PLMA EV SYMPOSIUM
AUGUST 26-27 DENVER, CO

Switch Mode: Converting Customers Between Programs To Maximize Learning

August 26, 2025 | 4:15 – 5:00 PM

Intent of the CT EV Program: The Regulator's Perspective

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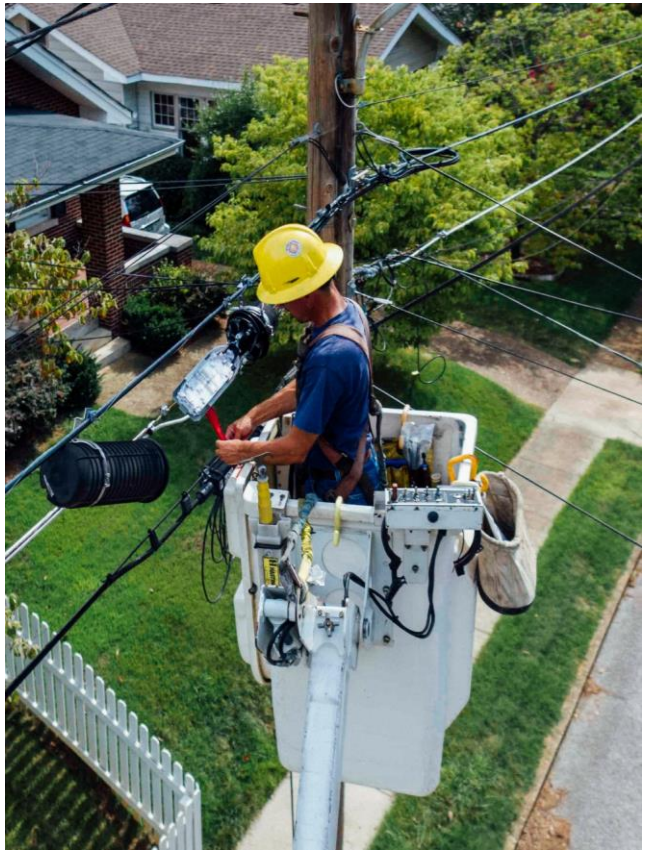
CT Public Utilities Regulatory Authority (PURA)

