Case No. 14-E-0423
Proceeding on Motion of the Commission to Develop Dynamic Load Management Programs

ORANGE & ROCKLAND UTILITIES, INC. ANNUAL REPORT ON PROGRAM PERFORMANCE AND COST EFFECTIVENESS OF DYNAMIC LOAD MANAGEMENT PROGRAMS – 2023

November 15, 2023

Contents

1.0 Executive Summary

Orange and Rockland Utilities, Inc. ("O&R" or the "Company") submits this annual report of its Dynamic Load Management ("DLM") programs pursuant to the New York Public Service Commission's ("Commission" or "PSC") April 23, 2018 *Order Adopting Program Changes with Modification and Making Other Findings* ("April Order")[1] and September 17, 2020 *Order Establishing Term-Dynamic Load Management and Auto-Dynamic Load Management Program Procurements and Associated Cost-Recovery* ("September Order).[2] The April Order requires the Company submit a report to the Commission by November 15 of each year assessing the DLM programs approved by the June 18, 2015 *Order Adopting Dynamic Load Management Filings with Modifications* ("June Order").[3] The September Order requires the Company include information on the Term- and Auto- Dynamic Load Management programs in accordance with the April Order.

O&R discusses its demand response ("DR") programs in this report: (1) Rider D – Direct Load Control Program ("DLCP"), which consists of the Bring Your Own Thermostat ("BYOT") and a proposal to add Residential Energy Storage ("RES") for the 2024 Capability Period; (2) Rider E – Commercial System Relief Program ("CSRP"); (3) Rider F – Distribution Load Relief Program ("DLRP"); and (4) Rider P – Term- and Auto- Dynamic Load Management Programs ("Term-DLM" and "Auto-DLM"). The report covers the cost components and program performance associated with these programs for the 2023 Capability Period.

This is the eighth full Capability Period for CSRP and DLRP. The Company accepted 270 applications from Direct Participants and Aggregators, and enrolled 22.2 MW between the two programs, while rejecting an additional 5.1 MW due to CSRP diesel cap generation restrictions.[4] Outreach to Direct Participants and Aggregators indicated that concerns related to load shedding capabilities impacted by the COVID-19 pandemic continued into the 2023 Capability Period. As a result, 2023 program enrollment decreased by eight percent from 2022 enrollment levels. The Company estimates that it will spend $393,032 between CSRP and DLRP in 2023.

Individually, CSRP realized a 13 percent decrease in MW enrolled, or 1.2 MW, and DLRP realized a decrease of five percent in MW enrolled, or 0.8 MW. However, the number of customers enrolled in CSRP and DLRP grew significantly, due to increased participation from residential customers, resulting in a123 percent and 134 percent increases, respectively.

The BYOT Program incentivizes customers to enroll eligible smart thermostats and participate in DR events. In 2023, the program added over 1,100 customers for a total enrollment of over 6,300 customers and 8,500 devices, and the average load reduction was 5.9 MW during the system-wide peak shaving events.

[1] Case 14-E-0423, et al., *Proceeding on Motion of the Commission to Develop Dynamic Load Management Programs*, Order Adopting Program Changes with Modification and Making Other Findings (issued April 23, 2018); *see also* Case 14-E-0423, et. al., *Proceeding on Motion of the Commission to Develop Dynamic Load Management Programs*, Order Adopting Program Changes with Modifications and Making Other Findings (issued March 18, 2019).

[2] Case 18-E-0130, et al., *In the Matter of Energy Storage Deployment Program,* Order Establishing Term-Dynamic Load Management and Auto-Dynamic Load Management Program Procurements and Associated Cost-Recovery (issued December 13, 2018).

[3] Case 14-E-0423, et. al, *Proceeding on Motion of the Commission to Develop Dynamic Load Management Programs*, Order Adopting Dynamic Load Management Filings with Modifications (issued June 18, 2015).

[4] CSRP has both environmental and performance requirements, including a 20 percent cap on the program resources enrolled via the use of on-site diesel generation. Participating diesel electric generating equipment must have an engine of model year vintage 2000 or newer. Enrollment by such generators is accepted on a first-come, first-served basis. All other electric generating equipment is limited to the following: natural gas-fired rich burn electric generating equipment that incorporates three-way catalyst emission controls; natural gas lean-burn electric generating equipment with an engine model year vintage 2000 or newer; or electric generating equipment that has a NOx emissions level of no more than 2.96 lb/MWh.

DLCP was activated three times during the 2023 Capability Period, including two one-hour Test Events and one two-hour Test Event.

For the 2023 Capability Period, one CSRP one-hour Test Event, one DLRP one-hour Test Event, and one DLRP two-hour Test Event were called. CSRP achieved a Performance Factor of 88 percent, compared to 82 percent in 2022. Over the span of the one-hour Test Event and two-hour Test Event, DLRP achieved an average Performance Factor of 92 percent, compared to a 106 percent Performance Factor in 2022. Most of the new enrollments were residential customers.

The Company introduced Term-and Auto-DLM programs in 2021. Under these programs based on the September Order, Aggregators can sign multi-year contracts to provide load relief at a fixed dollar per kW value ("Incentive Rate"), determined through a competitive procurement process. Term-DLM program is a peak shaving program and Auto-DLM is a contingency program, where participating customers also provide peak shaving by participating in Term-DLM events when called. Neither program had enrollment for the 2023 Capability Period.

2.0 Tariff Proposals

After reviewing our programs and Summer 2023 performance, the Company is proposing tariff revisions for Riders D, E, and F for the 2024 Capability Period. The Company is not proposing tariff revisions for Rider P for the 2024 Capability Period.

First, the Company proposes an expansion of the Direct Load Control Program, Rider D, to allow for participation of Residential Energy Storage ("RES") within DLCP. Additional details are available in Section 8.2. Housekeeping changes clarifying terminology and definitions are also included within the tariff proposal.

Second, the Company proposes changing the initial Performance Factor for new Aggregators or Direct Participants from 0.5 to 0.0 in Riders E and F. Currently, new Aggregators or Direct Participants have their Performance Factors set at 0.5 in the current Capability Period and will remain at that level until the first month in which an Event or Test Event is called, resulting in recalculation. The Performance Factor calculated for that month will then be applied retroactively, starting with the enrollment month, to true-up the Reservation Payments for prior month(s). In this scenario, the potential for overpaying an Aggregator or Direct Participant for the month(s) prior to the true-up is possible and can lead to administrative confusion. For example, if an Aggregator or Direct Participant receives a 0.5 Performance Factor beginning in May and the Performance Factor is not recalculated until an Event or Test Event in August, if the Aggregator or Direct Participant receives a Performance Factor below 0.5 for their August participation, they will have been overpaid, potentially causing unnecessary administrative and accounting complexities. By setting the initial Performance Factor to 0.0, these administrative and accounting complexities are averted without penalizing the Aggregator or Direct Participant. A new Performance Factor will still be calculated for the month where the first Event or Test Event is called, which will then be applied retroactively, starting with the enrollment month, to true-up the Reservation Payments for prior month(s).

