Data

- Usage is recorded in ~30 day intervals
- Data must be shaped for 15 minute Wholesale Settlement

VS



Interval Data

- Usage is recorded in 15 minute intervals (96 intervals per 24 hrs)
- Data is already shaped for 15 minute Wholesale Settlement

Characteristics

- Wholesale Settlement ready
- Remotely read



AMSR (≤ 200 amp)

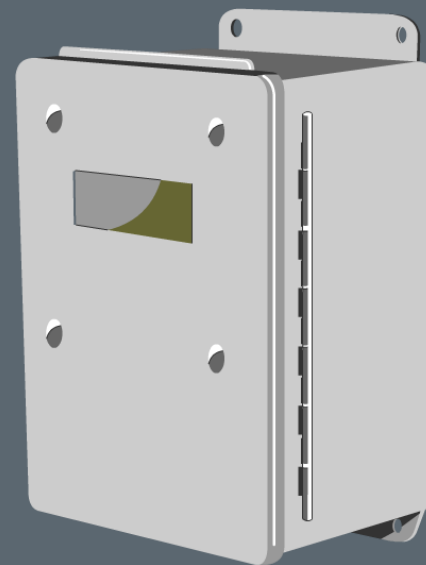
Remote connect /
disconnect

AMSM

Manual connect /
disconnect

Interval Data Recorder (IDR) Meter Characteristics

- Wholesale Settlement ready
- Typically reported monthly
- Predominantly on large customers
> 700 kW/kVA demand
- May require manual field activities



AMS benefits to the market

- 99.5% competitive load using interval data
- REP and Customer can see actual usage
- More accurate CR Settlement with QSE

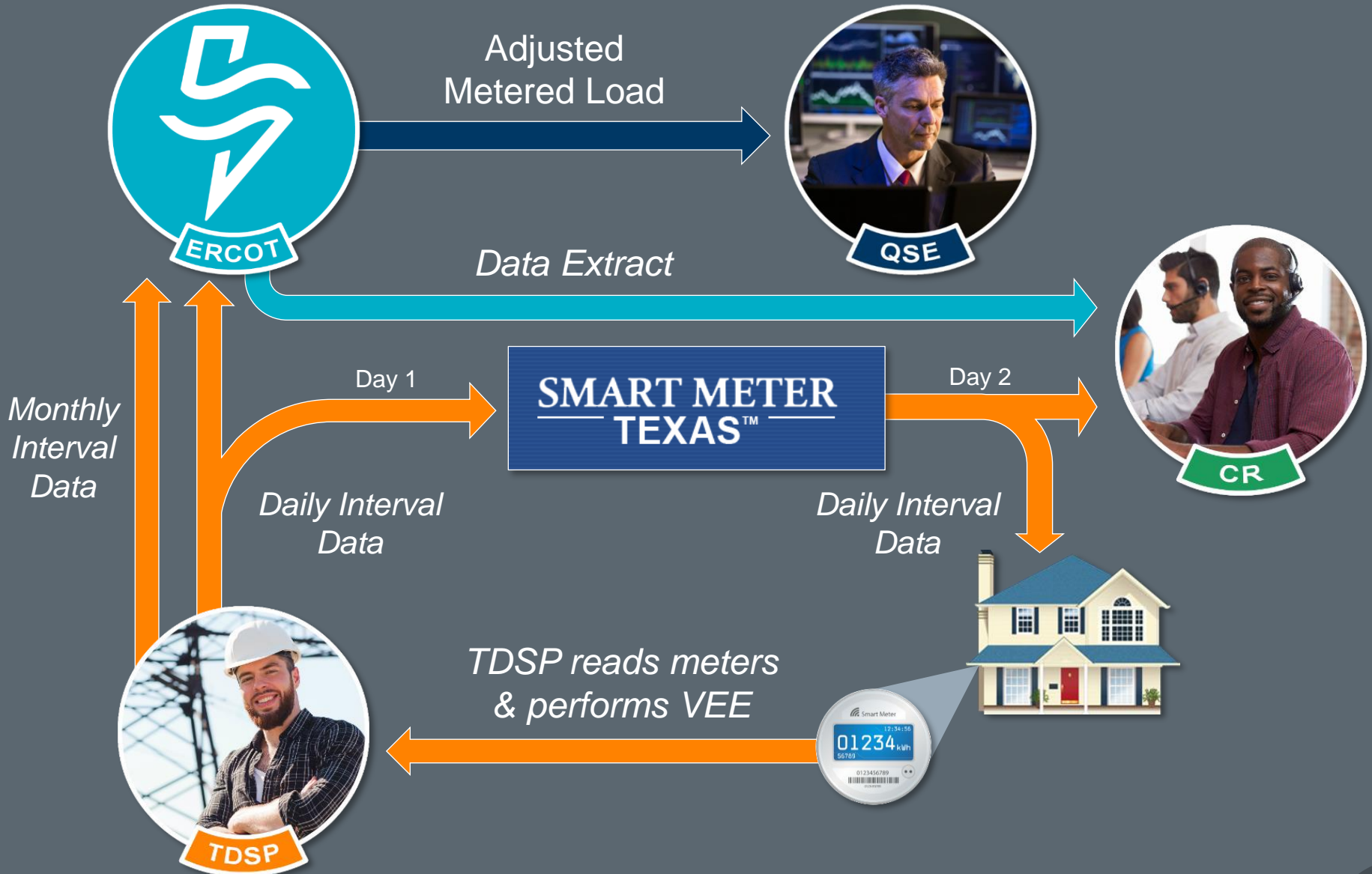


AMS benefits to the market

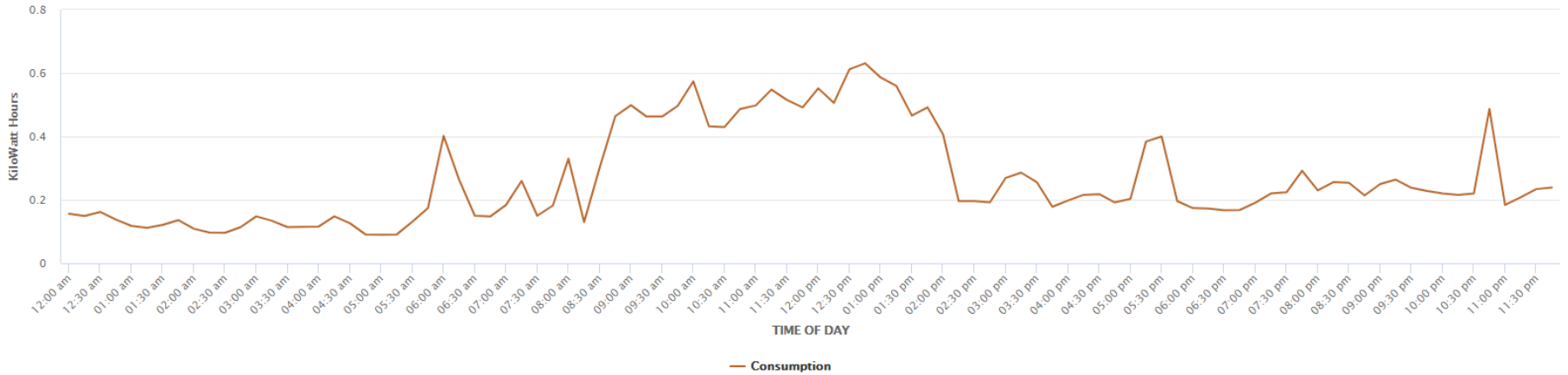
- 73% actual data used on Initial Settlement
- Faster execution of retail market processes



