

## **Filing Receipt**

Filing Date - 2023-05-12 02:03:36 PM

Control Number - 53911

Item Number - 48

#### **MEMORANDUM**

FROM: Jason M. Ryan, ADER Task Force Chair

Arushi Sharma Frank, ADER Task Force Vice-Chair

RE: Project No. 53911, Aggregate Distributed Energy Resource (ADER)

ERCOT Pilot Project

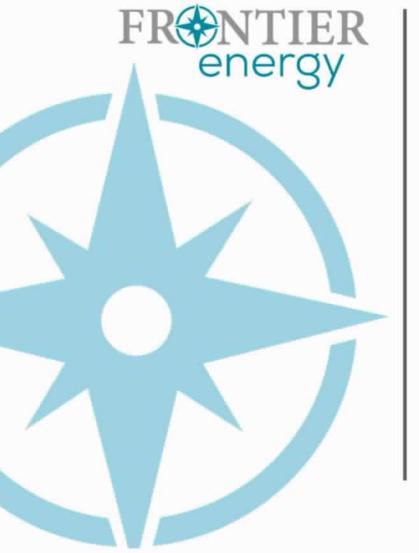
DATE: May 12, 2023

On March 12, 2023, the ADER Task Force held a workshop titled "Understanding the Potential for Participation in Other Programs."

The following attached material was presented:

- EUMMOT, Overview of ERCOT Transmission & Distribution Utility (TDU) Residential and Commercial Load Management Programs
  - Any questions regarding this presentation may be directed to Amy Martin at amartin@frontierenergy.com
- ERCOT, ERCOT's Process for identifying duplicate participants in the ADER Pilot Project and the Emergency Response Service
  - Any questions regarding this presentation may be directed to Mark Patterson at mark.patterson@ercot.com

A recording of the workshop is available on the Texas ADER Task Force YouTube channel at: https://youtu.be/8ZijQue7iEg













#### Presentation to the PUC ADER Task Force:

Overview of ERCOT Transmission & Distribution Utility (TDU) Residential and Commercial Load Management Programs

05.12.2023



# Frontier Energy (formerly Frontier Associates)

#### National footprint

- 140+ employees
- Offices in TX, CA, MN, NY

#### Our capabilities

- Energy engineering
- Electric transportation
- Energy efficiency/DSM programs
- Advanced power generation
- Foodservice energy & water
- Cloud-based software







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# Frontier Energy Texas Focus

- Program Administration (Standard Offer Programs, Load Management)
- Implementation (Low-income Weatherization)
- Database Support ("P3" all TX IOUs except CenterPoint and Oncor)
- Program Design & Improvement (contractor feedback, incentive rate changes, measure mix modifications, etc.)
- Regulatory Support (EEPR/EECRF filing support, bonus & cost-effectiveness calculations, PUC/EM&V support)
- EUMMOT Administrator
  - Host/plan/support quarterly meetings
  - Deemed savings development in support of TRM (collaboration with Tetra Tech)
  - Research & Development projects
  - Facilitate group discussions regarding PUC/EM&V/TRM/program specific matters
  - Other tasks as needed



### **EUMMOT**

### Electric Utility Marketing Managers of Texas

 Voluntary organization of electric investor-owned utilities formed to facilitate coordination among the energy efficiency program managers across the state

#### Key Objectives:

- Convey common perspectives on efficiency program design and implementation,
- Provide for exchange of information on markets and technologies, and
- Advance understanding and participation in efficiency programs.



