3.0 DR Programs Introduction

O&R implements three types of DLM programs: a direct load control program; peak shaving programs; and contingency programs:

- The Direct Load Control Program ("Rider D" or "DLCP") remotely controls central heat pump and central air conditioning ("AC") equipment in residential customers' homes and small businesses during peak shaving or contingency events. The Company is proposing to add Residential Energy Storage to the DLCP for the 2024 Capability Period.
- The Commercial System Relief Program ("Rider E" or "CSRP") and Term-DLM ("Rider P") are peak shaving programs that can be called on a day-ahead basis when the next-day forecasted load approaches the Company's forecasted summer electric system peak load.
- The Distribution Load Relief Program ("Rider F" or "DLRP") and Auto-DLM ("Rider P") are contingency programs that can be called to address local reliability issues in specific defined circuits or geographic areas.

The programs operate during the summer period May 1 through September 30 (the "Capability Period") and are summarized in Table 1.

Table 1: Summary of DLM Programs

Program	General Information	Incentive
DLCP	Activated by O&R in system critical contingency situations or peak shaving events. Participation limited to O&R residential, religious, and small business customers with central AC. Allows O&R to remotely control the device (smart thermostat) settings. The Company is proposing to add Residential Energy Storage to the DLCP for the 2024 Capability Period.	**Company Provided Thermostat Option:** customers receive a free or low-cost controllable device (smart thermostat). **Bring Your Own Thermostat Option:** customers enroll an eligible smart thermostat through a Service Provider and receive an enrollment payment of $85 and an annual Participation Payment of $25 starting the second summer. **Residential Energy Storage Option:** The Company is proposing to add a residential energy storage option for the 2024 Capability Period. Customers will enroll eligible battery storage devices through a Service Provider and receive a Participation Payment of $50/kW-year based on calculated load shed.
CSRP	Activated by O&R when the day-ahead forecast is 92 percent or greater of forecasted summer electric system peak to relieve system peak loads. Events last four hours. Reservation and Voluntary Payment Options.	**Reservation Payment Option:** customers receive $3 per kW-month pledged and performed for months with fewer than five events and $4 per kW-month for months with five or more events. Performance payment is $0.50 per kWh provided during a Planned Event or $1.00 per kWh for Unplanned Events. **Voluntary Participation Option:** customers receive a Performance Payment of $1.00 per kWh provided during Planned Events or $1.50 per kWh provided during Unplanned Events.
DLRP	Activated by O&R in response to a system emergency or voltage reduction of five percent or greater. Events last four or more hours. Reservation and Voluntary Payment Options.	**Reservation Payment Option:** customers receive a $3 or $5 per kW-month pledged and performed depending on location for months with fewer than five events and $4 or $6 per kW-month pledged and performed depending on location for months with five or more events, and a Performance Payment of $0.50 per kWh provided during events. **Voluntary Participation Option:** customers receive a Performance Payment of $1.00 per kWh provided during events.
Term-DLM	Activated by O&R when the day-ahead forecast meets or exceeds a specified percentage of forecasted system peak, as specified by the Program Agreement.	**Reservation Payments:** equal to the applicable Reservation Payment Rate per kW multiplied by the Direct Participant or Aggregator's kW of Portfolio Quantity multiplied by the Performance Factor (as described in the Program Agreement). Reservation Payments to Aggregators or Direct Participants are

		determined per aggregation based on the Aggregator's kW of Portfolio Quantity in that aggregation.
Auto-DLM	Activated by O&R in response to a system emergency or peak shaving purposes under the same activation criteria as Term-DLM.	**Reservation Payments:** equal to the applicable Reservation Payment Rate per kW multiplied by the Direct Participant or Aggregator's kW of Portfolio Quantity multiplied by the Performance Factor (as described in the Program Agreement). Reservation Payments to Aggregators or Direct Participants are determined per aggregation based on the Aggregator's kW of Portfolio Quantity in that aggregation.

These programs are segmented by customer type because the programs require specific operational processes, equipment, communication, and education. This report reflects this segmentation.

4.0 Commercial System Relief Program

CSRP is intended to reduce the system peak and targeted area peak load. CSRP is available service territory wide to participants who, with a minimum of 21 hours' advance notice before a Planned Event, agree to curtail load or integrate certain on-site generation to reduce their demand by a minimum of 50 kilowatts ("kW") individually, or through Aggregators who aggregate at least 50 kW of demand reduction. A Planned Event refers to the Company's request for Load Relief when the day-ahead forecasted load is at least 92 percent of the Company's forecasted summer system peak. Customers in CSRP may be called to participate in Unplanned Events, which are events requesting Load Relief with less than 21 hours' advance notice. CSRP includes both a Reservation Payment Option and a Voluntary Option. Participant payment under both options is shown in Table 2.

Table 2: CSRP Payment Structure

Enrollment Option	Reservation Payment	Event Type	Performance Payment
Reservation Payment Option	$3 / kW / month, less than 5 events/month	Planned	$0.50 / kWh reduced
	$4 / kW / month, 5 or more events/month	Unplanned	$1.00 / kWh reduced
Voluntary Payment Option	No Reservation Payment	Planned	$1.00 / kWh reduced
		Unplanned	$1.50 / kWh reduced

4.1 Event Summary

During the 2023 Capability Period, the Company called one one-hour CSRP Test Event. In 2023, the 92 percent CSRP trigger was 1,421 MW based on a forecasted peak of 1,545 MW which is an integrated peak for O&R's New York and New Jersey service territories.

For 2023, 8.0 MW were enrolled in the CSRP program, and an average Performance Factor of 88 percent was achieved across events, which was six percent higher than 2022. Additionally, much of the reduction in MW enrollment was attributable to non-performing customers de-enrolling from CSRP, or customers reducing their pledges to more attainable levels.

Two customers enrolled in CSRP elected to have their performance measured with the Average Day CBL, while the remaining customers chose the Weather Adjusted CBL.[5] The achieved performance is calculated

[5] The CBL is a representation of a customer's average hourly consumption based on the top five highest days of energy usage within a 10-weekday period selected from the 30 weekdays prior to an event. For weekend events, the CBL uses the two highest weekend days from the three weekends

by subtracting customer/Aggregator actual load from customer/Aggregator baseline load. The Performance Factor is the ratio of the achieved load reduction to the pledged load reduction. All customers in CSRP were enrolled in the Reservation Payment Option. A summary of the event results is detailed in Table 3.