<u>Enrollment type</u> Initiating Transaction	<u>AMS Remote</u> (AMSR)	<u>AMS Manual</u> (AMSM)	<u>Non-AMS</u>
Move-In 814_16	Same Day	2 Business Days	2 Business Days
Standard Switch 814_01	Same Day	Same Day	Within Next 4 Business Days
Self Selected Switch 814_01	Same Day	Same Day	At Least 2 Business Days
Move-Out 814_24	Same Day	2 Business Days	2 Business Days



Energy Data Graph (15 Minute Intervals) - Kilowatt Hours for 03/29/2021



Energy Data Table (15 Minute Intervals) - Kilowatt Hours for 03/29/2021

Consumption = Consumption in excess of Generation ; Surplus Generation = Generation in excess of Consumption

[View in Excel](#)

Start Time	End Time	Consumption(Kwh)	Act./Est.	Surplus Generation(Kwh)	Act./Est.
01:00 am	01:15 am	0.118	Actual	0	NA
01:15 am	01:30 am	0.112	Actual	0	NA
01:30 am	01:45 am	0.121	Actual	0	NA
01:45 am	02:00 am	0.136	Actual	0	NA
02:00 am	02:15 am	0.109	Actual	0	NA
02:15 am	02:30 am	0.097	Actual	0	NA
02:30 am	02:45 am	0.096	Actual	0	NA
02:45 am	03:00 am	0.114	Actual	0	NA
03:00 am	03:15 am	0.148	Actual	0	NA
03:15 am	03:30 am	0.134	Actual	0	NA
03:30 am	03:45 am	0.114	Actual	0	NA
03:45 am	04:00 am	0.115	Actual	0	NA

Other AMS Benefits



Allows for pre-pay programs



Allows for demand response



Allows for Time-of-Use rate offerings



Improved service reliability



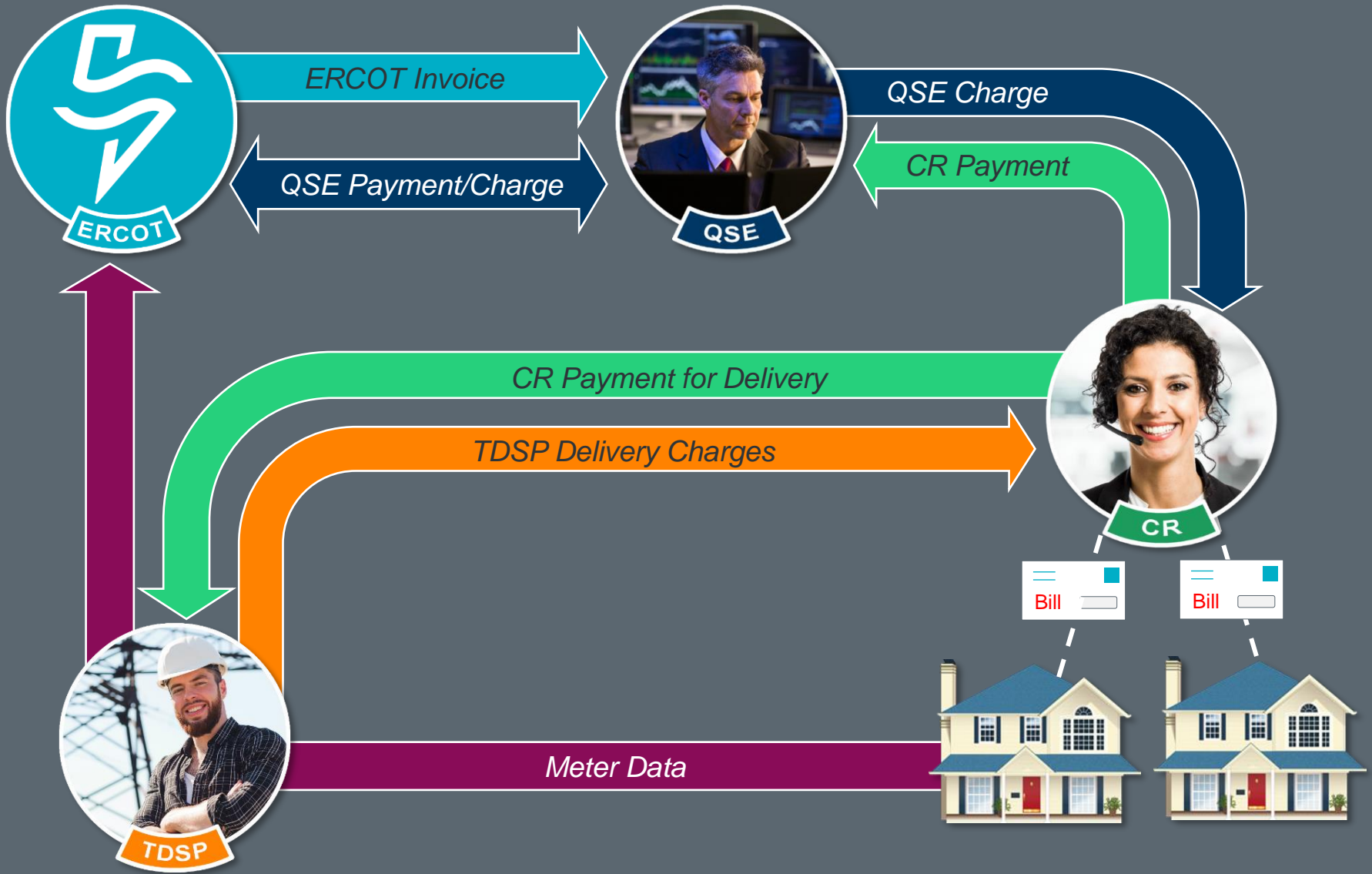
Early detection of faulty meters or tampering



