

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE



June 17, 2022

PG&E Advice Letter 6485-E
SCE Advice Letter 4708-E
SDG&E Advice Letter 3939-E

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SUBJECT: Emergency Load Reduction Program Pilot Terms and Conditions of PG&E, SCE, and SDG&E Adopted by the CPUC

Dear Mr. Dietz, Ms. Menon, and Mr. Anderson:

Pursuant to California Public Utilities Commission (CPUC) Decision (D.) 21-12-015 Ordering Paragraph (OP) 7 and OP 22, Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E) (collectively the IOUs) jointly filed Tier 1 Advice Letters (ALs) on January 31, 2022, to incorporate the modified Emergency Load Reduction Program (ELRP) terms and conditions. The ALs include: PG&E's AL 6485-E, SCE's AL 4708-E, and SDG&E's AL 3939-E.

Per its review and disposition (see Attachment 1), the Energy Division (ED) has determined that the Advice Letters, as amended via substitute sheets, are in compliance with D.21-12-015 and are approved, effective the filing date.

Please contact Andrew Magie of the Energy Division at Andrew.Magie@cpuc.ca.gov if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Pete Skala", followed by the word "FOR" in a simple, sans-serif font.

Pete Skala
Interim Deputy Executive Director for Energy and Climate Policy/
Interim Director, Energy Division
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R.20-11-003

Attachment 1 Energy Division’s Review and Disposition

Background

The IOUs submitted ALs PG&E 6485-E, SCE 4708-E, and SDG&E 3939-E on January 31, 2022, providing terms and conditions for the ELRP pilot as directed by D.21-12-015 (Decision). The ALs implemented several OPs of the Decision summarized below:

OP 1 of the Decision directed that “Attachments 1 and 2 to this decision are adopted in their entirety, and Southern California Edison Company (SCE), Pacific Gas and Electric Company (PG&E), and San Diego Gas & Electric Company (SDG&E) shall comply with the requirements set forth therein. To the extent Attachments 1 and 2 contain requirements in addition to those in this decision, SCE, PG&E and SDG&E shall comply with those additional requirements. To the extent this decision contains requirements in addition to those in Attachments 1 and 2 to this decision, SCE, PG&E and SDG&E shall comply with those additional requirements.”¹

OP 7 of the Decision directed the IOUs that “[w]ithin 60 days of the effective date of this decision, Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company shall jointly file Tier 1 Advice Letters incorporating the new Emergency Load Reduction Program (ELRP) terms and conditions for Group A and B, respectively, adopted in this decision and set forth in Attachment 2. The filings shall include details necessary to implement the ELRP guidelines set forth above and address various aspects of ELRP pilot design and processes, including enrollment, the process to update enrollment related program parameters, ELRP event notification and customer acknowledgment, Incremental Load Reduction measurement, and settlement.”²

OP 22 of the Decision directed the IOUs that “[w]ithin 60 days of this Decision, PG&E, SCE and SDG&E shall jointly file a Tier 1 Advice Letter (AL) incorporating the modifications by this Decision to ELRP terms and conditions for Group A [and B]. Limited deviations to accommodate investor-owned utility (IOU) specific implementations due to information technology (IT) and billing systems are permitted. The filing shall include the details necessary to implement the ELRP guidelines set forth above and address various aspects of ELRP pilot design and processes, including enrollment, the process to update enrollment related program parameters, ELRP event notification and customer acknowledgment, Incremental Load Reduction measurement, and settlement.”³

OP 27 of the Decision required ELRP “[p]articipants in the Electric Vehicle and Vehicle-Grid Aggregation (VGI) aspects of the Emergency Load Reduction Program who use Electric Vehicle

¹ D.21-12-015, OP 1, at 160.

² D.21-12-015, OP 7, at 162.

³ D.21-12-015, OP 22, at 167-168.

Supply Equipment (EVSE) [to] meet applicable standards established by the Commission for EVSE meters and sub-meters.”⁴

The Solar Energy Industries Association (SEIA) and California Solar & Storage Association (CALSSA) timely filed a joint protest concerning ELRP option A.4 (Virtual Power Plant Aggregators aka VPP) on February 22, 2022. The Vehicle Grid Integration Council (VGIC) and California Energy Storage Association (CESA) each timely filed protests concerning ELRP options A.4 and A.5 (VPP and Vehicle-Grid-Integration Aggregators aka VGI) on February 22, 2022.

Separate from the protests, Energy Division (ED) identified other issues with the ALs in its review.

On March 1, 2022, the IOUs filed individual replies to the protests. PG&E also submitted a Substitute Sheet for Joint AL 6485-E et al. on March 1, 2022.

Per Energy Division’s guidance, the IOUs jointly filed a Substitute Sheet for Joint AL 6485-E et al. on April 11, 2022. PG&E and SDG&E filed additional Substitute Sheets for Joint AL 6485-E et al. on April 19, 2022. PG&E filed a fourth Substitute Sheet for Joint AL 6485-E et al. on April 28, 2022.

Discussion

Each IOU AL is discussed separately, resolving issues raised by protesting parties and Energy Division (ED) staff related to ELRP participation options A.2 (Non-Residential Aggregators), A.4 (VPP), and A.5 (VGI).

The protesting parties raised one protest item related to ELRP option A.2 (Non-Residential Aggregators), seven protest items related to ELRP option A.4 (VPP), and 11 protest items related ELRP option A.5 (VGI). ED staff identified eight additional issues of concern. Each protest or issue and its disposition is discussed individually below.

⁴ D.21-12-015, OP 27, at 169.

PG&E AL 6485-E

Option A.2 (Non-Residential Aggregators)

1. Aggregator enrollment timeline

VGIC protested the AL imposed deadline for aggregators to enroll in ELRP and nominate capacity, stating “the utilities [should] allow for flexible enrollment beyond April 30, 2022.”⁵

PG&E did not provide a reply.

Energy Division finds PG&E’s pre-season enrollment deadline is not in compliance with the Decision, inconsistent with 2021 precedent, and contradicts the clear intent of the Decision to allow ELRP enrollment (and the associated potential load reduction) to grow throughout the season to help mitigate summer reliability concerns that may be caused by extreme heat waves.

Additionally, Energy Division notes OP 22 of the Decision states, “Limited deviations to accommodate investor-owned utility (IOU) specific implementations due to information technology (IT) and billing systems are permitted.”⁶ A condensed enrollment timeline for aggregators unique to PG&E does not reasonably fall under the allowed IOU-specific deviations.

In response to ED’s guidance, PG&E filed a fourth substitute sheet on April 28, 2022 with the following revision: “Sub-Group A.2 participants must nominate a non-zero estimated, portfolio load reduction quantity ~~by April 30 of the program year~~ and failure to do so may result in disenrollment from the ELRP.”⁷

PG&E noted that “the April 30 date is not a deadline, though in consultation with Energy Division, acknowledge how the language could be misunderstood as a deadline. Thus, PG&E will remove the date however, PG&E remains intent on enforcing the requirement for a non-zero estimated, portfolio load reduction quantity.”⁸

Energy Division agrees with PG&E that it is appropriate to maintain PG&E’s enrollment deadline for new BIP aggregators in sub-group A.2 no later than April 15 of the program year.⁹ This deadline will allow PG&E to offer timely ELRP enrollment to individual BIP resources whose aggregators declined to participate in ELRP without unnecessary confusion.

⁵ Protest of the Vehicle Grid Integration Council to Advice Letter 6485-E of Pacific Gas and Electric Company, Advice Letter 4708-E of Southern California Edison Company, and Advice Letter 3939-E of San Diego Gas and Electric Company, Protest V, at 7.

⁶ D.21-12-015, OP 22, at 167 & 168.

⁷ Fourth Substitute Sheet for Joint IOU AL 6485-E et al., April 28, 2022, at 1.

⁸ Second Substitute Sheet for Joint IOU AL 6485-E et al., April 19, 2022, at 1.

⁹ PG&E AL 6485-E, Attachment A, 1.1.2.1 Application Process for Sub-Group A.2, at 6.

With the above revision to the AL and explanation from PG&E, this protest item is resolved.

Option A.4 (VPP)

1. Aggregator enrollment timeline

Similar to the protest in A.2, VGIC protested the AL-imposed enrollment deadline for all aggregators, including A.4 (VPP). For the same reasons as stated in A.2 (with no BIP exception, as it is not relevant for A.4), Energy Division agrees with the protest.

In response to Energy Division's guidance, PG&E filed a second substitute sheet on April 11, 2022 with alterations as follows: "Sub-Group A.4 participants must nominate a non-zero estimated, portfolio load reduction quantity ~~by April 30 of the program year~~ and failure to do so may result in disenrollment from the ELRP."¹⁰

With the above revision to the AL and explanation from PG&E, this protest item is resolved.

2. Submetering.

SEIA and CALSSA protested the submetering requirements proposed by PG&E. SEIA and CALSSA argued that "The additional requirements for use of submetering...i.e., approval of CPUC approved submetering protocols and use of approved submetering services as outlined in the Aggregator Participation Agreement – must be rejected by the Commission as non-compliant with Decision 21-12-015."¹¹

CESA similarly protested the additional submetering requirements: "CESA does not understand the applicability of 'approved submetering protocols' in determining A.4 participation using sub-metering methods. To CESA's knowledge, there is no specification of sub-metering protocols for stationary storage devices eligible for sub-metering in Group A.4. D.21-12-015 does not provide additional guidance on specific sub-metering protocols that should be followed, and CESA is unaware of any open proceedings currently evaluating sub-metering protocols for stationary storage devices."¹²

PG&E submitted a substitute sheet on March 1, 2022, with the following corrections: "The baseline method, ~~may be used with submetering once the CPUC has approved submetering protocols~~ as specified in Section 3.2.1.1, will be used with submetering as approved by PG&E."¹³

¹⁰ Second Substitute Sheet for Joint Advice Letter 6485-E et al., at 1, April 11, 2022.

¹¹ SEIA and CALSSA Protest II A, at 2.

¹² CESA Protest II, at 3.

¹³ PG&E Substitute Sheet for Joint Advice Letter 6485-E et al., at 1. March 1, 2022.

PG&E submitted a second substitute sheet on April 11, 2022, with the following revisions: “The baseline method as specified in Section 3.2.1.1, may be used with submetering ~~as approved by PG&E.~~”¹⁴

Energy Division considers the revisions by PG&E a satisfactory resolution of the above protests, and this issue is resolved.

Option A.5 (VGI)

1. Submetering

VGIC protested the AL requirement that “no EVSE submetering [will] be permitted until applicable standards are established by the Commission.”¹⁵ As noted by VGIC, D.21-12-015 Attachment 2 states, “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. The EVSE sub-meter must meet applicable standards established by the CPUC when adopted.”¹⁶ Thus, according to VGIC, the IOUs have a clear obligation to offer EVSE submetering immediately and may not condition the use of submetering on any future adoption of submetering protocols by the Commission.

CESA similarly protested the AL requirement, stating, “[T]he adoption of an EVSE sub-metering protocol is not or should not be a gating factor for A.5 customer participation seeking to use sub-metering methods, especially when these sub-meters are used for DR settlement (not billing) and because some eligible EVSEs may still participate by using separately-metered utility revenue-grade meters.”¹⁷

PG&E’s reply cited OP 27 as the basis for conditioning the use of submeters on CPUC adoption of standards. “PG&E maintains that non-utility-owned, revenue-grade sub-metering—in this context EVSE sub-metering—cannot be used for sub-group A.5 until the Commission establishes applicable standards.”¹⁸ PG&E continues by citing the exact language from OP 27: “Participants in the Electric Vehicle and Vehicle-Grid Aggregation (VGI) aspects of the Emergency Load Reduction Program who use Electric Vehicle Supply Equipment (EVSE) shall meet applicable standards established by the Commission for EVSE meters and sub-meters.”¹⁹

¹⁴ Second Substitute Sheet for Joint Advice Letter 6485-E et al., at 3, April 11, 2022.

¹⁵ Protest of the Vehicle Grid Integration Council to Advice Letter 6485-E of Pacific Gas and Electric Company, Advice Letter 4708-E of Southern California Edison Company, and Advice Letter 3939-E of San Diego Gas and Electric Company, Protest II, at 3.

¹⁶ D.21-12-015, Attachment 2, A.5 Vehicle-to-Grid Aggregators Compensation, at 15.

¹⁷ CESA Protest, at 3.

¹⁸ Pacific Gas and Electric Company’s Reply to the Protest to Advice Letter 6485-E – Emergency Load Reduction Program Pilot Terms and Conditions in Compliance with Decisions 21-12-015 and 21-12-069, March 1, 2022, at 3.

¹⁹ Pacific Gas and Electric Company’s Reply to the Protest to Advice Letter 6485-E – Emergency Load Reduction Program Pilot Terms and Conditions in Compliance with Decisions 21-12-015 and 21-12-069, March 1, 2022, at 3.