# TDU Load Management Programs (ERCOT)

- Residential Load Management (Summer only)
  - CenterPoint
  - Oncor
- Commercial Load Management (Winter & Summer)
  - AEP Texas
  - CenterPoint
  - Oncor
  - 4. TNMP





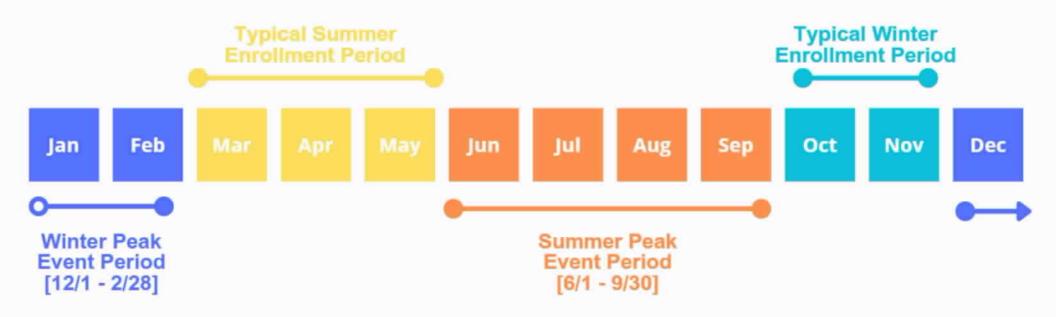








### **General Timeline: Enrollment & Events**















# **Residential Load Management**













### Residential Load Management Programs (ERCOT)

Residential LM	2022 Actuals			
Utility	Total Spending	Number of Meters	Reported Demand Reduction (kW)	Reported Energy Savings (kWh)
CenterPoint	\$838,487	22,361	19,630	58,890
Oncor	\$1,437,794	41,127	44,067	132,200
Total	\$2,276,281	63,488	63,697	191,090

Residential LM	2023 Projections			
Utility	Total Budget	Projected Demand Reduction (kW)	Projected Energy Savings (kWh)	
CenterPoint	\$973,409	22,000	66,000	
Oncor	\$1,130,896	35,000	105,000	
Total	\$2,104,305	57,000	171,000	













# **Key Program Features**

#### Oncor

- Eligible service providers include (but not limited to) national/local energy service companies and REPs
- Project must include potential kW reduction from at least 1,000 residential customers
- Cannot participate in an ERCOT load curtailment program while enrolled in the Oncor program

#### CenterPoint

- Program sponsors may include REPs, cable/satellite TV providers, alarm service providers, aggregators, consultants, etc.
- Single-family homes only (all A/C systems must be enrolled); electric water heaters and pool pumps may also be considered
- Cannot participate in multiple residential LM programs within ERCOT for the same period of performance











# **Key Dates**

- Programs Open & Close for Participant Sign-up in Winter/Spring each year
- Participant lists provided to ERCOT

#### Oncor

- Program opens for applications April 3, 2023
- Final ESIID lists must be submitted by approved participants by May 5, 2023

#### CenterPoint

- New sponsor enrollment and ESID submittals begin January 30, 2023
- ESID submittal date February 28, 2023
- Enrollments must be completed prior to March 31, 2023











# **Key Program Features**

- Summer Peak Period (PUC Subst. Rule 25.181)
  - June 1 September 30; 1 pm 7 pm (excluding weekends and federal holidays)

#### Oncor

- Participants must be available to curtail 24 hours a day, 7 days a week, and within 30 minutes notice during the summer peak period
- Will pay incentives to participants that curtail at Energy Emergency Alert (EEA) Level 1 and EEA Level 2

#### CenterPoint

- Not a 24/7 program design; focused on the summer peak period
- Trigger to initiate an event is ERCOT EEA Level 2 (or an ERCOT notification in anticipation of a Level 2 event)













### 2023 Residential Load Management Curtailments

### **Test Events**

Utility	Count	Minimum Duration	Maximum Duration
CenterPoint	2	1 hour	4 hours
Oncor	1	<u> </u>	3 hours

### Unscheduled

Utility	Count	Minimum Duration	Maximum Duration
CenterPoint	5		
Oncor	6	3 hours	12 hours