Module 5

Settlement of Retail Load





ERCOT Settles with QSE based on Adjusted Metered Load



Adjusted Meter Load

Unaccounted for Energy

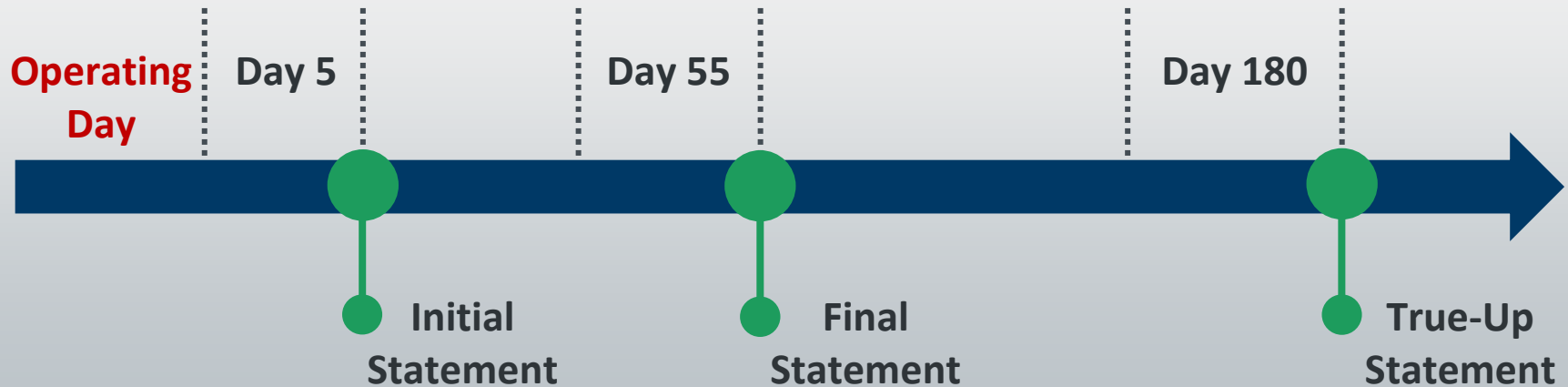
Transmission Loss Factors

Distribution Loss Factors

Aggregation by QSE and LSE

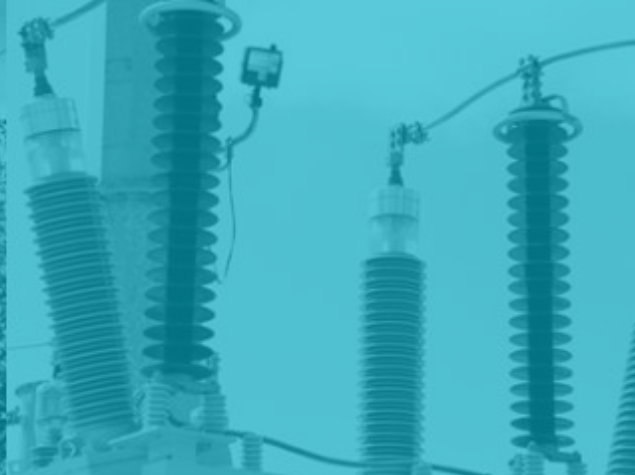
- Each Operating day is settled a minimum of three times
- Most settlement is transacted on the Initial Settlement