Table 3: 2023 Summary of CSRP Event and Performance

Test or Event	Event/Test Date	Event/Test Hours	Customers Enrolled	MW Enrolled	MW Reduction Achieved	Performance Factor Achieved
Test Event	07/28/2023	5:00 – 6:00 PM	257	8.0	7.0	88%

4.2 CSRP System Impacts

The goal of the Company's peak shaving program is to reduce the level of system peak to decrease capital investments, with the associated benefits of reduced customer costs and improved reliability of service. Table 4 below summarizes the system impact, which is the ratio of CSRP enrollment and performance data to the total summer system peak. "Enrolled" is defined as the total MW pledged in the program without adjusting for performance. "Achieved" reductions were calculated using the average performance from the Planned Events.

Table 4: 2023 CSRP Summary of Enrolled Anticipated and Achieved Impact

Enrolled Reservation Payment Option	Reservation Payment Option Impact (% of summer peak)	Voluntary Participation Option Impact (% of summer peak)	Achieved Reservation Payment Option Impact (% of summer peak)
8.0 MW	0.52%	0.52%	0.45%

While CSRP realized a decrease in enrollment due to continued uncertainties related to COVID-19 this year, the Company anticipates program growth in 2024, continuing the previous enrollment trend prior to the pandemic. O&R will monitor and analyze the system impacts and growth rates for CSRP each year.

4.3 Program Costs

Total costs for CSRP during the program year are estimated at $120,205, a decrease of 40 percent compared to the 2022 total costs of $199,093. Costs decreased for CSRP largely due to a reduction in Program Administration expenditures. Additionally, the program experienced a reduction in enrollment and customer incentives due to fewer Events, which was offset by payments from higher Performance Factors. All program costs are recovered through a line item of the existing Energy Cost Adjustment ("ECA") non-bypassable delivery charge. Table 5 summarizes the costs, by component, associated with CSRP in 2023.

Table 5: CSRP Cost Components for 2023 Program Year[6]

Component	Cost	Percentage
Customer Incentives – Reservation Payments	$88,792	74%
Customer Incentives – Performance Payments	$3,562	3%
Program Administration	$17,851	15%
Program Marketing	$0	0%

prior to the Event. The CBL is used to calculate a customer's performance during a test or event by taking the difference between the CBL and the customer's actual load on the event day. Customers have the choice of selecting an average day or weather adjusted CBL depending on how they believe their load is normally affected by changes in the weather. If a customer does not make a choice in the application, the customer is assigned a weather adjusted CBL.

[6] Costs for November and December have been estimated.

Program Evaluation	$10,000	8%
Total Program Costs	**$120,205**	**100%**

4.4 Assessment of CSRP Growth

In 2023, the number of participating Aggregators grew to nine, from eight in 2022, and the number of Direct Participants remained at three. Overall, the number of customer accounts increased from 115 in 2022 to 257 in 2023. Much of this growth was due to increased participation from residential customers. 149 additional customers joined CSRP, representing 1.9 MW of enrollment. Seven customers that participated in 2022 did not re-enroll in 2023, representing a 2.1 MW reduction. Additionally, 35 existing participants, mostly residential, increased pledge levels from 2022, representing an increase of 0.3 MW, while 24 remaining participants, mostly residential, decreased pledge levels from 2022, representing a reduction of 1.2 MW. While the total number of participating customers increased, participants and Aggregators expressed uncertainty regarding the ability to shed load, stemming from impacted businesses practices in the wake of COVID-19. O&R expects that the program will increase in participation and MW enrollment in the future.

Table 6 summarizes the MW enrollment, which includes both the amount of MW enrolled and the amount of MW operationally available. The MW operationally available are the MW reductions demonstrated during events. The MW operationally available in 2022 is based on Planned Event data, and the MW operationally available in 2023 are based on Test Event data, as there were no Planned Events during the 2023 Capability Period.

Table 6: 2023 CSRP Overall Enrollments

2022 MW Enrolled	2022 Operationally Available MW	2023 MW Enrolled	2023 MW Operationally Available	2022 vs. 2023 MW Enrolled % Decrease	2022 vs. 2023 Operationally Available MW % Increase
9.2	5.8	8.0	7.0	13%	21%

O&R anticipates that CSRP will see enrollment increases in the 2024 Capability Period as business processes return to pre-COVID levels. Multiple commercial and industrial customers have expressed interest in participating in 2024, or increasing pledge levels. O&R will continue to pursue outreach opportunities and anticipates marketing commercial DR programs in conjunction with commercial energy efficiency programs for the 2024 Capability Period.

As enrollment increases and performance improves, the benefits from CSRP are expected to follow suit. Growth in available load reduction will provide increased reliability and reduce the costs and environmental impacts associated with peaking generation, enabling CSRP to become a larger driver of distribution system planning. The Company recognizes that additional enrollment growth is necessary for CSRP to have substantial impacts on capital cost deferrals.

5.0 Distribution Load Relief Program

The purpose of DLRP is to relieve the Company's distribution system during contingencies and emergencies to maintain reliability. DLRP is available service territory-wide to Direct Participants and Aggregators that contract to provide at least 50 kW of Load Relief. Participants are given at least two hours' advance notice for Contingency Events and less than two hours' advance notice for Immediate Events.

DLRP includes both a Reservation Payment Option and a Voluntary Option. Participant payment under both options is shown in Table 7.

Table 7: DLRP Payment Structure

Enrollment Option	Tier	Reservation Payment	Performance Payment
Reservation Payment Option	1	$3 / kW / month, less than 5 events/month	$0.50 / kWh reduced
		$4 / kW / month, 5 or more events/month	
	2	$5 / kW / month, less than 5 events/month	$0.50 / kWh reduced
		$6 / kW / month, 5 or more events/month	
Voluntary Payment Option	1 or 2	No Reservation Payment	$1.00 / kWh reduced

Of the 266 customers enrolled in DLRP, 136 are enrolled in Tier 1 and 130 are enrolled in Tier 2. The total MW enrollment for Tier 1 is 9.5, while the total MW enrollment for Tier 2 is 4.7, for a total of 14.2 MW enrolled.

5.1 Event Summary

In 2023, one one-hour Test Event and one two-hour Test Event were called for DLRP. An average Performance Factor of 98 percent was achieved during the Test Events, which was 8 percent lower than in 2022.

One customer enrolled in DLRP elected to have their performance measured with the Average Day CBL, while the remaining customers chose the Weather Adjusted CBL. The achieved performance is calculated by subtracting customer/Aggregator actual load from customer/Aggregator baseline load. The Performance Factor is the ratio of the achieved load reduction to the pledged load reduction. All customers in DLRP were enrolled in the Reservation Payment Option. A summary of the event results is detailed in Table 8.