### **CenterPoint** - Residential Load Management SOP



#### Important Dates and Deadlines:

- Enrollment must be completed prior to March 31<sup>st</sup>, 2023. The ESIID submittal date begins at 1:00 PM February 28<sup>th</sup>.
- Two unannounced test events will occur during the summer peak period, called with 30-minute notice. Sponsors
  may be asked to initiate five additional load management events in response to an ERCOT EEA2 emergency during
  the summer peak period.
- Incentive payments are issued by November 30<sup>th</sup>, 2023













### CenterPoint - Residential Load Management SOP



#### Eligibility Requirements:

- Sponsors may include REPs, cable/satellite TV providers, alarm service providers, load management aggregators, consultants, etc.
- Participants must be single-family homes within CenterPoint's service territory:
  - If multiple AC systems exist at the premise, all must be enrolled in the program.

#### • Exclusions:

- No window ACs
- Participants may not participate in multiple residential load management programs within ERCOT for the same program year.
- Individual Sponsors are limited to 20% of the annual budget
- Where curtailment would have negative environmental or health effects













### **CenterPoint** - Residential Load Management SOP



#### Incentive Structure:

- Incentive Budget:
  - \$900,000
  - It's estimated 22,000 ESIIDs will be required to achieve this budget goal.
- \$35/kW
- The baseline period kW follows a High 3 of 5 model.
- Curtailed kW is based on the total average kW reduction of all events for each ESIID.













# Oncor - Residential Load Management SOP



#### Important Dates and Deadlines:

- Applications open April 3, 2023
- Once approved, participants may submit projects beginning April 28, 2023
- Final ESIID lists must be submitted no later than May 5, 2023
- A scheduled test curtailment will occur in June. A maximum of six unscheduled events may be called at any time during the summer peak period.
- Incentives are paid at the end of the summer period (September 30<sup>th</sup>) within 45 days.













# Oncor - Residential Load Management SOP



#### Eligibility Requirements:

- Individual projects must include potential demand savings from at least 1,000 residential customers. The sites composing these projects, defined as individual ESIIDs, must meet the following requirements:
  - Be located within Oncor service territory in a residential service rate class
  - Not participate in an ERCOT load curtailment program while enrolled in the Oncor program
  - Expressed agreement to participating

#### Exclusions:

- Loads contracted with a REP where that contract prevents the load from participating in curtailment
- Where curtailment would have negative environmental or health effects
- Curtailable load that receives incentives through any other energy efficiency program
- "Critical Load" customers













# Oncor - Residential Load Management SOP



- Incentive Structure:
  - Incentive Budget:
    - \$1,050,000
- Participants must curtail a minimum of 90% of obligation across all events to be eligible for payment.

Type of Incentive	Incentive Rate	Demand Savings to Reach Cap	Incentive Cap
Tier 1 – EEA Level 2	\$30/kW	7,000 kW	\$210,000
Tier 2 – EEA Level 1 & 2	\$40/kW	5,250 kW	\$210,000













# **Commercial Load Management**













## **Summer Commercial Load Management Programs (ERCOT)**

Summer Comm LM	2022 Actuals				
Utility	Total Spending Number of Meters/Premises Number of (kW) Reported Energy Savings (kW)				
AEP Texas	\$892,547	292	28,968	28,968	
CenterPoint	\$3,859,406	353	143,798	786,380	
Oncor	\$2,597,495	488	89,809	296,428	
TNMP	\$248,607 80 7,306 7,3				
Total	\$7,598,055 1,213 269,881 1,119,082				

Summer Comm LM	2023 Projections			
Utility	Total Budget Projected Demand Projected Er Reduction Savings (kW) (kWh)			
AEP Texas	\$821,563	26,308	26,308	
CenterPoint	\$3,508,636	110,000	660,000	
Oncor	\$2,338,678	60,000	180,000	
TNMP	\$269,400	1,500	1,500	
Total	\$6,938,277 197,808 867,808			













