HG&E Commercial Demand Response Program Pilot

June – September 2025

Program Materials for HG&E Commercial Demand Response Program for Commercial and Industrial Customers

Contents

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Summary

HG&E's Commercial Demand Response Program incentivizes commercial and industrial customers who reduce power usage, or electric 'demand', during certain times each month when demand for electricity is highest across the entire New England grid, including locally in Holyoke. These are known as "peak events", and they typically occur in the evening hours during heat waves. HG&E incurs significant charges based on the one highest hour each month where the total electric demand across our region is the most; therefore, reducing electric demand during peak events helps keep rates down for all customers.

Customers who enroll in HG&E's Commercial Demand Response Program will be eligible to participate by either reducing their electric consumption (known as "curtailment") or dispatching non-emitting grid-connected or back-up generators (i.e., energy storage, green hydrogen, etc.) throughout peak events. Peak events typically occur 2-3 times per month on weekday evenings from 4-7 PM. Customers will be notified before each anticipated peak and will be compensated for their performance if participation occurs during actual peak day and hour. HG&E will notify the customer of the actual monthly peak day and hour along with their performance shortly after the month has ended.

Examples of how to temporarily reduce electric consumption:

- Turn off unnecessary appliances, equipment, and lighting (or dimming lights)
- Use energy management systems, automated controls, building management systems, or software and controls
- Raise the thermostat temperature a few degrees to reduce air conditioner use
- Use eligible grid-tied or on-site generation (i.e. battery, green hydrogen, etc.)
- Adjust various process loads
- Reduce speeds on variable frequency drives
- Keep cooler doors closed
- Turn off or reducing the use of various electric appliances such as unused computers, domestic hot water (if electric hot water), refrigeration, etc.
- Restrict use of electric vehicle charging stations

Performance Payment*
$8/kW per month

kW = kilowatt, a measure of how much power, or demand, is used for one single hour
**Payment based on kW reduction during coincident monthly peak hour*

Summary Table

	Details
Number of Events per Month	1-5
Performance Incentive	$8/kW-month
Length of Events	3 Hours
Days	Weekdays (rarely Weekends)
Peak Event Time	4-7 PM
Notification Time	11 AM to 1 PM
Months	June-September
Non-Performance Penalty	None

Eligibility Requirements

Customers interested in enrolling in the Program must be a commercial or industrial customer with an active electric account. Customers who participate in ISO-NE's Demand Response Program are not eligible to participate in HG&E's Program.

HG&E will confirm that the Customer has at least ten (10) days of 5-minute interval meter data at facility where demand response will be implemented before enrolling. HG&E will review customer's historical meter data before a customer is accepted into the Program and may require that the meter needs to be upgraded to an advanced meter capable of logging interval data to participate.

Enrollment Deadlines

A Customer may enroll at any point during the course of the year, however it's recommended that enrollment occurs prior to June in order to take full advantage of the Program incentives.

Withdrawal from the Program

Customers who enroll in the Program will remain in the program until they provide written notice to HG&E that they would like to be removed from the program. It's encouraged that the customer remains enrolled for the entire duration of the Program from June to September.

Modification or Cancellation of the Program

Due to regulatory, cost effectiveness, or other reasons, HG&E may modify or cancel the Program or subsets of their program at any time.

Notification of Demand Response Events

Notification of demand response events will be given typically 3-5 hours prior to the event to properly prepare. For customers who use a third-party vendor, these notifications will be sent to the customer's vendor. The vendor will be responsible for coordinating with the customer. Notification emails will be sent directly to primary contact using the email address or cell phone given in the customer's application.

Length and Time of Demand Response Events

Targeted Dispatch events last three hours. Events typically happen between 4PM and 7PM, however they may occur outside of this window. All events start and end at the beginning of the hour (i.e., start time: 4pm or end time: 7pm).

Days for Demand Response Events

Program Peak Events are generally called on weekdays. However, there are certain situations where Peak Events may be called on Weekends or Holidays. Peak Events are typically weather driven, therefore if there are extreme weather events, peaks can occur during these days.

Performance Calculation

To receive a performance payment for a month, the Customer must reduce electric use by at least 5 kW from adjusted baseline during actual coincident monthly peak hour to receive incentive for that month.

