

Con Edison Performance-Based Gas Demand Response Pilot Guidelines

2020/2021 Capability Period
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Disclaimer: On April 26, 2018, Con Edison submitted an Implementation Plan to the New York State Public Services Commission (“NYSPSC”) for the Performance-Based Gas Demand Response (DR) Pilot. On August 9th, 2018, NYSPSC approved the Implementation Plan with modifications. On July 1st, 2019, Con Edison submitted an updated Implementation Plan to the New York State Public Services Commission (“NYSPSC”) for the Performance-Based Gas Demand Response (DR) Pilot. This document is meant to elaborate on the pilot as described in the most recent implementation plan. Con Edison reserves the right to change any of the content in the Guidelines without notice if necessary for regulatory, legal, business, or operational purposes.

ACRONYMS AND DEFINITIONS

Aggregator – A party other than the Company that represents and aggregates the load of Customers who collectively have a Load Relief potential of 50 therms and is responsible for the actions of the Customers it represents, including performance and, as applicable, repayments to the Company.

Capability Period – The period between November 1 through March 31 during which Direct Participants and Aggregators have pledged Load Relief.

CBL – The Customer Baseline Load as calculated under the Company’s CBL methodology (described in Appendix F) using the baseline options listed in the methodology.

Con Edison or the Company – Consolidated Edison Company of New York, Inc.

Contracted Hours – Refers to the 24-hour period (10:00 AM to 10:00 AM the following day) during which the Load Relief of Participating Customers will be measured during a Planned Event, Test Event, or Unplanned Event.

Customer – Any firm gas customer taking service from Con Edison.

Demand Response (DR) – Load Relief upon request.

Direct Participant – A Customer that enrolls in the Pilot directly for a single Con Edison account, and agrees to provide at least 50 therms of Load Relief.

Enrollment Value – The quantity of Load Relief enrolled by each Participating Customer.

Event Performance Factor – The ratio of (i) the therms of Load Relief provided during a Planned Event or Test Event up to the Enrollment Value, to (ii) the Enrollment Value. The Event Performance Factor is rounded to two decimal places and has an upper limit of 1.00 and a lower limit of 0.00. The Event Performance Factor is calculated for each participating Customer.

Interval Meter – A gas meter capable of measuring gas consumption on a one-hour basis.

Load Relief – Net reduction in gas consumption (measured in therms) ordinarily supplied by the Company at the Participating Customer’s premise during the entirety of the Contracted Hours.

Load Relief Verification Methodology – The methodology used by the Company to verify the actual Load Relief provided during Planned Events, Test Events, and Unplanned Events. Metered gas consumption levels are compared to the CBL to verify whether the Participating Customer provided the contracted Load Relief. The Company reserves the right to estimate data if they are not available for all the intervals required by the methodology.

Participating Customer – A Con Edison Customer who satisfies the eligibility and metering requirements set forth in the Implementation Plan, and who participates in the Pilot through an Aggregator or as a Direct Participant.

Performance Payment – An incentive for Participating Customers based on their Load Relief during Planned Events, Test Events, and Unplanned Events.

Pilot – Con Edison’s Performance-Based Gas DR Pilot.

Planned Event – The Company’s request for Load Relief during the Contracted Hours when event notification is issued at least 21 hours in advance and the Company’s prior-day weather forecast meets the event calling criteria.

Reservation Payment – A monthly incentive under the Reservation Payment Option. Reservation Payments are based on each Participating Customer’s Enrollment Value, after adjusting for the Monthly Performance Factor, for each month of the Capability Period that the Participating Customer is enrolled in the Pilot.

Reservation Payment Option – Participation option for the Pilot in which Direct Participants and Aggregators are eligible for both a Reservation Payment and Performance Payment.

Monthly Performance Factor – The average Event Performance Factor from all Planned Events and Test Events called during the month. The Monthly Performance Factor is rounded to two decimal places and has an upper limit of 1.00 and a lower limit of 0.00.

Test Event – Refers to the Company’s request under the Reservation Payment Option for Participating Customers to provide Load Relief in order to test Participating Customers’ responses to a request for Load Relief. A Test Event’s duration and notification time match that of a Planned Event.

Unplanned Event – The Company’s request for Load Relief (a) on less than 21 hours’ advance notice, or (b) at temperatures higher than the event calling criteria.

Value Zone – The Pilot incentive levels for the Reservation Payment and the Performance Payment are based on the physical location of the Participating Customer, and are differentiated by two Value Zones identified by zip code in Appendix A. Zone A includes areas of the Company’s gas service territory where Load Relief is of higher value compared to Zone B, and Zone B includes all other areas that are eligible to participate in the Pilot.

Voluntary Payment Option – Participation option of the Pilot in which Participating Customers are eligible only for Performance Payment.

1 ELIGIBILITY

Customers who wish to enroll in the Pilot must take firm gas delivery service from Con Edison in the Value Zones identified in Appendix A. If a Customer switched to firm gas delivery service from interruptible delivery service or if the Customer moved to firm delivery service as a result of failure to meet interruptible delivery service requirements, the Customer must take firm delivery service for a full calendar year before being eligible to enroll in the Pilot.

2 CONTRACTING FOR SERVICE

Aggregators and Direct Participants are required to provide a minimum Enrollment Value of 50 therms for the duration of the Contracted Hours to participate in the Pilot. An Aggregator may contract to provide Load Relief under the Voluntary Participation Option and/or the Reservation Payment Option as long as a total of 50 therms is provided. Additionally, any Participating Customer enrolling in the Pilot using metering option 3 in appendix C or by metering option 2 in appendix C, provided that the BMS/EMS system is connected to a volume corrector, must provide a minimum Enrollment Value of 10 therms.