Table 8: 2023 Summary of DLRP Event and Performance

Test or Event	Event/Test Date	Event/Test Hours	Customers Enrolled	MW Enrolled	MW Reduction Achieved	Performance Factor Achieved
Test Event	08/25/2023	5:00 – 6:00 PM	264	14.2	11.6	81%
Test Event	09/07/2023	4:00 – 6:00 PM	264	14.2	13.9	98%

5.2 DLRP System Impacts

To assess the potential impacts of DLRP, the Company analyzed the enrollment and performance data by substation to determine the potential impact where reductions are needed for contingency purposes. Table 9 summarizes the program impact for Tier 1 Areas, Tier 2 Areas, and system wide ("All Areas").

Table 9: 2023 DLRP Summary of Enrolled Anticipated and Achieved Impact[7]

[7] "Enrolled" is defined as the total MW pledged in the program without adjusting for performance. "Achieved" reductions were calculated using the average performance from the Test Events.

	Enrolled Reservation Payment Option	Reservation Payment Option Impact (% of summer peak)	Voluntary Participation Option Impact (% of summer peak)	Achieved Reservation Payment Option Impact (% of summer peak)
Tier 1 Areas	9.5 MW	1.35%	0.00%	1.18%
Tier 2 Areas	4.7 MW	1.14%	0.00%	1.19%
All Areas	14.2 MW	1.28%	0.00%	1.19%

While DLRP realized a decrease in MW enrollment this year, the Company anticipates that the program will increase enrollment in 2024, continuing the previous trend of program growth prior to the pandemic. O&R continuously monitors and analyzes the system impacts and growth rates for DLRP.

5.3 Program Costs

Total costs for DLRP during the 2023 program year were $272,827, a decrease of 17 percent compared to the 2022 total costs of $330,452. Costs decreased primarily due to a reduction in Program Administration expenditures. All program costs are recovered through the ECA non-bypassable delivery charge. Table 10 summarizes the costs, by component associated with DLRP in 2023.

Table 10: DLRP Cost Components for 2023 Program Year[8]

Component	Cost	Percentage
Customer Incentives – Reservation Payments	$225,245	83%
Customer Incentives – Performance Payments	$19,907	7%
Program Administration	$17,675	6%
Program Marketing	$0	0%
Program Evaluation	$10,000	4%
Total Program Costs	**$272,827**	**100%**

5.4 Assessment of DLRP Growth

In 2023, the number of participating Aggregators grew to nine, from eight in 2022, and the number of Direct Participants remained at three. Overall, the number of customer accounts increased from 113 in 2022 to 264 in 2023. Much of this growth was due to increased participation from residential customers. 158 additional customers joined DLRP, representing 2.1 MW of enrollment. Seven customers that participated in 2022 did not re-enroll in 2023, representing a 1.8 MW reduction. Additionally, 35 existing participants, mostly residential, increased pledge levels from 2022, representing an increase of 0.2 MW, while 23 remaining participants, mostly residential, decreased pledge levels from 2022, representing a reduction of 1.3 MW. O&R expects that the program will increase in participation and MW enrollment in the future.

Table 11 below summarizes the MW enrollment, which includes both the amount of MW enrolled and the amount of MW operationally available. The MW operationally available are the average MW reductions demonstrated during Test Events.

Table 11: 2023 DLRP Overall Enrollments

2022 MW Enrolled	2022 Operationally Available MW	2023 MW Enrolled	2023 MW Operationally Available	2022 vs. 2023 MW Enrolled % Decrease	2022 vs. 2023 Operationally Available MW % Decrease

[8] Costs for November and December have been estimated.

15.0	15.8	14.2	12.8	5%	19%

O&R anticipates that DLRP will see enrollment increases in the 2024 Capability Period. Multiple commercial and industrial customers have already expressed interest in participating in 2024, or increasing pledge levels, a trend that is expected to continue. O&R will continue to pursue outreach opportunities and anticipates marketing commercial DR programs in conjunction with commercial energy efficiency programs for the 2024 Capability Period.

As enrollment and performance continue to increase, the benefits of DLRP are expected to expand. Growth in load reduction will eventually provide system redundancy, decrease distribution congestion, and provide increased reliability. The Company recognizes that additional enrollment growth is necessary for DLRP to have a substantial impact on the system.

6.0 Term and Auto Dynamic Load Management Programs

In 2021, the Company introduced the Term- and Auto-DLM programs. These programs are expected to improve system reliability, as resources are procured via 3–5-year contracts, providing the Company with long-term resource assurance and more accurate forecasting capabilities.

Term-DLM is a peak-shaving program open to customers throughout the Company's service territory who can curtail load or use on-site generation to reduce their demand or increase export for qualifying facilities by a minimum of 50 kW individually, or as part of an aggregation that pledges a minimum of 50 kW of demand reduction. Like CSRP, a minimum of 21 hours of notice is provided before a Term-DLM Event. A Term-DLM Event refers to the Company's option to request load relief when the day-ahead and then same-day forecasted load is at least 88 percent of the Company's forecasted summer system peak. The Company is required to request load relief when the day-ahead forecasted load is at least 92 percent of the Company's forecasted summer system. The Term-DLM Event can be cancelled up to two hours before an event begins if the forecasted load falls below 92 percent of the Company's forecasted summer system peak.

Participants must respond to a Term-DLM Event for a four-hour period ("Call Window" or "Contracted Hours"). The Call Window(s) are established by the Company based on need and will be posted on the Company's website no later than January 1 for the upcoming Capability Period. The Call Window(s) will be Monday – Friday, excluding federal holidays. Like the CSRP and DLRP programs, customer load reductions are measured using a CBL methodology. Customers choose between an Average Day or Weather Adjusted CBL. Term-DLM has environmental and performance requirements and excludes on-site diesel generators from participating. Fossil fuel generation participation in the program is restricted based on emissions and model year vintage. Performance Payments for Term-DLM customers are $1 per kWh.

Auto-DLM is a contingency program applicable to individual customers and Aggregators who contract to reduce 50 kW or more during an event. Auto-DLM may be called by the Company to reduce strain on specific distribution circuits when contingencies or certain emergency conditions occur. When Term-DLM events are called, Auto-DLM customers are required to participate unless they are called for a separate Auto-DLM event during that day. Whereas participants in Term-DLM are provided no less than 21 hours' notice to respond to events, participants in Auto-DLM must be able to respond with as little as 10 minutes' notification.

Customer load reductions are measured using the same CBL methodology for Auto-DLM as for Term-DLM. Customers can choose between an Average Day or Weather Adjusted CBL. Auto-DLM has environmental and performance requirements and excludes onsite diesel generators from participating. Fossil fuel generation participation in the program is restricted based on emissions and model year vintage.