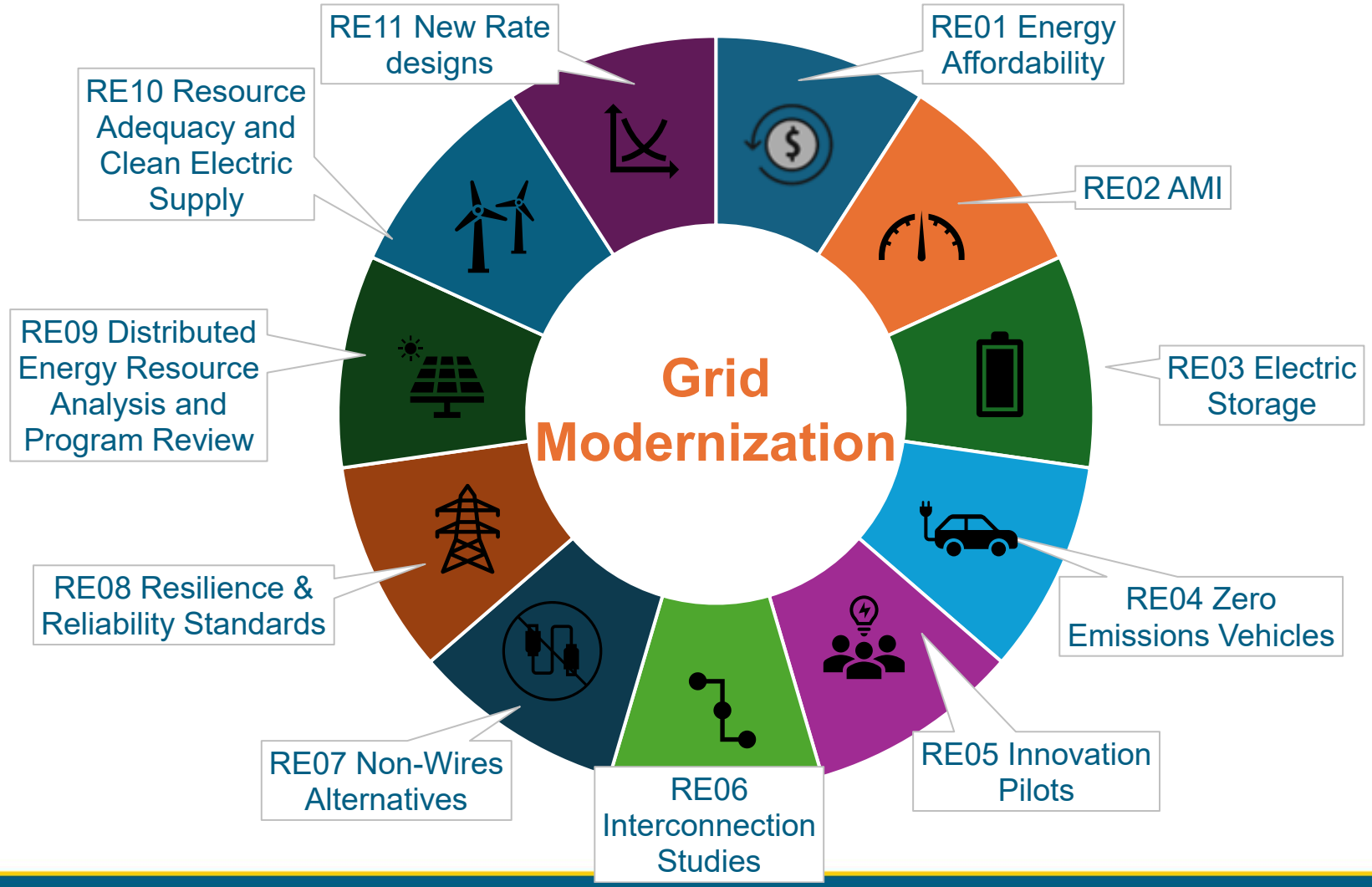
Equitable Modern Grid (EMG) Framework

2017	2019	2022
EMG proceeding opens	Interim decision	CT EV program launch

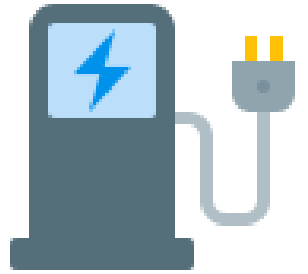
1. Support, or remove barriers to, the growth of CT's green economy;
2. Enable a cost-effective, economy-wide transition to a decarbonized future;
3. Enhance customer access to a resilient, reliable, and secure commodity; and
4. Advance the ongoing energy affordability dialogue in the State; particularly for underserved communities



Grid Modernization Dockets



CT Electric Vehicle Charging Program



- **CT Electric Vehicle (EV) Charging Program is a 9-year program**
  - Launched on January 1, 2022
  - Administered by CT's electric utilities (Eversource and United Illuminating)
  - Incentives for Residential and Commercial **EVSE** + **make-ready** costs
  - Rate for DCFCs and Level 2 EVSE serving Light-Duty Fleets (reduced demand charges)
  - **Required** managed charging programs for residential customers & light-duty fleet operators

EV Charging Program Deployment Targets:

	NUMBER OF PORTS (STATEWIDE)				
PROGRAM AREA	2022–2024	% Reserved	2025–2027	2028–2030	TOTAL
Residential Single-Family (Level 2)	15,000	53%	17,500	17,500	50,000
Residential Multi-Unit Dwellings (Level 2)	3,639	87%	To be revisited	To be revisited	To be revisited
DCFC	438	78%	172	172	782
Destination (Level 2)	1,578	98%	1,654	1,654	4,868
Workplace & Light-Duty Fleets (Level 2)	2,314	79%	2,521	2,521	7,356

CT Electric Vehicle Managed Charging Program

- **PURA** requires participation in the **managed charging** program if you receive program incentives for:

1. Residential single-family home L2 and/or wiring upgrade incentives
2. Light-duty fleet L2 or DCFC charger that is **private** (not publicly accessible)

- **PURA directed the electric utilities to:**
  - Design and establish a 2-tier managed charging program to "optimize the distribution system and maximize grid level benefits of transportation electrification for all customers"
  - Establish a Managed Charging Working Group to develop implementation details