Participating Customers in the Reservation Payment Option are required to provide Load Relief during the Contracted Hours whenever the Company designates a Planned Event during the Capability Period. They may also voluntarily provide Load Relief if the Company calls an Unplanned Event. Participating Customers under the Reservation Payment Option must provide Load Relief if and when the Company calls one or more Test Events.

Customers will be required to have at least one of the four metering options outlined in Appendix C for the collection of interval data.

The restrictions on eligibility and participation are as follows:

- Participating in the Pilot by fuel-switching to liquid fossil fuels is not permitted.
- Dual enrollment in the Pilot and the Direct Load Control (DLC) Gas DR Pilot is not allowed.

3 APPLICATIONS AND TERMS OF SERVICE

Applications for service by Direct Participants or Aggregators for the Reservation Payment Option or Voluntary Participation Option must be made electronically before the respective enrollment deadline for each Capability Period, as specified in Appendix B.

The Company will accept applications for the Voluntary Participation Option at any time, provided the metering and communications requirements specified in Appendix C are met.

Each application must state the therms of Load Relief that will be provided by the Participating Customer during the Contracted Hours.

A single CBL Verification Methodology will be used for each Participating Customer to assess Load Relief. A Direct Participant or Aggregator must contract to provide at least 50 therms of Load Relief in the Pilot. An Aggregator may contract to provide Load Relief under the Voluntary Participation Option and/or the Reservation Payment Option as long as a total of 50 therms is provided. The Company reserves the right to require participants who elect the Weather-Sensitive adjustment to demonstrate weather-sensitive load upon making the CBL selection or at any point during the Capability Period.

An Aggregator may increase its therms of pledged Load Relief during a Capability Period only if it enrolls Customers whose Aggregator either exits the pilot or is suspended from participation in the pilot for noncompliance with Aggregator eligibility requirements or the Company's operating procedures. In such case, the Aggregator may increase pledged Load Relief up to the amount of the transferred Customers' existing therms of pledged Load Relief.

Any Participating customer(s) that are identified to have potentially switched to fuel oil or liquid fuels will have their performance put under administrative review, per Section 6 of these Guidelines. Participants that are confirmed to have switched to fuel oil or liquid fuels will be disqualified from receiving any incentive payments for the entirety of the Winter Capability Period that the violation occurred in, and will be ineligible to participate during the following Winter Capability Period.

4 NOTIFICATION BY THE COMPANY

Con Edison will have the option of calling an event when the forecasted average daily temperature is 18°F or below for the next gas day. The Company will reassess the event calling criteria prior to each Capability Period to determine whether it is still in alignment with operational needs.

The Company will notify Direct Participants and Aggregators by phone, e-mail, or machine-readable electronic signal, or a combination thereof, in advance of the commencement of a Planned Event, Test Event, or Unplanned Event. The Direct Participant or Aggregator shall designate in writing to DR@coned.com two authorized representatives, and include an email address and phone number, to receive the notice. The Aggregator is responsible for notifying all of its Participating Customers.

The Company will call a Planned Event or Test Event with at least 21 hours' advance notice. If day-ahead notice was given for a Planned Event or Test Event, the Company will provide either an activation or cancellation notice at least 2 hours prior to the start of an event. The Company will provide notice as soon as practicable if an Unplanned Event is called.

5 METERING

Con Edison must be able to record and collect hourly gas usage interval data for all Participating Customers.

If a Customer wishes to enroll in the Pilot but is unable to collect interval data with existing equipment, Con Edison will arrange for the installation of appropriate metering equipment if the conditions in Appendix C are met.

If a Participating Customer fails to provide access to Con Edison for installing equipment or reading usage data, the Participating Customer may not receive credit for Load Relief provided.

Further details on meter installation and meter data retrieval are provided in Appendix C.

6 ADMINISTRATIVE REVIEW

The Company reserves the right to review records and/or operations of any Direct Participant, Aggregator, or Customer of an Aggregator to verify enrollment information and performance associated with any designated Planned Event, Test Event, or Unplanned Event called by the Company. Once the Company initiates an administrative review, all payments will be suspended pending the outcome of the review. Any suspended payments will be reinstated if the Company's review of the information results in a finding that the enrollment and performance information are correct.

If the Company determines that a Direct Participant, Aggregator, or Customer of an Aggregator failed to cooperate fully and promptly with the review and/or did not fully comply with the provisions of these guidelines and/or provided inaccurate information, the Direct Participant, the Aggregator, or the Customer of the Aggregator may be deemed ineligible to participate in the Pilot until the issue is rectified. In addition, the Direct Participant or Aggregator will be required to make prompt repayment to the Company of any overpayments that were made to the Direct Participant or Aggregator, on behalf of its Customer, for the Capability Period that was reviewed as well as the current Capability Period, if different.

If a Direct Participant, Aggregator, or Customer of an Aggregator does not comply with requests related to measurement and verification or if measurement and verification shows that Customer submitted data was not accurate, Con Edison has the right to suspend all payments and participation of the Direct Participant or Aggregator.

7 VOLUNTARY PAYMENT OPTION

The Company will make Performance Payments to a Direct Participant or Aggregator enrolled in the Voluntary Payment Option for Load Relief provided during a designated Planned Event or Unplanned Event. The Performance Payment is equal to the applicable Performance Payment

Rate multiplied by the Load Relief provided by the Direct Participant or Aggregator during the Planned Event or Unplanned Event.

Payments to Aggregators will be the sum of the payments of Participating Customers enrolled under the Voluntary Payment Option and enrolled by the Aggregator. Load Relief of individual Participating Customers enrolled under the Voluntary Payment Option will not impact payments of other Participating Customers enrolled with an Aggregator.