Like Term-DLM, Incentive Rates for Auto-DLM are determined by the rates submitted by RFP participants whose bids are accepted. Tier 2 networks are those identified as higher priority and in need of additional demand reduction resources. Performance Payments for Auto-DLM customers are $1 per kWh.

6.1 RFP and Enrollment Process

In 2020, the Company released an RFP for Term- and Auto-DLM, seeking to procure resources for 2021 and 2022 Capability Periods. To participate in Term- and Auto-DLM, Aggregators are required to make bids for aggregations, collections of enrolled customers in a single network, that combine to provide at least 50 kW of load relief across a set of Term- or Auto-DLM contracts starting in a particular year, known as a "Vintage Year." For each aggregation, the Aggregator specifies a $ per kW Incentive Rate they are seeking, the amount of load relief they will provide in kW for each aggregation, three-to-five-year contract durations, and which program the aggregation seeks to enroll in. No submissions passed the benefit-cost analysis, which was submitted to the Commission for confirmation. As a result, enrollment for the 2021 and 2022 Capability Periods for Term- and Auto-DLM is 0 MW. In November 2021, the Company released an RFP for Term- and Auto-DLM resources for the 2023Capability Period. No submissions were received, and as a result, enrollment for the 2023 Capability Period for Term-and Auto-DLM was 0 MW. Similarly, in December 2022, the Company released an RFP for Term-and Auto-DLM resources for the 2024 Capability Period. No submissions were received, and as a result, enrollment for the 2024 Capability Period for Term-and Auto-DLM is 0 MW. The Company anticipates issuing an RFP for 2025 resources in December 2023.

7.0 Commercial DLM Portfolio Cost Effectiveness

This section details the evaluation of cost effectiveness for CSRP and DLRP using the Societal Cost Test ("SCT"), Utility Cost Test ("UCT"), and Ratepayer Impact Measure ("RIM"). For this report, O&R incorporated the results of the separate BCA track associated with Case 14-M-0101 into program design and reporting as appropriate.

The Company updated the cost-effectiveness model for the 2021 Capability Period. The purpose of the cost-effectiveness model is to assess the cost effectiveness of the Company's DLM programs both as a whole and on a marginal basis. The model assesses the cost effectiveness of each DLM program by using program-specific cost and benefit inputs. No major changes to the BCA Handbook were made this year.

The CSRP and DLRP programs are being evaluated jointly since overhead costs are shared, overlap between the programs is substantial, and incentives were designed on a combined basis. Results for all three tests are displayed in Table 12.

Table 12: 2023 Commercial DLM Portfolio Cost-effectiveness Test Results

	SCT	UCT	RIM
BENEFIT	$12,265,598	$12,286,324	$12,286,324
COST	$7,124,062	$7,124,062	$7,213,592
NET BENEFIT	$5,141,537	$5,162,262	$5,072,732

RATIO	1.72	1.72	1.70

The SCT test determines whether New York benefits from the implementation of the program. As defined in the Company's BCA Handbook, the SCT compares the costs incurred to design and deliver programs and customer costs with avoided electricity and other supply-side resource costs and includes the cost of externalities. The SCT test for the commercial DLM portfolio yields a BCA ratio of 1.72 and $5,141,537 in net benefits over a 10-year period.

The UCT determines whether costs for the utility decrease from the implementation of the program. This test includes the costs and benefits that are experienced by the utility resulting from the program. This test is useful for identifying impacts on utility revenue requirements and provides information on the effectiveness of program delivery. As defined in the Company's BCA Handbook, the UCT compares the costs incurred to design, deliver, and manage projects by the utility with avoided electricity supply-side resource costs. The UCT for the commercial DLM portfolio yields a BCA ratio of 1.72 and $5,162,262 in net benefits over a 10-year period.

The RIM determines whether customer electricity bills decrease or increase from the implementation of the program. This test is useful for understanding whether utility rates need to increase to fund the program. This test reflects the perspective of all utility customers who do not participate in the programs. As defined in the Company's BCA Handbook, the RIM compares utility costs and utility bill reductions with avoided electricity and other supply-side resource costs. The RIM for the commercial DLM portfolio yields a BCA ratio of 1.70 and $5,072,732 in net benefits over a 10-year period.

Benefit cost ratios above 1.0 indicate that a program is cost effective. Each benefit cost ratio for the DLM Commercial Portfolio is above 1.0. To maintain cost effectiveness of the DLM Portfolio, O&R will continue to manage spending, reduce barriers to entry to increase enrollment, and provide participants with tools to maximize performance.

8.0 Direct Load Control Program

The DLCP program supports electric system reliability and reduces operational costs by using a Control Device at participating customers' locations to control participants' central heat pump and AC units and reduce peak demand. The Control Device is a smart thermostat that is used to cycle units. The smart thermostat connects to the customer's existing Wi-Fi router with no separate hardware needed. The smart thermostats provide reliable two-way communication, which allows the Company to more accurately monitor event participation and verify load reduction. Customers can override any event and are able to remotely control their central AC units online through a personal computer, smart phone, or tablet throughout the year.

The DLCP is highly flexible and can be called for high system loads or localized emergencies. The Company may control smart thermostats during the summer Capability Period of May 1 through September 30 of each year. The DLCP is available to qualifying residential, religious, and small business customers that enroll in one of two participation options. Customers may participate in the Bring Your Own Thermostat ("BYOT") program option or Company Provided Thermostat ("CPT") program option. The CPT program option may be included into Non-Wire Solutions ("NWS") projects and in other targeted areas requiring demand management. A description of the DLCP options, incentives, and program progress

to date are detailed below. To date, the Company has not implemented the CPT option. In addition to the existing framework of the DLCP, the Company is proposing to add a third program, Residential Energy Storage ("RES") for the 2024 Capability Period. Additional details can be found in Section 8.2.

8.1 BYOT Option

O&R launched the BYOT program on October 1, 2015. The BYOT program allows customers to enroll an eligible smart thermostat through a Service Provider for a one-time Sign-Up Payment of $85. In addition, starting the second summer following enrollment the Company offers a Participation Payment of $25 for each summer period in which the Company can verify that the customer participated in no less than 80 percent of the aggregate event hours.

The BYOT program offers customers choices with thermostat equipment, flexibility, and control. This approach leverages existing marketing done by various thermostat manufacturers and potentially removes barriers to DLCP participation for customers that already have a smart thermostat or are in the process of purchasing one of their choice. Table 13 presents the smart thermostats eligible for program enrollment as of November 15, 2023.