However, PG&E’s interpretation of OP 27 is wrong. PG&E erred by focusing exclusively on OP 27²⁰ and ignoring OP 1, which requires IOUs to comply with Attachment II of the Decision. Further, OP 1 directs “To the extent Attachments 1 and 2 contain requirements in addition to those in this decision, [IOUs] shall comply with those additional requirements.”²¹ In Attachment II, there are two separate directives, one applicable to the present (which allows the immediate use of submeters) and one applicable to a future (which requires submeters to comply with standards if/when adopted by the CPUC). PG&E’s interpretation of OP 27 would therefore have the effect of rendering inoperative the Decision’s directive in Attachment II to allow immediate use of submeters. In addition, OP 1 states that PG&E **shall comply** with Attachment II of the decision rendering PG&E’s views on OP 27 irrelevant.

Energy Division agrees with the protest and rejects PG&E’s rebuttal. ED finds the original AL was not in compliance with Attachment II’s directive applicable to the present time. That is, the directive regarding the future adoption of a standard cannot be used to preclude use of submeters in ELRP prior to the standards adoption, as permitted by another directive in the same Attachment.

In response to ED’s guidance, PG&E filed a second substitute sheet on April 11, 2022, with the following revisions: “The baseline method, as specified in Section 3.2.1.1, may be used with submetering ~~once the CPUC has approved submetering protocols.~~ 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.”²²

Energy Division considers the above revisions to the AL a satisfactory resolution of the above protests and this issue is resolved.

2. Aggregator enrollment deadline

Similar to the protest in A.4, VGIC protested the AL-imposed enrollment deadline for all aggregators, including A.5 (VGI). For the same reasons as stated in A.4, Energy Division agrees with the protest.

In response to ED’s guidance, PG&E filed a second substitute sheet on April 11, 2022 with as follows: “Sub-Group A.5 participants must nominate a non-zero estimated, portfolio load reduction quantity ~~by April 30 of the program year~~ and failure to do so may result in disenrollment from the ELRP.”

²⁰ OP 27 is sufficiently clear because it says that participants must meet “applicable standards” for sub-metering. Standards that have not been adopted are not applicable, despite PG&E’s assertion to the contrary.

²¹ D.21-12-015, OP 1, at 160.

²² Joint Advice Letter Attachment A at 15 (PG&E)

PG&E noted that “the April 30 date is not a deadline, though in consultation with Energy Division, acknowledge how the language could be misunderstood as a deadline. Thus, PG&E will remove the date however, PG&E remains intent on enforcing the requirement for a non-zero estimated, portfolio load reduction quantity.”²³

With the above revision to the AL and explanation from PG&E, Energy Division considers the above protest to be resolved.

3. Availability of expanded interconnection pathway

VGIC complained that “the utilities are currently not allowing [bidirectional V2G DC EVSE systems certified to UL 1741 and not UL 1741 SA] to interconnect and are telling prospective participants that the interconnection pathway is not yet available because Joint Advice Letter has not yet been approved.”²⁴ Per VGIC, this action taken by the IOUs runs counter to directives in D.21-12-015, which allowed these systems to interconnect initially for the purposes of the ELRP.²⁵

Energy Division notes that the AL is Tier 1 and is thus effective as filed as of January 31, 2022, pending disposition. ED’s suspension of the Joint Tier 1 AL is not a valid basis for delaying implementation in accordance with the terms described in the AL per G.O. 96-B §7.3.3.²⁶

Additionally, Energy Division notes that Commission policy forbids the IOUs from limiting interconnections of V2G AC certified to UL 1741 (but not UL 1741 SA). The most recent rules for V2G AC interconnections were established in D.20-09-035, which adopted Proposal 23i. Proposal 23i “clarif[ies] a pathway for parties to interconnect V2G AC systems on a timely basis for experimental, pilot, and/or temporary use until the appropriate rules are updated in the future. Specifically, this proposal would allow V2G AC system pilots to be exempt, on a temporary basis, from Rule 21 smart inverter requirements.”²⁷

Hence, the IOUs should not limit interconnections of either V2G DC or V2G AC EVSEs certified to UL 1741 for participation in ELRP per D.21-12-015 and D.20-09-035, respectively. The IOUs are directed to immediately begin authorizing UL 1741 interconnections as required by D.21-12-015.

PG&E communicated to ED on March 29, 2022, that PG&E has been accepting all bidirectional V2G DC EVSE and V2G AC EVSE systems certified to UL 1741 (but not UL 1741 SA) to interconnect in compliance with D.21-12-015 and D.20-09-035.

²³ Second Substitute Sheet for Joint IOU AL 6485-E et al., April 11, 2022, at 1.

²⁴ VGIC Protest, pp.7-8

²⁵ D.21-12-015, Attachment 2, at 6

²⁶ G.O. 96-B §7.3.3: “Unless an earlier effective date is authorized, or a later effective date required, under the appropriate Industry Rules, an advice letter properly designated as effective pending dispositions may be made effective on the date of submittal, or as provided under General Rule 7.3.2 or 9.2.3.”

²⁷ D.20-09-035, 5.6.11. Resolving Issue 23, at 133.

With the above clarification, these protest items are resolved.

4. Termination of interconnection pathway

VGIC protested language in the AL stating that the IOUs “reserve the right to terminate this exception [allowing bidirectional V2G DC EVSE with UL 1741 certification to interconnect] after the 2024 ELRP season.”²⁸ VGIC asserted, “The plain language of the decision does not grant the utilities the right to unilaterally terminate this interconnection pathway in 2024, as such a termination would be subject to Commission review and approval.”²⁹

VGIC is correct. Nothing in the Decision grants the IOUs unilateral authority to terminate the interconnection of bidirectional V2G DC EVSE and V2G AC EVSE systems certified to UL 1741. ED communicated this determination to the IOUs and in response to ED’s guidance, PG&E submitted a substitute sheet on March 1, 2022, with the following revisions (underline indicates added text):

“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.”³⁰

With this revision to the AL, the above protest item is resolved.

5. Post-termination allowance for existing interconnections

Related to the previous protest, VGIC also protested PG&E’s failure to recognize that the potential termination of the pathway (post 2024) for UL 1741 interconnection would not affect previously interconnected EVSE.³¹ VGIC noted that the AL leaves out important Decision language on grandfathering UL 1741 interconnections, which states “Termination of this pathway would not affect previously interconnected EVSE.”³²

Energy Division agrees with the protest. In response to ED’s guidance, PG&E filed a second substitute sheet on April 11, 2022, inserting the following language, “Termination of this pathway would not affect previously interconnected EVSE,” following the sentence revised per

²⁸ Protest of the Vehicle Grid Integration Council to Advice Letter 6485-E of Pacific Gas and Electric Company, Advice Letter 4708-E of Southern California Edison Company, and Advice Letter 3939-E of San Diego Gas and Electric Company, at 6.

²⁹ Protest of the Vehicle Grid Integration Council to Advice Letter 6485-E of Pacific Gas and Electric Company, Advice Letter 4708-E of Southern California Edison Company, and Advice Letter 3939-E of San Diego Gas and Electric Company, at 6.

³⁰ PG&E AL 6485-E Attachment A, at 9

³¹ Joint IOU AL 6485-E, Attachment A, at 9 footnote 1 (PG&E).

³² D.21-12-015 Attachment 2 p.6.

previous direction above: “PG&E reserves the right to terminate this exception after the 2024 ELRP season via a Tier 2 Advice Letter filing.”³³

With the above revision to the AL, this protest item is resolved.

6. Bi-directional EV supply equipment (EVSE)

VGIC protested the AL language: “All sites within the VGI aggregation have operational electric vehicle supply equipment (EVSE) that has UL 1741 SA certification, any subsequent UL 1741 supplement certification as required in Rule 21...”³⁴ VGIC argues the requirement “that all sites within the VGI aggregation must have operational EVSE that have UL 1741 certification violates previous Commission guidance on Rule 21 per D.20-09-035, which specifically states that only bidirectional EVSE are subject to the referenced UL 1741 safety standard.”³⁵ VGIC recommended that “PG&E ... specify [explicitly] that only bi-directional equipment within an aggregation be certified to the UL 1741 safety standard.”³⁶

Energy Division agrees with the protest. In response to ED’s guidance, PG&E submitted a second substitute sheet on April 11, 2022, with the following revisions:

Original Text (Page 9)

- All sites within the VGI aggregation have operational electric vehicle supply equipment (EVSE) that has UL 1741 SA 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
- Sites within the VGI aggregation that intend to implement V2G must have a Rule 21 export permit and operates in a manner compliant with existing rules and tariffs applicable to the site

Revised Text (Page 9)

- All sites within the VGI aggregation have operational electric vehicle supply equipment (EVSE), and

³³ Second Substitute Sheet for Joint Advice Letter 6485-E, April 11, 2022, at 3.

³⁴ Protest of the Vehicle Grid Integration Council to Advice Letter 6485-E of Pacific Gas and Electric Company, Advice Letter 4708-E of Southern California Edison Company, and Advice Letter 3939-E of San Diego Gas and Electric Company, at 4.

³⁵ Protest of the Vehicle Grid Integration Council to Advice Letter 6485-E of Pacific Gas and Electric Company, Advice Letter 4708-E of Southern California Edison Company, and Advice Letter 3939-E of San Diego Gas and Electric Company, at 6.

³⁶ Protest of the Vehicle Grid Integration Council to Advice Letter 6485-E of Pacific Gas and Electric Company, Advice Letter 4708-E of Southern California Edison Company, and Advice Letter 3939-E of San Diego Gas and Electric Company, at 6.

- Sites within the VGI aggregation that intend to implement V2G must have UL 1741 SA 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 requirements³⁷

With the above revisions to the AL, the protest is resolved.

7. Elimination of day-of adjustment

Energy Division objected to the AL eliminating the day-of adjustment value (DOAV) option when calculating the baseline for A.5 VGI aggregation. The AL states: “The DOAV—as detailed in Section 3.2.1.1—will not be applied to Sub-Group A.5.”

In response to Energy Division’s inquiry, PG&E responded with the following explanation on March 25, 2022. “The purpose of the day-of adjustment is principally to address the variability in weather sensitive loads in the favor of the customer/aggregator... PG&E does not believe that EV load is weather sensitive, thus the application of a day-of adjustment is moot.”³⁸ PG&E also contended that “the day-of adjustment poses challenges in periods where the load is positive during the adjustment period, but the event load is negative (export). The likelihood of this is elevated in V2G applications.”³⁹

Energy Division found PG&E’s response to be unclear. VGI aggregators may elect to use utility metering and aggregate EV loads with loads from residential homes. The load behavior of such an aggregation would still be subject to the weather, and thus the potential application of the DOAV is relevant. Additionally, aggregations enrolled in the A.4 (Virtual Power Plant Aggregators) also involve batteries (stationary in this case, rather than mobile) but PG&E does not find a reason to eliminate DOAV from this subgroup. In contrast, SCE solves this problem for A.5 by eliminating the DOAV *only* when A.5 baseline is negative. Lastly, ED notes that the DOAV elimination for A.5 is unique to PG&E and concludes that the above cited language is in violation of OP 22.

In response to ED’s guidance, PG&E filed a second substitute sheet on April 11, 2022 that strikes the problematic language: “~~The DOAV—as detailed in Section 3.2.1.1—will not be applied to Sub Group A.5.~~”

With the above revisions to the AL, the protest is resolved.

³⁷ Second Substitute Sheet for Advice Letter 6485-E et al., April 11, 2022, at 2.

³⁸ Email from Lisa Wan (PG&E) on 3/25/2022 at 2:58pm.

³⁹ Email from Lisa Wan (PG&E) on 3/25/2022 at 2:58pm.

SCE AL 4708-E

Back-up Generator Data Collection and Use

1. BUG Data Collection

SCE's AL had the following requirements for back-up generator (BUG) data collection for A.1-A.5 and B.1-B.2: "VPP Aggregators must provide information about their customer's back-up generation (BUG), including location, type of fuel used, the capacity of the generator, and the notice or ramp time for the generator that may be used during ELRP events."⁴⁰

Energy Division found this requirement noncompliant with OP 1, which required the IOUs to comply with Attachment 2, as well as other OPs, in D.21-12-015. Attachment 2 states, "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, the capacity of the generator, for years 2021 and 2022."⁴¹

SCE gave ELRP A.1-A.5 and B.1-B.2 participants the option to provide "the notice ~~or~~ ramp time"⁴² when the decision required "the minimum notification time."⁴³ While Energy Division appreciates SCE's willingness to collect ramp time data, SCE must still collect the minimum notification time from all A.1-A.5 and B.1-B.2 customers that have BUGs participating in ELRP.

SCE filed a substitute sheet with the following edits to BUGs data collection language applicable to each ELRP option A.1-A.5 and B.1-B.2: "... must provide information about their customer's back-up generation (BUG), including location, type of fuel used, the capacity of the generator, and the ~~notice or ramp time for~~ minimum notification time required to dispatch the generator that may be used during ELRP events."⁴⁴

With the above revisions, Energy Division finds SCE in compliance with OP 1.

2. BUG Dispatch During Non-Overlapping DR Events for Dual-Enrolled Customers

⁴⁰ SCE AL 4708-E, Attachment D, at 8. (ED is using the language for A.4 as an example)

⁴¹ D.21-12-015, Attachment 2, at 1.

⁴² SCE AL 4708-E, Attachment D, at 8 (E.g.).