8 RESERVATION PAYMENT OPTION

The Company will make one Reservation Payment to a Direct Participant or Aggregator for each Capability Period in which the Direct Participant or Aggregator is enrolled. The Reservation Payment for each month is equal to the applicable Reservation Payment Rate per therm multiplied by each Participating Customer's Enrolled Value multiplied by the Monthly Performance Factor. The seasonal reservation payment will be equal to the sum of the monthly reservation payments.

The Company will also make Performance Payments to a Direct Participant or Aggregator enrolled in the Reservation Payment Option for Load Relief provided during a designated Planned Event or Unplanned Event. The Performance Payment is equal to the applicable Performance Payment Rate multiplied by the Load Relief provided by the Participating Customer during the Planned Event or Unplanned Event.

Performance Payments for Test Events are equal to the applicable Performance Payment Rate multiplied by the Load Relief provided by the Participating Customer during the Test Event up to the Enrollment Value.

Payments to Aggregators will be the sum of the payments of Participating Customers enrolled under the Reservation Payment Option and represented by the Aggregator. Load Relief of individual Participating Customers enrolled under the Reservation Payment Option will not impact payments of other Participating Customers enrolled with an Aggregator.

9 INCENTIVE RATES

The Reservation Payment rate in Zone A is \$9.00 per therm per month, and \$5.00 per therm per month in Zone B.

The Performance Payment Rate under the Reservation Payment Option is:

- \$1.00 per therm for Load Relief provided during a Planned Event or a Test Event; and
- \$2.00 per therm for Load Relief provided during an Unplanned Event, or in Planned Events called on three or more consecutive days, or in Planned Events called on holidays (Thanksgiving Day, Christmas Day, or New Year's Day).

- If there are three or more consecutive days of Planned Events, the \$2.00 per therm for Load Relief is the rate paid for the third event and the immediately consecutive events.

The Performance Payment rate under the Voluntary Payment Option is \$2.00 per therm for Load Relief provided during a Planned Event and Unplanned Event.

The Company will make payment to a Direct Participant or Aggregator after the end of the Capability Period for the sum of the payments due for all Planned Events, Test Events, and Unplanned Events in the Capability Period. Payments will be made by check, or ACH transfer.

Table 1: Pilot Incentive Rates

	Zone 1	Zone 2	Zone 3
Voluntary Payment Option			
Reservation Payment Rate (\$/Therm of Enrollment Value per month, adjusted by the Seasonal Performance Factor)	N/A	N/A	N/A
Performance Payment Rate (\$/Therm of Load Relief per event)	\$2	\$2	\$2
Reservation Payment Option			
Reservation Payment Rate (\$/Therm of Enrollment Value per month, adjusted by the Seasonal Performance Factor)	\$12	\$7	\$5
Performance Payment Rate (\$/Therm of Load Relief per event) for Planned Events and Test Events	\$1	\$1	\$1
Performance Payment Rate (\$/Therm of Load Relief per event) for Unplanned Events, Planned Events Called on Holidays, Planned Events Called in 3 or More Consecutive Days	\$2	\$2	\$2

APPENDIX A. VALUE ZONES

Table 2 presents the zip codes by Value Zone for determining Customer incentives and eligibility for participation in the Pilot.

Table 2: Gas DR Pilot Value Zones for Customer Incentives and Eligibility

Gas Reduction Value	ZIP	Location
Zone 1. Highest	10502	Westchester
	10503	Westchester
	10504	Westchester
	10506	Westchester
	10507	Westchester
	10510	Westchester
	10514	Westchester
	10522	Westchester
	10523	Westchester
	10528	Westchester
	10530	Westchester
	10532	Westchester
	10533	Westchester
	10536	Westchester
	10538	Westchester
	10543	Westchester
	10545	Westchester
	10549	Westchester
	10550	Westchester
	10552	Westchester
	10553	Westchester
	10562	Westchester
	10567	Westchester
	10570	Westchester
	10573	Westchester
	10577	Westchester
	10580	Westchester
10583	Westchester	
10591	Westchester	
10594	Westchester	

	10595	Westchester
	10601	Westchester
	10603	Westchester
	10604	Westchester
	10605	Westchester
	10606	Westchester
	10607	Westchester
	10610	Westchester
	10701	Westchester
	10702	Westchester
	10703	Westchester
	10704	Westchester
	10705	Westchester
	10706	Westchester
	10707	Westchester
	10708	Westchester
	10709	Westchester
	10710	Westchester
	10801	Westchester
	10802	Westchester
	10803	Westchester
	10804	Westchester
	10805	Westchester
Zone 2. Significant	11105	Queens
	11361	Queens
	11426	Queens
	11358	Queens
	11104	Queens
	11103	Queens
	11355	Queens
	11354	Queens
	11101	Queens
	11106	Queens
	11365	Queens
	11357	Queens
	11427	Queens
	11362	Queens
	11356	Queens

	11004	Queens
	11363	Queens
	11423	Queens
	11102	Queens
	11364	Queens
	11001	Queens
	11040	Queens
	11367	Queens
	11366	Queens
	11360	Queens
	11370	Queens
	11377	Queens
	11432	Queens
	11435	Queens
	11359	Queens
	11428	Queens
	11109	Queens
	11415	Queens
	11373	Queens
	11439	Queens
	11374	Queens
	11436	Queens
	11433	Queens
	10029	Manhattan
	10032	Manhattan
	10014	Manhattan
	10025	Manhattan
	10022	Manhattan
	10024	Manhattan
	10009	Manhattan
	10013	Manhattan
	10021	Manhattan
	10002	Manhattan
	10010	Manhattan
	10028	Manhattan
	10033	Manhattan
	10040	Manhattan
	10031	Manhattan