ERCOT Real-Time Settlements Timeline





Important Questions



Module 6

Data Transparency & Availability





Also available
on ercot.com

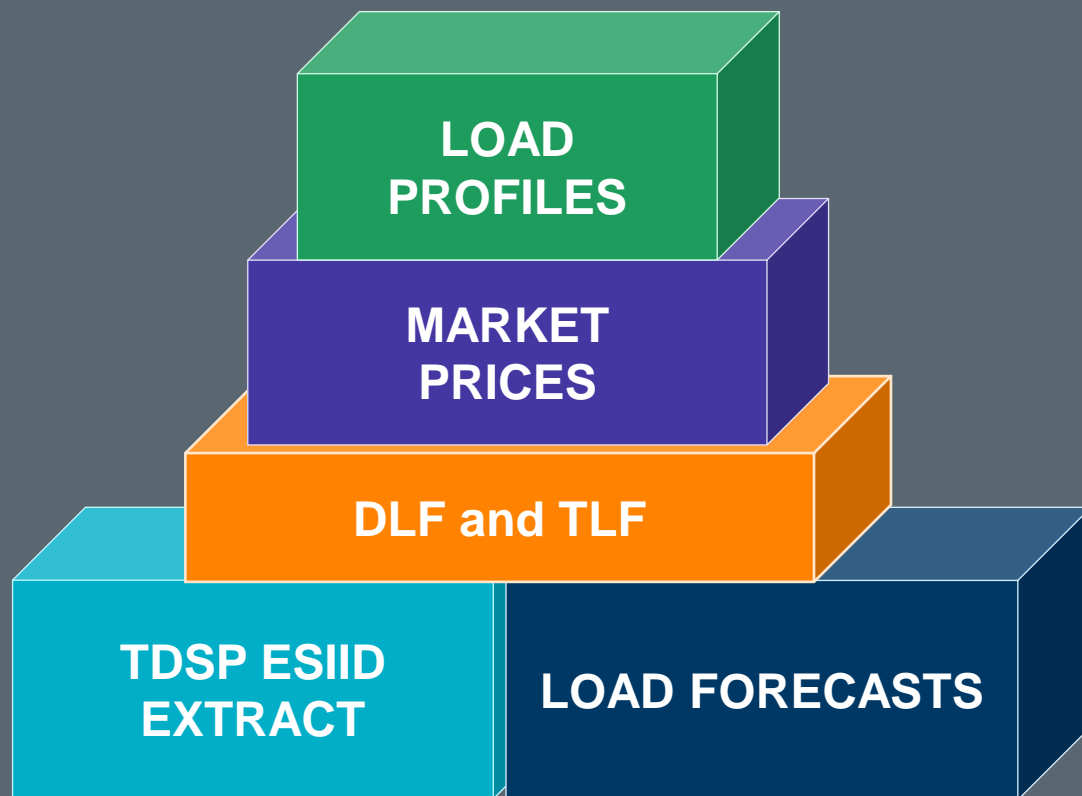


Available to
all Market
Participants

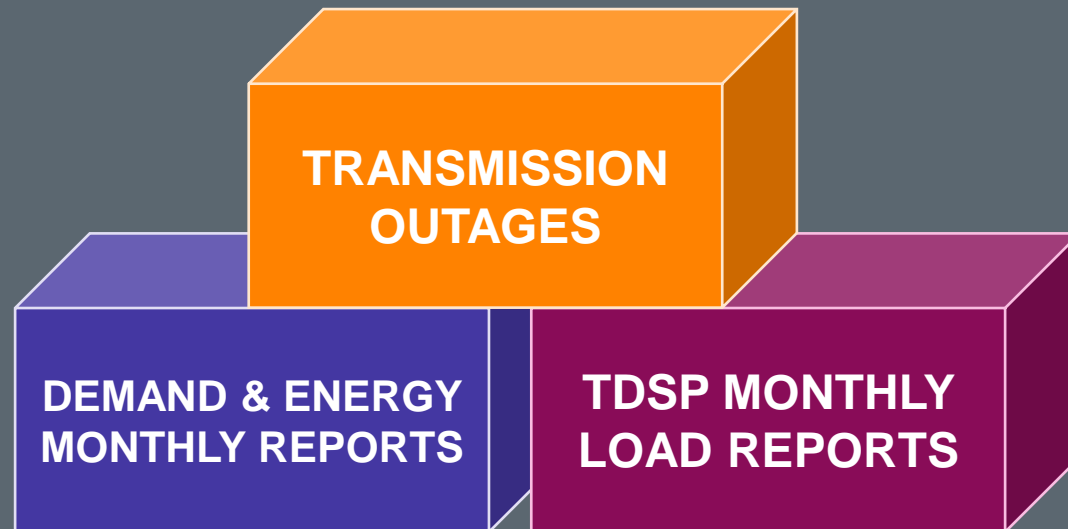


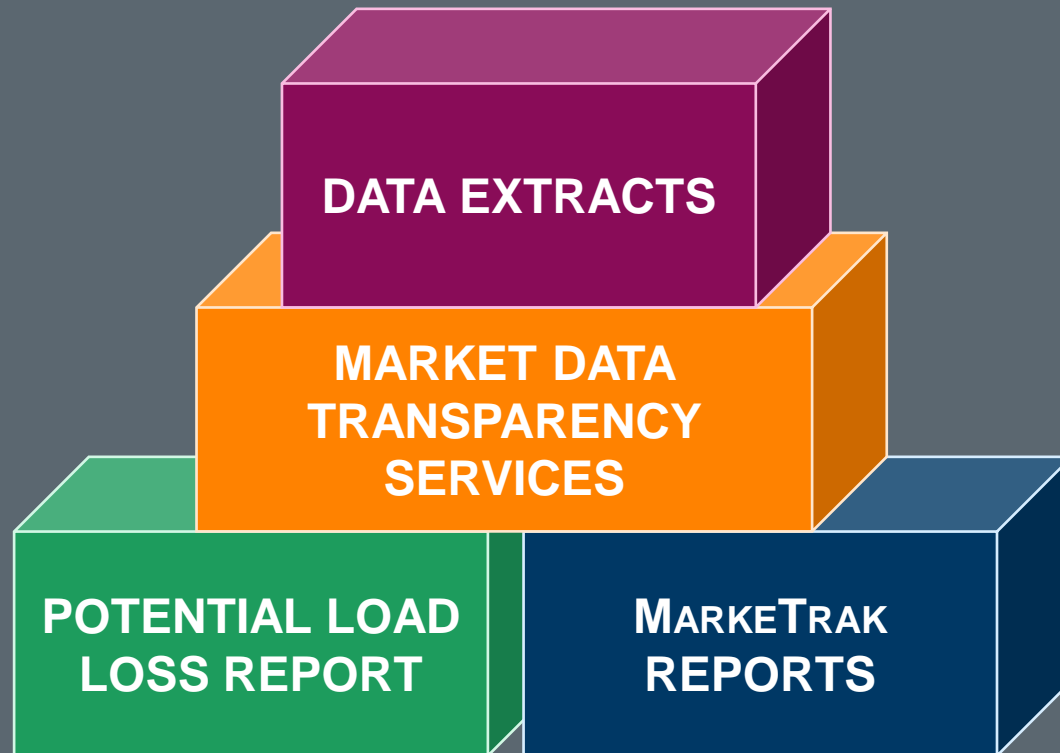
Only available
to a specific
Market
Participant





Public Data is also available on ercot.com



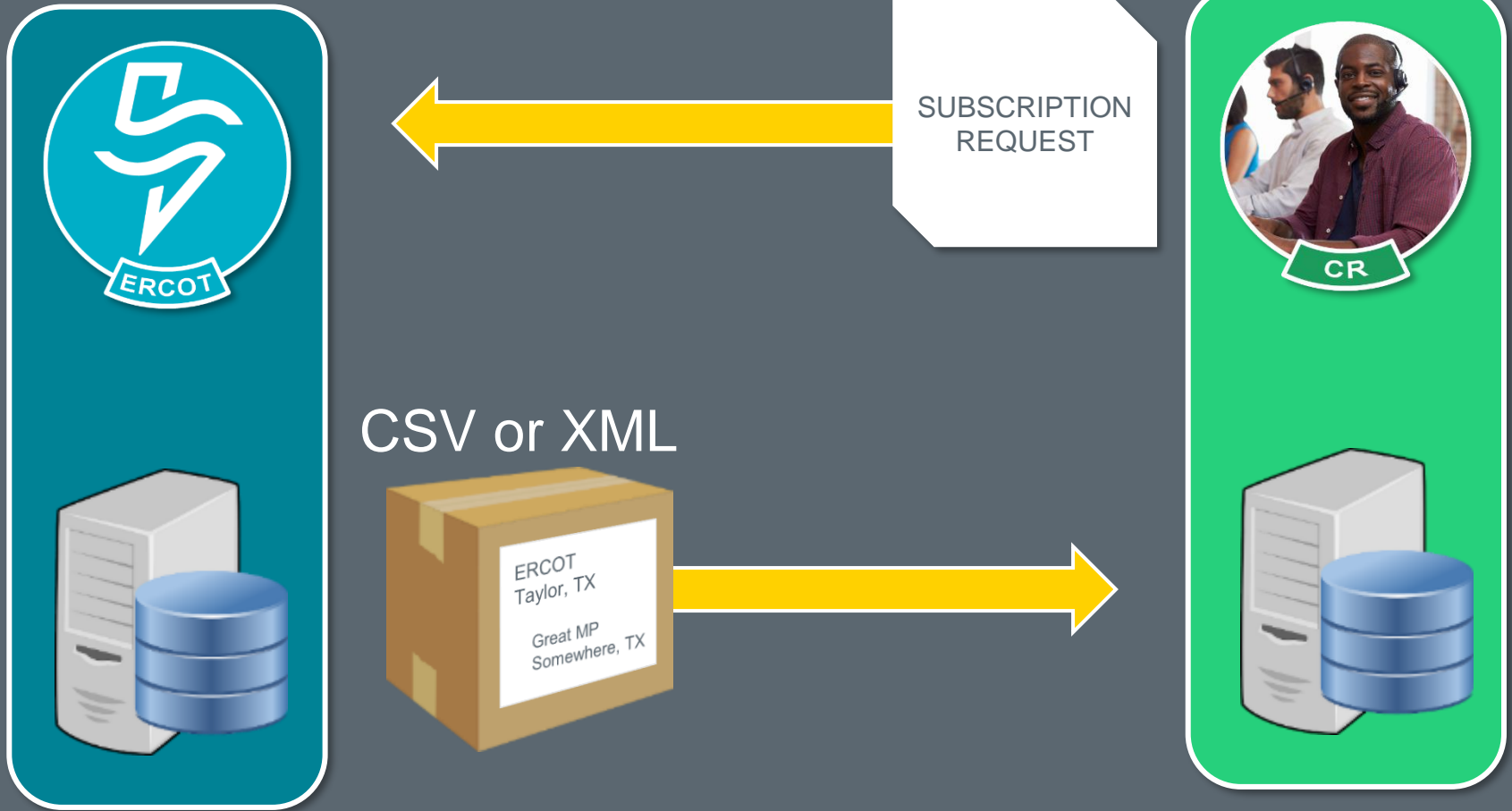


ESIID Service History and Usage Extract

- ESI ID Relationships and Characteristics
- Provides data needed to perform shadow settlements of Retail load.
 - Supplemental IDR Required Interval Data Extract
 - Supplemental AMS Interval Data Extract



