Emergency Load Reduction Program (ELRP) Terms and Conditions Group A1-A5

February

26th

2024

UPDATED

Emergency Load Reduction Program (ELRP) Terms and Conditions Group A

These Terms and Conditions incorporate requirements from Decision D.21-03-056, D.21-06-027,

D.21-12-015, and D.23-12-005 and reflect all changes from the original ELRP Terms and

Conditions Dated April 26, 2021. The terms and conditions are detailed in the following sections.

1. Pilot Program Duration

2. Out of Market Framework

3. Program Parameters

4. Customer Eligibility and Enrollment

5. Program Event Triggers

6. Compensation

Pilot Program Duration

ELRP duration will be seven years (2021-2027), with years 2023-2025 subject to review and revision in the Demand Response (DR) Applications proceeding expected to be initiated May

2022.

ELRP design aspects that are subject to review and revision include minimizing the use of diesel

backup generators where there are safe, cost-effective, and feasible alternatives; consideration of local air pollution impacts on disadvantaged communities; and other modifications to make

the program more effective and consistent with the state's decarbonization goals. To this end,

PG&E, SCE, and SDG&E should collect data on backup generator participation in ELRP, including

as location, type of fuel used, minimum notification time required to dispatch the generator, and

the capacity of the generator, for years 2021 and 2022.

2. Out of Market Framework

ELRP load reduction capacity will be excluded from the Resource Adequacy (RA) / California

Energy Commission (CEC) peak forecast framework with no CAISO market obligations.

3. **Program Parameters**

Program availability: May 1st – October 31st; seven days a week; 4 pm – 9 pm

Event duration:

• Sub-Groups A.1., A.2., A.3.:1-hour minimum; 5-hour maximum

Sub-Groups A.4., A.5.: 1-hour minimum, 3-hour maximum

Annual dispatch limit: Up to 60 hours

Consecutive day dispatches: No constraints

2

As discussed below, the program parameters for Residential ELRP may differ.

4. Customer Eligibility and enrollment

Eligible participants for ELRP are divided into two groups with several subgroups:

Group A: Customers and aggregators not participating in Demand Response (DR) programs.

A.1. Non-Residential Customers

A.2. Non-Residential Aggregators

A.3. Rule 21 Exporting Distributed Energy Resources (DERs)

A.4. Virtual Power Plant(VPP) Aggregators

A.5. Vehicle-Grid-Integration (VGI) Aggregators

Group B: DR providers participating in market-integrated supply-side Demand Response (DR) programs.

B.1. Third-party DR Providers (DRPs)

B.2. IOU Capacity Bidding Programs (CBPs)

At any time, a customer can participate in ELRP via either Group A or Group B, but not both groups at the same time. At any time, a Group A customer can participate in ELRP via only one sub-group under Group A. Eligibility criteria for each group are defined below.

GROUP A ELIGIBILITY: Customers and aggregators not participating in Demand Response (DR) programs.

At the time of enrollment, or at designated times during the ELRP pilot, Group A participants, will nominate an estimated target load reduction quantity to be achieved during an ELRP event. 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.

A.1. Non-Residential Customers Eligibility and Enrollment

Bundled and unbundled non-residential customers of an IOU who meet the following criteria are eligible to enroll and participate in ELRP:

- Customer's service account must be able to reduce load by a minimum of 1 kW during an ELRP event
- Customer is not simultaneously enrolled in another supply-side DR program offered by an IOU, third-party demand response provider (DRP), or community choice aggregator (CCA).

Qualifying individual customers can directly apply and enroll with SDG&E or our program administrator. At the time of enrollment, or at designated times during the ELRP pilot, customers must nominate 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, (4) the notice time, and (5) the ramp time for generators that may be used during ELRP events.

A.2. Non-Residential Aggregators Eligibility and Enrollment

Third-party non-residential aggregators are eligible to participate in ELRP.

Non- Residential aggregators with aggregated bundled or unbundled non-residential customer resources meeting the following criteria are eligible to participate in ELRP:

- Customer's service account is classified as non-residential; and
- The aggregated resource is not simultaneously enrolled in a supply-side DR program offered by an IOU, third-party DRP, or CCA, and
- The aggregated resource capacity meets or exceeds Minimum the Aggregation Size Threshold at 500 kW

At the time of enrollment, or at designated times during the ELRP pilot, aggregators must nominate 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, (4) the notice time, and (5) the ramp time for generators that may be used during ELRP events.