	10034	Manhattan
	10001	Manhattan
	10019	Manhattan
	10023	Manhattan
	10038	Manhattan
	10017	Manhattan
	10016	Manhattan
	10065	Manhattan
	10036	Manhattan
	10012	Manhattan
	10027	Manhattan
	10128	Manhattan
	10003	Manhattan
	10035	Manhattan
	10011	Manhattan
	10026	Manhattan
	10030	Manhattan
	10075	Manhattan
	10006	Manhattan
	10069	Manhattan
	10039	Manhattan
	10007	Manhattan
	10037	Manhattan
	10018	Manhattan
	10004	Manhattan
	10112	Manhattan
	10044	Manhattan
	10282	Manhattan
	10005	Manhattan
	10280	Manhattan
	10281	Manhattan
	10020	Manhattan
	10106	Manhattan
	10111	Manhattan
	10123	Manhattan
	10169	Manhattan
	10152	Manhattan
	10154	Manhattan

	10119	Manhattan
	10104	Manhattan
	10080	Manhattan
	10173	Manhattan
	10115	Manhattan
	10105	Manhattan
	10165	Manhattan
	10122	Manhattan
	10162	Manhattan
	10166	Manhattan
	10041	Manhattan
	10178	Manhattan
	10285	Manhattan
	10118	Manhattan
	10176	Manhattan
	10110	Manhattan
	10167	Manhattan
	10279	Manhattan
	10172	Manhattan
	10045	Manhattan
	10175	Manhattan
	10103	Manhattan
	10271	Manhattan
	10278	Manhattan
	10170	Manhattan
	10174	Manhattan
	10121	Manhattan
	10466	Bronx
	10469	Bronx
	10467	Bronx
	10464	Bronx
	10470	Bronx
	10452	Bronx
	10475	Bronx
	10462	Bronx
	10473	Bronx
	10465	Bronx
	10461	Bronx

	10460	Bronx
	10472	Bronx
	10453	Bronx
	10468	Bronx
	10457	Bronx
	10463	Bronx
	10451	Bronx
	10474	Bronx
	10456	Bronx
	10455	Bronx
	10454	Bronx
	10459	Bronx
	10471	Bronx
	10458	Bronx
Zone 3. Moderate	10547	Westchester
	10533	Westchester
	10514	Westchester
	10523	Westchester
	10577	Westchester
	10603	Westchester
	10601	Westchester
	10532	Westchester
	10573	Westchester
	10604	Westchester
	10703	Westchester
	10605	Westchester
	10607	Westchester
	10520	Westchester
	10548	Westchester
	10606	Westchester
	10511	Westchester
	10530	Westchester
	10583	Westchester
	10535	Westchester
10588	Westchester	
10598	Westchester	
10595	Westchester	
10589	Westchester	

	10505	Westchester
	10550	Westchester
	10580	Westchester
	10502	Westchester
	10707	Westchester
	10701	Westchester
	10549	Westchester
	10710	Westchester
	10536	Westchester
	10528	Westchester
	10594	Westchester
	10506	Westchester
	10706	Westchester
	10801	Westchester
	10805	Westchester
	10507	Westchester
	10504	Westchester
	10501	Westchester
	10517	Westchester
	10526	Westchester
	10527	Westchester
	10540	Westchester
	10596	Westchester

APPENDIX B. ENROLLMENT GUIDELINES

B.1 Pre-enrollment

Direct Participants and Aggregators who wish to enroll in the Pilot should email DR@coned.com to express interest in joining the Pilot.

Upon receipt of expressed interest in enrollment, Con Edison will email all required documentation, which will include the following:

1. Pilot Contract
2. W-9
3. Remit-to Letter
4. ACH Form
5. Bank letter or voided check
6. Data Security Agreement (for Aggregators only)
7. Vendor Risk Assessment (for Aggregators only)
8. Enrollment Sheet.

All documentation should be completed and returned to DR@coned.com. Existing electric DR aggregators that have submitted the above documentation only need to submit the Pilot Contract.

B.2 Enrollment

Direct Participants and Aggregators approved to participate in the Pilot must enroll accounts in the Pilot each year. In 2020/2021, this will be done using an Excel Enrollment Spreadsheet, unless otherwise specified by Con Edison. The Excel Enrollment Spreadsheet contains the following fields:

- The name of the Aggregator
- The 15-digit Account Number being enrolled
- Primary contact at Participating Customer
- The phone number of the primary contact at the Participating Customer
- The email address of the primary contact at the Participating Customer
- The CBL option (Average Day, Weather Adjusted) for each account being enrolled
- The gas end uses that will be reduced during events
- The reduction strategy (e.g., curtailment, fuel switching to electric)
- Whether or not gas consumption at the meter level can be measured with a BMS/EMS or recording device. (If you plan to get the necessary equipment installed for this, please explain the status)
- The Enrollment Value in terms

The Excel Enrollment Spreadsheet should be submitted via email to DR@coned.com. Following the submission of Excel Enrollment Spreadsheet, Con Edison will provide guidance in regard to the metering option for each enrolled account (see Appendix C).

For the 2020/2021 Capability Period, the Company will accept completed Excel Enrollment Spreadsheets for the Reservation Payment Option for metering options 1, 2, and 3 by October 1 for a November 1 commencement date, and by November 1 for a December 1 commencement date. For Customer’s that require metering option 4 to participate, the Company will accept completed Excel Enrollment Spreadsheets for the Reservation Payment Option by September 1 for a November 1 commencement date, and by October 1 for a December 1 commencement date. See Appendix C for the eligible metering options. When the first day of the month falls on a weekend or federal holiday, applications will be accepted until the first business day after.

Participants in the Voluntary Payment Option may commence participation at any time during the capability period.