Current Managed Charging Pilots:
- Multi-Unit Dwellings
- Light-Duty Fleets

Residential Managed Charging Program

Tier	On-Peak Hours		Maximum Monthly Incentive	Maximum Annual Incentive
Baseline Tier	3:00 P.M. – 9:00 P.M. non-holiday weekdays	Passive Managed Charging	$10	$120
Advanced Tier	3:00 P.M. – 9:00 P.M. non-holiday weekdays	Active Managed Charging	$25	$300

Executing on the Vision: The Utility Perspective

EVERSOURCE

Gabby Ostrov

Evolution of Managed Charging at Eversource

2019-2021
ConnectedSolutions DR

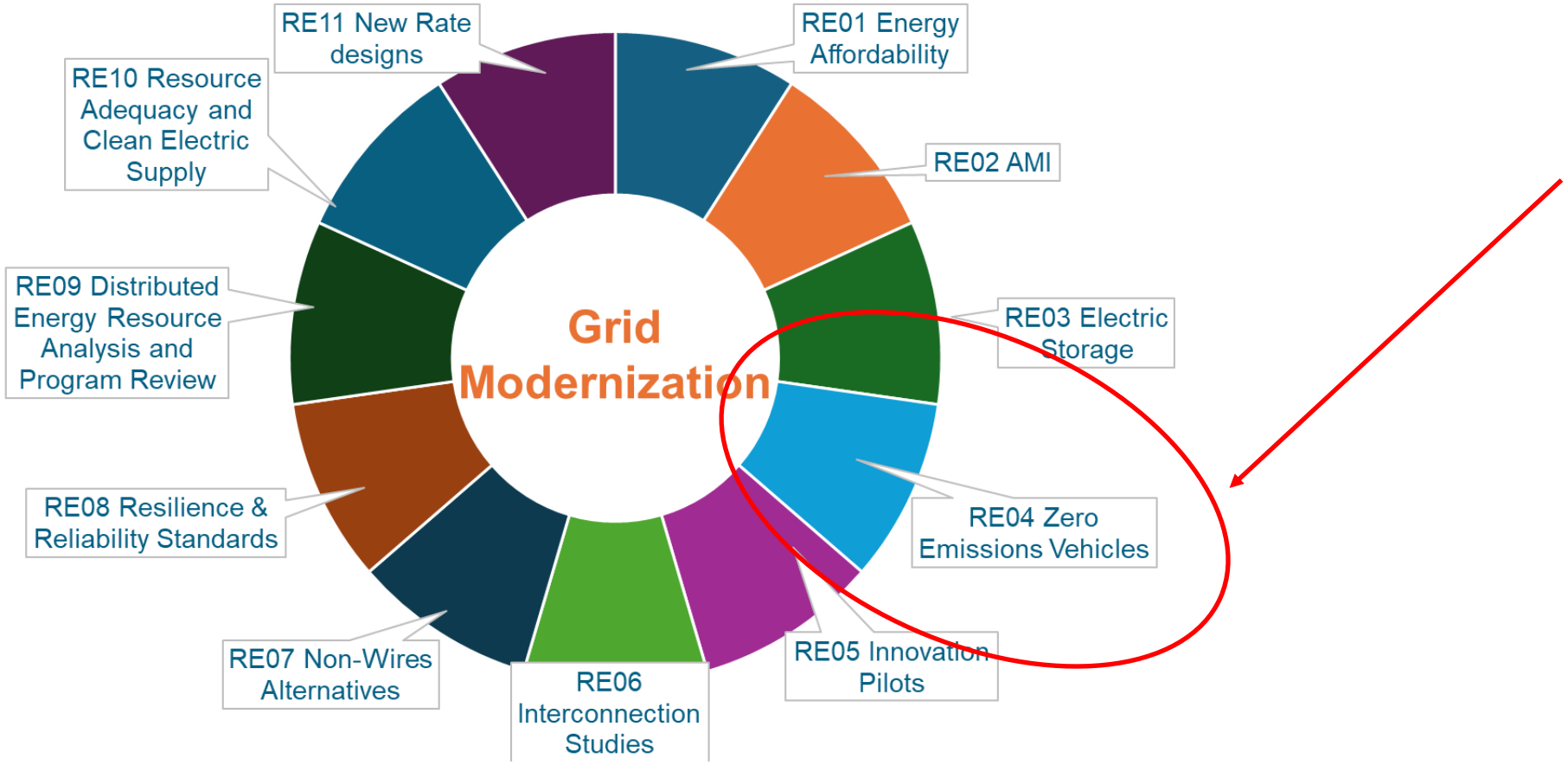
- Pilot (2019)
  - Began as a pilot to see if technology worked before adding EV chargers as eligible tech for ConnectedSolutions
- To program (2021) within ConnectedSolutions
  - Implemented within ConnectedSolutions
  - Called alongside batteries and thermostats for DR (Demand Response) events
    - BYOD (bring your own device) in CT and MA
    - Just chargers (ChargePoint and Enel X)
    - Just DR Events

