

Pacific Gas & Electric Company
Emergency Load Reduction Program
(ELRP) Pilot

Group A Terms and Conditions Pursuant
to California Public Utilities Commission
Decision 21-03-056, 21-06-027 and 21-12-
015

May 1, 2023

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Program Overview

On March 26, 2021, the California Public Utilities Commission (CPUC or Commission) issued Decision (D.) 21-03-056 which approved the Emergency Load Reduction Program (ELRP) pilot, a demand response (DR) resource that is not bid or integrated into the CAISO market. The Commission subsequently issued D. 21-06-027 and D. 21-11-015 making modifications to the ELRP.

These are the Terms and Conditions of the ELRP pilot for potential participants and other interested parties and can change in whole or in part subject to CPUC approval. The ELRP will be administered by Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E) for their respective service territories. Any changes made to the ELRP Terms and Conditions will be published in revisions to this document and/or posted to PG&E's website and/or its ELRP Program Administrator's website. Other documents supporting the ELRP will be made available and updated from time to time at PG&E's website and/or its ELRP Program Administrator's website. PG&E has engaged Olivine, Inc., using the ClimateResponse™ Technology Suite to be the Program Administer for the ELRP at this time.

The ELRP pilot provides financial incentives to eligible participants that provide demand load reductions, or demand response, during times of potential or actual stress on the California Independent System Operator (CAISO) transmission system. The ELRP will be available starting May 1, 2021 and will end by October 31, 2025.

The ELRP does not provide capacity or enrollment incentives; rather, incentives are a pay-for-performance energy payment for a customer's verified incremental load reduction. The ELRP load reduction capacity is not eligible for Resource Adequacy (RA), nor in the California Energy Commission (CEC) peak forecast framework. ELRP does not have any California Independent System Operator (CAISO) market obligations.

1 Program Eligibility and Enrollment

1.1 Program Participant Criteria

ELRP eligible participants are divided into several sub-groups (A.1, A.2, A.3, A.4, and A.5). All customers must be located in PG&E's service territory and must have a PG&E approved interval meter or SmartMeter™ meter that can measure energy consumption at least hourly, and if applicable, can measure exported energy.¹

Group A: Select customers and aggregators not participating in DR programs

- Sub-Group A.1. – Non-Residential Customers
- Sub-Group A.2. – Non-Residential Aggregators
- Sub-Group A.3. – Rule 21 Exporting Distributed Energy Resources (DERs)
- Sub-Group A.4. – Virtual Power Plants (VPP) Aggregators
- Sub-Group A.5. – Electric Vehicle (EV) and Vehicle-Grid Integration (VGI) Aggregators

Additional descriptions for each of these 5 sub-groups are provided below.

1.1.1 Sub-Group A.1 – Non-Residential Customers

Bundled and unbundled non-residential customers that meet all of the following criteria may directly participate in ELRP:

- Customer's service account is classified as non-residential²; and
- Customer's service account must be able to reduce load by a minimum of one kilowatt during an ELRP event; and
- Customer's service account is not simultaneously enrolled in another DR program offered by an IOU, demand response provider (DRP), or Community Choice Aggregator (CCA), with the exception that dual enrollment is allowed in PG&E's Base Interruptible Program (BIP) subject to compliance with the BIP tariff.

If an eligible BIP customer is participating with a BIP aggregator and their BIP aggregator chooses to participate in the ELRP, then the BIP customer must participate

¹ PG&E is not required to install an interval meter and communication equipment or SmartMeter™ to provide remote read capability if the installation is impractical or not economically feasible.

² Non-residential consists of Commercial, Industrial and Agricultural as well as Small Medium Business.

under Sub-Group A.2. If the customer's BIP aggregator chooses not to participate in ELRP, then a BIP customer may enroll and participate in ELRP under Sub-Group A.1.