A.3. Rule 21 Exporting DER Eligibility and Enrollment

Bundled and unbundled non-residential customers of an IOU who meet the following criteria are eligible to enroll and participate in ELRP:

- Customer is not simultaneously enrolled in any market-integrated DR program offered by an IOU, third-party DRP, or CCA, and
- Customer possesses a behind-the-meter (BTM) Rule 21-interconnected device (including Prohibited Resources) with an existing Rule 21 export permit, and
- Customer's BTM Rule 21 interconnected device meets the Minimum Export Threshold of 25kW specified further below for at least one hour in compliance with Rule 21 and other applicable regulations and permits during an ELRP event.

NEM customers meeting the above requirements are eligible to participate in ELRP. Qualifying

individual customers can directly apply and enroll with SDG&E at www.sdge.com/emergency-load-reduction. At the time of enrollment, or at designated times during the ELRP pilot, customers must nominate 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, (4) the notice time, and (5) the ramp time for generators that may be used during ELRP events.

A.4. Virtual Power Plant Aggregators Eligibility and enrollment

An aggregator managing a BTM virtual power plant (VPP) aggregation consisting of storage paired with net energy metering (NEM) solar or stand-alone storage deployed with residential (bundled or unbundled) or non-residential (bundled or unbundled) customers, whose VPP meet 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 an IOU, third-party DRP, or CCA, unless the ELRP A.4. payments to the aggregator are based on end use data and the customer site is enrolled in AC Saver.
- All sites within the VPP aggregation are located within the distribution service area of a single IOU, and
- The aggregated BTM storage capacity of the VPP meets the Minimum VPP Size Threshold 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.
- A customer participating in ELRP A.6 is permitted, at any time, to enroll in ELRP A.4. After SDG&E becomes aware that the Participant's service account has been enrolled in ELRP A.4 SDG&E will de-enroll the service account from ELRP A.6

NEM customers meeting the above requirements are eligible to participate in ELRP.

VPP aggregators interested in participating in ELRP should contact SDG&E at drp@sdge.com or our program administrator. SDG&E may negotiate agreements with the VPP Aggregator to clarify other requirements as needed, including potential administration fees, to implement the Minimum Dispatch Hours and related ELRP compensation. If applicable, VPP Aggregators 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, (4) the notice time, and (5) the ramp time for generators that may be used during ELRP events.

A.5. Vehicle-Grid-Integration Aggregators Eligibility

An 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 an IOU, third-party DRP, or CCA, unless the ELRP A5 payments to the aggregator are based on end use data and the customer site is enrolled in AC Saver
- All sites within the VGI aggregation are located within the distribution service area of a single IOU, and
- The VGI aggregation can contribute Incremental Load Reduction (ILR) of at least 25 kW for a minimum of one hour during an ELRP event.
- Subject to Rule 21 interconnection requirements, any direct current (DC) V2G electric vehicle supply equipment (EVSE) that has UL 1741¹ certification but not UL 1741 SA certification, any subsequent UL 1741 supplement certification required in Rule 21, or Smart Inverter Working Group-recommended smart inverter functions may interconnect initially, but only for the purpose of participating in the ELRP.
- A customer participating in ELRP A.6 is permitted, at any time, to enroll in ELRP A.5. After SDG&E becomes aware that the Participant's service account has been enrolled in ELRP A.5 SDG&E will de-enroll the service account from ELRP A.6.

NEM customers with electric vehicles meeting the above requirements are eligible to participate in the VGI aggregation.

The use of a virtual aggregation may be elected by an aggregator at the time of enrollment. A virtual aggregation permits separately metered EVSEs that have a Rule 21 Interconnection Agreement with other load and generation at an electrically contiguous 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. Virtual Aggregation applications will be reviewed and approved by SDG&E on a case-by-case basis.

VGI aggregators interested in participating in ELRP should contact SDG&E at drp@sdge.com or our program administrator. SDG&E may negotiate agreements with the VGI Aggregator to clarify other requirements as needed, including potential administration fees, to implement the Minimum Dispatch Hours and related ELRP compensation.