Evolution of Managed Charging at Eversource

2019-2021	2022
ConnectedSolutions DR	CS Legacy DR
	CT EV DR only

- Launch of RE04: CT (only) EV Managed Charging DR-Only
  - BYOD-ish + up front installation rebates
  - Chargers and Vehicle Telematics
  - Just DR Events
- Legacy DR continues for existing participants

RE04: Grid Modernization Docket



Evolution of Managed Charging at Eversource

<table>
<tr><th>2019-2021</th><th>2022</th><th colspan="2">2023</th><th>2024</th></tr>
<tr><td rowspan="2">ConnectedSolutions DR</td><td rowspan="2">CS Legacy DR</td><td colspan="3">CT EV Control Group</td></tr>
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- RE04 Cont: CT EV Managed Charging with two participation tiers
  - Off-Peak Rewards + DR and Scheduled Charging (no DR)
  - Legacy DR continues for existing participants (some transferred to RE04, some stay as ‘control group’)

Working Toward Simplification

<table>
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Customer Experience is Top Priority.

Managing complexity across groups to honor the commitment to the customer

Prioritizing the Customer

Enel X Leaving North American Business Fall ‘24

- **Loss of access to** ~1,400 participants devices
+ **6 unique email campaigns to** ~1000 of Enel customers had the option to reconnect via their vehicle telematics via different pathways across DERMS and OEMs

Single Touchpoint for Rebates & MC Enrollment ‘24-’25

- **Fragmented enrollment flow** in marrying Managed Charging to up front installation rebate
- **Goal being to minimize complexity** when switching vendors as it would be Eversource hosted (Unable to complete across different parties and data requirements at that time)

Prioritizing the Customer

Transition of DERMS and Rebate Processor Jan ‘25

- **Potential for loss of data** and customer confusion across parties
+ **Email campaign for change** of party / terms, automatic customer incentive for loss of data during month of transition, etc.