⁴³ D.21-12-015, Attachment 2, at 1.

⁴⁴ Second Substitute Sheet for Joint Advice Letter 6485-E et al., at 4, 6, and 7, April 11, 2022. The revisions are in following places in SCE's AL 4708-E:

- Attachment D, 1.1.1.1 at 5
- Attachment D, 1.1.2.1.1 at 5
- Attachment D, 1.1.2.2.1 at 6
- Attachment D, 1.1.3.1 at 7
- Attachment D, 1.1.4.1 at 8
- Attachment D, 1.1.5.1 at 9-10
- Attachment E, 1.1.1.1. at 4-5
- Attachment E 1.1.2.1 at 5
- Attachment E 3, at 8

SCE's AL incorrectly required that an independently triggered DR event occur at the same time as an ELRP event in order for eligible non-residential customers to utilize their Prohibited Resources in ELRP. "For all other non-residential customers, Prohibited Resources may be used during an ELRP event to achieve ILR, but only when permitted by a Governor's Executive Order and in compliance with Rule 21 and other applicable regulations and permits, **and only** [emphasis added] 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."⁴⁵

This language would limit the use of BUGs in ELRP to periods *only* when an overlapping and independent DR event are triggered. D.21-12-015 does not make such a requirement, and a majority of ELRP participants are not dual-enrolled in other supply-side demand response programs.

SCE filed a substitute sheet on April 11, 2022 correcting the erroneous language as follows: "For all other non-residential customers, Prohibited Resources may be used during an ELRP event to achieve ILR, but only when permitted by a Governor's Executive Order and in compliance with Rule 21 and other applicable regulations and permits, ~~and only~~ 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."⁴⁶

With the above revision, Energy Division finds SCE's AL to be in compliance with OP 1 of D.21-12-015.

Option A.4 (VPP)

1. VPP Rule 21 Export Permit

In order to participate in ELRP A.4, SCE's AL would require that "Each site within the VPP aggregation has a Rule 21 **export** [emphasis added] permit."⁴⁷

Energy Division notes that this requirement was unique to SCE (PG&E and SDG&E ALs do not specify this) and was inconsistent with D.21-12-015, which does not have an export permit requirement. D.21-12-015 only requires that "Each site within the VPP aggregation has a Rule 21 permit."⁴⁸ That is, each site in the VPP aggregation is required to have a Rule 21 permit, but that permit could be an export or a non-export permit.

⁴⁵ AL 4708-E, Attachment D, at 13.

⁴⁶ Second Substitute Sheet for Joint Advice Letter 6485-E et al., at 5-6, April 11, 2022.

⁴⁷ AL 4708-E, Attachment D, at 8 (SCE)

⁴⁸ D.21-12-015, Attachment 2, at 5.

SCE filed a substitute sheet on April 11, 2022, striking the erroneous language to match the decision language: “Each site within the VPP aggregation has a Rule 21 ~~export~~ permit.”⁴⁹

With the above revisions, Energy Division finds SCE’s AL to be in compliance with OP 1 and OP 22 of D.21-12-015.

2. Submetering

In order to utilize submetering in A.4, SCE AL required, “If accepted by SCE, the above baseline method may be used in conjunction with a meter or a sub-meter embedded within a storage system (such as, an internal sub-meter within the battery inverter) that directly measures the energy flows into/out of the storage device to determine the ILR for the ELRP settlement.”⁵⁰

Energy Division notes this requirement is unique to SCE (PG&E and SDG&E ALs do not have this additional requirement) and it contradicts OP 22 which only permits “Limited deviations to accommodate investor-owned utility (IOU) specific implementations due to information technology (IT) and billing systems.”⁵¹ Adding the language “If accepted by SCE” would grant authority and discretion to SCE that is not present in the Decision, contradicting OP 1. In fact, D.21-12-015 requires that embedded storage system meters and sub-meters be eligible for determining settlement: “The above baseline method may be used in conjunction with a meter or a sub-meter embedded within a storage system (such as, an internal sub-meter within the battery inverter) that directly measures the energy flows into/out of the storage device to determine the ILR for the ELRP settlement.”⁵² SCE’s language is therefore arbitrary and capricious, and ED finds it out of compliance with OP 1 and OP 22.

SCE filed a substitute sheet on April 11, 2022 with the non-compliant language deleted as follows: “~~If accepted by SCE, the~~ The above baseline method may be used in conjunction with a meter or a sub-meter embedded within a storage system (such as, an internal sub-meter within the battery inverter) that directly measures the energy flows into/out of the storage device to determine the ILR for the ELRP settlement.”⁵³

With the above revision, Energy Division finds SCE’s AL to be in compliance with OP 1 and OP 22 of D.21-12-015.

Option A.5 (VGI)

1. Submetering

⁴⁹ Second Substitute Sheet for Joint Advice Letter 6485-E et al., at 5, April 11, 2022.

⁵⁰ AL 4708-E, Attachment D, at 16 (SCE)

⁵¹ D.21-12-015, OP 22, at 167.

⁵² D.21-12-015, Attachment II, at 15.

⁵³ Second Substitute Sheet for Joint Advice Letter 6485-E et al., at 6, April 11, 2022.

In a similar manner to PG&E A.5 item #1 disposed in this letter titled *Submetering*, VGIC and CESA protested SCE's language.

SCE's reply to VGIC's protest cites decision language that supports the protest, undermining SCE's claim that they need not allow submetering now.⁵⁴

Energy Division agrees with the protest and rejects SCE's rebuttal.

SCE filed a substitute sheet on April 11, 2022 with the non-compliant text deleted as follows: ~~"Once the CPUC adopts EVSE sub-metering standards and requirements and is accepted by SCE,~~ ~~an~~ 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 must meet applicable standards established by the CPUC. The election to utilize submetering will apply to all locations within a single aggregation."⁵⁵

With the above revisions, the protest is resolved.

2. Availability of expanded interconnection pathway

Similar to PG&E A.5 item #3 in this disposition, VGIC protested that, "[T]he utilities are currently not allowing [bidirectional V2G DC EVSE systems certified to UL 1741 and not UL 1741 SA] to interconnect and are telling prospective participants that the interconnection pathway is not yet available because Joint Advice Letter has not yet been approved."⁵⁶

SCE has assured ED that it is accepting interconnection applications in compliance with both D.21-12-015 and D.20-09-035. Energy Division accepts SCE's commitment to the decision and the protest is resolved. Energy Division also takes this opportunity to remind SCE that it is obligated to comply with the **all** of the requirements of D.21-12-015 and D.20-09-035 and any failure to do so would potentially constitute grounds for the initiation of enforcement actions by the Commission.

⁵⁴ SCE cites OP 27 which states: "27. Participants in the Electric Vehicle and Vehicle-Grid Aggregation (VGI) aspects of the Emergency Load Reduction Program who use Electric Vehicle Supply Equipment (EVSE) shall meet applicable standards established by the Commission for EVSE meters and sub-meters." As noted in regard to the PG&E response, Standards that have not been adopted are not applicable.

⁵⁵ Joint Advice Letter Attachment D at 16 (SCE)

⁵⁶ VGIC Protest, pp.7-8

SDG&E AL 3939-E

Back-up Generator Data Collection

1. BUG Data Collection

SDG&E's AL has the following requirements for back-up generator (BUG) data collection for A.1-A.3: "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 backup 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."⁵⁷ This language is correct as it requires the collection of notice time for the generator, and Energy Division welcomes SDG&E's initiative in collecting ramp time for the generator data.

Confusingly, however, SDG&E's BUG data collection for A.4-A.5 and B.1-B.2 are different: "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) minimum notification time to dispatch the generator (4) the capacity of the generator, that may be used during ELRP events."⁵⁸

Energy Division finds the BUG data collection requirements for A.4-A.5 and B.1-B.2 out of compliance with OP 1 of the D.21-12-015, which requires the IOUs to comply with Attachment 2, as well as other OPs, in the Decision. Attachment 2 states, "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, the capacity of the generator, for years 2021 and 2022."⁵⁹

SDG&E gave ELRP A.4-A.5 and B.1-B.2 the option to provide "the notice **or** [emphasis added] ramp time"⁶⁰ when the decision requires "the minimum notification time."⁶¹ While Energy Division appreciates SDG&E's willingness to collect ramp time data, SDG&E must still collect the minimum notification time from all A.1-A.5 and B.1-B.2 customers that have BUGs participating in ELRP.

SDG&E filed a substitute sheet on April 11, 2022 with the following edits to BUGs data collection language applicable to each ELRP option A.1-A.5 (ED is using the language for A.4 as an example): "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,

⁵⁷ SDG&E AL 3939-E. Attachment F, at 4. (ED is using the language for A.1 as an example)

⁵⁸ SDG&E AL 3939-E. Attachment F, at 5-6. (ED is using the language for A.4 as an example)

⁵⁹ D.21-12-015, Attachment 2, at 1.

⁶⁰ SDG&E AL 3939-E. Attachment F, at 4. (ED is using the language for A.1 as an example)

⁶¹ D.21-12-015, Attachment 2, at 1.

battery, etc.), (3) minimum notification time to dispatch the generator, and (4) the capacity of the generator, that may be used during ELRP events, ~~type of fuel used, the capacity of the generator, and the notice or ramp time for the generator that may be used during ELRP events.~~⁶²

SDG&E also edited the BUGs data collection language applicable to each ELRP option B.1-B.2 (ED is using language for B.1 as an example): “For each registered service account, the third-party DRP must provide information about the service account’s back-up generation (BUG) location, type of fuel used, the capacity of the generator, and the ~~notice or ramp time for~~ minimum notification time required to dispatch the generator and the capacity of the generator that may be used during ELRP events.”⁶³

With the above revisions, Energy Division finds SDG&E’s AL to be in compliance with OP 1 of D.21-12-015.

Option A.4 (VPP)

1. Submetering

Similar to PG&E A.4 item #2 in this disposition, SEIA, CALSSA, and CESA protested SDG&E’s barring of submetering for A.4 until the Commission approves submetering protocols.

SDG&E dismissed these protests concerning A.4 submetering protocols, stating, “These claims lack merit... [and they] constitute substantive matters that would require that the Commission establish a new record for review and adoption.”⁶⁴

Energy Division found SDG&E’s response insufficient, and per ED guidance, SDG&E filed a substitute sheet on April 11, 2022 to correct the AL as follows: “The baseline method stated above may be used in conjunction with a meter or sub-meter embedded within a storage system (such as, an internal sub-meter within the battery inverter) that directly measures the

⁶² Second Substitute Sheet for Joint Advice Letter 6485-E et al., at 4, 6, and 7, April 11, 2022. The revisions are in following places in SDG&E’s AL 3939-E:

Attachment F, A.1
Attachment F, A.2
Attachment F, A.3
Attachment F, A.4
Attachment F, A.5

⁶³ Second Substitute Sheet for Joint Advice Letter 6485-E et al., at 4, 6, and 7, April 11, 2022. The revisions are in following places in SDG&E’s AL 3939-E:

Attachment H, B.1
Attachment H, B.2

⁶⁴ Reply of San Diego Gas & Electric Company to Protest of Advice Letter 3939-E Regarding the Company’s Emergency Load Reduction Program Pilot Terms and Conditions in Compliance with Decisions 21- 12-015 and 21-12-069, at 1.

energy flows into/out of the storage device to determine the ILR for the ELRP settlement submetering once the CPUC has approved submetering protocols.”⁶⁵

With the above revisions, the protest is resolved.

Option A.5 (VGI)

1. Submetering

Similar to PG&E A.5 item #1 and SCE A.5 item #1 in this disposition, VGIC and CESA protested SDG&E’s disallowance of the usage of submeters to calculate ILR for A.5 participants until standards were established by the Commission.

SDG&E’s reply to VGIC’s and CESA’s protests posited that the protesting parties were asking for changes that would “require that the Commission establish a new record for review and adoption.”⁶⁶ Further, SDG&E noted that, “EVSE submetering has the potential to simplify ELRP enrollment for EV customers,”⁶⁷ and claimed, “The Commission should not require the utilities to rush to design an ad-hoc submetering protocol that may not be robust enough to resolve inevitable customer data gaps and billing disputes.”⁶⁸

For the same reasons discussed earlier, SDG&E filed a substitute sheet on April 11, 2022, in response to ED's guidance, with the erroneous language corrected as follows: “~~Once the CPUC has approved submetering protocols and is accepted by SDG&E, an~~ 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. The EVSE sub-meter must meet applicable standards established by the CPUC when adopted.”⁶⁹

With the above revisions, the protest is resolved.

2. Termination of interconnection pathway

Similar to PG&E A.5 item #4 in this disposition, VGIC protested that SDG&E does not have the unilateral right to terminate the UL 1741 interconnection pathway.

⁶⁵ Second Substitute Sheet for Joint Advice Letter 6485-E et al., at 8.

⁶⁶ Reply of San Diego Gas & Electric Company to Protest of Advice Letter 3939-E Regarding the Company’s Emergency Load Reduction Program Pilot Terms and Conditions in Compliance with Decisions 21- 12-015 and 21-12-069, at 1.