If applicable, the VGI Aggregators must provide information about their customer's back-up generation (BUG),

¹ 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. SDG&E reserves the right to terminate this exception after the 2024 ELRP season.

including (1) location (address), (2) type of fuel used (e.g., diesel, natural gas, battery, etc.), (3) the nameplate capacity, (4) the notice time, and (5) the ramp time for generators that may be used during ELRP events.

5. **Program Event Triggers**

Minimum Aggregation Dispatch Hours

Certain aggregated resources participating in ELRP have Minimum Aggregation Dispatch Hours, as follows:

- Sub-Group A.2. (Non-Residential Aggregators) = 10 hours
- Sub-Group A.4. (VPP Aggregators) = 20 hours
- Sub-Group A.5. (VGI Aggregators) = 30 hours

To meet the Minimum Aggregation Dispatch Hours, SDG&E will exercise discretion to dispatch aggregators in response to other forecasted or anticipated grid stress conditions, such as, high locational marginal prices in the CAISO markets, extreme heat waves, etc., and will notify aggregators of the start time and duration of the ELRP event to achieve the Minimum Aggregation Dispatch Hours.

ELRP will utilize both day-ahead (DA) and day-of (DO) triggers.

ELRP may be activated after the CAISO issues or declares an Energy Emergency Alert (EEA) watch EEA 1, EEA 2, or EEA 3. The EEA process is defined by the CAISO Operating Procedure 4420². The ELRP utilizes Day- Ahead (DA) and Day-Of (DO) triggers for Group A participants.

Sub-groups with a minimum dispatch requirement 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.

Group A Test Events: SDG&E will conduct one test event, with two-hour duration, per year for Sub-Group A.1. and Sub-Group A.3. participants. Each participant, except for those relying exclusively on prohibited resources, is required to participate in test events. **Use of prohibited resources during a test event is not permitted and should not be compensated.** Otherwise, all other incremental load reduction delivered during the ELRP test event is eligible for ELRP compensation Section below.

6. Compensation

Participation during an ELRP event is entirely voluntary, and no financial penalties will result from

² When the CAISO completes the transition from the current AWE process to the North American Electric Reliability Corporation (NERC) Energy Emergency Alert (EEA) standards, the AWE declarations will be replaced with the equivalent NERC EEA level notices (e.g., EEA Watch, EEA-1, EEA-2, and EEA-3).

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 to the non-event applicable baseline and any other existing commitment. Only ILR is eligible for compensation under ELRP.

The ILR for an ELRP event is calculated by summing the differences (both positive and negative) between the participant's baseline and the recorded energy used for all intervals of the ELRP event.

Any load reduction technology may be used during an ELRP event to achieve ILR. BUGs or Prohibited resources, except those located in a Disadvantaged Community³, 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, SDG&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.

General ELRP compensation parameters for all customers include the following:

- After-the-fact pay-for-performance will be made at a prefixed energy-only ELRP Compensation Rate applied to ILR.
- There are no "capacity-like" payments.
- There are no penalties for non- or under-performance.

The ELRP Compensation Rate for Group A is set at \$2 / kilowatt-hour (kWh) (or \$2000 / megawatt-hour (MWh)).

GROUP A COMPENSATION

For Group A eligible participants, the compensation for load reduction delivered during an ELRP event is determined by calculating the product of ILR and ELRP Compensation Rate.

A.1. Non-Residential Customer Compensation

The ELRP baseline will be constructed according to the method described below.

i. Calculate the Customer Specific Energy Baseline (CSEB) – A Customer service account must have at least 10 similar days of interval meter data available in

³ 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.

SDG&E's billing system to have a valid CSEB. Only the hourly average usage for the hours included in the event will be included in the CSEB determination. The CSEB and Adjusted CSEB (ACSEB) will all be calculated at the service account level. If the ELRP event occurs on a non-holiday weekday the CSEB will be calculated on an hourly basis using the average of the ten (10) preceding similar non-holiday weekdays If the ELRP event occurs on a weekend or holiday the CSEB and will be calculated on an hourly basis using the average of the four (4) preceding similar weekend or holiday days.