### Winter Commercial Load Management Programs (ERCOT)

Winter Comm LM	2022 Actuals			
Utility	Total Spending  Number of Meters  Reported Demand Reported Energy Savings (kW)			
AEP Texas				
CenterPoint	NA NA			
Oncor	\$1,509,695 34 34,722 104,		104,166	
TNMP	NA NA			
Total	\$1,509,695	34	34,722	104,166

Winter Comm LM	2023 Projections			
Utility	Total Budget Projected Demand Projected Energy Reduction Savings (kW) (kWh)			
AEP Texas	\$375,000	12,768	12,768	
CenterPoint	\$476,753	15,000	90,000	
Oncor	\$1,507,861	35,000	105,000	
TNMP	\$64,656	6,250	6,250	
Total	\$2,424,270 69,018 214,018			

New Programs developed in response to Senate Bill 3 (2021)













# Main Comm LM Program Features

#### Typical Eligibility Requirements

- Commercial customers taking service at the distribution level, and/or certain eligible transmission level customers including nonprofits, governmental entities and educational institutions; individual project sites may be self-sponsors, ESCOs/REPs, or other third-parties with customer agreements
- Utilities require a minimum load reduction
- Must contribute to the Energy Efficiency Cost Recovery Fund (EECRF)

#### Typical Exclusions

- If curtailment would have negative environmental or health effects
- Curtailable load that receives incentives through any other energy efficiency or demand response program no double-dipping
- Please see utility program manuals and websites for more details

















# Thank you!

Amy D. Martin amartin@frontierenergy.com 737.236.0287







Texas PUC ADER Task Force: Virtual Workshop on Understanding the Potential for Participation in Other Programs

ERCOT's Process for identifying duplicate participants in the ADER Pilot Project and the Emergency Response Service

# Site Participation in ERS

Emergency Response Service (ERS)

- 4 ERS Standard Contract Terms (SCT) per program year
  - Dec-Mar, Apr-May, Jun-Sep, Oct-Nov
  - Procurement for each SCT occurs approx. 2 weeks before the start of the SCT (ex: Jun-Sep SCT procurement ~ mid May
  - Once procurement is completed ERCOT will know which sites (ESIIDs or UMIs) will be carrying an ERS obligation for the SCT.
- Any ADER Pilot Project DOTA form submitted for validation by ERCOT will be evaluated against sites participating in the current ERS SCT or the subsequent SCT for which the procurement has been completed.
- ERCOT will rerun validation after the procurement of each subsequent ERS SCT. If a site offers in subsequent ERS procurements, those sites will be rejected in ERS.

Note: Even though the start date for a site may be in future ERS SCTs, ERCOT will assume if a site in participating in the current SCT, it will also offer to participate in subsequent SCTs; therefore, ERCOT will reject that site from an ADER if it is participating in the current SCT.



### Other Validations

# There are other validations performed beyond just ERS participation which may result in a site being rejected

### For aggregations in competitive choice areas (ESIIDs)

- Valid ESIID
- Verify no duplicate sites in other approved ADER DOTA forms
- Verify no duplicate sites in submitted DOTA (exception: different controllable device types)
- All sites represented by same LSE
- All sites in same ERCOT Load Zone
- All sites in same DSP service territory (validated by DSP)
- A valid TDSP interval data recorder meter type



# Other Validations

## For aggregations in NOIE/Co-Op areas (UMI's)

- Verify no duplicate sites in other approved ADER DOTA forms
- Verify no duplicate sites in submitted DOTA (exception: different controllable device types)

Note: ERCOT has limited information in our systems to validate if UMI sites meet all the criteria defined in the governing document to be included in a DOTA form. Any additional validation beyond those listed above will need to be completed by the appropriate DSP reviewing the forms before submitting to ERCOT.



#### Slide 4

A0 I switched order of these two bullets to be the same order as prior page Author, 2023-05-11T14:01:18.744



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