⁶⁷ Reply of San Diego Gas & Electric Company to Protest of Advice Letter 3939-E Regarding the Company’s Emergency Load Reduction Program Pilot Terms and Conditions in Compliance with Decisions 21- 12-015 and 21-12-069, at 2.

⁶⁸ Reply of San Diego Gas & Electric Company to Protest of Advice Letter 3939-E Regarding the Company’s Emergency Load Reduction Program Pilot Terms and Conditions in Compliance with Decisions 21- 12-015 and 21-12-069, at 2.

⁶⁹ AL 3939-E, Attachment F, at 10 (SDG&E)

SDG&E did not respond to this protest.

Energy Division agrees with VGIC's protest; the IOU does not have the unilateral right to terminate this exception without CPUC approval.

SDG&E made the same revision as PG&E in a substitute sheet filed April 11, 2022: "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 via a Tier 2 Advice Letter filing."⁷⁰

With the above revisions, the protest is resolved.

3. Post-termination allowance for existing interconnections

Related to the previous protest item and similar to PG&E A.5 item #5 in this disposition, VGIC also protested SDG&E's failure to recognize that the potential termination of the pathway (post 2024) for UL 1741 interconnection does not affect previously interconnected EVSE.⁷¹

SDG&E's March 3 response to VGIC's protest claimed that the summer reliability "decision requires utilities to follow Rule 21" and thus can only certify UL 1741 SA and is "slightly ambiguous." SDG&E incorrectly ignored the plain language of the decision that allows a pathway allowing interconnection of bi-directional EVSE that comply with UL 1741 so long as they comply with "all **other** (emphasis added) Rule 21 requirements."⁷²

Per ED's guidance, SDG&E filed a substitute sheet on April 11, 2022, which inserted the following language to bring the AL into compliance with the Decision, "Termination of this pathway would not affect previously interconnected EVSE," following the sentence revised per previous direction above: "SDG&E reserves the right to terminate this exception after the 2024 ELRP season via a Tier 2 Advice Letter filing."

Energy Division agrees with the protest and accepts the revisions by SDG&E. With the above revisions, the protest is resolved.

4. Availability of expanded interconnection pathway

Also related to the last protest and similar to PG&E A.5 item #3 and SCE A.5 item #2 in this disposition, VGIC was concerned that, "[T]he utilities are currently not allowing [bidirectional V2G DC EVSE systems certified to UL 1741 and not UL 1741 SA] to interconnect and are telling

⁷⁰ AL 3939-E, Attachment F, at 6 (SDG&E)

⁷¹ Attachment A p.9 footnote 1 (PG&E)

⁷² D.21-12-015, Attachment 2, at 6

prospective participants that the interconnection pathway is not yet available because Joint Advice Letter has not yet been approved.”⁷³

SDG&E has assured Energy Division that they are accepting interconnection applications as directed by both D.21-12-015 and D.20-09-035. Energy Division accepts SDG&E’s commitment to the decision and the protest is resolved. Energy Division also takes this opportunity to remind SDG&E that it is obligated to comply with the **all** of the requirements of D.21-12-015 and D.20-09-035 and any failure to do so would potentially constitute grounds for the initiation of enforcement actions by the Commission.

5. Bi-directional EV supply equipment (EVSE)

Similar to PG&E A.5 item #6 in this disposition, VGIC protested AL language suggesting all sites in an aggregation needed UL 1741 certifications instead of solely bidirectional equipment.

Per ED’s guidance, SDG&E filed a substitute sheet with inserted clarifying language stating that certification to the UL 1741 safety standard is only required for bi-directional equipment within an aggregation: “Subject to Rule 21 interconnection requirements, any direct current (DC) V2G electric vehicle supply equipment (EVSE) that has UL 1741 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. Certification to the UL 1741 safety standard is only required for bi-directional equipment with an aggregation.”⁷⁴

With the above revisions, the protest is resolved.

⁷³ VGIC Protest, pp.7-8

⁷⁴ Second Substitute Sheet for Joint Advice Letter 6485-E et al., April 11, 2022, at 8.

Rejected Protests

1. Aggregator agreements

VGIC, SEIA, CALSSA, and CESA all asked for the ALs to be more specific on the process by which the IOUs will be approving various elements of ELRP in their Aggregator Participation Agreements.

SEIA and CALSSA, e.g., protested, “the IOUs have provided no clarity regarding the determination of the baseline... SEIA and CALSSA urge the Commission to provide greater clarity on baselining so that aggregators have sufficient information regarding how incremental load reduction will be determined and, in turn, what the value proposition will be for customers. As a starting point, it makes sense to look at the CAISO’s Meter Generation Output baseline methodology but adjust it to account for exported energy as well as to allow charging energy to be included in the baseline.”⁷⁵

CESA’s protest items III and IV were, “The IOUs should establish minimum sub-metering standards that are “deemed approved” in the absence of any utility/aggregator negotiation,” and “Considerations for using sub-meters to determine baselines should be further specified,” respectively.⁷⁶

VGIC recommended, e.g., “[T]he utilities [should] detail how baselines will be determined for Group A.5 aggregations/customers that enroll, begin receiving utility service, and/or interconnect V2G systems within 10 days of a dispatch signal.”⁷⁷ VGIC also protested: “Additional clarity is needed in SCE’s terms and conditions regarding baseline and settlement calculation for group A.5”⁷⁸

Energy Division rejects these various protests as the Decision does not require IOUs to specify the technical requirements for submeters/inverters, approaches for communication, nor baseline and settlement methodologies in the advice letters for ELRP terms and conditions.

Instead, Attachment II states, “The IOUs may negotiate agreements with the VGI aggregators to clarify other requirements as needed, including potential administration fees, to implement the Minimum Dispatch Hours and related ELRP compensation. Each IOU shall strive to develop a standardized agreement to implement a uniform process to simplify implementation and ensure similar treatment across different aggregators. The IOUs are encouraged to jointly conduct workshops or a working group process to facilitate consensus building on the terms and conditions of the agreements.”⁷⁹

⁷⁵ SEIA and CALSSA Protest III at 3, February 22, 2022.

⁷⁶ CESA Protest III & IV at 4 & 5, respectively, February 22, 2022.

⁷⁷ VGIC Protest V, at 8, February 22, 2022.

⁷⁸ VGIC Protest VI, at 8, February 22, 2022.

⁷⁹ D.21-12-015, Attachment 2, at 7.

Energy Division concludes that, with respect to the protest issues above, the IOUs' ALs are in compliance with the Decision and the protests on these issues are rejected.

2. Submetering optionality

VGIC protested the AL requirement that "election of submetering must apply to all sites within an aggregation, thereby precluding aggregations that contain a mix of EVSE meters and submeters."⁸⁰ VGIC believed this was superfluous and "may limit total load reduction capabilities of EV/VGI aggregations and be counterproductive to the underlying intent of D.21-12-015 in establishing A.5 to allow a broad aggregation of different EV customer types."⁸¹

The IOUs did not respond to this protest.

Energy Division rejects this protest as VGIC did not identify a valid ground to protest the AL.⁸² Additionally, ED does not see this requirement set by IOUs as unreasonably burdensome nor discriminatory to VGI aggregators. Aggregators still have the option to develop two different aggregations—one with all sites measured relative to the EVSE meter, the other with all sites measured relative to the submeter—as long as each aggregation meets the Minimum VGI Aggregation Size Threshold of 25 kW.

Accordingly, this protest item is rejected.

3. Minimum dispatch hours

VGIC protested the AL language: "pro-rate the 30 hours minimum dispatch requirement accordingly [for late enrollees]... If the aggregator enters into an agreement on July 31, for example, then the minimum dispatch requirements for the remainder of the 2022 season should only be 15 hours, rather than 30 hours."⁸³

SCE replied to this protest, stating, "VGIC's recommendation to prorate the minimum dispatch hours is inappropriate and administratively burdensome. The minimum dispatch hour requirement applies to the entire subgroup and does not apply on a per aggregator basis. Therefore, VGIC's recommendation for pro-rated minimum dispatch hours should be rejected."⁸⁴

SDG&E replied with nearly identical language: "VGIC's recommendation to prorate the minimum dispatch hours is inappropriate and administratively burdensome. The minimum

⁸⁰ VGIC Protest II at 4.

⁸¹ VGIC Protest II, at 4.

⁸² G.O 96-B, 7.4.2, at 13.

⁸³ VGIC Protest V at 7.

⁸⁴ Reply of Southern California Edison Company (SCE) to Protests of (a) Solar Energy Industries Association and California Solar & Storage Association, (b) California Energy Storage Alliance, and (c) Vehicle Grid Integration Council to SCE Advice Letter 4708-E, at 6.

dispatch hour requirement applies to the entire subgroup and does not apply on a per aggregator basis. Therefore, SDG&E recommends that VGIC’s recommendation for pro-rated minimum dispatch hours be rejected.”⁸⁵

Energy Division rejects this protest as no such requirement exists in D.21-12-015 nor any of its attachments. The Decision requires, “The Minimum VGI Dispatch Hours is set at 30 hours per season,” describing requirements at the subgroup level, not on a per-aggregator basis, as SCE and SDG&E correctly state in their replies.

The Decision does offer some flexibility for Minimum Dispatch Hour implementation when it states: “The IOUs may negotiate agreements with the VGI aggregators to clarify other requirements as needed, including potential administration fees, **to implement the Minimum Dispatch Hours** [emphasis added] and related ELRP compensation,”⁸⁶ but any terms and conditions agreed upon between the IOUs and Aggregators in the Aggregator Participation Agreement are not required to be specified in the Advice Letters.

VGIC does did not offer a valid grounds to protest this requirement, and its recommended change is in direct conflict with the Decision.⁸⁷ Thus, VGIC’s protest is rejected.

4. Telematics

VGIC asked for the inclusion of telematics for EV-based measurements: “...the potential for direct EV-based measurements of ILR via telematics ... should also be considered and included as an option within the sub-metering protocol developed for Group A.5 participants... At a bare minimum, VGIC believes the Commission should direct the IOUs to develop this option in advance of the 2023 summer season if it cannot be accomplished for the 2022 season.”⁸⁸

SCE replied to this protest, stating, VGIC’s request for a new EV-based measurement option does not identify any shortcoming with respect to the Advice Letter, but rather a substantive matter that was within the Commission’s purview to decide as part of the Decision.”⁸⁹

⁸⁵ Reply of San Diego Gas & Electric Company to Protest of Advice Letter 3939-E Regarding the Company’s Emergency Load Reduction Program Pilot Terms and Conditions in Compliance with Decisions 21- 12-015 And 21-12-069, at 3.

⁸⁶ D.21-12-015, Attachment II, 4. Eligible Customers, A.5 Vehicle-Grid-Integration Aggregators Eligibility, at 7.

⁸⁷ G.O 96-B, 7.4.2, at 13.

⁸⁸ Protest of the Vehicle Grid Integration Council to Advice Letter 6485-E of Pacific Gas and Electric Company, Advice Letter 4708-E of Southern California Edison Company, and Advice Letter 3939-E of San Diego Gas and Electric Company, Protest III, at 4-5.

⁸⁹ Reply of Southern California Edison Company (SCE) to Protests of (a) Solar Energy Industries Association and California Solar & Storage Association, (b) California Energy Storage Alliance, and (c) Vehicle Grid Integration Council to SCE Advice Letter 4708-E, at 4-5.

SDG&E identically replied, “VGIC’s request for an EV-based measurement option does not identify any shortcoming with respect to the AL, but rather a substantive matter that was within the Commission’s purview to decide as part of the decision.”⁹⁰

Energy Division agrees with the IOUs. VGIC does not offer a valid ground to protest AL’s omission of telematics as a measurement option or that the omission is not compliant with the Decision and the protest is rejected.⁹¹

Disposition

In accordance with the discussion above, Energy Division hereby approves PG&E AL 6485-E, SCE AL 4708-E, and SDG&E AL 3939-E including First, Second, Third, and Fourth Substitute Sheets for Joint Advice Letter 6485-E et al.

⁹⁰ Reply of San Diego Gas & Electric Company to Protest of Advice Letter 3939-E Regarding the Company’s Emergency Load Reduction Program Pilot Terms and Conditions in Compliance with Decisions 21- 12-015 And 21-12-069, at 3.

⁹¹ G.O 96-B, 7.4.2, at 13.

January 31, 2022

Advice 6485-E

(Pacific Gas and Electric Company ID – U 39 E)

Advice 4708-E

(Southern California Edison Company – U 338-E)

Advice 3939-E

(San Diego Gas and Electric Company – U902-E)

Public Utilities Commission of the State of California

Subject: Emergency Load Reduction Program Pilot Terms and Conditions of Southern California Edison Company, Pacific Gas and Electric Company, and San Diego Gas & Electric Company in Compliance With Decisions 21-12-015 and 21-12-069

Purpose

In compliance with Ordering Paragraph (OP) 7 and OP 22 of Decision (D.) 21-12-015,¹ Pacific Gas and Electric Company (PG&E) hereby submits this advice letter in coordination with Southern California Edison Company (SCE) and San Diego Gas & Electric Company (SDG&E) (together, the “Investor Owned Utilities” (IOUs)) to provide each IOU’s Emergency Load Reduction Program (ELRP) pilot Terms and Conditions for customers eligible within Group A and Group B.