Shutdown Reporting Requirement

Customers or their vendor must inform HG&E of a planned facility shutdown with a week's notice. This is typically done for maintenance or holiday breaks. There is a limit of 10 shutdown days per summer.

Performance Calculation for Curtailment

Performance payments for customers who participate by curtailing their electric demand will be paid based on the following performance calculation methodology:

Performance (kW) = (Adjusted Baseline) – (Average Demand During the Hour of the Actual Coincident Peak Event)

Where:

- *Performance* = Customer's average performance (in kW) throughout the hour of the actual monthly coincident peak event as determined by HG&E using twelve 5-minute intervals.
- *Adjusted Baseline:*
  - This is what the customer's estimated electric demand would have typically been during the time of the peak event.
  - Adjusted Baseline Calculation: *Adjusted Baseline = Unadjusted Baseline + Baseline Adjustment*
    - *Unadjusted Baseline*:
      - Average actual demand from the past 10 similar days during the hour of the peak event. For example, if the coincident monthly peak event occurs from 5-6 pm, the unadjusted baseline is the average demand from 5-6 pm over the past 10 similar days.
        - The past 10 similar days are the 10 most recent similar days before the peak event day. Similar days do not include weekends, holidays, or other demand response events.
        - Shutdown Days will be recognized via metering data and will be excluded from the performance calculation.
        - If peaks occur during a customer shutdown period, no performance compensation will be provided as no active demand response was performed.
    - *Baseline Adjustment*:
      - The baseline adjustment is used to account for the fact that the day of the peak event may be hotter or colder than the last 10 similar days, and the customer's load may subsequently be higher or lower on the day of the peak event than it was during the past 10 days (i.e. due to increased air conditioning or heating use).
      - The baseline adjustment may be positive or negative.
      - Baseline adjustment calculation: *Baseline Adjustment = (Customer's average electric demand on the day of the peak event during the baseline adjustment interval) – (Customer's average electric demand over the past 10 similar days during the baseline adjustment interval)*
        - For example, if a customer's demand during the baseline adjustment interval is typically 150 kW, but on the day of the peak event, their demand is 175 kW during the same time interval, the baseline adjustment would be 25 kW, and this would be added to the unadjusted baseline to determine the value of the adjusted baseline.
        - The baseline adjustment is limited to plus or minus 20% of the unadjusted baseline.
    - *Baseline adjustment interval*:
      - The baseline adjustment interval will typically be the average demand during a two-hour window 3 to 5 hours prior to the peak event. For example, if the peak occurs between 5-6 PM, the baseline adjustment interval used will be between 1-3 PM.

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June – September 2025

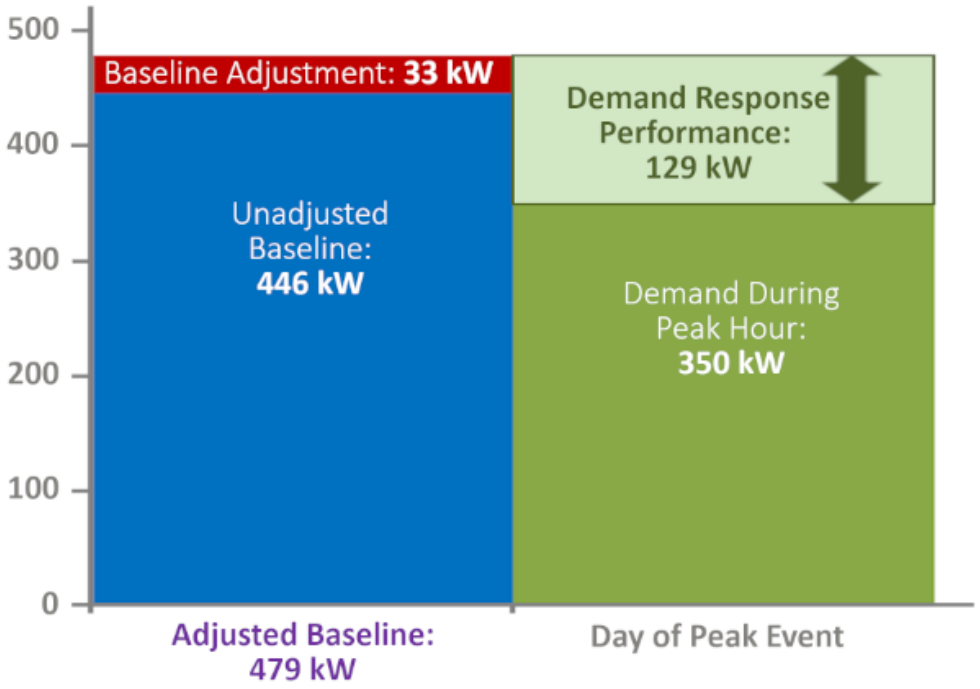
Example of Performance Calculation for Curtailment Customer:

- Hour of actual coincident monthly peak: 5:00 – 6:00 PM
- Baseline adjustment interval: 1:00 PM – 3:00 PM (Notification sent at 2:00 PM on day of peak event)

Day	Average Demand from 1-3 pm (kW)	Average Demand from 5-6 pm (kW)
1st similar day	500	450
2nd similar day	470	430
3rd similar day	490	460
4th similar day	520	440
5th similar day	500	460
6th similar day	520	450
7th similar day	480	440
8th similar day	470	430
9th similar day	490	440
10th similar day	480	460
Average of Past 10 Similar Days	**492**	**446**
Day of peak event	**525**	**350**

Baseline Calculation:		
Unadjusted Baseline:	**446 kW**	Average demand from 5-6 PM from past 10 similar days
Baseline Adjustment:	**33 kW**	Demand from 1-3 PM on day of peak event (**525 kW**) – average demand from 1-3 PM during past 10 similar days (**492 kW**)
Adjusted Baseline:	**479 kW**	Unadjusted baseline **(446 kW)** + baseline adjustment **(33 kW)**
Actual Usage:	**350 kW**	Demand from 5-6 PM on Peak Day

Demand Response Performance:	**129 kW**	Adjusted baseline (**479 kW**) - demand during hour of peak event (**350 kW**)
Performance Payment:	**$1,032**	Demand response performance (**129 kW**) * Performance Payment Rate (**$8/kW**)



Performance Incentive and Payment Process

The Performance Incentive for reduction in demand will be $8/kW per month for the performance calculated as defined above. Increased demand (i.e. negative performance) during a peak event is not penalized. If performance is negative, performance for hour is 0. HG&E will apply this incentive as an on-bill credit to the Customer's bill, which will typically be delayed one month due to the timing of when the peak information is received. HG&E will notify the customer of the actual peak day and hour along with supporting data once this information is received. For example, the performance credit for June will show up on the Customer's July bill. HG&E will not make any direct payments to third-party vendors that a Customer may use. All financial arrangements between the Customer and third-party vendor must be separate from HG&E.

Missed Peak Events (HG&E)

Monthly payment is based on the customer's reduction in demand during the one hour each month during which the actual coincident monthly peak occurs. Though it is rare, it is possible that HG&E will fail to predict the actual coincident monthly peak. If this occurs, the Customer will receive $1/kW based on their average performance during the monthly called events.

On-Site Generation and Exporting Power to the Electrical Grid

On-site Generators (Zero-emissions)

Customers who have zero-emitting on-site generation may participate in the Program. This may include green hydrogen, carbon-capture fossil generators, or other technologies. These generators must comply with all local, state and federal standards and regulations. Performance will be measured at the meter similar to the curtailed demand method above, if a separate meter is not available. The Customer will be responsible for all fuel related costs, including refilling fuel tanks and any losses associated with charging and discharging of an energy storage system. HG&E will not be responsible for any equipment failure due to operating the generator during a called peak event.

Storage Only Systems

Customers who have an energy storage system may participate in the Program. Before exporting power to the grid, customers must go through the interconnection process. Participation in the Program does not alter a customer interconnection service agreement (ISA).

Enrollment Process

To enroll in the program, the customer must complete an application form. This form is available on the HG&E website found here: Commercial Demand Response Program Enrollment Form.

Terms and Conditions

These Program materials and participation in HG&E's Commercial Demand Response Program are pursuant to and subject to the Terms and Conditions in effect for customer applications at the time that the application is approved by HG&E. See the Commercial Demand Response Program application for more details.