Table 13: Eligible Smart Thermostats for BYOT Program

Service Provider	Thermostat Manufacturer	Eligible Models
EnergyHub	Alarm.com	CT 30, CT 80, CT 100, Trane ComfortLink Control, RCS Z-Wave Communicating Thermostat, GoControl Z-wave Thermostat, Alarm.com Smart Thermostat
EnergyHub	Ecobee	Ecobee SmartThermostat with voice control, ecobee4 ecobee3, ecobee3 lite, ecobee Smart, ecobee Smart Si
EnergyHub	Emerson	Sensi Touch Smart Thermostat, Sensi Smart Thermostat
EnergyHub	Lux	LUX/GEO
EnergyHub	Radio Thermostat Company of America/Filtrete	Filtrete 3M-50, CT 30, CT 50, CT 80
EnergyHub	Honeywell/Resideo	RTH9580WF, TH9320WF, RTH8580WF, TH8320WF, RCHT8610WF2006/W, Wi-Fi Vision PRO 800, RTH6580WF1001, RTH9585WF1004, RCHT9610WFSW2003, RCHT8610WF2006
EnergyHub	Nest	Google Nest Learning Thermostat, Google Nest Thermostat

Additionally, O&R is cross promoting the BYOT program through the Customer Engagement Marketplace Platform ("CEMP"), and its energy efficiency portfolio of programs. Eligible smart thermostats are available for sale on the CEMP, the ORU Marketplace (www.myorustore.com).[9]

Currently, when customers buy a smart thermostat on the ORU Marketplace, they receive an instant energy efficiency rebate upon point of sale and are encouraged to enroll in the BYOT program. In 2023, the Company continued to expand instant $85 demand response rebates on select pre-provisioned thermostat

[9] The ORU Marketplace is an online marketplace where O&R customers can purchase energy saving products and services, such as light bulbs, smart power strips, smart thermostats, heating and cooling equipment tune-ups by local contractors and more. Customers visiting the ORU Store may qualify for an instant energy efficiency rebate and are directed to enroll in the Company's other energy efficiency and demand response programs.

models, streamlining the enrollment process, improving the customer experience and driving adoption, resulting in the largest annual enrollment growth in program history. Thermostats that do not have the pre-provisioning capability are rebated via e-gift card once customers install the device and enroll in the BYOT program. The addition of instant rebates and a streamlined e-gift card payment process has streamlined the customer experience and driven increased enrollment in 2023. The success of these program enhancements will be monitored, and the Company will explore opportunities to expand these offerings in 2024.

8.2 RES Option

The Company is proposing to add Residential Energy Storage ("RES") to the DLCP for the 2024 Capability Period. Currently, when a residential customer installs an energy storage system, there is no clear path for this customer to leverage their device for market participation, resulting in large numbers of customers with residential storage being unable to provide important peak-shaving resources. Under Rider D, O&R operates a BYOT demand response program which allows customers to enroll eligible thermostats into the program and agree to allow O&R to make limited adjustments to their device to participate in Company demand response events. Since its inception, this program has proved to be an effective way to allow customers to leverage their communicating control technology to provide grid services and receive financial incentives for their participation. Allowing customers to participate directly via their device removes any barriers to participation caused by the customer's metering configuration, leverages the existing strong relationship between customers, service providers, and the utility, and allows for a seamless "hands-off" approach for customers to participate in load flexibility while always maintaining the ability to opt out at any time.

O&R believes a similar "Bring Your Own" program design that has proven successful for thermostats will provide many of the same advantages for customers with residential energy storage. Allowing customers with residential battery storage to participate within the DLCP greatly expands the number of potential customers that can participate in the program and provide additional grid resources. Device partner outreach and marketing in support of the BYOT program has proven extremely effective, and the company believes this relationship will prove similarly effective for residential energy storage systems.
The "Bring Your Own" device model allows customers to participate in demand response and grid services events with very little discomfort or intervention required on their part, a key factor in long-term participation in these programs. At the same time, this model allows the customer to opt out of any event at any point, which is essential for residential customer satisfaction.

While the Company believes the "Bring Your Own" device program design used for thermostats will also be effective for energy storage systems, there are a few unique considerations we believe need to be accounted for with a "Bring Your Own Battery" program. The first primary distinction is based on how customer performance is measured and how a customer is compensated for their participation in events. Device telemetry provided by energy storage systems provides a much more direct view of load flexibility provided by the storage system, compared to telemetry provided by communicating thermostats, which is more runtime focused on HVAC runtime. Due to this difference in data availability, we believe that a customer incentive for energy storage should be focused on customer performance (in terms of kW delivered) during Company dispatched events, rather than based upon customer enrollment and participation in percentage of event hours as is done with thermostats. O&R has conducted preliminary program-level Bring Your Own Battery BCA to use forecasted program costs to design a Participation Payment that appropriately values customer performance with their storage system while ensuring that the program can be operated cost-effectively. As a result of this analysis, O&R plans to offer an incentive of

$50/kW-year for energy storage customers participating in the program. As the Company conducts further analysis over the coming months, this incentive may be revised, with the final incentive being filed no less than 60 days before the effective date.

The second primary distinction is how these devices are purchased by customers. When a customer acquires a new communicating thermostat, they purchase the device from a retailer like the MYORUStore, and in most instances, install it themselves. Once a customer buys a thermostat, they own it outright. The purchase process for energy storage systems differs from this process. Energy storage systems are much more expensive than thermostats and cannot be installed by a customer directly- they require professional installation. They may also be installed at the same time the customer is purchasing a solar PV system. Due to the cost and complexity of these systems, energy storage systems are often not paid for in full upfront by a customer, but are financed, leased, or acquired through a Power Purchase Agreement ("PPA") instead. Because of these more complex contractual relationships tied to energy storage acquisition, an important trend in energy storage system incentives is to allow for a customer to assign the incentive directly to a service provider. Upfront incentives to encourage customers to purchase storage systems are routinely paid directly to a service provider to reduce a customer's monthly financing or leasing costs. The same structure can be valuable for performance incentives- when a customer has a financed or leased energy storage system and earns a performance incentive from a utility program, the ability for that customer to assign the incentive directly to their energy storage service provider is a valuable means for them to reduce their out-of-pocket costs for their storage system.

The Company has filed draft tariff leaves modifying the DLCP tariff language to incorporate these distinctions between energy storage system and thermostat program models.

8.3 CPT Option

For the CPT program, O&R will provide a free or low-cost smart thermostat to the enrolling residential or small business customer. The smart thermostat becomes the property of the customer upon enrollment. No Sign-Up or Participation Payments are currently proposed. O&R reserves the right to add enhanced incentives to encourage enrollment and event participation as needed for NWS projects. These enhanced incentives may be provided by the NWS project budget. The Company may launch the CPT Program option in specific NWS areas in 2024.

8.4 Event Summary

Enrollment in the BYOT program increased by 1,047 customers, surpassing a total of 6,300 customers in 2023, bringing our total enrollment over 8,500 devices. The Company called two one-hour Test Events and one two-hour Test Event in 2023. The program achieved an average reduction of 5.9 MW over the three events.