Background

On November 19, 2020, the California Public Utilities Commission (CPUC or Commission) initiated Rulemaking (R.) 20-11-003 to establish policies, process, and rules to ensure reliable electric service in California in the event of potential extreme weather in the Summer of 2021 and 2022. On March 26, 2021, after receiving testimonies, legal opening, and reply briefs from parties, the Commission issued D.21-03-056, which, among other things, directed the IOUs to establish the ELRP pilot.

¹ Any relevant modifications pertaining to updates made by D.21-12-069 were considered in preparing this filing.

On July 30, 2021, Governor Newsom signed an emergency proclamation to “free up energy supply to meet demand during extreme heat events and wildfires that are becoming more intense and to expedite deployment of clean energy resources this year and next year.”² In the Governor’s July 30, 2021 Emergency Proclamation, all energy agencies, including the Commission, were directed to act immediately to achieve energy stability during this emergency. In response to the Governor’s Emergency Proclamation, on August 2, 2021, the assigned Administrative Law Judge (ALJ) sent a ruling to parties in R.20-11-003 setting forth a proposed scope and schedule for Phase 2.

On December 6, 2021, after receiving testimonies, legal opening and reply briefs from parties, the Commission issued D.21-12-015, Summer Reliability OIR Phase 2 decision directing the IOUs to take additional actions to prepare for potential extreme weather in the Summer of 2022 and 2023. On December 27, 2021, the Commission issued D.21-12-069 correcting inadvertent typographical and clerical errors in D.21-12-015.

Discussion

In the documents attached, each IOU provides its updated ELRP pilot Terms and Conditions for Group A and Group B. The IOUs have aligned their Terms and Conditions where possible, but due to system, process, and customer differences, some areas were unable to align on all programmatic aspects.

The attachments to this filing are as follows:

1. Attachment A: PG&E’s ELRP Pilot Terms and Conditions for Group A
2. Attachment B: PG&E’s ELRP A.6 Residential Terms and Conditions
3. Attachment C: PG&E’s ELRP Pilot Terms and Conditions for Group B
4. Attachment D: SCE’s ELRP Pilot Terms and Conditions for Group A
5. Attachment E: SCE’s ELRP Pilot Terms and Conditions for Group B
6. Attachment F: SDG&E’s ELRP Pilot Terms and Conditions for Group A
7. Attachment G: SDG&E’s ELRP A.6 Residential Terms and Conditions
8. Attachment H: SDG&E’s ELRP Pilot Terms and Conditions for Group B

Tier Designation

Pursuant to OP 7 and 22 of D. 21-12-015, this advice letter is submitted with a Tier 1 designation.

² Governor Newsom’s Proclamation of a State of Emergency can be found at <https://www.gov.ca.gov/wp-content/uploads/2021/07/Energy-Emergency-Proc-7-30-21.pdf>.

Protests

Anyone wishing to protest this submittal may do so by letter sent electronically via E-mail, no later than **February 22, 2022**, which is 22³ days after the date of this submittal. Protests must be submitted to:

CPUC Energy Division
ED Tariff Unit
E-mail: EDTariffUnit@cpuc.ca.gov

The protest shall also be electronically sent to PG&E via E-mail at the address shown below on the same date it is electronically delivered to the Commission:

For PG&E:

Sidney Bob Dietz II
Director, Regulatory Relations
c/o Megan Lawson

E-mail: PGETariffs@pge.com

For SCE:

Shinjini C. Menon
Managing Director, State Regulatory Operations
Southern California Edison Company

E-mail: AdviceTariffManager@sce.com

Tara S. Kaushik
Managing Director, Regulatory Relations
c/o Karyn Gansecki

E-mail: Karyn.Gansecki@sce.com

For SDG&E:

Attn: Greg Anderson
Regulatory Tariff Manager
E-mail: GAnderson@sdge.com and SDGETariffs@sdge.com

³ The 20-day protest period concludes on a weekend and the proceeding day is a holiday; therefore, PG&E is moving this date to the following business day.

Any person (including individuals, groups, or organizations) may protest or respond to an advice letter (General Order 96-B, Section 7.4). The protest shall contain the following information: specification of the advice letter protested; grounds for the protest; supporting factual information or legal argument; name and e-mail address of the protestant; and statement that the protest was sent to the utility no later than the day on which the protest was submitted to the reviewing Industry Division (General Order 96-B, Section 3.11).

Effective Date

The IOUs requests that this **Tier 1** advice filing become effective upon date of filing, which is **January 31, 2022**.

Authorization

This Advice Letter is submitted by PG&E on behalf of, and with the authorization from, SDG&E and SCE.

Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically to parties shown on the attached list and the parties on the service list for **R.20-11-003**. Address changes to the General Order 96-B service list should be directed to PG&E at email address PGETariffs@pge.com. For changes to any other service list, please contact the Commission's Process Office at (415) 703-2021 or at Process_Office@cpuc.ca.gov. Send all electronic approvals to PGETariffs@pge.com. Advice letter submittals can also be accessed electronically at: <http://www.pge.com/tariffs/>.

/S/

Sidney Bob Dietz II
Director, Regulatory Relations

Attachments

cc: Service List R.20-11-003



ADVICE LETTER SUMMARY

ENERGY UTILITY



MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No.: Pacific Gas and Electric Company (U 39 E)

Utility type:

- ELC GAS WATER
 PLC HEAT

Contact Person: Stuart Rubio

Phone #: (415) 973-4587

E-mail: PGETariffs@pge.com

E-mail Disposition Notice to: SHR8@pge.com

EXPLANATION OF UTILITY TYPE

ELC = Electric GAS = Gas WATER = Water
 PLC = Pipeline HEAT = Heat

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #: 6485-E

Tier Designation: 1

Subject of AL: Emergency Load Reduction Program Pilot Terms and Conditions of Southern California Edison Company, Pacific Gas and Electric Company, and San Diego Gas & Electric Company in Compliance With Decisions 21-12-015 and 21-12-069

Keywords (choose from CPUC listing): Compliance

AL Type: Monthly Quarterly Annual One-Time Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #: D.21-12-015 and D.21-12-069

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

Summarize differences between the AL and the prior withdrawn or rejected AL: N/A

Confidential treatment requested? Yes No

If yes, specification of confidential information:

Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/ access to confidential information:

Resolution required? Yes No

Requested effective date: 1/31/22

No. of tariff sheets: 0

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: N/A

Service affected and changes proposed¹: N/A

Pending advice letters that revise the same tariff sheets: N/A

¹Discuss in AL if more space is needed.

Protests and correspondence regarding this AL are to be sent via email and are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:

California Public Utilities Commission
Energy Division Tariff Unit Email:
EDTariffUnit@cpuc.ca.gov

Contact Name: Sidnev Bob Dietz II. c/o Megan Lawson
Title: Director, Regulatory Relations
Utility/Entity Name: Pacific Gas and Electric Company

Telephone (xxx) xxx-xxxx: (415)973-2093
Facsimile (xxx) xxx-xxxx:
Email: PGETariffs@pge.com

Contact Name:
Title:
Utility/Entity Name:

Telephone (xxx) xxx-xxxx:
Facsimile (xxx) xxx-xxxx:
Email:

CPUC
Energy Division Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102

Clear Form

Attachment A

PG&E's ELRP Pilot Terms and Conditions for Group A

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

January 31, 2022

Contents

Program Overview	3
1 Program Eligibility and Enrollment	4
1.1 Program Participant Criteria.....	4
1.1.1 Sub-Group A.1 – Non-Residential Customers	4
1.1.2 Sub-Group A.2 – Non-Residential Aggregators.....	5
1.1.3 Sub-Group A.3 – Rule 21 Exporting Distributed Energy Resources	6
1.1.4 Sub-Group A.4 – Virtual Power Plants Aggregators	8
1.1.5 Sub-Group A.5 – Electric Vehicle (EV) and Vehicle-Grid Integration (VGI) Aggregators .	9
2 Program Parameters	11
2.1 Program Availability	11
2.2 Program Trigger.....	11
2.2.1 Group A.....	12
2.3 Sub-Group Minimum Dispatch	12
2.4 Test Events.....	12
3 Compensation	12
3.1 Incentive Rate	13
3.2 Incentive Calculation.....	13
3.2.1 Sub-Group A	13

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.

Sub-Group A.2 participants must nominate a non-zero estimated, portfolio load reduction quantity by April 30 of the program year and failure to do so may result in disenrollment from the ELRP.

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&E, 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 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&E, 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
- Sites within the VGI aggregation that intend to implement V2G must have UL 1741 SA⁴ certification, any subsequent UL 1741 supplement certification as required in Rule 21 or Smart Inverter Working-Group recommended smart

⁴ 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.

*

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 contiguous⁵ 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 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.

⁵ 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."

*

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 “Alert, Warning, Emergency (AWE)”. The AWE 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.

In the future, when the CAISO completes the transition from the current AWE process to the North American Electric Reliability Corporation (NERC) Energy Emergency Alert (EEA) standards, then the AWE declarations shall be replaced with the equivalent NERC EEA level notice.

In the future, when the CAISO completes the transition from the current AWE process to the North American Electric Reliability Corporation (NERC) Energy Emergency Alert (EEA) standards, then the AWE declarations shall be replaced with the equivalent NERC EEA level notice.

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 Community⁶, 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 ILR and ECR. 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, and A.5.

Steps for calculating a participant's ELRP baseline:⁷

⁶ 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.

⁷ 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. The EB and AEB will be calculated on an hourly basis using the average of the preceding *similar days*⁸, 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 1.00 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).
 - 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).

⁸ For weekday events, the 10 non-excluded weekdays will be selected; for weekend and holiday events, the 4 non-excluded weekend and holiday days will be selected.

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 aggregator selected CPUC approved baseline for PG&E's Capacity Bidding Program is utilized and modified to account for exported energy, to the extent allowed by a site's Rule 21 export permit, during non-event days and count exported energy 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 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.

Attachment B

PG&E's ELRP A.6 Residential Terms and Conditions

Pacific Gas and Electric Company

ELRP A.6. Residential Customers

Participation Terms and Conditions

Thank you for your participation in the Pacific Gas and Electric Company (“PG&E”) Emergency Load Reduction Program Pilot A.6 (“Pilot”) implemented by Olivine, Inc. (“Olivine”) via ClimateResponse™ on behalf of PG&E. On March 26, 2021, the California Public Utilities Commission (CPUC) issued Decision D. 21-03-056 which approved the Emergency Load Reduction Program (ELRP) pilot. The CPUC subsequently issued D. 21-12-015 making modifications to the ELRP which included a large-scale program for residential customers. Participation is legally bound by the Pilot’s participation terms and conditions (“Terms”).

- 1. The Pilot.** The Pilot includes Participants who have been automatically enrolled or elect to participate for the Demand Response (DR) season for Pilot event hours (“Event”) as defined below. PG&E will use each Pilot Participant’s SmartMeter data to measure performance across the Pilot Events.
- 2. Participant Eligibility.** PG&E shall determine in its sole discretion Participant’s eligibility which must include:
 - i* Participant receives electric service on a residential rate
 - ii* Participant has an active service agreement with PG&E
 - iii* Participant has a PG&E SmartMeter
 - iv* Participant is not simultaneously enrolled in another supply-side demand response program offered by PG&E, third-party DR provider (DRP), or Community Choice Aggregator (CCA)
 - v* Participant is not an electric customer of a Community Choice Aggregator who has opted out of being included in the Pilot
- 3. Pilot Enrollment Period.** The Pilot shall continue until at least December 31, 2023 unless extended, or Participant’s enrollment is terminated sooner (“Pilot Enrollment Period”) or eligibility changes resulting in Participant unenrollment.
- 4. ELRP A.6. Residential Customers Events.** ELRP A.6. Residential Customers Events will be triggered the day-ahead by CAISO Grid Alerts and Flex Alert days between May 1st and October 31st (DR Season) and the Event hours will be between 4:00 PM and 9:00 PM.
- 5. Pilot Incentives.**

Participants who have participated in Events will receive an incentive at a minimum of yearly for Event participation in 2022 and 2023. The incentive value has been set by the CPUC at \$2 per kilowatt hour as based on the incremental load reduction during Event hours. PG&E retains sole discretion for the calculation of the incremental load reduction. The incentive will likely be paid as a bill credit likely in the first months of the following calendar year for Participants who have an active service agreement.
- 6. Communications.** Participant has the option to provide and maintain a valid email address or cellular phone number for Pilot communications, accepts responsibility for the receipt of these communications and any consequences of not receiving them. Participant may unsubscribe from communications by following instructions in event notifications or as directed on the website. It may take up to 10 days to take effect. Participant may authorize the use of email and/or cellular phone or download the Pilot app required to receive Pilot communications.
- 7. Participant Information.** Participant authorizes PG&E and Olivine to access and/or provide Participant’s personal identifiable information, energy usage data, utility account number, or information generated and arising from Participant’s participation during the Pilot Enrollment Period to carry out the Pilot’s purpose and as required to be disclosed pursuant to the CPUC’s request.
- 8. Personal Non-Commercial Use.** The Pilot is offered ONLY for personal, non-commercial premises.