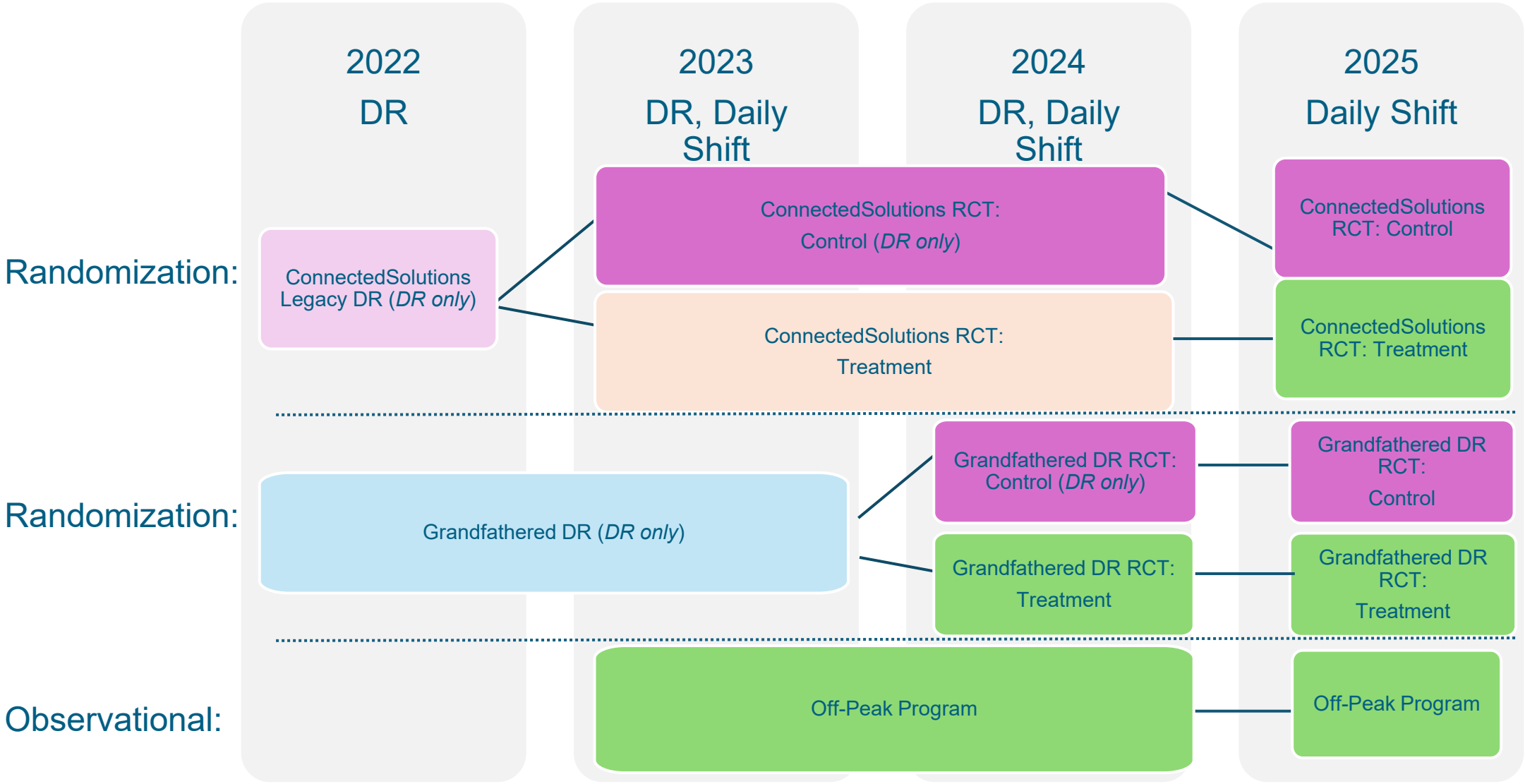
Reversed Enrollment Flow Mar ‘25

- **Goal follow up** on fragmented enrollment flow resulting in customers not connecting to managed charging and rebates then being stalled
+ **Flipped flow to** connect managed charging first, and making rebate application optional as a next step