Payment Option	Metering Option	Enrollment Received By	Commencement Date
Reservation Payment	1, 2, 3	October 1	November 1
		November 1	December 1
	4	September 1	November 1
		October 1	December 1
Voluntary	1, 2	October 1 – March 31	November 1 or the date of application, whichever is later

B.3 Enrollment Limit

Enrollment in the Pilot will be limited to 500 Customers in the first year (2018/19), 750 Customers in the second year (2019/20), and 1,000 Customers in the third year (2020/21). Direct Participants and Aggregators can enroll in the Pilot as long as the Enrollment Limit has not been met for the respective Capability Period.

For the 2019/2020 capability period, enrollments will be evaluated on a first come first serve basis. The Company will consider a different process in future years.

B.4 Con Edison Approved Aggregator List

New Aggregators requesting to be on the Con Edison Approved Gas DR Aggregator List must email the following information to DR@coned.com:

- Company Name
- Contact Name
- Email Address
- Phone Number
- Website
- NYISO Registered (Y/N)
- Provide Energy Audit (Y/N)
- Capability to have automatic control implemented (Y/N)
- Offer a software program to monitor the gas load (Y/N)
- Provide additional metering hardware to capture real time consumption (Y/N)
- Display sub-metered data (Y/N)
- Other Services

Prior to becoming an Aggregator, the organization must sign a Data Security Agreement and complete the Vendor Risk Attestation.

- Aggregators that are in good standing may be included on the Aggregator list published on the Con Edison website.
- New Aggregators that have submitted the required documents and information will be listed on the website for two seasons even if they do not enroll Customers and establish a record. After two seasons without enrollments, the Aggregator will be contacted by the Con Edison DR team for a review.

B.5 NYSPSC DER Oversight

On October 19, 2017, the NYSPSC published Uniform Business Practices for Distributed Energy Resource Suppliers (UBP-DERS). Aggregators are considered DER suppliers and these rules apply to those participating in Con Edison's DR programs. Further, DR payments are considered ongoing transactions.

The following categories are addressed and elaborated on in the [UBP-DERS](#):

- Sales agreements
- General marketing standards
- Customer data authorization
- Responsibility for contractors and other third party agents
- Customer inquiries and complaints
- Consequences for violations
- Oversight requirements

It is the responsibility of Aggregators to be familiar with DER Oversight and ongoing changes.

APPENDIX C. METER DATA GUIDELINES

C.1 Metering Options

Con Edison will utilize one of four different metering options for the collection of interval data:

1. Con Edison will use Advanced Meter Infrastructure (AMI) meters for data collection from Participating Customers who are billed monthly using an AMI meter at the time of application.
2. Con Edison will allow Customer submitted data from a customer-owned gas consumption recording device (BMS, EMS, or other consumption recording device) capable of collecting hourly interval data from their existing gas meter(s). The data must be submitted to Con Edison at the end of the Capability Period. Con Edison will need a minimum of 30 days of data ending on the 24th hour of each event in order to calculate settlements. Not providing 30 days of data for each event may result in zero credit for Load Relief.
3. Con Edison will retrieve data via an annual meter read for Participating Customers without AMI meters or a consumption-recording device, and whose existing gas meters are equipped with a volume corrector. In some cases, Con Edison will need access to the customer site in order to replace volume correctors with higher storage capacity volume correctors.
4. Customers who enroll in the Pilot without AMI meters, a consumption-recording device, or volume correctors will have their gas meters upgraded with an AMI Interface Management Unit (IMU) that will be provided by Con Edison at no cost to the participating customer and the Company will collect the meter data from the IMU.

All metering options are available for Customers enrolling under the Reservation Payment Option. Customers enrolling under the Voluntary Payment Option can only use metering Option 1 or Option 2.

A maximum of 150 Customers can enroll in Option 3 and a maximum of 150 Customers can enroll in Option 4. In order to be eligible for the meter retrofit and additional meter reading associated with either Options 3 or 4, participants must have monthly usage of at least 4,000 therms in at least one month during the previous year's Capability Period.

C.2 Metering Enablement

The process for establishing metering capabilities for Participating Customers is the following:

1. Direct Participants and Aggregators request to enroll in the Pilot by filling out the Enrollment Sheet and emailing it to DR@coned.com, or as otherwise specified by Con Edison.
2. Con Edison confirms existing meter configuration and determines which of the four metering options each of the accounts being enrolled can use to participate in the Pilot.

Direct Participants and Aggregators should specify on the Enrollment Sheet if a Participating Customer is enrolling with an EMS/BMS (Option 2).

3. For Option 3, Con Edison may arrange for installation of Volume Corrector with more storage capacity by contacting the Participating Customer directly using the contact information provided in the Enrollment Sheet. If a Customer does not provide Con Edison with access to the Customer's site during the visit for the installation of the new volume corrector unit, the Customer will be ineligible to participate in the Pilot for the remainder of the Capability Period.

4. For Option 4, Con Edison arranges for installation of an IMU retrofit unit (at no cost to Customer) by contacting the Participating Customer directly using the contact information provided in the Enrollment Sheet. If a Customer does not provide Con Edison with access to the Customer's site during the visit for the installation of the IMU retrofit unit, the Customer will be ineligible to participate in the Pilot for the remainder of the Capability Period.

C.3 Meter Data Retrieval

Con Edison requires interval meter data for each Participating Customer for settlement purposes. Interval data collected by or provided to Con Edison explicitly for Pilot purposes will not be used for normal bill calculations. If a Customer enrolled in any of the four options does not provide Con Edison with access to the Customer's site for collection of data during the season at Con Edison's request, the Customer will not receive credit for Load Relief for each event that access is not provided.

In cases where the collected interval data are expressed in cubic feet, Con Edison will convert the data to therms by multiplying each data point with a conversion coefficient to account for the heating value. The conversion coefficient for the 2019/20 Capability Period is set at 1.03 therms per 100 cubic feet (therms/CCF). This value may change in the future.