In both cases the similar days shall exclude those days when the account: (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 and time of use plus event days will not be excluded from the similar days in order to capture incrementality for ILR.

- ii. Calculate the Day-Of Adjustment (DOA) A DOA shall not be less than 1.00 or greater than 1.40. The DOA is a ratio of (a) the average load of the first three hours of the four hours prior to the ELRP Event to (b) the average load of the same hours from the similar days used to calculate the CSEB in step 1 above. If either a or b are negative the DOA is equal to 1.
- iii. Calculate the Adjusted Customer Specific Energy Baseline (ACSEB) An account's ACSEB for an ELRP event hour is calculated by multiplying the CSEB by the DOA. If the CSEB is negative, then the ACSEB is set equal to the CSEB.

Special Considerations

- 1. If the customer has a Rule 21 interconnected device with export capability and permit, the customer may choose to count exported energy 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.
- 2. If the customer is currently taking a CPP or real-time pricing (RTP) equivalent tariff, any ILR during overlapping hours between the dynamic rate and the ELRP event is attributed to ELRP.

A.2. Non-Residential Aggregators Compensation

Same guidelines as A.1 apply with the exception that the baseline will be calculated at the aggregated level.

A.3. Rule 21 Exporting DER Compensation

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 a customer not on a CPP or RTP equivalent tariff, 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.

Only during ELRP dispatch hours, a customer with control over multiple electrically contiguous sites is permitted to virtually 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. 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.

A.4 Virtual Power Plant Aggregators Compensation

The baseline for ELRP A1 will be used for aggregations of non-residential customers participating in A.4 with the exception that if submeter data is used the day-of adjustment (DOA) will not be applied. The baseline will be calculated at the aggregated level.

The baseline for residential A4 aggregations is described below. If submeter data is used the day-of-adjustment will not be applied. The baseline will be calculated at the aggregated level.

i. Calculate the Customer Specific Energy Baseline (CSEB) – A customer service account must have at least 10 similar days of interval meter data available in SDG&E's billing system to have a valid CSEB. Only the hourly average usage for the hours included in the event will be included in the CSEB determination. The CSEB will count net exports to the distribution grid. If the ELRP event occurs on a non-holiday weekday the CSEB will be calculated on an hourly basis using the average of the highest five (5) of the ten (10) preceding similar non-holiday weekdays If the ELRP event occurs on a weekend or holiday the CSEB will be calculated on an hourly basis using the weighted average of the three (3) highest of the five (5) preceding similar weekend or holiday days

In both cases the similar days shall exclude 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. Time of Use plus event days will not be excluded from the similar days in order to capture incrementality for ILR.

- ii. Calculate the Day-Of Adjustment Value (DOA) A DOA shall not be less than 1.00 or greater than 1.40. The DOA is a ratio of (a) the average load of the first two hours of the four hours prior to the ELRP Event and the average of the last two of the four hours after the ELRP Event[6] to (b) the average load of the same hours from the days selected in accordance with Step 2 above. If either (a) or (b) are negative, the DOA is 1.0.
- iii. Calculate the Customer Specific Adjusted Energy Baseline (CSAEB) when the

CSEB is greater than zero, the CSAEB will be calculated by multiplying the CSEB by the DOA. If the CSEB is less than zero, then the CSAEB is set equal to the CSEB.

The baseline method stated above may be used in conjunction with submetering once the CPUC has approved submetering protocols. 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.

A.5 Vehicle-to-Grid Aggregators Compensation

The A.5. baseline calculations will be the same as the A.4 baseline calculations described above. An EVSE meter or EVSE sub-meter if the EVSE is taking service through the host site meter, may be used to determine the ILR for ELRP settlement. Upon adoption by the CPUC, EVSE sub-meter, including the use of telematics, must meet applicable standards established by the CPUC.

Only during IOU dispatched hours, the VGI aggregator is permitted to virtually aggregate separately metered EVSE that have a Rule 21 Interconnection Agreement with other load and generation (if any) at an electrically contiguous host site to allow export from the EVSE to reduce the host site's load and export from such aggregation up to the sum of the net export allowed by any available Rule 21 Interconnection Agreements of the EVSE site and the host site.

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.

(End of Terms and Conditions for Group A, excluding A.6 Residential, found in attachment G)