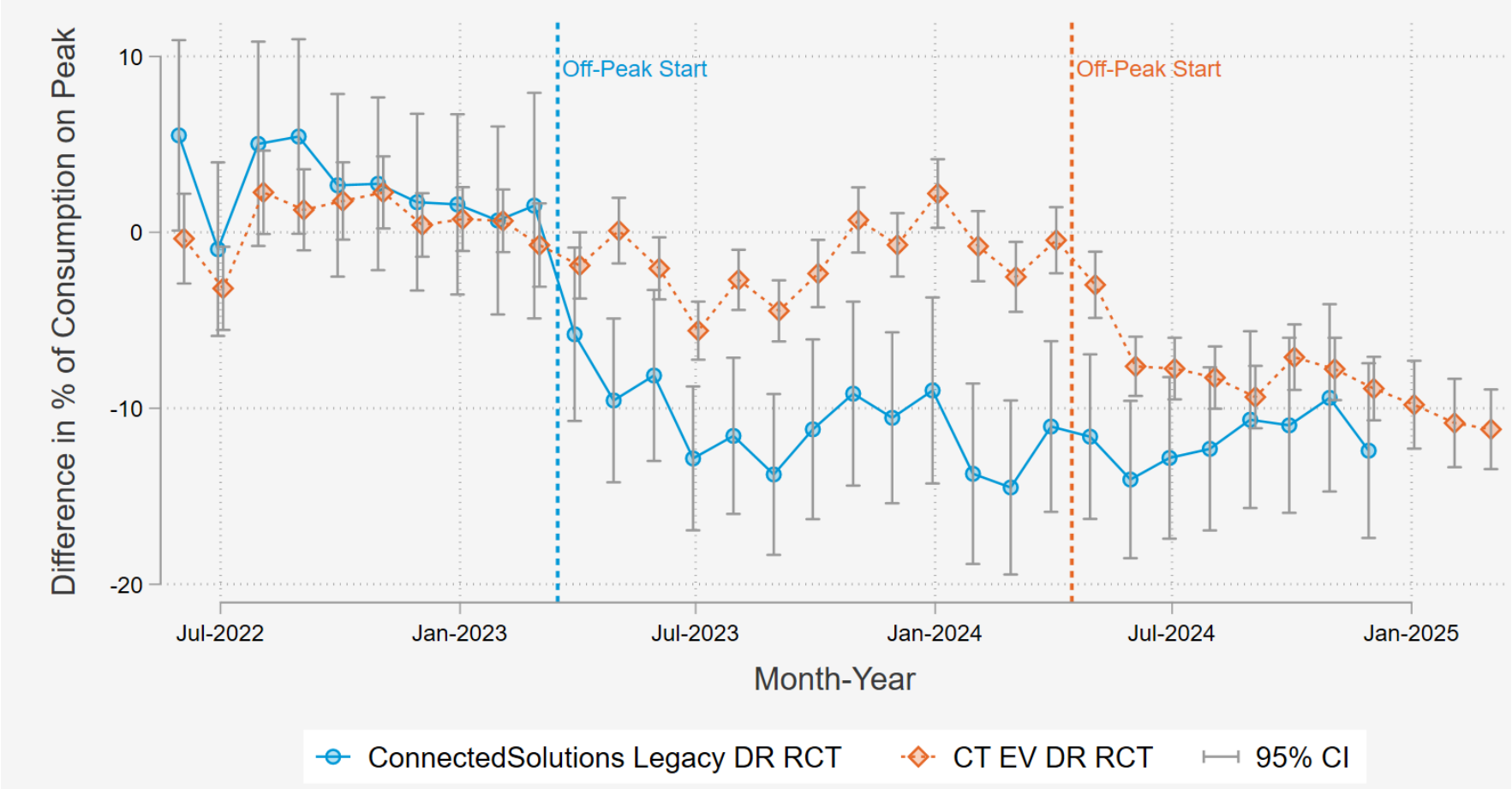
Quantifying the Impact: The Evaluator's Perspective