See ERCOT
courses on MIS and
Intro to Extracts





1. Construct a Database

The screenshot shows the ERCOT website's 'Market Data Transparency' page. The browser address bar is 'ercot.com/services/mdt'. The navigation menu includes 'About ERCOT', 'Services', 'Committees and Groups', 'Market Rules', 'Market Information', 'Grid Information', and 'Market Participants'. The 'Services' menu is open, listing categories like Client Services, Registration and Qualification, Training, Market Participant Communications, Programs, and Projects. The 'Market Data Transparency' link under Training is highlighted. The main content area has a breadcrumb 'Home > Services > Market Data Transparency' and a heading 'Market Data Transparency'. Below the heading is a description: 'As a service to the market, ERCOT publishes helpful guides on how to use data extracts and applications. For more information, see the Market Data Transparency Information List (EMIL).'. A section titled 'IN THIS SECTION' contains links for 'DDLs', 'User Guides', 'Digital Certificate Security Information', and 'XSDs'. The 'DDLs' link is highlighted with a yellow box. Below this is a table of 'Key Documents' with columns for document name, date, and size.

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About ERCOT **Services** Committees and Groups Market Rules Market Information Grid Information Market Participants

MIS LOG IN Search

Home > Services > Market Data Transparency

Market Data Transparency

As a service to the market, ERCOT publishes helpful guides on how to use data extracts and applications. For more information, see the Market Data Transparency Information List (EMIL).

IN THIS SECTION

DDLs
Data Definition Language (DDL) files are provided to Market Participants from ERCOT in order to create and use data extracts.

[User Guides](#)
Find helpful ERCOT guides on how to use various data extracts and applications.

[Digital Certificate Security Information](#)
This page contains root and intermediate certificates and public key information needed to interface with ERCOT systems.

[XSDs](#)
XML Schema Definitions (XSD) files are used to define extracts provided in an Extensible Markup Language (XML) format.

Key Documents

Document Name	Date	Size
MDT Missed Posting Archive 2021	Jan 3, 2022	- xlsx - 23.9 KB
MDT Missed Posting Archive 2020	Jan 4, 2021	- xlsx - 26.4 KB
MDT Missed Posting Archive 2019	Jan 11, 2020	- xlsx - 55.9 KB



2. Subscribe



EMIL Applications Notices

Home > Applications

Application Library

These are the applications available based on your Digital Certificate's permissions.



CRR MOI

Internal Congestion Revenue Rights (CRR)
Market Operator Inte...

Certified



Extract Subscriber

Subscribe/unsubscribe to/from specific
certified retail and s...

Certified



Find ESIID

Find Electric Service Identifier (ESI ID)
information.

Secure



Market Data Transparency Web Services

Self-service data request access for a subset of
AMS, Service...

Certified

Help



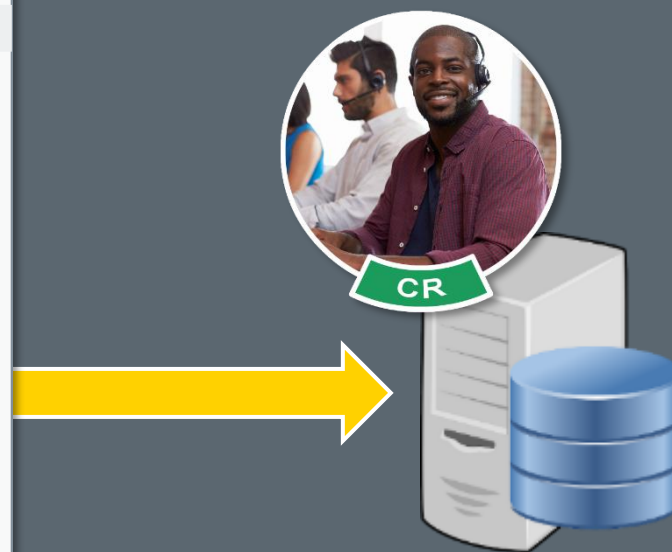
3. Download and import data

ercot **Extract Subscriber** ?

Welcome Current as of: 01/07/2020

Company: ENERGY SERVICES LLC (LSE) - 999999999

Extract Name	Subscribe	Unsubscribe	Output Type
Default Profile ESI ID Report			
DAILY	<input type="checkbox"/>		CSV
ESI ID Service History and Usage Extract			
DAILY	Subscribed	<input type="checkbox"/>	CSV
Load Estimation Counts Report - Certified			
DAILY	Subscribed	<input type="checkbox"/>	CSV
Mapping Status Reject Report			
DAILY	Subscribed	<input type="checkbox"/>	CSV
Potential Load Loss Report			
DAILY	Subscribed	<input type="checkbox"/>	CSV
Real Time Market Consolidated Operating Day Extract			
DAILY	Subscribed	<input type="checkbox"/>	CSV



Applications | PowerPoint - All Documents | mis.ercot.com/secure/applications | DUNS: 183529049 | ART DELLER



EMIL Applications Notices


Home > Applications

Application Library

These are the applications available based on your Digital Certificate's permissions.

- CRR MOI** Certified
Internal Congestion Revenue Rights (CRR) Market Operator Inte...
- Market Data Transparency Web Services** Certified
Self-service data request access for a subset of AMS, Service...
- NMMS PTC** Certified
NMMS Project Tracker and Coordinator (PTC) allows for submiss...
- Service Requests** Certified
Create or find Service Requests.
- Extract Subscriber** Certified
Subscribe/unsubscribe to/from specific certified retail and s...
- Market Manager (MMSUI)** Certified
Market Manager (MMSUI) is used to create and review market su...
- Outage Scheduler** Certified
Outage Scheduler (OS) is used to view, submit, and modify Out...
- Settlement Disputes** Certified
Create or find Settlement Disputes.
- Find ESIID** Secure
Find Electric Service Identifier (ESI ID) information.
- NMMS MOD** Certified
NMMS Model on Demand (MOD) allows for submission, modificatio...
- Renewable Energy Credits**
Link to Texas Renewable Energy Credits (REC) website.