1.1.1.1 Enrollment Process for Sub-Group A.1

Qualifying individual customers can directly apply and enroll with PG&E at elrp.olivineinc.com. At the time of enrollment, or at designated times during the ELRP pilot, customers must nominate, unless exempt, an estimated target load reduction quantity to be achieved during an ELRP event and, if applicable, must provide information about their back-up generation (BUG), including: (1) location (address), (2) type of fuel used (e.g., diesel, natural gas, battery, etc.), (3) the nameplate capacity of the generator, (4) the notice time for the generator, and (5) the ramp time for the generator that may be used during ELRP events.

BIP customers who are currently enrolled with a third-party aggregator should contact their aggregator for enrollment options.

1.1.1.2 Disenrollment Process for Sub-Group A.1

Sub-group A.1 participants can disenroll from the ELRP by contacting the Program Administrator under Section 1.1.1.1 titled Enrollment Process with a 30-day written notice. The disenrollment will become effective within 30 days after the written notice is received.

1.1.2 Sub-Group A.2 – Non-Residential Aggregators

Third-party, non-residential aggregators—including those participating in PG&E's Base Interruptible Program (BIP)—are eligible to participate in ELRP. Aggregators can only add bundled and unbundled non-residential service accounts for ELRP that meet the following criteria:

- Customer's service account is classified as non-residential; and
- Customer's service account is not simultaneously enrolled in another DR program offered by an IOU (with the exception of BIP), demand response provider (DRP), or Community Choice Aggregator (CCA).

BIP aggregators must enroll their entire BIP portfolio. The aggregated resource capacity meets or exceeds 500 kW for non-BIP aggregators.

1.1.2.1 Application Process for Sub-Group A.2

Sub-Group A.2 applicants can enroll into the ELRP by contacting the Program Administrator under Section 1.1.1.1 titled Enrollment Process.

At the time of enrollment, or at designated times during the ELRP pilot, non-residential aggregators must nominate an estimated, portfolio load reduction quantity to be achieved during an ELRP event and provide information about their customer's back-up generation (BUG), including: (1) location (address), (2) type of fuel used (e.g., diesel, natural gas, battery, etc.), (3) the nameplate capacity of the generator, (4) the notice time for the generator, and (5) the ramp time that may be used during ELRP events.

New BIP aggregators will need to affirm intent to participate in ELRP sub-group A.2 no later than April 15 of the program year and as part of enrollment, nominate an estimated, portfolio load reduction quantity no later than April 30 of the program year.

1.1.2.2 Disenrollment Process for Sub-Group A.2

Sub-Group A.2 participants can disenroll from the ELRP by contacting the Program Administrator under Section 1.1.1.1 titled Enrollment Process.

Disenrollment requests are processed on an annual basis and requests must be received by April 15 of the program year otherwise, the disenrollment will not be effective until the following program year.

1.1.3 Sub-Group A.3 – Rule 21 Exporting Distributed Energy Resources

Bundled and unbundled non-residential customers that meet all of the following criteria may directly participate in ELRP:

- Customer's service account is not simultaneously enrolled in any market-integrated DR program offered by PG&E, a third-party DRP, or CCA; and

- Customer's service account possesses a behind-the-meter (BTM) Rule 21-interconnected device (including Prohibited Resources/BUG) with an existing Rule 21 export permit; and
- Customer's BTM Rule 21 physical interconnected device has a minimum capacity of 25 kW and is able to export a minimum of 25 kW for at least one hour in compliance with Rule 21 and other applicable regulations and permits during an ELRP event.

1.1.3.1 Application Process for Sub-Group A.3

Sub-Group A.3 applicants can enroll into the ELRP by contacting the Program Administrator identified under Section 1.1.1.1 titled Enrollment Process.

At the time of enrollment, or at designated times during the ELRP pilot, the applicant must nominate, unless exempt, an estimated target load reduction quantity for each eligible account to be achieved during an ELRP event and, if applicable, must provide information about their customer's back-up generation (BUG), including: (1) location (address), (2) type of fuel used (e.g., diesel, natural gas, battery, etc.), (3) the nameplate capacity of the generator, (4) the notice time for the generator, and (5) the ramp time for the generator that may be used during ELRP events.