Depending on which metering option is used, data will be retrieved in one of the four following ways.

C.3.1 Option 1: AMI Meter

Con Edison will download interval data for Participating Customers with AMI Meters directly from its Meter Data Management System (MDMS). No action is required from the Participating Customer.

C.3.2 Option 2: Customer Submitted Data

Participating Customers with consumption-recording devices must provide Con Edison with interval meter data no later than 30 days after the end of the Capability Period (i.e. by 11:59 PM

EDT on April 30). Direct Participants and Aggregators must provide interval data for 30 days prior to each event called during the Capability Period. Interval data collected by the Participating Customer will be subject to measurement and verification spot checks by Con Edison.

The data must be provided in a spreadsheet format in intervals of one hour, and should include the account number, the date, the hour ending, the hourly gas consumption measured in cubic feet, and the meter number (see template in Figure 1 below).

Figure 1: Template for Interval Data Submitted Under Option 2

account_id	date	hour_ending	hourly_usage	meter_number
11111111111111000	5/20/2018	1	0.02	1234567
11111111111111000	5/20/2018	2	0	1234567
11111111111111000	5/20/2018	3	0.06	1234567
11111111111111000	5/20/2018	4	0.32	1234567
11111111111111000	5/20/2018	5	0	1234567
11111111111111000	5/20/2018	6	0	1234567

C.3.3 Option 3: Volume Corrector

Con Edison will arrange for interval meter data collection from each Participating Customer with a volume corrector after the end of the capability period.

Con Edison will arrange meter data collection directly with each Participating Customer using the contact information provided in the Enrollment Sheet.

C.3.4 Option 4: IMU Upgrade

Similar to Option 3, Con Edison will arrange for interval meter data collection from each Participating Customer with a newly-installed IMU monthly.

Con Edison will arrange meter data collection directly with each Participating Customer using the contact information provided in the Enrollment Sheet.

APPENDIX D. INCENTIVE PAYOUT EXAMPLES

Example 1:

- Participating Customer with Enrollment Value of 50 therms in Zone 1
- No events called in November
- One Test Event in December, Customer Event Performance Factor is 40%
- Two Planned Events in January, Customer Event Performance Factors are 60% and 80% respectively
- No events for the remaining Capability Period months
- Monthly Performance Factor:
 - November: No events, so equal to December
 - December: 40%
 - January: Average of two events = 70%
 - February: No events, so equal to January
 - March: No events, so equal to January
- Reservation Payment = $40\% * 50 \text{ therms} * \$12/\text{therms} * 2 \text{ months} + 70\% * 50 \text{ therms} * \$12/\text{therms} * 3 \text{ months} = \$480 + \$1,260 = \$2,120$
- Performance Payment
 - December Event = $20 \text{ therms} * 1/\text{therms} = \20
 - January Events = $(30 \text{ therms} + 40 \text{ therms}) * \$1/\text{therms} = \$70$
- Total Seasonal Payment = Reservation Payment + Performance Payment = \$1,810

Example 2:

- Participating Customer with Enrollment Value of 100 therms in Zone 2
- No events in November or December
- One Planned Event in January, Customer Event Performance Factor is 90%
- Three consecutive Planned Events in February, Customer Event Performance Factors are 90%, 80%, and 60% respectively
- No events for the remaining Capability Period months
 - November: No events, so equal to January
 - December: No events, so equal to January
 - January: 90%
 - February: Average of three events: 77%
 - March: No events, so equal to February
- Reservation Payment = $90\% * 100 \text{ therms} * \$7/\text{therms} * 3 \text{ months} + 77\% * 100 \text{ therms} * \$7/\text{therms} * 2 \text{ months} = \$1,890 + \$1,078 = \$2,968$
- Performance Payment
 - January Event = $90 \text{ therms} * \$1/\text{therms} = \90
 - February Event 1 & 2 = $170 \text{ therms} * \$1/\text{therms} = \170
 - February Event 3 = $60 \text{ therms} * \$2/\text{therms} = \120
- Total Seasonal Payment = Reservation Payment + Performance Payment = $\$2,968 + \$380 = \$3,348$.

APPENDIX E. EVENT NOTIFICATION MESSAGES

E.1 Advisory

This is notification of a Con Edison Gas Demand Response Planned Event for tomorrow, [Event Date]. Con Edison requests that participants reduce net gas consumption between 10 AM on [Event Date] and 10 AM the following day. If you have any questions, please contact Con Edison at DR@coned.com. Thank you for your participation.

E.2 Cancellation

This is a cancellation of a Con Edison Gas Demand Response Planned Event for [Event Date]. If you have any questions, please contact Con Edison at DR@coned.com. Thank you for your participation.

E.3 Day-of Notice

This is notification of a Con Edison Gas Demand Response Planned Event for today, [Event Date]. Con Edison requests that participants reduce net gas consumption from 10 AM today to 10 AM tomorrow.. If you have any questions, please contact Con Edison at DR@coned.com. Thank you for your participation.

E.4 Communications Test

Please email DR@coned.com to confirm receipt of this communications test for Con Edison demand response event notifications. If you are a demand response aggregator or direct participant and would like to edit, add or delete event notification contact information, please email us at DR@coned.com. Otherwise, no action is required at this time. Thank you!
Commercial Demand Response Programs Team
Con Edison Company of New York.

APPENDIX F. CBL PROCEDURE

The language in this section is intended for use by Direct Participants and Aggregators enrolled in the Pilot, as it provides guidance for calculating the Customer Baseline Load (CBL).