9. Costs. PG&E and Olivine are not responsible for providing any costs associated with equipment that might aid Participant in the Pilot, i.e. devices, internet access, or, if any, impact to Participant's electric bills.

10. No Warranty; Disclaimer. PG&E and Olivine expressly disclaim all warranties of any kind relating to the Pilot, whether express, implied or statutory (including, without limitation, any implied warranties for conditions or merchantability, fitness for a particular purpose, title, non-infringement or misappropriation of intellectual property rights).

11. Limitation of Liability. To the fullest extent permitted by applicable law, under no circumstances shall Olivine or PG&E be liable for any indirect, incidental, special or consequential damages, arising in connection with the Pilot. If Participant is dissatisfied with the Pilot, any of these Terms, or believes Olivine or PG&E has breached these Terms in any way, Participant's sole and exclusive remedy is to discontinue participation in the Pilot.

12. Pilot Participation Termination.

- i Termination By PG&E.* PG&E has the sole discretion to terminate the Pilot, or Participant's participation in the Pilot, at any time without cause by providing Participant written notice.
- ii* A customer participating in ELRP A.6 is permitted, at any time, to enroll in a market-integrated DR program offered by the IOU, third-party DRP, or CCA. After PG&E becomes aware that the Participant's service account has been enrolled in a market-integrated DR program, PG&E will de-enroll the service account from ELRP A.6.
- iii Termination by Participant.* Participant may terminate their enrollment in the Pilot at any time for any reason by going to the ELRP A6 website.

13. General.

- i Entire Agreement.* These Terms are the entire agreement between PG&E, Olivine and Participant concerning the Pilot's eligibility and participation requirements.
- ii No Assignment.* These Terms may not be assigned by Participant without PG&E's prior written consent.
- iii Severability and Waiver.* If any provision herein is invalid or unenforceable, the remaining provisions will remain in full force and effect.
- iv. Survival.* Termination of the Participant's enrollment in the Pilot will not affect the parties' obligations and rights under these Terms which by their sense and context are intended to survive such termination.
- v. CPUC Jurisdiction.* These Terms shall be subject to all legal and regulatory requirements applicable to ELRP (including, without limitation, any decisions, orders or rules of the CPUC).
- vi. Amendments.* These Terms may be changed by PG&E from time to time and any changes will be published in revisions to this document and/or posted to PG&E's or Olivine's website.

Attachment C

PG&E's ELRP Pilot Terms and Conditions for Group B

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

Group B Terms and Conditions Pursuant
to California Public Utilities Commission
Decision 21-03-056 & Decision 21-12-015

January 31, 2022

Contents

Program Overview	3
Acceptance of Terms and Conditions	4
Group B.....	4
1.1 Sub-Group B.1	4
1.2 Sub-Group B.2	4
1 Program Eligibility and Enrollment	5
1.1 Program Participant Criteria.....	5
1.1.1 Sub-Group B.1 – Third-party DR Providers (DRPs)	5
1.1.2 Sub-Group B.2 – Capacity Bidding Program (CBP)	5
2 Program Parameters	6
2.1 Program Availability	6
2.2 Program Trigger.....	6
2.3 Group B Notification	6
2.4 Test Events.....	6
3 Compensation	6
3.1 Incentive Rate	7
3.2 Incentive Calculation.....	7
3.2.1 Baseline Methodology for Group B (B.1 and B.2)	8
3.2.2 Settlement Calculation for Group B (B.1 and B.2).....	8
3.2.3 Payment for Group B (B.1 and B.2).....	12

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. 21-11-015 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. Information on ELRP is available at: <https://elrp.olivineinc.com/>

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.

Acceptance of Terms and Conditions

All third-party entities are requested to affirm intent to participate in ELRP and to accept the Terms and Conditions for ELRP participation.

Group B

ELRP eligible participants are divided into two sub-groups under Group B with both sub-groups comprised of market integrated Proxy Demand Response resources as shown.

- Sub-Group B.1 – Third-party DR Provider (DRP)
- Sub-Group B.2 – Capacity Bidding Program (CBP)

1.1 Sub-Group B.1

Third-party DR Providers involved with Sub-Group B.1 are requested to affirm intent to participate in ELRP, including acceptance of Terms and Conditions and any agreements that may be developed to support third-party DRP participation in ELRP by April 15 of the program year, if they are interested in receiving courtesy ELRP notifications. Otherwise, Third-party DR Providers must accept Terms and Conditions and any agreements that are developed by the time they submit their invoices for processing by PG&E.

1.2 Sub-Group B.2

Capacity Bidding Program (CBP) Aggregators involved with Sub-Group B.2 are requested to accept the Terms and Conditions and any Agreements that may be developed to support CBP enrollment in ELRP.

1 Program Eligibility and Enrollment

1.1 Program Participant Criteria

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

1.1.1 Sub-Group B.1 – Third-party DR Providers (DRPs)

A third-party DRP with a market-integrated PDRs resource is eligible to participate in ELRP.

1.1.1.1 Application Process for Sub-Group B.1

Sub-Group B.1 applicants can enroll into the ELRP by contacting the Program Administrator, Olivine at <https://elrp.olivineinc.com/contact-us/>.

The third-party DRP 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 an ELRP event at time of invoicing.

1.1.2 Sub-Group B.2 – Capacity Bidding Program (CBP)

A third-party CBP Aggregator with a market-integrated PDR resource is eligible to participate in ELRP. An account is only eligible to participate in ELRP if the service account has been nominated and bid during the ELRP operating month.

1.1.2.1 Application Process

Sub-Group B.2 applicants can enroll into the ELRP by contacting the Program Administrator, Olivine at <https://elrp.olivineinc.com/contact-us/>.

At the time of enrollment, or at designated times during the ELRP pilot, the third-party DRP 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 an ELRP event.

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 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

The ELRP shall be activated after the CAISO issues or declares an “Alert, Warning, Emergency (AWE)”. The AWE process is defined by CAISO Operating Procedure 4420. Group B participants utilize Day-Ahead (DA) Alert and Day-Of (DO) triggers for ELRP.

In the future, when the CAISO completes the transition from the current AWE process to the North American Electric Reliability Corporation (NERC) Energy Emergency Alert (EEA) standards, then the AWE declarations shall be replaced with the equivalent NERC EEA level notice.

2.3 Group B Notification

An ELRP event for Group B participants is activated after the CAISO issues or declares a day-ahead (DA) Alert or day-of (DO) trigger. The start time and duration are specified in the CAISO Alert notice and is limited to the parameters set forth in Section 2.1 “Program Availability” above. Parties that have affirmed their intent to participate, including acceptance of Terms and Conditions and any agreements would be eligible to receive courtesy ELRP notifications from the Program Administrator (Olivine).

2.4 Test Events

Group B is not subject to ELRP Test Events.

3 Compensation

Participation during an ELRP event is entirely voluntary, and no financial penalties will result from not achieving 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 Community², 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 nameplate 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 ILR and ECR. The ILR is determined using the prescribed baseline per section 3.2.1 and the settlement methodology per section 3.2.2 for Group B (B.1 and B.2). Payments associated with Group B varies between B.1 and B.2 as described in section 3.2.3.

² 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.

3.2.1 Baseline Methodology for Group B (B.1 and B.2)

To construct the ELRP baseline for measuring a Group B PDR's ILR contribution during an ELRP event, the applicable CAISO baseline will be modified to account for the following steps:

- 1) Count net exports to the distribution grid by customer locations within the PDR aggregation that comply with Rule 21 and other applicable permits;
- 2) Exclude prior days with other ELRP events when selecting the set of "non-event, but similar" days when calculating the baseline;
- 3) Exclude applicable preceding hours with either CAISO market awards or another ELRP event on the day of the ELRP event when calculating the same-day adjustment (SDA) to the calculated baseline in step 2, and
- 4) Allow the SDA in step 3 to be no greater than 100%.

3.2.2 Settlement Calculation for Group B (B.1 and B.2)

For participation in ELRP under Group B, a DRP must construct a PDR Portfolio consisting of only 1) PDRs with RA assignment or PDRs without RA assignment (but not both) and 2) PDRs limited to PG&E's service territory.

The CAISO settled aggregated load during an ELRP event is modified to count net energy exported to the distribution grid by any customer location within the PDR aggregation, subject to each customer's *net* exporting limit under its Rule 21 interconnection agreement and adherence to each customer's Net Energy Metering tariff, as applicable.

Following an ELRP event, the DRP's scheduling coordinator (SC) is responsible for determining the following:

- 1) ELRP Event Performance (total load reduction during the ELRP event) of each PDR in the DRP's PDR Portfolio by applying the applicable ELRP modified baseline to the PDR's modified aggregated load settled during the ELRP event.
- 2) ILR of each PDR by subtracting the CAISO scheduled award quantities, inclusive of day-ahead market (DAM) and real-time market (RTM), from the

PDR's ELRP Event Performance. If the total market award for the PDR during the ELRP event is zero, then ILR of the PDR equals the ELRP Event Performance.

3) The ELRP Event Compensation due for each PDR by adding all interval-specific ELRP Compensations across all applicable intervals of the ELRP event, subject to the following:

a) The interval-specific ELRP Compensation in each applicable interval of the ELRP event is obtained by subtracting 1) any CAISO market payments for any portion of the load reduction counted in the interval-specific ILR and 2) the interval-specific CAISO Opportunistic Revenue (COR), defined below, from 3) the interval-specific Product of the ECR and the interval-specific ILR (see illustration below).

If the interval-specific ILR is negative, then the interval-specific ELRP Compensation is set to zero in that interval.

If the interval-specific COR is greater than the interval-specific Product, then the interval-specific ELRP Compensation is set to zero in that interval.

b) The interval-specific COR is the product of the interval-specific Market Eligible Capacity (MEC), defined below based on the interval-specific CAISO Market Event Performance (MEP) determined under applicable CAISO market baseline, and the interval-specific CAISO Clearing Price Delta (CCPD), defined below.

i. MEC:

1. If the total CAISO scheduled award quantity in an interval is non-zero and the interval-specific MEP is less than or equal to the total CAISO scheduled award quantity in the interval, then the interval-specific MEC is set to zero.
2. If the total CAISO scheduled award quantity in an interval is non-zero and if the interval-specific MEP is greater than the total CAISO scheduled award quantity in the interval and

less than or equal to the Qualifying Capacity (QC)³ of the PDR in that interval, then the interval-specific MEC is equal to the interval-specific MEP minus the interval-specific total CAISO scheduled award quantity.

3. If the total CAISO scheduled award quantity in an interval is non-zero and if the interval-specific MEP is greater than the Qualifying Capacity (QC)⁴ of the PDR in that interval, then the interval-specific MEC is equal to the interval-specific QC of the PDR minus the interval-specific total CAISO scheduled award quantity.

If the total CAISO scheduled award quantity in an interval is zero, then the interval-specific MEP in the above cases is set to the interval-specific ILR.

If the PDR has no assigned QC in the above cases, then the QC is replaced by the PDR's "PMin" parameter on record in the CAISO Master File applicable to the interval. The MEC shall have a floor value of zero. Additionally, if the PMin value is less than the total CAISO scheduled award quantity in an interval, then the interval-specific MEC is set to zero.

ii. CCPD:

For a PDR participating in the DAM only (that is, "long-start" PDR), the interval-specific CCPD is the DAM clearing price in that interval.

For a PDR participating in the RTM, the interval-specific CCPD is equal to the higher of the DAM or RTM clearing price in that interval minus the lower of the DAM or RTM clearing price in that interval.

³ The QC value is defined as the Supply Plan quantity.

⁴ Ibid.

4) PDR Portfolio Level Net Event Compensation across all PDRs in the
DRP's Portfolio.

3.2.3 Payment for Group B (B.1 and B.2)

Eligible Group B participants will be compensated in the manner described below.

3.2.3.1 Payment for Group B-1 Participants (Third-Party DRPs)

The third-party DRP for each PDR Resource is responsible for submitting an aggregate invoice for the Cumulative Portfolio Level Net Event Compensation of each PDR Portfolio for May-June-July (First Quarter) period by September 30 and for August-September-October (Second Quarter) by December 31 of the program year to PG&E's organization responsible for administering Demand Response Auction Mechanism (DRAM) invoices. Invoices and related information can be submitted to the following email inbox: ELRPB1@pge.com

The Cumulative Portfolio Level Net Event Compensation of a PDR Portfolio over one Quarter is determined by summing the Portfolio Level Net Event Compensation across all ELRP events in that Quarter. Any impact on DRAM performance, if applicable, is the responsibility of the seller. The invoice shall be accompanied with the supporting data for each event, including but not limited to PDR-specific ELRP Event Performance, ILR, applicable market awards during the event, applicable CAISO market payments for load reductions counted in the ILR, and ELRP Event Compensation.⁵ PG&E may audit and verify the invoice as needed. PG&E will settle the invoice within 60 days of the invoice date absent the need for additional information, which would set the 60 days from the time all additional information is received in order to process the invoice. In case of an audit, the 60 day period is frozen until there is resolution to PG&E's satisfaction.