1.1.3.2 Sub-Group A.3 Use of Virtual Aggregation

The use of a virtual aggregation may be elected by a customer at the time of enrollment. A virtual aggregation permits a customer with control over multiple electrically contiguous³ sites to aggregate the load and generation to fully utilize the sum of the net export allowed by any Rule 21 permit(s) associated with the sites. Virtual Aggregation application will be reviewed and approved by PG&E on a case-by-case basis.

1.1.3.3 Disenrollment Process for Sub-Group A.3

Sub-group A.3 participants can disenroll from the ELRP by contacting the Program Administrator under Section 1.1.1.1 titled Enrollment Process with a

³ Per D. 21-12-015, "Two sites are considered electrically contiguous when they have electric service derived from the same utility distribution transformer secondary and there are no devices on the utility distribution system that can interrupt power flow to only one site. "

30-day written notice. The disenrollment will become effective within 30 days after the written notice is received.

1.1.4 Sub-Group A.4 – Virtual Power Plants Aggregators

A third-party aggregator managing a BTM hybrid Virtual Power Plant (VPP) consisting of storage paired with net energy metering (NEM) solar and/or stand-alone storage deployed with residential (bundled or unbundled) and/or non-residential (bundled or unbundled) customers, whose VPP meet all of the following criteria, is eligible participate in ELRP:

- The VPP or any customer site within the aggregation is not simultaneously enrolled in a market-integrated DR program offered by PG&E⁴, a third-party DRP, or CCA; and
- All sites within the VPP aggregation are located within PG&E's service territory; and
- The aggregated BTM storage capacity of the VPP is a minimum of 500 kW, where the VPP size is determined by summing the Rule 21 interconnected capacity of the individual storage devices comprising the aggregation, and
- Each site within the VPP aggregation has a Rule 21 permit and operates in a manner compliant with existing rules and tariffs applicable to the site.

1.1.4.1 Application Process for Sub-Group A.4

Sub-Group A.4 applicants can enroll into the ELRP by contacting the Program Administrator identified under Section 1.1.1.1 titled Enrollment Process.

At the time of enrollment, or at designated times during the ELRP pilot, the VPP aggregator must nominate an estimated target load reduction for their VPP aggregation to be achieved during an ELRP event and, if applicable, must provide information about their customer's back-up generation (BUG), including: (1) location (address), (2) type of fuel used (e.g., diesel, natural gas, battery, etc.), (3) the nameplate capacity of the generator, (4) the notice time for the

⁴ Aggregators utilizing device-level metering for ELRP settlement may be eligible to dual participate in additional IOU DR programs.

generator, and (5) the ramp time for the generator that may be used during ELRP events.

1.1.4.2 Disenrollment Process for Sub-Group A.4

Sub-Group A.4 participants can disenroll from the ELRP by contacting the Program Administrator under Section 1.1.1.1 titled Enrollment Process.

Disenrollment requests are processed on an annual basis and requests must be received by April 15 of the program year otherwise, the disenrollment will not be effective until the following program year.

Sub-Group A.4 participants must nominate a non-zero estimated, portfolio load reduction quantity and failure to do so may result in disenrollment from the ELRP.

1.1.5 Sub-Group A.5 – Electric Vehicle (EV) and Vehicle-Grid Integration (VGI) Aggregators

A third-party aggregator managing a Vehicle-Grid-Integration (VGI) aggregation consisting of any combination of electric vehicles and charging stations – including those that are capable of managed one-way charging (V1G) and bi-directional charging and discharging (V2G) deployed with residential (bundled or unbundled) or non-residential (bundled or unbundled) customers that meets the following criteria, is eligible to participate in ELRP:

- The VGI aggregation or any customer site within the aggregation is not simultaneously enrolled in a market-integrated, supply-side DR program offered by PG&E⁵, third-party DRP, or CCA, and
- All sites within the VGI aggregation are located within PG&E's service territory, and
- All sites within the VGI aggregation have operational electric vehicle supply equipment (EVSE), and

⁵ Aggregators utilizing device-level metering for ELRP settlement may be eligible to dual participate in additional IOU DR programs.

