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RIE Gas DR Pilot SRP Investment Proposal

EERMC C-Team Meeting – October 19, 2023

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EERMC's Role in Gas Demand Response Pilot

The LCP Standards require the Company to file all SRP Investment Proposals with the EERMC

They also give the EERMC discretion regarding whether to engage in review or formally weigh in

6.3 Guidelines for System Reliability Procurement Plans and Proposals

- A. The Council shall review Three-Year System Reliability Procurement Plans. The Council may review SRP Proposals.
- G. The distribution company shall submit any draft SRP Proposal to the Council and the Division of Public Utilities and Carriers for their review six weeks prior to filing the SRP Proposal with the PUC. The Council may determine its endorsement or opposition, involvement or abstention, or any other level of action related to the filing on a case-by-case basis.

The Council may choose to vote on the Gas DR Pilot proposal today or choose not to vote. The Council does not have a specified timeline for making this decision in the Standards.

Gas Demand Response Pilot Motivation & Objectives



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Motivation

- During the coldest days of the year, upstream or on-system constraints may result in gas demand exceeding pipeline capacity
- Reducing peak demand through demand response has the potential to mitigate capacity constraints on the system

Objectives

- Test (1) the level of customer interest and scalability of the program, and (2) the gas system benefits of incentivizing the reduction or curtailment of gas usage during system peak demand periods (from November 1st to March 31st)
- Increase program enrollment and participation within – and potentially beyond – large commercial and industrial customers
- Continue to focus on Aquidneck Island and seek to expand the program to other similarly capacity-constrained areas

Research Questions



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The Gas DR Pilot seeks to ascertain how to increase program enrollment and participation during peak demand events:

- Are large commercial and industrial customers interested in participating in an incentivized gas demand response program?
- Are residential customers with eligible smart thermostats interested in participating in gas demand response?
- What incentive structure and level are sufficient to stimulate program enrollment and participation?
- How do we increase enrollment – within and possibly across customer classes – and scale the program? Can program enrollment be increased through targeted marketing and/or the use of aggregators?
- What are distribution system benefits of gas demand response? From large commercial and industrial customer participation? For residential customer participation, if the pilot is expanded?
- Is there a minimum threshold for participation to realize system benefits? Does this differ across customer classes?

Application of Research Questions

For 2024

- Initiate testing the effectiveness of leveraging target marketing and aggregators to increase enrollment and participation of large commercial and industrial customers

For 2025

- Apply the results of using targeted marketing and aggregators to inform any adjustments to the incentives for large commercial and industrial customers and test the impact on enrollment and participation
- Test residential customers' interest in a gas demand response offering and the associated benefits of participation in such a program expansion on the gas system during peak events

Primary Program Design – Large C&I Customers

Participants

- The Gas DR Pilot is specifically designed for large commercial and industrial customers with firm service

Demand Response Offerings

- *Extended Demand Response (EDR)* – 24-hour demand reduction (10AM on day 1 until 10AM on day 2, Nov. 1st through March 31st), primarily via non-gas backup heating
- *Peak Period Demand Response (PPDR)* – Peak period demand reduction (6AM-9AM, Nov. 1st to March 31st) via non-gas backup heating or thermostat setback

Hourly Peak Reduction & Incentive

- 40-50 Dth of hourly peak reduction during the winter months
- Customer compensation determined by peak hour reduction (Dth) provided

	PPDR	EDR
Event Duration (hours) (Maximum 6/winter)	3 6AM-9AM	24 10AM-10AM
Capacity Payment (per month)	\$250/peak-hour Dth	\$700/peak-hour Dth
Energy Payment	\$50/Dth	\$7/Dth

Potential Design Modification – Residential & Small Business Customers

Participants & Timeframe

- Residential and small-business customers with smart thermostats who are already enrolled in the Company's ConnectedSolutions electric demand response program
- Anticipated possible program expansion to take place in 2025

Incentive Structure

- One-time enrollment incentive per enrolled customer, plus...
- Annual participation incentive per device per year, to be rendered at the end of the peak season for all participants with full participation in at least 50% percent of peak events
- Incentives are likely to be similar in quantum as the ConnectedSolutions electric demand response offering: e.g., \$50 per enrolled customer and \$25 per device per year, respectively

Annual Peak Reduction, Budget, and Funding

Annual Peak Reduction Target

- Will continue to be 27,520 therms for the 2024-2026 period for large C&I customers
- Any expected incremental peak reductions associated with increased participation by C&I customers – or the addition of residential customers – will be proposed on an annual basis

Annual Budget

- The annual budget will continue to be \$268,042 for the 2024-2026 period for large C&I Customers
- Any expected incremental spend associated with increased participation by C&I customers – or the addition of residential customers – will be proposed on an annual basis

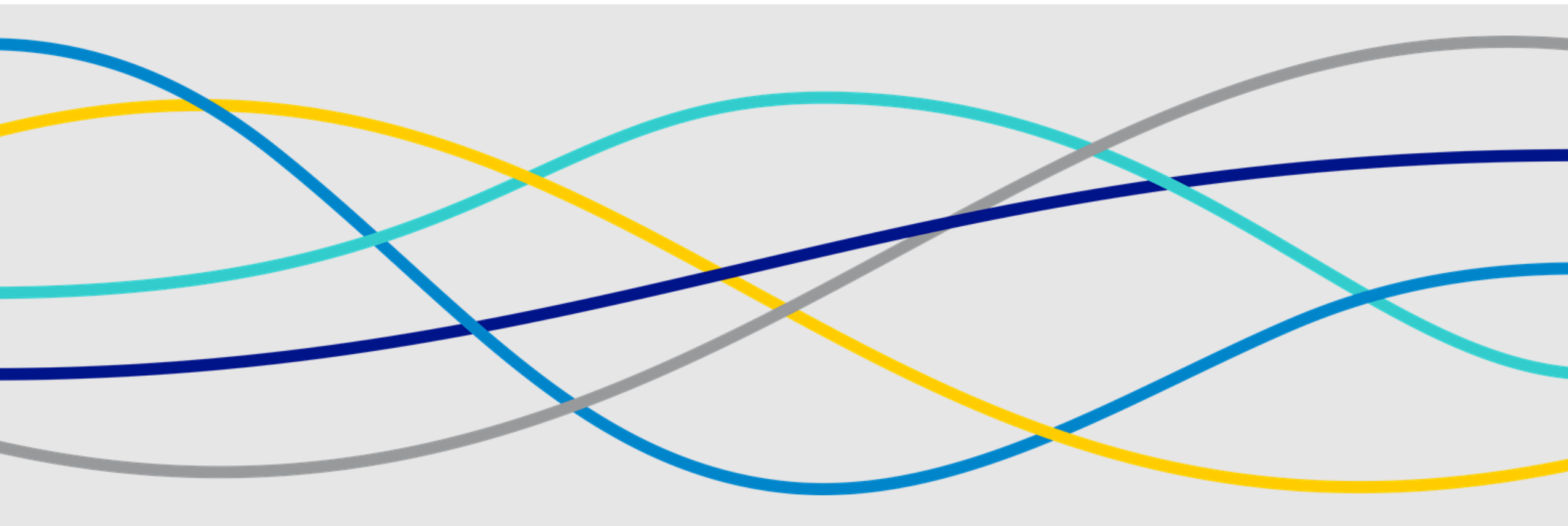
Funding

- Cost recovery of the budget via the System Reliability Procurement Factor added to the Energy Efficiency System Benefit Charge



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Thank You