3.2.3.2 Payment for Group B-2 Participants (CBP Aggregators)

PG&E will be responsible for calculating baselines and settlements for each CBP Aggregator/Participant.

⁵ An invoice template will be provided to participants for invoice processing and audit.

Attachment D

SCE's ELRP Pilot Terms and Conditions for Group A

Southern California Edison Company
Emergency Load Reduction Program
(ELRP) Pilot Group A
Terms and Conditions Pursuant to
California Public Utilities Commission
Decisions 21-03-056, 21-06-027, and
21-12-015

January 31, 2022

Contents

- Program Overview** 3
- 1 Program Eligibility and Enrollment** 4
 - 1.1 Program Participant Criteria 4
 - 1.1.1 Sub-Group A.1. – Non-Residential Customers 4
 - 1.1.2 Sub-Group A.2. – Aggregators of Non-Residential Customers..... 5
 - 1.1.3 Sub-Group A.3. – Rule 21 Exporting Distributed Energy Resources (DERs) 6
 - 1.1.4 Sub-Group A.4. – Virtual Power Plant (VPP) Aggregators..... 7
 - 1.1.5 Sub-Group A.5. – Vehicle Grid Integration (VGI) Aggregators..... 8
 - 1.1.6 Sub-Group A.6. – Residential Customers 10
- 2 Program Parameters**..... 11
 - 2.1 Program Availability..... 11
 - 2.2 Program Trigger 11
 - 2.2.1 Group A 11
- 3 Compensation** 13
 - 3.1 Incentive Rate 13
 - 3.2 Incentive Calculation 13
 - 3.2.1 Group A 13

Program Overview

As part of Rulemaking (R.) 20-11-003 (the Summer Reliability Rulemaking), on March 26, 2021, the California Public Utilities Commission (CPUC or Commission) issued Decision (D.) 21-03-056, which (among other measures) approved the Emergency Load Reduction Program (ELRP) pilot, an out-of-market demand response (DR) resource. On June 25, 2021, as part of the same rulemaking, the Commission issued D.21-06-027, which added a day-of trigger for participants in “Group A” of the ELRP, as defined by D.21-03-056.

On August 2, 2021, the assigned Administrative Law Judge (ALJ) initiated Phase 2 of the Summer Reliability Rulemaking. On December 6, 2021, the Commission issued its final decision in Phase 2 of the rulemaking, D.21-12-015, which directs the investor-owned utilities (Southern California Edison Company (SCE), Pacific Gas and Electric Company (PG&E), and San Diego Gas & Electric (SDG&E) (collectively, the IOUs)) to take additional actions to prepare for potential extreme weather in the summers of 2022 and 2023, including modifications to the ELRP pilot. The Commission subsequently issued D.21-12-069, making minor corrections to D.21-12-015.

These Terms and Conditions of the ELRP pilot conform with the ELRP program parameters for Group A participants set forth in D.21-03-056, D.21-06-027, D.21-12-015 and their respective Attachments, and may change in whole or in part subject to CPUC approval. The ELRP will be administered by each IOU in its respective service territory.

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 pilot became available on May 1, 2021 and is currently scheduled to end on October 31, 2025.

The ELRP does not provide capacity or enrollment incentives; rather, incentives are in the form of a non-penalty 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 to be included in the California Energy Commission (CEC) peak forecast framework. ELRP does not have any CAISO market obligations.

These terms and conditions are meant to enhance the understanding of the ELRP pilot. They do not replace pricing information or program requirements contained in SCE’s CPUC-approved tariffs or agreements. Please refer to the tariffs, which are available on <https://www.sce.com/regulatory/tariff-books>.

1 Program Eligibility and Enrollment

1.1 Program Participant Criteria

ELRP eligible participants are divided into several sub-groups. All customers must be located in SCE's service territory and must have an SCE-approved interval meter or SmartConnect™ meter that can measure energy consumption, at least hourly, and if applicable, can measure exported energy.

Group A: Select Customers and Aggregators

- Sub-Group A.1. – Non-Residential Customers
- Sub-Group A.2. – Aggregators of Non-Residential Customers
- Sub-Group A.3. – Rule 21 Exporting Distributed Energy Resources (DERs)
- Sub-Group A.4. – Virtual Power Plant (VPP) Aggregators
- Sub-Group A.5. – Vehicle Grid Integration (VGI) Aggregators
- Sub-Group A.6. – Residential Customers

Additional descriptions for each sub-group in Group A are provided below.

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

Bundled and unbundled non-residential customers may directly participate in ELRP, if the customer's service account meets all of the following:

- Has a monthly peak demand of greater than or equal to 100 kW (≥ 100 kW); and
- Is not simultaneously enrolled in another DR program offered by SCE, a demand response provider (DRP), or a Community Choice Aggregator (CCA), with the exception that dual enrollment in SCE's Base Interruptible Program (BIP), Agricultural and Pumping Interruptible (AP-I) program, or Summer Discount Plan Program-Commercial (SDP-C) is permitted.

BIP Customers: If an eligible BIP customer is participating with a BIP aggregator, then the BIP customer must participate under Sub-Group A.2. BIP-ELRP dual participants should also review the Special Conditions on compensation in [Section 3.2.1.1](#).

1.1.1.1 Enrollment Process

Qualifying customers can directly apply and enroll with SCE by going to www.sce.com/drp/enroll. At the time of enrollment, customers must submit their Energy Bid, defined as the 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 location, type of fuel used, the capacity of the generator, and the minimum notification time required to dispatch their generator that may be used during ELRP events.

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

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

1.1.2.1 BIP Aggregators

Third-party aggregators participating on SCE's BIP are eligible to participate in ELRP. Eligible BIP aggregators must add and nominate all bundled and unbundled non-residential Service Accounts that are participating under the aggregator's BIP aggregated group.

1.1.2.1.1 Enrollment Process

BIP Aggregators interested in participating in ELRP should contact SCE's BIP Program Manager.

Customer Service Accounts in a BIP Aggregator's portfolio will be automatically enrolled after their BIP Aggregator elects to participate in ELRP. At the time of enrollment, the BIP Aggregator must provide information about their customer's back-up generation (BUG), including location, type of fuel used, the capacity of the generator, and the minimum notification time required to dispatch their generator that may be used during ELRP events. Also, see Special Conditions on compensation for BIP-ELRP dual participants in [Section 3.2.1.1](#).

1.1.2.2 Non-Residential Aggregators

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

- Accounts in the aggregated resource cannot be simultaneously enrolled in a supply-side DR program offered by an IOU, third-party DRP, or CCA;
- Accounts in the aggregated resource meet the eligibility criteria under Sub-Group A.1. (except the Minimum Size Threshold requirement); and
- The aggregated resource capacity meets or exceeds Minimum the Aggregation Size Threshold of 500 kW.

If a Non-BIP Aggregator chooses not to participate, its non-residential customers may independently participate in ELRP under Sub-Group A.1., subject to the applicable criteria and requirements.

1.1.2.2.1 Enrollment Process

Non-BIP Aggregators interested in participating in ELRP should contact SCE at ELRP@sce.com. SCE may negotiate agreements with the Non-BIP Aggregator to clarify other requirements as needed, including potential administration fees, to implement the Minimum Dispatch Hours and related ELRP compensation.

Non-BIP Aggregators must provide information about their customer's back-up generation (BUG), including location, type of fuel used, the capacity of the generator, and the minimum notification time required to dispatch their generator that may be used during ELRP events.

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

Bundled and unbundled non-residential customers may directly participate in ELRP, if the customer's service account meets all of the following:

- Is not simultaneously enrolled in any market-integrated DR program offered by SCE, a third-party DRP, or CCA;

*

- 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.

Net Energy Metering (NEM) customers meeting the above requirements are eligible to participate.

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 contiguous¹ 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 SCE on a case-by-case basis.

1.1.3.1 Enrollment Process

Qualifying customers can directly apply and enroll with SCE by going to www.sce.com/drp/enroll. At the time of enrollment, customers must submit their Energy Bid and, if applicable, must provide information about their back-up generation (BUG), including location, type of fuel used, the capacity of the generator, and the minimum notification time required to dispatch their generator that may be used during ELRP events.

1.1.4 Sub-Group A.4. – Virtual Power Plant (VPP) Aggregators

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

¹ 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. "

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- The VPP or any customer site within the aggregation is not simultaneously enrolled in a market-integrated DR program offered by SCE, a third-party DRP, or CCA;
- All sites within the VPP aggregation are located within SCE's service territory;
- The VPP aggregated capacity 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.

1.1.4.1 Enrollment Process

VPP Aggregators interested in participating in ELRP should contact SCE at ELRP@sce.com. SCE 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.

VPP Aggregators must provide information about their customer's back-up generation (BUG), including location, type of fuel used, the capacity of the generator, and the minimum notification time required to dispatch their generator that may be used during ELRP events.

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

A VGI Aggregator managing an aggregation consisting of any combination of electric vehicles and charging stations, also known as Electric Vehicle Supply Equipment (EVSE) – 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 all of the following criteria, is eligible to participate in ELRP:

- The EVSE and/or customer site within the aggregation is not simultaneously enrolled in a market-integrated DR program offered by SCE, a third-party DRP, or CCA;
- All sites within the VGI aggregation are located within SCE's service territory; and

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- The VGI aggregation can contribute Incremental Load Reduction (ILR) of at least 25 kW for at least one hour during an ELRP event.

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

Subject to all Rule 21 interconnection requirements, any direct current (DC) V2G electric vehicle supply equipment (EVSE) that has UL 1741 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.

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 with other load and generation at an electrically contiguous² 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 SCE on a case-by-case basis.

1.1.5.1 Enrollment Process

VGI Aggregators interested in participating in ELRP should contact SCE at ELRP@sce.com. SCE 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.

VGI Aggregators must provide information about their customer's back-up generation (BUG), including location, type of fuel used, the capacity of the generator, and the minimum notification time required to dispatch their generator that may be used during ELRP events.

² 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. "

1.1.6 Sub-Group A.6. – Residential Customers

A residential (bundled or unbundled) customer who meets all of the following criteria, is eligible to participate in ELRP:

- The customer's service account is not simultaneously enrolled in a market-integrated DR program offered by SCE, a third-party DRP, or CCA;
- The customer is located within SCE's service territory; and
- If the customer is served by a CCA, the CCA has not elected to exclude its customers from participating in ELRP.³

To be determined (TBD). SCE will be submitting an advice letter to Energy Division (ED) seeking approval of the program parameters for the residential ELRP sub-group. This section is subject to change pending ED's disposition of SCE's Residential ELRP Program Parameters Advice Letter.

³ SCE will send a communication and notification to CCAs once a year notifying them that they have till January 31st of each year to elect to be excluded from ELRP Sub-Group A.6. for that ELRP season. CCAs must make their election each year. CCAs may contact SCE at ELRP@sce.com for more information.

2 Program Parameters

2.1 Program Availability

An ELRP event can be dispatched from May 1 through October 31 each year for the five-year pilot period (2021-2025).

An ELRP event can occur any day of the week between 4:00 p.m. and 9:00 p.m., except for ELRP Sub-Group A.6. which will be dispatched for a static three (3) hours (5:00 p.m. to 8:00 p.m.).

Except for ELRP Sub-Group A.6., ELRP events shall be a minimum of one (1) hour up to a maximum of five (5) hours each event day. *TBD for Sub-Group A.6. SCE will be submitting an advice letter to Energy Division (ED) seeking approval of the program parameters for the residential ELRP sub-group. This section is subject to change pending ED's disposition of SCE's Residential ELRP Program Parameters Advice Letter.*

ELRP will have an annual dispatch limit of sixty (60) hours.

2.2 Program Trigger

Except for ELRP Sub-Group A.6., ELRP will utilize both day-ahead (DA) and day-of (DO) event triggers. ELRP may be activated after the CAISO issues or declares an Alert, Warning, or Emergency Notice, as defined by the "Alert, Warning, Emergency (AWE)" process in CAISO Operating Procedure 4420.⁴ *TBD for Sub-Group A.6. SCE will be submitting an advice letter to Energy Division (ED) seeking approval of the program parameters for the residential ELRP sub-group. This section is subject to change pending ED's disposition of SCE's Residential ELRP Program Parameters Advice Letter.*

SCE will exercise discretion to activate the DA or DO trigger for Group A participants, either selectively staggered over time or for all participants simultaneously.

The ELRP will not be used for SCE's localized needs (i.e., local transmission and distribution).

2.2.1 Group A

SCE shall notify Group A participants of the start time and duration of the ELRP event.

Notification can occur through email, phone, SMS, or Mobile App. The start time and

⁴ 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).

duration specified by SCE will define the ELRP event window for the Group A participants.

2.2.1.1 Group A Test Events

SCE 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 set forth in Section 3 below.

ELRP Sub-Groups A.2. (non-BIP Aggregators), A.4. (VPP Aggregators), and A.5. (VGI Aggregators) are exempt from testing requirements because these sub-groups are subject to the Minimum Dispatch Hours in [Section 2.2.1.2](#).

ELRP Sub-Group A.6. is exempt from testing requirements.