- Sites within the VGI aggregation that intend to implement V2G must have UL 1741 SA⁶ certification, any subsequent UL 1741 supplement certification as required in Rule 21 or Smart Inverter Working-Group recommended smart inverter functions and satisfies all other Rule 21 interconnection requirements, and
- The VGI aggregation can contribute Incremental Load Reduction (ILR) equal to or greater than 25 kW for a minimum of one hour during an ELRP event.

1.1.5.1 Application Process for Sub-Group A.5

Sub-Group A.5 applicants can enroll into the ELRP by contacting the Program Administrator identified under Section 1.1.1.1 titled Enrollment Process.

At the time of enrollment, or at designated times during the ELRP pilot, the VGI aggregator must nominate an estimated target load reduction quantity for their VGI aggregation to be achieved during an ELRP event and, if applicable, must provide information about their customer's back-up generation (BUG), including: (1) location (address), (2) type of fuel used (e.g., diesel, natural gas, battery, etc.), (3) the nameplate capacity of the generator, (4) the notice time for the generator, and (5) the ramp time for the generator that may be used during ELRP event.

1.1.5.2 Sub-Group A.5 Use of Virtual Aggregation

The use of a virtual aggregation may be elected by an aggregator at the time of enrollment. A virtual aggregation permits separately metered EVSE that have a Rule 21 Interconnection Agreement to be aggregated with other load and generation at an electrically contiguous⁷ host site. This aggregation will allow export from the EVSE to reduce the host site's load. Such aggregation will permit an amount up to the sum of the net exports allowed by all available Rule 21 Interconnection Agreements pertaining to the EVSE site and the host site.

⁶ Direct Current (DC) V2G EVSE that have UL 1741 certification, but not UL 1741 SA, may interconnect initially for the purposes of participating in the ELRP, subject to remaining Rule 21 interconnection requirements. PG&E reserves the right to terminate this exception after the 2024 ELRP season via a Tier 2 Advice Letter filing. Termination of this pathway would not affect previously interconnected EVSE.

⁷ Per D. 21-12-015, "Two sites are considered electrically contiguous when they have electric service derived from the same utility distribution transformer secondary and there are no devices on the utility distribution system that can interrupt power flow to only one site. "

Virtual Aggregation applications will be reviewed and approved by PG&E on a case-by-case basis.

1.1.5.3 Disenrollment Process for Sub-Group A.5

Sub-Group A.5 participants can disenroll from the ELRP by contacting the Program Administrator under Section 1.1.1.1 titled Enrollment Process.

Disenrollment requests are processed on an annual basis and requests must be received by April 15 of the program year otherwise, the disenrollment will not be effective until the following program year.

Sub-Group A.5 participants must nominate a non-zero estimated, portfolio load reduction quantity and failure to do so may result in disenrollment from the ELRP.

2 Program Parameters

2.1 Program Availability

The ELRP has the following program parameters for all participants:

- Program Availability:
 - May – October
 - Seven (7) days per week
 - 4 p.m. to 9 p.m. (Pacific Time Zone)
- Event Duration:
 - 1-hour minimum; 5-hour maximum
- Annual Dispatch Limit:
 - Up to 60 hours
- Consecutive Day Dispatches
 - No constraints (limits)

2.2 Program Trigger

ELRP may be activated after the CAISO issues or declares an “Energy Emergency Alert (EEA). The EEA process is defined by the CAISO Operating Procedure 4420. The ELRP utilizes Day-Ahead (DA) and Day-Of (DO) triggers for Group A participants.