Marshall Blundell
Demand Side Analytics

EM&V Flow Chart



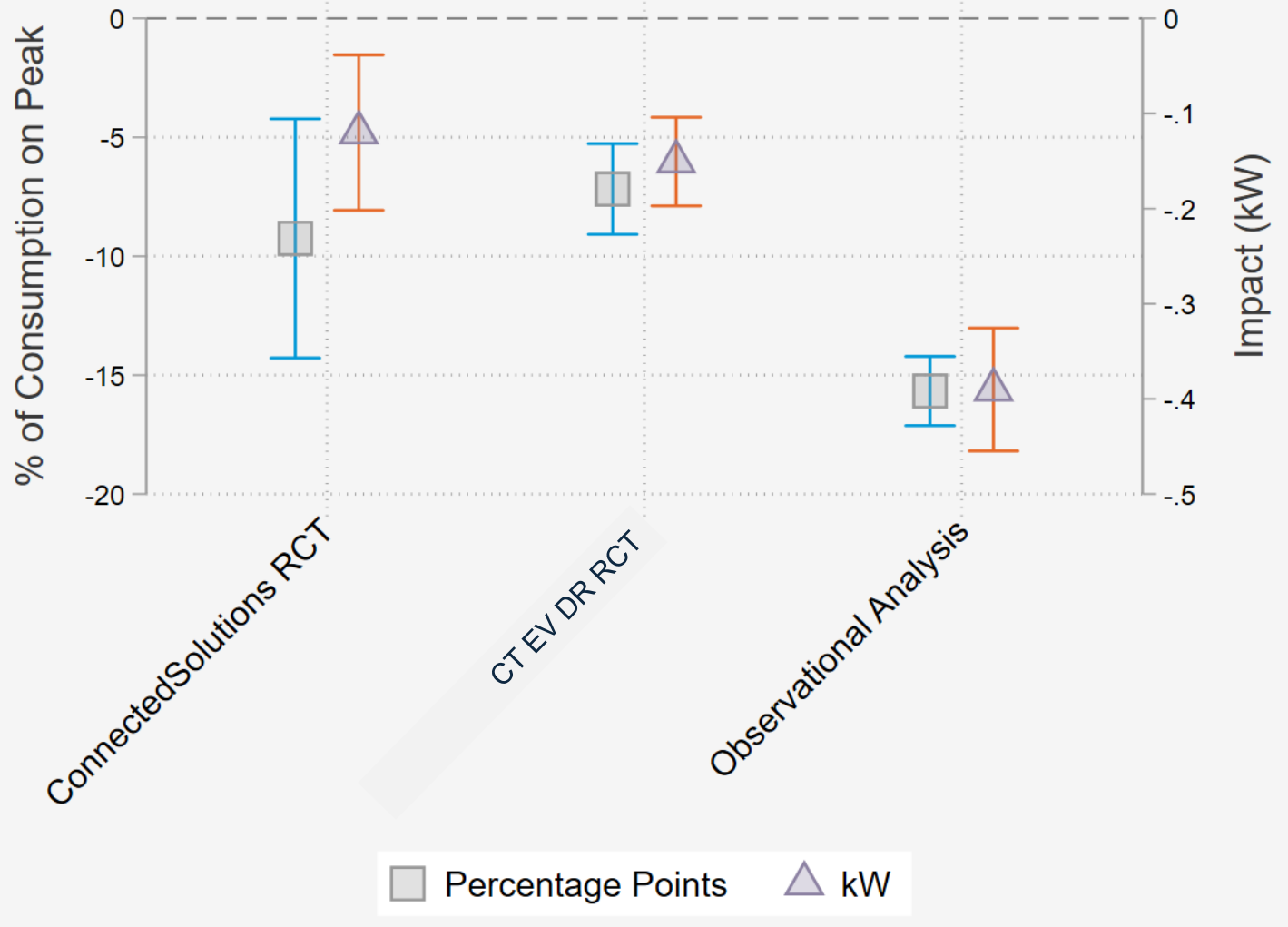
Off-Peak Program: RCT Results



Note: Graph presents estimated monthly coefficients and 95% confidence intervals from two regressions of monthly percent peak charging on treatment status for participants in the ConnectedSolutions RCT and the Grandfathered DR RCT. Peak hours are 3 PM to 9 PM on non-holiday weekdays. Standard errors are two-way clustered at the ID and month-of-sample level. The sample period covers January 1, 2022, through December 31, 2024. Since the dependent variable is a percentage, to recover average effects, observations are weighted by total monthly consumption.

- Peak consumption share:
  - Fell by 9.3 and 7.2 percentage points in the ConnectedSolutions Legacy DR RCT and the CT EV DR RCT, respectively.
  - Avg. peak consumption share in each control group is 21.5% and 22%.
- Peak demand:
  - Fell by 0.12 and 0.15 kW per participant.
  - Avg. peak demand in each control group is 0.3 and 0.43 kW.

Off-Peak Program: Impacts Comparison



Note: Graph presents estimated coefficients and 95% confidence intervals from six separate regressions. Standard errors are two-way clustered at the ID and week-of-sample level. The sample period covers April 1, 2024, through May 31, 2025.