Provides Similar Information on Ad Hoc Basis



Data Request Services Status

- Request Information

Provide ESIID account records	?
Provide ESIIDs I own for a trade date	?
Provide Non-IDR transaction data for ESIIDs I own	?
Provide ESIIDs where AMS interval data not loaded for a trade date	?
Provide IDR usage data for ESIIDs I own (IDR required)	?
Provide all extract records for ESIID Service History and Usage extract	?
Provide AMS interval data for a trade date	?

+ Transaction Information

mis.ercot.com/secure/data-products?page=1

DUNS: 183529049 | ART DELLER

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EMIL Applications Notices

Home > EMIL

ERCOT Market Information List (EMIL)

EMIL shows all ERCOT market products required to be supplied by Protocols or other binding documents (OBDs) and details about each product, including the Report Type ID, target audience, MIS posting location, and required access roles. You can filter the products using the buttons below. You can also enter keywords in the search bar. Items that can be searched using keywords are the Product Name, Product Description, EMIL ID, Report Type ID, or applicable Rules.

Mimic

Select a Market Participant

View as MP

Availability Audience Channel Posting Type Status Keyword

To search for an exact keyword string, enclose search terms in quotation marks. Example: "State Estimator Load Report"

Applied Filters None Applied

3,512 Products [Export the full EMIL](#)

25 per page Previous 1 2 3 4 5 Next

2-Day Ancillary Services Reports

This report will contain all 48 Hour disclosure data related to DAM. The following individual files are included in the report: NP3-959-EX 48-hour Aggregate AS Offers; NP3-960-EX 48-hour Self-Arranged AS; NP3-961-EX 48-hour Cleared DAM AS (previously named 48 Hour Ancillary Services Reports)

Search for Related Topic(s): [Day-Ahead Market\(DAM\)](#) | [Ancillary Services](#) | [Market Results](#)

2-Day DAM Bids and Offers Reports

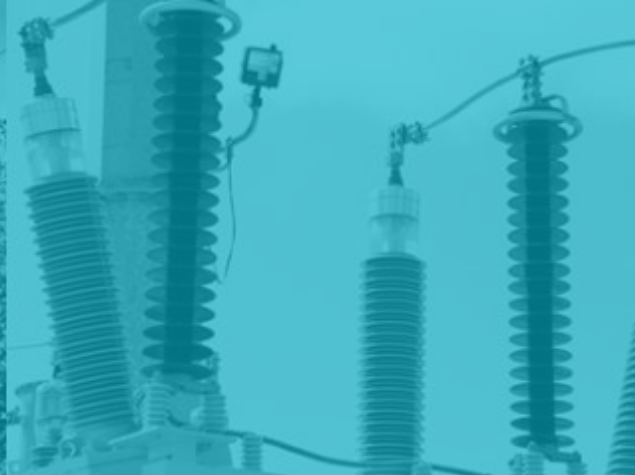
This report will contain all 48 Hour disclosure data related to DAM. The following individual files are included in the report: NP3-954-EX 48-hour Total Cleared Energy Bids and Energy-Only Offers; NP3-955-EX 48-hour Total Cleared Energy Bids and Energy-Only Offers by Disclosure Areas; NP3-962-EX 48-hour Point-to-Point Obligation Bids; NP3-963-EX 48-hour Point-to-Point Obligation Bids by Disclosure Areas (previously named 48 Hour DAM Bids and Offers Reports)

Search for Related Topic(s): [Day-Ahead Market\(DAM\)](#) | [Disclosure Reports](#) | [Market Results](#)

Help



What does a CR do with all this data?



Module 7

Issue Resolution



Retail responsibilities

- Investigate customer issues
- Maintain customer records
- Verify billing accuracy





**Missing
Transactions**

**Usage &
Billing Issues**



**Inadvertent
Gains &
Losses**

Switch Hold

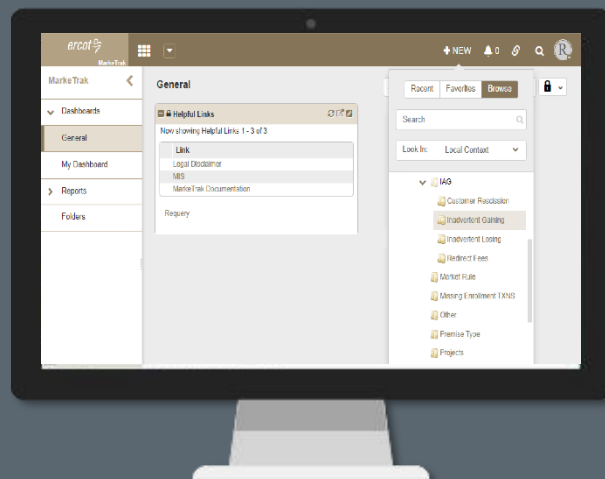


**What tools are available to identify
& resolve issues?**

Market Participants turn to ...

MarkeTrak

The Market issue resolution tool



Applications | mis.ercot.com/secure/applications | DUNS: 183529049 | ART DELLER

Application Library

These are the applications available based on your Digital Certificate's permissions.

CRR MOI Internal Congestion Revenue Rights (CRR) Market Operator Inte... Certified	Extract Subscriber Subscribe/unsubscribe to/from specific certified retail and s... Certified	Find ESIID Find Electric Service Identifier (ESI ID) information. Secure
Market Data Transparency Web Services Self-service data request access for a subset of AMS, Service... Certified	Market Manager (MMSUI) Market Manager (MMSUI) is used to create and review market su... Certified	NMMS MOD NMMS Model on Demand (MOD) allows for submission, modificatio... Certified
NMMS PTC NMMS Project Tracker and Coordinator (PTC) allows for submiss... Certified	Outage Scheduler Outage Scheduler (OS) is used to view, submit, and modify Out... Certified	Renewable Energy Credits Link to Texas Renewable Energy Credits (REC) website.
Service Requests Create or find Service Requests. Certified	Settlement Disputes Create or find Settlement Disputes. Certified	