Sub-groups with a minimum dispatch requirement—as specified in Section 2.3—may have additional program triggers in response to forecasted or anticipated grid stress conditions which may be utilized in order to achieve the minimum dispatch requirement.

2.2.1 Group A

PG&E shall notify Group A participants of the start time and end time of the ELRP event. Notification can occur through email or text. Customers or participants with connected Automated Demand Response (AutoDR or ADR) technology may also receive a notification.

2.3 Sub-Group Minimum Dispatch

A minimum number of dispatch hours will be implemented within the program availability for sub-groups A.2 (Non-BIP), A.4 and A.5. The minimum dispatch hours for each sub-group are specified in the following table.

ELRP Sub-Group	Minimum Dispatch Hours
A.2 Non-Residential Aggregators (Non-BIP)	10
A.4 Virtual Power Plant Aggregators	20
A.5 Vehicle-Grid Integration Aggregators	30

2.4 Test Events

If an ELRP event or dispatch does not occur during the season, PG&E will conduct one test event, with a two-hour duration, per year for Group A.1 and A.3 participants. Group A.1 and A.3 participants, except for those relying exclusively on prohibited resources, are required to participate in test events. **Use of prohibited resources during a test event is not permitted and will not be compensated.** Otherwise, all other incremental load reduction delivered during the ELRP test event is eligible for ELRP compensation set forth in Section 3 below.

3 Compensation

Participation during an ELRP event is entirely voluntary, and no financial penalties will result from not meeting or exceeding the nominated target load reduction during the event.

Incremental load reduction (ILR) is defined as the load reduction achieved during an ELRP event incremental or relative to the non-event applicable baseline and/or any other existing commitment. Only ILR is eligible for compensation under ELRP.

Any load reduction technology may be used during an ELRP event to achieve ILR. BUGs or Prohibited Resources, except those located in a Disadvantaged Community⁸, may be used when permitted by a Governor's Executive Order and in compliance with Rule 21 and other applicable regulations and permits during an ELRP event to achieve ILR, including during the overlapping period with an independently triggered event in a dual-enrolled DR program, but only for achieving load reduction incremental to any other existing commitment (e.g., under a dual-enrolled DR program).

If applicable, PG&E may withhold a Participant's ELRP incentives until data or information about the customers' back-up or onsite generation resources (e.g. Prohibited Resources) is provided. Participants are required to provide information about the location, type of fuel used, the capacity of the generator, the notice time for the generator and, the ramp time for the generator that may be used during ELRP events.

3.1 Incentive Rate

The ELRP Compensation Rate (ECR) is \$2 per kilowatt-hour (\$2/kWh)

3.2 Incentive Calculation

Compensation for load reduction delivered during an ELRP event is determined by calculating the product of event ILR and ECR, where the event ILR is defined as the sum of the positive and negative⁹ ILR calculated at the interval level across all intervals of a given event. Details are provided below.

3.2.1 Sub-Group A

All delivered ILR as a result of an ELRP event is eligible to receive compensation.

3.2.1.1 Baseline for Sub-Groups A.1, A.2, A.3, A.4 and A.5.

Steps for calculating a participant's ELRP baseline:¹⁰

⁸ Pursuant to Section 39711 of the Health and Safety Code, Disadvantaged Communities are defined as (1) Areas disproportionately affected by environmental pollution and other hazards that can lead to negative public health effects, exposure, or environmental degradation and (2) Areas with concentrations of people that are of low income, high unemployment, low levels of homeownership, high rent burden, sensitive populations, or low levels of educational attainment. See also Health and Safety Code Section 116426.

⁹ Load increase relative to the baseline for non-exporting resources.

¹⁰ As it pertains to steps 2 and 3 under Section 3.2.1.1, PG&E seeks to limit the ELRP baseline to only one option for the ten-day selection or one option for the Day-Of adjustment by filing a Tier 1 Advice Letter consistent with D.21-03-056.