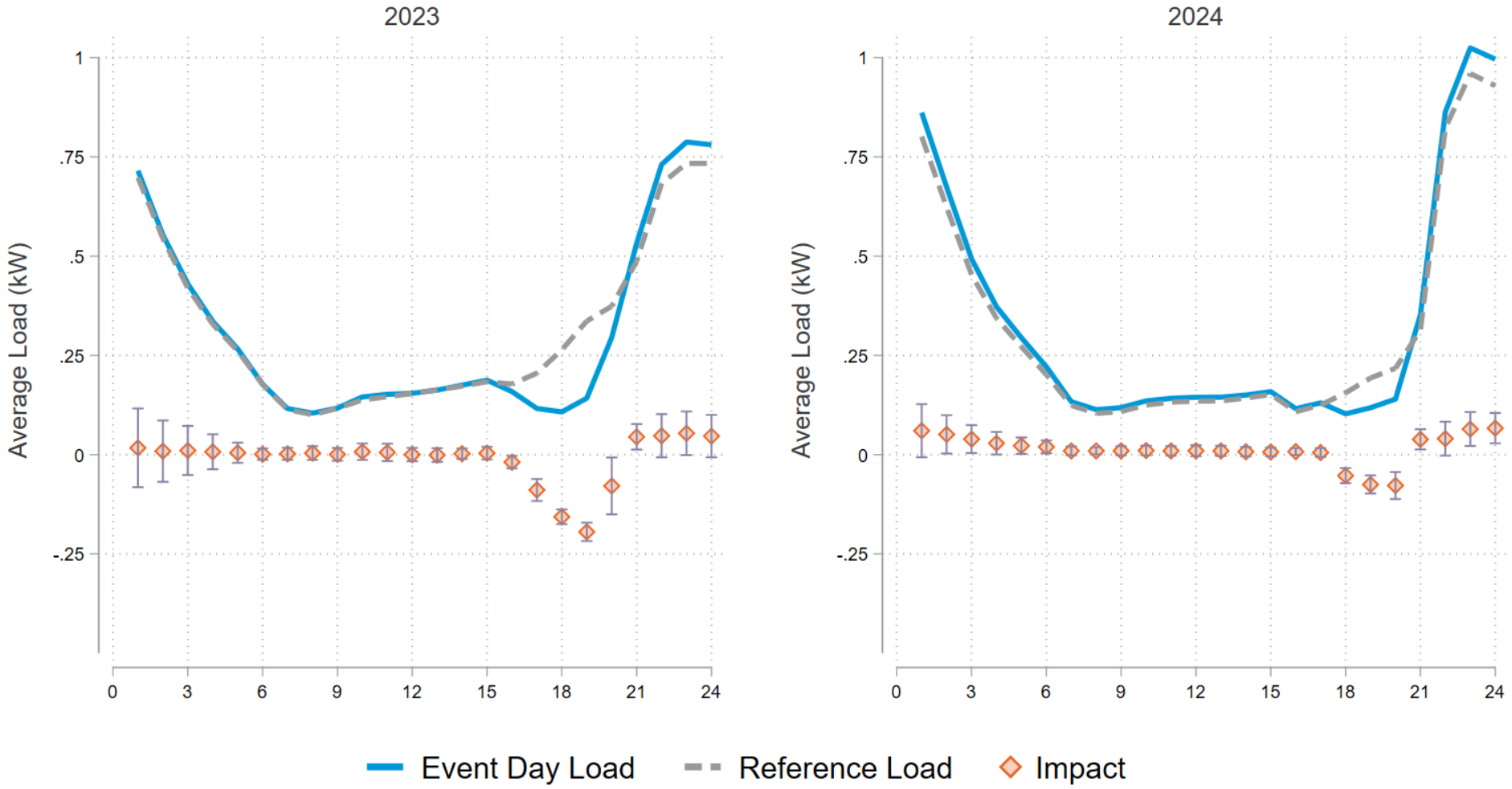
- Off-Peak program impacts shown are all for April 2024 onwards.
- Impacts are similar across RCT treatments.
  - Larger impacts in observational analysis.
- RCT results are preferred in terms of methods.
  - In the observational analysis, we attempt to control for observable differences between participants and non-participants.

Off-Peak Program: Avg. Load by Tier

- Recall the two tiers in the Off-Peak Program:
  - Baseline (behavioral curtailment).
  - Advanced (automated curtailment).
- Advanced tier customers had the lowest load during peak hours on weekdays.
  - This is also true on weekends when their load is not curtailed!

Note: Graph presents average per participant load for weekends and weekdays by program option, inclusive of event-based DR days, for the period April 2024 to May 2025. The peak hours, from 3 PM to 9 PM, are shown using red vertical lines.

Demand Response: Avg. Event Day Impacts



- Avg. load reduction per participant was 0.17 kW in 2023 and 0.08 kW in 2024.
- Higher Off-Peak Program enrollment in 2024 resulted in lower DR impacts.

Note: Graph presents estimated hourly coefficients and 95% confidence intervals from two separate regressions of per participant load on hourly event day dummy variables. The observed load, shown in blue, is equal to average participant load on event days. The reference load, shown in grey, is equal to the observed load minus estimated load impacts.

Thank you!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