This section focuses on evaluation of BYOT performance for the 2023 Capability Period. Table 14 shows the various demand reduction strategies employed by the Service Provider.

Table 14: BYOT Demand Reduction Strategies

Service Provider	Demand Reduction Strategy
EnergyHub	EnergyHub employs temperature offset events of configurable duration, with an optional pre-cool period of up to 90 minutes, and an option to set a temperature ceiling. The strategy includes opt-out events, with a four-degree offset and temperature ceiling of 85 degrees F. Test Events last one-hour and actual events last up to four-hours. Different thermostat manufacturers within the EnergyHub portfolio have slight variances in load reduction strategy. For example, Honeywell sends a signal to the thermostat which turns the AC compressor off, but still allows the fan to run. Typically, a compressor will run every other 15 minutes for the desired length of the event. This is considered a 50 percent cycling event as the compressor runs 50 percent of the hour. Nest leverages a customized approach to demand response, which is unique to each home. Nest uses a combination of AC cycling and temperature offsets to maximize load reduction based on envelope of the home, functionality of cooling equipment and customer preferences. The strategy also offers an option to pre-cool.

Table 15 shows a summary of the two one-hour Test Events and one two-hour Test Event called during the 2023 Capability Period.

Table 15: 2023 Summary of BYOT Events

Test or Event	Event/Test Date	Event/Test Hour(s)	Thermostats Called	Participating Thermostats	Average MW Reduction
Test Event	07/28/2023	5:00 – 6:00 PM	8,443	5,854	7.70
Test Event	08/25/2023	5:00 – 6:00 PM	8,505	5,628	3.18
Test Event	09/07/2023	4:00 – 6:00 PM	8,549	6,180	6.95

The demand reduction per Control Device varies based on the thermostat manufacturer and the demand reduction strategies that are utilized. The average MW reduction in the table above is the aggregate reduction based on the estimates from the Service Provider.

8.4 Program Costs

The Company estimates that it will spend $730,761 to implement the BYOT option of the DLC program in 2023. The BYOT program realized a 15 percent increase in total enrollment, which includes program attrition, and a 44 percent increase in total costs compared to 2022, where total expenditure was $509,070. This increase in cost was due to increased customer incentives based on enrollment and participation, which increased by over $$78,000 in 2023 compared to 2022. The remainder of this section will summarize program costs incurred for the DLC program. All costs are recovered through a line item of the existing ECA non-bypassable delivery charge. Table 16 summarizes the costs by component associated with DLCP in 2021.

Table 16: DLCP Cost Components for 2023 Program Year[10]

Component	Cost	Percentage
Customer Incentives – Reservation Payments	$240,843	33%
Customer Incentives – Performance Payments	$97,550	13%
Program Administration	$356,355	49%

[10] Costs for December have been estimated.

Program Marketing	$26,013	4%
Program Evaluation	$10,000	1%
Total Program Costs	**$730,761**	**100%**

8.5 Assessment of DLC Growth

As of 2023, all DLC enrollment is from the BYOT program (see Table 17.) In 2023, the BYOT program added 1,047 customers and 1,361 devices through November 15, 2023.[11] O&R anticipates a consistent rate of enrollment through the end of the year as thermostat vendors continue marketing activities and promote Black Friday and Cyber Monday smart thermostat discounts, both on the ORU Marketplace and in other retail locations. O&R plans to continue marketing activities and educate customers about the benefits of smart thermostats to generate new purchases. In particular, O&R will cross market demand response with energy efficiency by focusing on educating customers on how smart thermostats are a tool to help manage their energy usage and costs, all while aiding service reliability. The Company may also expand the pre-provisioned BYOT option for additional smart thermostats in conjunction with the ORU Marketplace, which will further streamline the customer experience, make enrollment significantly simpler, and provide an instant $85 rebate per eligible thermostat to the customer at the point of sale. Additionally, the Company transitioned to providing rebates via e-gift cards instead of physical checks. This payment mechanism never expires and can be easily reissued if the customer requires, making the transaction more user-friendly while simultaneously reducing the administrative burden. The Company realized significant benefits from these program additions in 2023 and anticipates that future enhancements will provide expanded benefits to the customer.

Table 17: Summary of BYOT Enrollment

Program Year	Customers	Devices
2015 (Oct 1 – Dec 31)	303	416
2016 (Jan 1 – Dec 31)	760	1,068
2017 (Jan 1 – Dec 31)	803	1,081
2018 (Jan 1 – Dec 31)	598	794
2019 (Jan 1 – Dec 31)	397	628
2020 (Jan 1 – Dec 31)	677	903
2021 (Jan 1 – Dec 31)	1,126	1,458
2022 (Jan 1 – Dec 31)	1,431	1,837
2023 (Jan 1 – Nov 15)	1,047	1,361
Total[12]	**6,305**	**8,593**

8.6 Program Cost Effectiveness

This section details the evaluation of cost effectiveness for DLCP using the SCT, UCT, and RIM. O&R used its demand response cost-effectiveness model and evaluation framework to calculate cost effectiveness of the DLCP program. Results for all three tests, including net benefits over 10 years, are displayed in Table 18.

[11] The BYOT program experiences attrition throughout the year. The reason for unenrollment can vary, but may include relocating, either within the O&R service territory or to a different service territory, network and wi-fi connectivity problems. Attrition rates are typically in the two to four percent range for O&R's BYOT program.

[12] Total represents number of active customers and devices at time of filing. The total is not a summation of year-over-year customers and devices, as it takes program attrition into consideration.

Table 18: 2023 DLCP Cost-effectiveness Test Results

	SCT	UCT	RIM
BENEFIT	$8,940,535	$8,913,582	$8,913,582
COST	$5,474,138	$4,055,803	$4,127,500
NET BENEFITS	$3,466,397	$4,857,779	$4,786,082
RATIO	**1.63**	**2.20**	**2.16**

Benefit cost ratios above 1.0 indicate that a program is cost effective. The BYOT program is deemed cost effective based on the efficient management of the program, low recurring costs for ongoing vendor management, and cross marketing efforts with the energy efficiency residential portfolio. By incorporating best practices and new program models and designs, O&R expects to improve cost effectiveness and provide customers with engaging programs.

8.7 DLCP Conclusions

In 2023, O&R continued to expand the BYOT program option of the DLCP and cross-marketed the BYOT program with the ORU Marketplace and its energy efficiency programs. 2023 marked the eighth summer Capability Period. The Company called two one-hour Test Events and one two-hour Test Event. The BYOT program continued to experience strong growth, and the ease of enrollment on the ORU Marketplace is expected to continue this trend in future years. DLCP remains an integral component of the Company's overall strategy for increasing demand response capabilities and will continue to be a useful tool for engaging residential and small business customers beyond demand response.