Goals of MarkeTrak

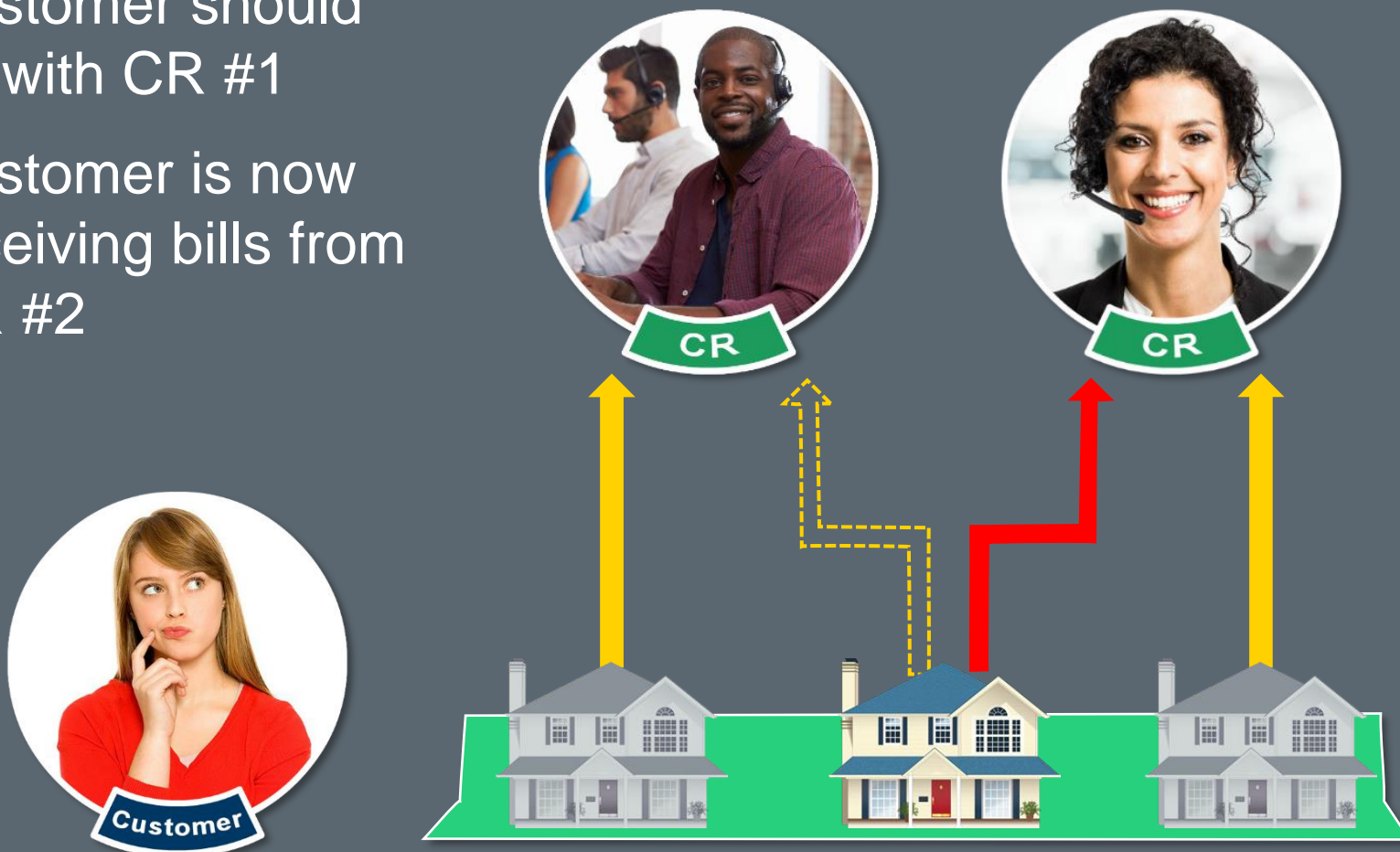
- Facilitate resolution of issues between Market Participants
 - Discovery and visibility
 - Tracking and status
- Enable historical reporting of issues





What Happened?












- Customer should be with CR #1
- Customer is now receiving bills from CR #2





Application Library

These are the applications available based on your Digital Certificate's permissions.

 <p>CRR MOI Certified Internal Congestion Revenue Rights (CRR) Market Operator Inte...</p>	 <p>Extract Subscriber Certified Subscribe/unsubscribe to/from specific certified retail and s...</p>	 <p>Find ESIID Secure Find Electric Service Identifier (ESI ID) information.</p>
 <p>Market Data Transparency Web Services Certified Self-service data request access for a subset of AMS, Service...</p>	 <p>Market Manager (MMSUI) Certified Market Manager (MMSUI) is used to create and review market su...</p>	 <p>NMMS MOD Certified NMMS Model on Demand (MOD) allows for submission, modificatio...</p>
 <p>NMMS PTC Certified NMMS Project Tracker and Coordinator (PTC) allows for submiss...</p>	 <p>Outage Scheduler Certified Outage Scheduler (OS) is used to view, submit, and modify Out...</p>	 <p>Renewable Energy Credits Link to Texas Renewable Energy Credits (REC) website.</p>
 <p>Service Requests Certified Create or find Service Requests.</p>	 <p>Settlement Disputes Certified Create or find Settlement Disputes.</p>	



ESI ID Summary

[Print Summaries](#)

ESI ID	Found	Status	Street	Address Line 2	City	ZIP	CSA	REP of Record	Open Svc Ord	Premise Type	POLR Customer Class	Select Dwnld
ESIID100563425MHOST	✓	A	728 Pacman Blvd		Pflugerville	78660	No	No	No	RES	RES	<input type="checkbox"/>

✓ Selected ESI ID

Select All

[Download Summary](#)

ESI ID Detail: ESIID100563425MHOST

[View Transactions](#)[Print Details](#)

Address 728 Pacman Blvd
Pflugerville, TX 78660

Current Status	Active	Utility Name	ERCOTTEST_TDSP	ESI ID Eligibility Date	Oct 27, 2010
Effective Date	Sep 11, 2010	DUNS #	666666666	ESI ID Start Date	Sep 11, 2010
Premise Type	Residential	Metered Flag	true	ESI ID Create Date	Aug 28, 2010
POLR Customer Class	Residential	Meter Read Cycle	21	ESI ID Retired Date	
Settlement AMS Indicator	false	Power Region	ERCOT		
Switch Hold	N	Station Name	DEVILS HILL		
TDSP AMS Indicator	AMSR	Station Code	DEVIHI		



CR





Transaction Summary for ESI ID: ESIID100545313MHOST

Print Summaries



REP of Record: Jul 08 2019

- + Switch
- + Move In
- + 1st Unknown 814_20 Process





Transaction Summary for ESI ID: ESIID100563425MHOST

[Download Results](#)[Print Summaries](#)

Switch

Status: **Complete** Original Trxn #: OTIDSW1100563427MHOST

Type	From	To	ERCOT Time Stamp ▲	Trxn Status	Key Date	Retry Status	Duplicate
814_01	LSE	ERCOT	Aug 28, 2019 0132 PM	Accept			No
814_03	ERCOT	ERCOTTEST_TDSP	Aug 28, 2019 0132 PM	Accept	Aug 28 2019		No
814_04	ERCOTTEST_TDSP	ERCOT	Aug 28, 2019 0134 PM	Accept	Aug 28 2019		No
814_05	ERCOT	LSE	Aug 28, 2019 0134 PM	Accept	Aug 28 2019		No
814_06	ERCOT	ERCOTTEST_LSE_1	Aug 28, 2019 0135 PM	Accept	Aug 28 2019		No
867_04	ERCOTTEST_TDSP	LSE	Aug 28, 2019 0137 PM	Accept			No

Details: 814_06

[Print Details](#)

From	ERCOT	To	ERCOTTEST_LSE_1
DUNS #	183529049	DUNS #	111111111
Request Submitted	20190828	Status/Action	Request Delete
Trxn Ref #	SBSW201908281335131WP4SF7	Reason	CHA
Orig Trxn Ref #	OTIDSW1100563427MHOST		
Service Period End	20190828		





ESI ID Summary [Print Summaries](#) ?