- 1) Calculate the Energy Baseline (EB) – A service account must have at least 10 days of interval meter data available in PG&E’s billing system to have a valid baseline. Only the hourly average usage for the hours included in the event will be included in the EB determination.
- 2) The EB and Adjusted Energy Baseline (AEB) will all be calculated at the service account level for customers directly enrolled in ELRP. The EB and AEB for customers enrolled through an aggregator will be calculated at the aggregated level. The EB and AEB will be calculated on an hourly basis using the average of the preceding *similar* days¹¹, excluding those days when the customer: (1) was subject to an ELRP event, or (2) an event for a dually enrolled DR program, if applicable, or (3) was subject to a grid outage. Critical Peak Pricing event days will not be excluded from the *similar* days in order to capture incrementality for ILR.
- 3) Calculate the Day-Of Adjustment Value (DOAV) – A DOAV shall not be less than 0.60 or greater than 1.40. The DOAV is a ratio of (a) the average load of the first three hours of the four hours prior to the event to (b) the average load of the same hours from the days selected in accordance with Step 2 above.
- 4) Calculate the Adjusted Energy Baseline (AEB) – A service account’s AEB for an ELRP event is calculated by multiplying the EB by the DOAV.

3.2.1.2 Sub-Group A Special Conditions

- 1) In the case of customers dual enrolled in BIP and ELRP, for overlapping BIP and ELRP events, only the incremental reduction below the customer’s pre-committed firm service level (FSL) for BIP is counted in ILR.
 - a. Load reduction by dual-enrolled BIP customers during an ELRP event outside of a BIP event is excluded from ILR (and not eligible for ELRP compensation).

¹¹ For non-residential or mixed (e.g. residential and non-residential) aggregations, the 10 non-excluded weekdays will be selected for weekday events; for weekend and holiday events, the 4 non-excluded weekend and holiday days will be selected. For residential aggregations, the 5-in-10 weekday and 3-in-5 weekend and holiday methodology is used.

- b. Load reduction by dual-enrolled BIP customers during an ELRP event on a day with no BIP event is excluded from ILR (and not eligible for ELRP compensation).
- 2) For a customer on a CPP or RTP equivalent tariff, the ELRP baseline is deemed to be zero and only exported energy is counted in ILR for sub-group A.3. Any ILR during overlapping event hours are attributed to the ELRP for sub-group A.1.
- 3) If the customer has a Rule 21 interconnected device with export capability and permit, the customer may choose to count exported energy, up to their export rating, in ILR. In that case, the applicable ELRP baseline is modified to account for exported energy during non-event days and count exported energy in ILR.

3.2.1.3 Settlement Calculations for Sub-Group A.3.

The ELRP baseline defined under A.1 is utilized and modified to account for exported energy during non-event days and exported energy is counted in ILR.

3.2.1.4 Settlement Calculations for Sub-Group A.4.

The ELRP baseline defined under A.1 is utilized and modified to account for exported energy during non-event days and exported energy is counted in ILR.

The baseline method, as specified in Section 3.2.1.1, may be used with submetering. Aggregators that elect to use sub-meter data for settlement purposes shall also comply with approved submetering services as outlined in the Aggregator Participation Agreement. The election to utilize submetering will apply to all locations within a single aggregation.

3.2.1.5 Settlement Calculations for Sub-Group A.5.

The ELRP baseline defined under A.1 is utilized and modified to account for exported energy during non-event days and exported energy is counted in ILR.

The baseline method, as specified in Section 3.2.1.1, may be used with submetering. Upon adoption by the CPUC, the submeter must meet applicable standards established by the CPUC. Aggregators that elect to use sub-meter

data for settlement purposes shall also comply with approved submetering services as outlined in the Aggregator Participation Agreement. The election to utilize submetering will apply to all locations within a single aggregation.