In 2024, O&R will work with its program Service Provider to increase customer enrollment, promote new smart thermostat functionality, test new incentive structures and delivery models, streamline incentive payments to customers, and cross market the programs with existing or new initiatives. The Company will also look to expand the successful pre-provisioned functionality within the CEMP, potentially adding additional thermostat models and manufacturers. Additionally, the Company is proposing to add Residential Energy Storage to the DLCP beginning in 2024.

Overall, the Company will assess how to best leverage new initiatives and projects while integrating newer technologies as they come to the market. As the Company evaluates new initiatives, it looks forward to working closely with Staff to advance the objectives of the program. Additionally, O&R will utilize DLCP to continue to engage, educate, and empower its customers. This is particularly effective when demand response is cross marketed with energy efficiency. In addition to demand response capability, the smart thermostats can deliver non-event day energy savings throughout the year by allowing customers to remotely manage their thermostat settings and control energy costs.

9.0 O&R DLM Programs Conclusion

The Company views DLM as a tool to support the effective and efficient operation of its electric distribution system. The initiatives discussed in this document are positive examples of progress, but it is important to recognize that this progress must continue with further efforts being made to encourage participation by more customers. Customer education and integration of new tools are very important to the growth of customer participation.

In 2023, O&R successfully implemented three DLM programs and completed its eighth full Capability Period. RFPs for the Term- and Auto DLM programs were issued, though these programs did not have enrollment during the 2023 Capability Period. MW enrollment decreased in the commercial programs but the BYOT program continued to demonstrate strong growth. The Company expects that the decrease in enrollment in the commercial programs is an aberration from typical growth trends and expects positive enrollment growth to continue in the 2024 Capability Period. CSRP had one one-hour Test Event, with a Performance Factor of 88 percent, an improvement from last year. The Company called one one-hour Test Event and one two-hour Test Event for DLRP, resulting in an average Performance Factor of 92 percent, a decrease from last year. The BYOT program called two one-hour Test Events and one two-hour Test Event, two of which provided record demand reduction and participation.

While MW enrollment declined in both CSRP and DLRP, the raw number of customers increased in both programs. The need for outreach and engagement with Aggregators and Direct Participants remains a key component of the programs' success, and the Company will continue to work with these stakeholders to increase enrollment and improve performance. Despite the reduction in MW enrollment, better and more predictable performance indicates that demand response will be a reliable, consistent, and useful resource for managing summer peak demand and contingencies at O&R. Additionally, the benefit cost analysis indicates that all DLM programs are cost effective. In 2024, O&R will build upon its successes and continue to promote the DLM programs through a variety of marketing and outreach activities, as well as new Company initiatives.

O&R will continue to work with Staff and other stakeholders to further develop cost-effective programs and incorporate new technologies as they become available. The Company will also align new initiatives with existing programs to maximize customer benefits and engage customers in new ways.

The DLM programs today will be instrumental in the delivery of longer-term benefits to New Yorkers, including avoiding or delaying transmission and distribution system investment, promoting energy efficiency, and improving the reliability and resiliency of electricity delivery systems.

10.0 Appendix

Appendix A – Key Terms

Aggregator – refers to a party other than the Company that represents and aggregates the load of customers who collectively have a Load Relief potential of 100 kW or greater and is responsible for actions of the customers it represents, including performance, and as applicable, performance adjustments, penalties and repayments to the Company.

Capability Period – refers to the period May 1 through September 30 during which the Company can request Load Relief.

Commercial System Relief Program (CSRP) – a peak shaving program activated by O&R when the day-ahead system electric load forecast is 92 percent or greater of forecasted system peak.

Contingency Event – refers to a Load Relief period lasting four or more hours for which the Company provides two or more hours' advance notice.

Control Device – a device installed on the customer's load controllable equipment via a smart plug or embedded control that allows the Company to remotely control the equipment when an Event is called.

Customer Baseline Load (CBL) Methodology – the methodology used by the Company to verify the actual Load Relief provided during each hour of Load Relief. Actual load levels are compared to the customer baseline loads to verify whether the Direct Participant or Aggregator provided the kW of contracted Load Relief.

Direct Load Control Program (DLCP) – a direct load control program that can be activated by O&R for peak shaving or contingency relief.

Direct Participant – refers to a customer who enrolls directly with the Company for a single customer account and agrees to provide at least 50 kW of Load Relief.

Distribution Load Relief Program (DLRP) – a contingency program activated by O&R to prevent or mitigate critical situations on the utility's electric grid, typically called in specific defined geographic areas.

Immediate Event – refers to a Load Relief period lasting six or more hours for which the Company provides less than two hours' advance notice.

Load Relief – refers to the power (kW) and energy (kWh) that is displaced by use of electric generating equipment and/or reduced by the Direct Participant and Aggregator at the customer's premises.

Participation Payments – payments made on a dollar per year at the end of a summer capability basis when the program participant has met a minimum threshold of participation in called demand response events.

Performance Factor – the ratio of the average hourly kW of Load Relief provided by the Direct Participant or Aggregator during requested hours, up to the kW of contracted Load Relief to the kW of contracted Load Relief.

Performance Payments – payments made to customers on a dollar per kWh basis only during called demand response events.

Planned Event – refers to the Company's request on not less than 21 hours' advance notice for Load Relief during contracted hours. Planned events are called when the Company's day-ahead forecasted load level is at least 92 percent of the forecasted summer system-wide peak.

Reservation Payments – payments made to participants on a set dollar per kW per month of the summer Capability Period basis.

Reservation Payment Option – a mandatory enrollment option that requires Direct Participants and Aggregators to provide Load Relief if and when the Company calls a Planned Event and Test Event for CSRP and a Contingency Event, Immediate Event or Test Event or DLRP. Customers enrolled in this option are paid a monthly Reservation Payment and Performance Payment.

Residential Energy Storage (RES) – A proposed addition to the DLCP beginning in the 2024 Capability Period. The program would allow residential customers to participate in demand response under Rider D utilizing energy storage devices.

Service Provider – a provider registered with the Company to develop, maintain and operate a communications portal that enables internet-connected Control Devices to participate in DLCP.

Sign-Up Payments – payments made on a dollar per device enrolled in direct load control programs basis once the Control Device is installed and the utility is able to confirm communications with the Control Device.

Test Event – refers to the Company's request under the Reservation Payment Option that Direct Participants and Aggregators provide one-hour of Load Relief on not less than 21 hours' advance notice for CSRP or 2 hours' advance notice for DLRP.

Unplanned Event – refers to the Company's request for Load Relief on less than 21 hours' advance notice or for hours outside of the contracted hours.

Voluntary Participation Option – a voluntary enrollment option that allows Direct Participants and Aggregators to provide Load Relief for all event types only if they are available. Customers enrolled in this option are only paid Performance Payment