ESI ID	Found	Status	Street ▲	Address Line 2	City	ZIP	CSA	REP of Record	Open Svc Ord	Premise Type	POLR Customer Class	Select Dwnld
ESIID100563425MHOST	✓	A	728 Pacman Blvd		Pflugerville	78660	No	Yes	No	RES	RES	<input type="checkbox"/>

✓ Selected ESI ID Select All [Download Summary](#)

ESI ID Detail: ESIID100563425MHOST [View Transactions](#) [Print Details](#) ?

REP of Record as of: Aug 28, 2019

Address **728 Pacman Blvd**
Pflugerville, TX 78660

Current Status	Active	Utility Name	ERCOTTEST_TDSP	ESI ID Eligibility Date	Oct 27, 2010
Effective Date	Sep 11, 2010	DUNS #	666666666	ESI ID Start Date	Sep 11, 2010
Premise Type	Residential	Metered Flag	true	ESI ID Create Date	Aug 28, 2010
POLR Customer Class	Residential	Meter Read Cycle	21	ESI ID Retired Date	
Settlement AMS Indicator	false	Power Region	ERCOT		
Switch Hold	N	Station Name	DEVILS HILL		
TDSP AMS Indicator	AMSR	Station Code	DEVIHI		





Transaction Summary for ESI ID: ESIID100545313MHOST

Print Summaries



REP of Record: Aug 28 2019

- + Switch
- + Move In
- + 1st Unknown 814_20 Process





Transaction Summary for ESI ID: ESIID100563425MHOST

[Download Results](#)[Print Summaries](#)

REP of Record: Aug 28 2019

Switch

Status: Complete Original Trxn #: OTIDSW1100563427MHOST

Type	From	To	ERCOT Time Stamp ▲	Trxn Status	Key Date	Retry Status	Duplicate
814_01	ERCOTTEST_LSE_2	ERCOT	Aug 28, 2019 0132 PM	Accept			No
814_03	ERCOT	ERCOTTEST_TDSP	Aug 28, 2019 0132 PM	Accept	Aug 28 2019		No
814_04	ERCOTTEST_TDSP	ERCOT	Aug 28, 2019 0134 PM	Accept	Aug 28 2019		No
814_05	ERCOT	ERCOTTEST_LSE_2	Aug 28, 2019 0134 PM	Accept	Aug 28 2019		No
814_06	ERCOT	LSE	Aug 28, 2019 0135 PM	Accept	Aug 28 2019		No
867_04	ERCOTTEST_TDSP	ERCOTTEST_LSE_2	Aug 28, 2019 0137 PM	Accept			No

Details: 814_01

[Print Details](#)

From	REP2	To	ERCOT
DUNS #	111111112	DUNS #	183529049
Request Submitted	20190828	Service ZIP	78660
Trxn Ref #	OTIDSW1100563427MHOST	Action/Status	Request Addition
Orig Trxn Ref #		Special Switch Date	
TDSP Name		Billing Type	ESP
DUNS #		Bill Calc Code	DUAL
Request Type	Historical Interval Usage,	Special Needs?	N

CUSTOMER INFORMATION

Contact Name	TRENT REZNOR	Billing Name	
Phone	8005551212	Address	
Notification Name	NOTICE NAME		
Address	728 PACMAN BLVD		
	PFLUGERVILLE, TX 78660		

**CR**



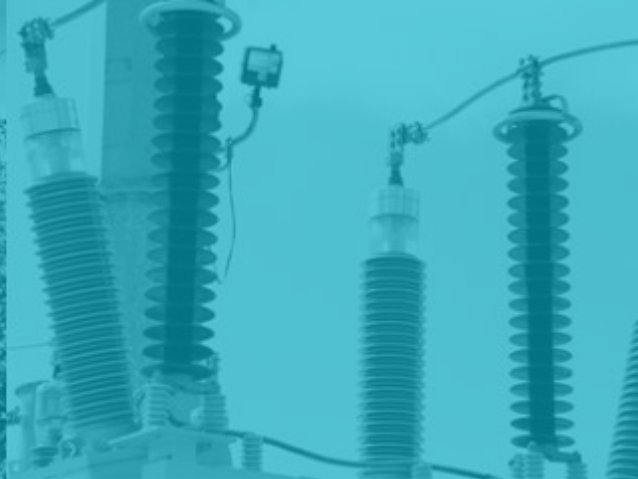
**What Happened?
How Is It Fixed?**





See ERCOT courses on MarkeTrak





Course Conclusion



Pre-requisites

- ERCOT Foundations – WBT
- Market Participant Relationships – WBT

For more info, see ...

- TxSET – ILT
- MarkeTrak – WBT
- LSE 201 – ILT and WBT

Course Recommendations x PowerPoint - All Documents x +

ercot.com/services/training/recommendations

MIS LOG IN Search

ercot

About ERCOT Services Committees and Groups Market Rules Market Information Grid Information Market Participants

Home > Services > Training > Course Recommendations

Course Recommendations

- QSE** – Qualified Scheduling Entity
- QSE-L** – Qualified Scheduling Entity Serving Load
- QSE-R** – Qualified Scheduling Entity Serving Resources
- RE** – Resource Entity
- CR** – Competitive Retailer (Includes Retail Electric Provider and Opt-In)
- NOIE** – Municipal or Cooperative Entity serving load
- CRR** – Congestion Revenue Rights Account Holder
- TDSP** – Transmission and/or Distribution Service Provider

— Foundational Market Courses

	QSE	QSE-L	QSE-R	RE	CR	NOIE	CRR	TDSP
ERCOT Foundations WBT	✓	✓	✓	✓	✓	✓	✓	✓
Market Participant Relationships WBT	✓	✓	✓	✓	✓	✓	✓	✓
Locational Marginal Pricing WBT	✓	✓	✓	✓	✓	✓	✓	✓

- ERCOT Client Services
Clientservices@ercot.com
- ERCOT Mailing Lists
<http://lists.ercot.com/>
- ERCOT Nodal Market Protocols
<http://www.ercot.com/mktrules/nprotocols/>
- ERCOT Training
<http://www.ercot.com/services/training/>
- Market Education Contact
Training@ercot.com

Scan this QR code to take the course survey!

<https://www.surveymonkey.com/r/ERCOTILT>