1. Select a CBL method

- 1.1. The participant selects the CBL formula when they enroll, or is enrolled by their Aggregator, with Con Edison for Pilot participation. The choice of CBL becomes effective when Con Edison accepts the enrollment.
- 1.2. During enrollment into the Pilot Capability Period, participants may elect either the Average Day CBL or the Weather Adjusted CBL formula.
- 1.3. A change in the CBL formula cannot be made during a Capability Period.

2. The Average Day CBL Verification Methodology

2.1. Average Day CBLs for Weekdays

2.1.1. **Step 1.** Establish the CBL Window. Establish a set of days that will serve as representative of participant's typical usage.

2.1.1.1. Determine the participant's peak hourly load during the event window over the past 30 days or the period covered by the load data file, whichever is lower. This value becomes the initial seed value for the average event period usage level.

2.1.1.2. Beginning with the weekday that is two days prior to the event:

2.1.1.2.1. Eliminate any holidays as specified by Con Edison.

2.1.1.2.2. Eliminate any days when Con Edison declared a Gas DR event for which the participant was eligible for payment for Load Relief.

2.1.1.2.3. Eliminate the day prior to any day when Con Edison declared a Gas DR event for which the participant was eligible for payment for Load Relief.

2.1.1.2.4. Create the average daily event period usage for that day, defined as the simple average of the sum of the participant's actual hourly usage over the number of hours that define the event for which the CBL is being developed.

2.1.1.2.5. Eliminate low usage days. If the average daily event period usage is less than 25% of the average event period usage level, eliminate that day.

2.1.1.2.6. If the day has not been eliminated, update the average event period usage level by including the average daily event period usage for this day. If this is the first day added to the CBL Window, replace the average event period usage level (which was the initial seed value) with the average daily event period usage. Add this day to the CBL Window.

2.1.1.2.7. Move back one day and loop to step 2.1.1.2.1.

- 2.1.1.2.8. Final Weekday CBL Window must contain 10 weekdays.
- 2.1.2. **Step 2.** Establish the CBL Basis. Identify the five days from the 10-day CBL Window to be used to develop CBL values for the event.
 - 2.1.2.1. Order the 10 days in the CBL Window according to their average daily event period usage level, and eliminate the five days with the lowest average daily event period usage.
 - 2.1.2.2. The remaining five days constitute the CBL Basis.
- 2.1.3. **Step 3.** Calculate Average Day CBL values for the event.
 - 2.1.3.1. The CBL is the average of the usage in the five days that comprise the CBL basis.
- 2.2. Average Day CBL Verification Methodology for Weekends
 - 2.2.1. **Step 1.** Establish the CBL Window
 - 2.2.1.1. The CBL Window is comprised of the most recent three like (Saturday or Sunday) weekend days. There are no exclusions for Holidays or event days.
 - 2.2.2. **Step 2.** Establish the CBL Basis.
 - 2.2.2.1. Calculate the average daily event period usage value for each of the three days in the CBL Window.
 - 2.2.2.2. Order the three days according to their average daily event period usage level.
 - 2.2.2.3. Eliminate the day with the lowest average value
 - 2.2.2.4. The Weekend CBL Basis contains two days.
 - 2.2.3. **Step 3.** Calculate Weekend Average Day CBL values for the event.
 - 2.2.3.1. The CBL value is average of usage in the two days that comprise the CBL basis.
- 2.3. Average Day CBL Verification Methodology for Holidays
 - 2.3.1. **Step 1.** Establish the CBL Window
 - 2.3.1.1. The CBL Window is comprised of the most recent three Sundays. There are no exclusions for Holidays or event days.
 - 2.3.2. **Step 2.** Establish the CBL Basis.
 - 2.3.2.1. Calculate the average daily event period usage value for each of the three days in the CBL Window.
 - 2.3.2.2. Order the three days according to their average daily event period usage level.
 - 2.3.2.3. Eliminate the day with the lowest average value
 - 2.3.2.4. The Holiday CBL Basis contains two days.
 - 2.3.3. **Step 3.** Calculate Weekend Average Day CBL values for the event.
 - 2.3.3.1. The CBL value is average of usage in the two days that comprise the CBL basis.

3. Weather-Sensitive CBL Verification Methodology

3.1. Elective Weather-Sensitive CBL Formulation

- 3.1.1. **Step 1.** Calculate the Average Day CBL values for the event period described in 2 above.
- 3.1.2. **Step 2.** Collect hourly weather data¹ for the event and the adjustment period, which is the 24-hour period starting at 10 am on each of the CBL Basis days.
 - 3.1.2.1. Data will include hourly dry bulb temperature in degrees Celsius at the Central Park NOAA weather station, which is converted to degrees Fahrenheit.
- 3.1.3. **Step 3.** Calculate the Weather Adjustment Factor. This factor is applied to the daily value of the Average Day CBL.
 - 3.1.3.1. Calculate the average HDH65 for the event day.
 - 3.1.3.1.1. For the event day, calculate hourly HDH65 = 65°F – T, or 0 if T > 65°F, where T is the hourly temperature in degrees Fahrenheit.
 - 3.1.3.1.2. Average the hourly HDH65 values for all hours of the event day.
 - 3.1.3.2. Calculate the average HDH65 for CBL Basis days.
 - 3.1.3.2.1. For each day of the CBL Basis, calculate hourly HDH65 = 65°F – T, or 0 if T > 65°F, where T is the hourly temperature in degrees Fahrenheit.
 - 3.1.3.2.2. Average the hourly HDH65 values for all hours of all days included in the CBL Basis.
 - 3.1.3.3. Calculate the Weather Adjustment Factor.
 - 3.1.3.3.1. Subtract the average HDH65 for the CBL Basis Days (calculated in 3.1.3.2.2.) from the average HDH65 for the event day (calculated in 3.1.3.1.2.)
 - 3.1.3.3.2. The Weather Adjustment Factor is calculated by multiplying the difference in HDH65 (calculated in 3.1.3.3.1.) by 1.5% and adding 1.
- 3.1.4. **Step 4.** Calculate the Adjusted CBL values.
 - 3.1.4.1. The Adjusted CBL value for each event is the product of the Weather Adjustment Factor and the Average CBL value for that event.

¹ Con Edison uses NOAA hourly weather data from the Central Park weather station, which can be downloaded from NOAA at this link: <ftp://ftp.ncdc.noaa.gov/pub/data/noaa>. To find the correct file, first select the folder for the year of data you wish to download, then identify the file for the Central Park weather station (USAF: 725053, WBAN: 94728). Files are named using the convention USAF-WBAN-Year.gz. For example, to download the 2019 data, click on the file named 725053-94728-2019.gz. Users who are not familiar with the process of parsing text files can refer to the NOAA Local Climatological Data sets available for download in PDF or CSV format from this link: <https://www.ncdc.noaa.gov/cdo-web/datatools/lcd>. Note that the Local Climatological data has been pre-processed by NOAA and there may be differences between the two data files.

4. Atypical Weather Adjustment

When the weather-adjusted CBL Verification Methodology is used and the calculated weather adjustment falls outside of Company defined ranges (i.e., the Company deems the weather to be atypical on the day of a Load Relief Period or Test Event when compared to the baselined period), the Company may review and revise a participant's baseline based on the Customer's historical load data. When the weather-adjusted CBL Verification Methodology is used, the Company, at its own discretion, may select alternate hours for the adjustment period to calculate the weather adjustment factor in order to accurately reflect the customer's typical usage.


Figure 2 shows CBL window selection for a single weekday event. The calendar view illustrates the reverse order selection of the 10 days of the CBL window. The table view shows the dates of the CBL window for the event and the calculation of the Weather Adjustment Factor.

Figure 2: Example of Gas DR Pilot CBL Window Selection – Single Weekday Event

SUN	MON	TUE	WED	THU	FRI	SAT
Feb 2	Feb 3	Feb 4	Feb 5	Feb 6	Feb 7	Feb 8
Feb 9	Feb 10 CBL DAY 10	Feb 11 LOW USAGE DAY	Feb 12 CBL DAY 9	Feb 13 CBL DAY 8	Feb 14 CBL DAY 7	Feb 15
Feb 16	Feb 17 CBL DAY 6	Feb 18 CBL DAY 5	Feb 19 CBL DAY 4	Feb 20 CBL DAY 3	Feb 21 CBL DAY 2	Feb 22
Feb 23	Feb 24 CBL DAY 1	Feb 25 IN-ELIGIBLE	Feb 26 EVENT	Feb 27	Feb 28	Mar 1

 Event day

 Ineligible days

 Days with highest consumption out of the CBL days (5 out of 10)

CBL Window for Single Weekday Event Example											
	EVENT DATE	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7	DAY 8	DAY 9	DAY 10
Date	Feb 26	Feb 24	Feb 21	Feb 20	Feb 19	Feb 18	Feb 17	Feb 14	Feb 13	Feb 12	Feb 10
Weather Adjustment Calculation for Single Weekday Event Example											
Average Temp (F)	15	20	25	30	35	30	25	20	25	30	35
Average HDH65 (F)	50	45	40	35	30	35	40	45	40	35	30
CBL Window for Single Weekday Event Example											
	EVENT DATE	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7	DAY 8	DAY 9	DAY 10
Date	Feb 26	Feb 24	Feb 21	Feb 20	Feb 19	Feb 18	Feb 17	Feb 14	Feb 13	Feb 12	Feb 10
Weather Adjustment Calculation for Single Weekday Event Example											
Average Temp (°F)	15	20	25	30	35	30	25	20	25	30	35
Average HDH65 (°F)	50	45	40	35	30	35	40	45	40	35	30

The average HDH65 on the event day is 50°F. The average HDH65 on the five CBL Basis days (highlighted in light green) is 36°F. The Weather Adjustment Factor is $1+0.015*(50 - 36) = 1.210$.


Figure 3 shows CBL window selection for a weekend event. The calendar view illustrates the reverse order selection of the three days of the CBL window. The table view shows the dates of the CBL window for the event and the calculation of the Weather Adjustment Factor.

Figure 3: Example of Gas DR CBL Window Selection – Weekend Event

SUN	MON	TUE	WED	THU	FRI	SAT
Feb 2	Feb 3	Feb 4	Feb 5	Feb 6	Feb 7	Feb 8 CBL DAY 3
Feb 9	Feb 10	Feb 11	Feb 12	Feb 13	Feb 14	Feb 15 CBL DAY 2
Feb 16	Feb 17	Feb 18	Feb 19	Feb 20	Feb 21	Feb 22 CBL DAY 1
Feb 23	Feb 24	Feb 25	Feb 26	Feb 27	Feb 28 IN-ELIGIBLE	Mar 1 EVENT

 Event day

 Ineligible days

 Days with highest consumption out of the CBL days (2 out of 3)

CBL Window for Weekend Event Example											
	EVENT DATE	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7	DAY 8	DAY 9	DAY 10
Date	Mar 1	Feb 22	Feb 15	Feb 8	Weekend CBL Window uses only 3 weekend days of same day type						
Weather Adjustment Calculation for Single Weekday Event Example											
Average Temp (°F)	16	27	38	31	Weekend CBL Window uses only 3 weekend days of same day type						
Average HDH65 (°F)	49	38	27	34							

The average HDH65 on the event day is 47°F. The average HDH65 on the two CBL Basis days (highlighted in light green) is 36°F. The Weather Adjustment Factor is $1 + 0.015 \times (49 - 36) = 1.195$.