2.2.1.2 Minimum Aggregation Dispatch Hours

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

- Sub-Group A.2. (Non-BIP 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, SCE 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.

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3 Compensation

Participation during an ELRP event is entirely voluntary, and no financial penalties will result from not meeting or exceeding the Energy Bid amount 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, **except Prohibited Resources operated by a non-residential customer located in a Disadvantaged Community (DAC)**. For all other non-residential customers, Prohibited Resources may be used during an ELRP event to achieve ILR, but only when permitted by a Governor's Executive Order and in compliance with Rule 21 and other applicable regulations and permits, 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.

There are no penalties for non- or under-performance.

If applicable, SCE may withhold a Participant's ELRP incentives until data or information about the customers' back-up or onsite generation resources (i.e., Prohibited Resources) is provided. Data will be collected in 2021 and 2022. Participants are required to provide information about the location, type of fuel used, the capacity of the generator, and the notice or 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 ILR and ECR. The ELRP incentive calculation for Group A varies. Details are provided below.

3.2.1 Group A

ELRP incentive calculations will be calculated and issued within a reasonable timeframe.

3.2.1.1 Group A Special Conditions

- 1) A BIP-ELRP dual participant will only be eligible for an ERLP incentive when:
 - a) BIP and ERLP event hours overlap; and
 - b) The customer's hourly energy usage is below their BIP Firm Service Level (FSL).
- 2) If the customer has a Rule 21 interconnected device with export capability and permit, the customer may choose and elect to count exported energy in ILR. If elected, the applicable ERLP baseline is modified to account for exported energy during non-event days and count exported energy in ILR.
- 3) If the customer is currently taking a Critical Peak Pricing (CPP), Real-Time Pricing (RTP), or dynamic pricing rate, any ILR during overlapping hours between the dynamic rate and the ERLP event is attributed to ERLP.

3.2.1.2 Baseline and Settlement Calculations for Sub-Group A.1.

Steps for calculating a participant's ERLP baseline, except for BIP-ELRP dual participants. For BIP-ELRP dual participants, see [Section 3.2.1.1](#):

- 1) Calculate the Customer Specific Energy Baseline (CSEB) – A Customer service account must have at least 10 days of interval meter data available in SCE'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 Customer Specific Energy Baseline (ACSEB) will all be calculated at the service account level. The CSEB and ACSEB will be calculated on an hourly basis using a 10-day rolling average energy usage profile of the immediate past 10 calendar days, including holidays, prior to the ERLP Event. The past 10 calendar days will exclude days when the customer: (1) was subject to an ERLP event, or (2) an event for a dual-enrolled DR program, if applicable, or (3) was subject to a grid outage.

- 2) 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 last 10 calendar days, excluding days in accordance with Step 1 above.
- 3) Calculate the Adjusted Customer Specific Energy Baseline (ACSEB) – A service account’s ACSEB for an ELRP event is calculated by multiplying the CSEB by the DOA.

3.2.1.3 Baseline and Settlement Calculations for Sub-Group A.2.

For BIP-ELRP dual participants, see Special Conditions in [Section 3.2.1.1](#).

For Non-BIP Aggregators, the baseline calculation will be the same as Sub-Group A.1. (see [Section 3.2.1.2](#)).

3.2.1.4 Baseline and Settlement Calculations for Sub-Group A.3.

Same baseline calculation as Sub-Group A.1. (see [Section 3.2.1.2](#).) with exceptions as follows:

- A Rule 21 Exporting DER customer on a CPP or RTP equivalent tariff, the ELRP baseline is deemed to be zero and only exported energy is counted in ILR.
- A Rule 21 Exporting DER customer not on a CPP or RTP equivalent tariff, the ELRP baseline for Sub-Group A.1. (see [Section 3.2.1.2](#).) is applied 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. Sites are considered electrically contiguous when they receive electric service 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.

3.2.1.5 Baseline and Settlement Calculations for Sub-Group A.4.

The residential and non-residential baselines in SCE's Capacity Bidding Program (Schedule CBP) will be baseline method for Sub-Group A.4., as modified to account for exported energy during non-event days. Exported energy will count in ILR calculations.

The above baseline method may be used in conjunction with a meter or a sub-meter embedded within a storage system (such as, an internal sub-meter within the battery inverter) that directly measures the energy flows into/out of the storage device to determine the ILR for the ELRP settlement. The election to utilize submetering will apply to all locations within a single aggregation.

3.2.1.6 Baseline and Settlement Calculations for Sub-Group A.5.

Same baseline calculation as Sub-Group A.3. (see [Section 3.2.1.4.](#)), except no DOA will be applied when the CSEB is less than zero.

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 must meet applicable standards established by the CPUC. The election to utilize submetering will apply to all locations within a single aggregation.

Only during IOU dispatched hours, a VGI Aggregator is permitted to virtually aggregate separately metered EVSEs 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.

3.2.1.7 Baseline and Settlement Calculations for Sub-Group A.6.

TBD. SCE will be submitting an advice letter to Energy Division (ED) seeking approval of the program parameters for the residential ELRP sub-group. This section is subject to change pending ED's disposition of SCE's Residential ELRP Program Parameters Advice Letter.

Attachment E

SCE's ELRP Pilot Terms and Conditions for Group B

Southern California Edison Company
Emergency Load Reduction Program
(ELRP) Pilot Terms and Conditions for
Group B Pursuant to California Public
Utilities Commission Decision 21-03-056
and 21-12-015

January 31, 2022

Contents

Program Overview	3
1 Program Eligibility and Enrollment	4
1.1 Program Participant Criteria	4
1.1.1 Sub-Group B.1. – Third-Party DRPs.....	4
1.1.2 Sub-Group B.2. – CBP Aggregators/Participants	5
2 Program Parameters	6
2.1 Program Availability.....	6
2.2 Program Trigger	6
2.2.1 Group B	7
3 Compensation	8
3.1 Incentive Rate.....	8
3.2 Incentive Calculation	8
3.2.1 Group B	9

Program Overview

As part of Rulemaking (R.) 20-11-003 (the Summer Reliability Rulemaking), on March 26, 2021, the California Public Utilities Commission (CPUC or Commission) issued Decision (D.) 21-03-056, which (among other measures) approved the Emergency Load Reduction Program (ELRP) pilot, an out-of-market demand response (DR) resource.

On August 2, 2021, the assigned Administrative Law Judge (ALJ) initiated Phase 2 of the Summer Reliability Rulemaking. On December 6, 2021, the Commission issued its final decision in Phase 2 of the rulemaking, D.21-12-015, which directs the investor-owned utilities (Southern California Edison Company (SCE), Pacific Gas and Electric Company (PG&E), and San Diego Gas & Electric (SDG&E) (collectively, the IOUs)) to take additional actions to prepare for potential extreme weather in the summers of 2022 and 2023, including modifications to the ELRP pilot. The Commission subsequently issued D.21-12-069, making minor corrections to D.21-12-015.

These Terms and Conditions of the ELRP pilot conform with the ELRP program parameters for “Group B” ELRP participants set forth in D.21-03-056, D.21-12-015, and their respective Attachments, and may change in whole or in part subject to CPUC approval. The ELRP will be administered by each IOU in its respective service territory.

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 pilot became available on May 1, 2021 and is currently scheduled to end on October 31, 2025.

The ELRP does not provide capacity or enrollment incentives; rather, incentives are in the form of a non-penalty 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 to be included in the California Energy Commission (CEC) peak forecast framework. ELRP does not have any CAISO market obligations.

These terms and conditions are meant to enhance the understanding of the ELRP pilot. They do not replace pricing information or program requirements contained in SCE’s CPUC-approved tariffs or agreements. Please refer to the tariffs, which are available on <https://www.sce.com/regulatory/tariff-books>.

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1 Program Eligibility and Enrollment

1.1 Program Participant Criteria

ELRP eligible participants are divided into two groups (Group A and Group B), each of which is further divided into sub-groups. All customers must be located in SCE's service territory and must have an SCE-approved interval meter or SmartConnect™ meter that can measure energy consumption, at least hourly, and if applicable, can measure exported energy. The following terms and conditions pertain to Group B and its two sub-groups, as defined in D.21-03-056, D.21-12-015, and their respective attachments.

Group B: Market-Integrated Proxy Demand Response (PDR) Resources

- Sub-Group B.1. – Third-Party DR Providers (DRPs)
- Sub-Group B.2. – IOU Capacity Bidding Programs (CBPs)

At the time of enrollment, or at designated times during the ELRP pilot, Group B participants will list the Proxy Demand Resources (PDRs) that will participate in ELRP and nominate an estimated target load reduction quantity (August) to be achieved during an ELRP event by each participating PDR resource.

Additional descriptions for each sub-group in Group B are provided below.

1.1.1 Sub-Group B.1. – Third-Party DRPs

A third-party DRP with a market-integrated PDR resource is eligible to participate in ELRP.

1.1.1.1 Enrollment Process

While there is no enrollment process applicable to this group, third-party DRPs with a market-integrated PDR resource may be requested to affirm their intent to participate in ELRP which may include acceptance of Terms and Conditions and/or agreements that may be developed to support third-party DRP participation in ELRP.

Service accounts registered under the third-party DRP's PDR CAISO Resource ID will be considered as "enrolled" or eligible to voluntarily participate in an ELRP Event. For each registered service account, the third-party DRP must provide information about the service account's back-up generation (BUG) location, type of fuel used, the capacity of the generator, and the minimum

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notification time required to dispatch the generator that may be used during ELRP events.

See Compensation in [Section 3.2.1](#) for baseline, settlement, and invoicing requirements pertaining to the third-party DRP's PDR Resource ID.

1.1.2 Sub-Group B.2. – CBP Aggregators/Participants

Third-party aggregators (Aggregators) or self-aggregated customers (Participants) enrolled and participating in SCE's Capacity Bidding Program (CBP) are eligible to participate in ELRP.

1.1.2.1 Enrollment Process

There is no enrollment process applicable to this group. For the purposes of ELRP, only service accounts that are nominated and bid will be considered as "enrolled" or eligible to voluntarily participate in an ELRP Event.

For each nominated account, the CBP Aggregator or Participant must provide information about the service account's BUG location, type of fuel used, the capacity of the generator, and the minimum notification time required to dispatch the generator that may be used during ELRP events.

See Compensation in [Section 3.2.2](#) for baseline, settlement, and invoicing requirements.

2 Program Parameters

2.1 Program Availability

An ELRP event can be dispatched from May 1 through October 31 each year for the five-year pilot period (2021-2025).

An ELRP event can occur any day of the week between 4:00 p.m. and 9:00 p.m.

ELRP events shall be a minimum of one (1) hour up to a maximum of five (5) hours each day.

ELRP will have an annual dispatch limit of sixty (60) hours. There is no consecutive day limit for dispatches.

2.2 Program Trigger

ELRP will be activated after the CAISO issues or declares an Alert, Warning, or Emergency Notice, as defined by the “Alert, Warning, Emergency (AWE)” process in CAISO Operating Procedure 4420.¹

The ELRP will not be used for SCE’s localized needs (i.e., local transmission and distribution).

The duration of the ELRP event (start and end time) shall follow the possible system reserve deficiency stated in the AWE or EEA Notice. For example, in the Statewide Alert Notice below, CAISO forecasted a possible system reserve deficiency between the hours of 17:00 (5pm) and 21:00 (9pm). Therefore, in this example, an ELRP Event for Group B would be from 17:00-21:00 (5pm-9pm).

STATEWIDE ALERT NOTICE [202002418]

The California ISO hereby issues a CAISO Grid
ALERT Notice,
effective 08/14/2020 17:00 through
08/14/2020 21:00.

Reason:

The CAISO is forecasting a possible system
reserve deficiency between the hours of
1700-2100 and is requesting additional
Ancillary Service and energy bids.

¹ 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).

2.2.1 Group B

SCE will **not** notify Group B participants of the start time and duration of the ELRP event. ELRP Events for Group B participants will be specified in the CAISO Alert Notice.

2.2.1.1 Group B Test Events

There are no ELRP Test Events for Group B participants.

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3 Compensation

Participation during an ELRP event is entirely voluntary, and no financial penalties will be assessed.

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 may be used 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).

There are no penalties for non- or under-performance assessed under ELRP. Participation during an ELRP event is entirely voluntary, and no financial penalties will result from not meeting or exceeding the nominated target load reduction quantity during the event.

If applicable, SCE may withhold a Participant's ELRP incentives until data or information about the customers' back-up or onsite generation resources (i.e., Prohibited Resources) is provided. Data will be collected in 2021 and 2022. Participants are required to provide information about the location, type of fuel used, the capacity of the generator, and the minimum notification time required to dispatch 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 ILR and ECR. The ELRP incentive calculations and invoicing for Group B are provided below.

3.2.1 Group B

To construct the ELRP baseline for measuring a Group B PDR's ILR contribution during an ELRP event, the applicable CAISO baseline can be modified to account for the following:

- 1) Count net exports to the distribution grid by customer locations within the PDR aggregation that comply with Rule 21 and other applicable permits;
- 2) Exclude prior days with other ELRP events when selecting the set of "nonevent, but similar" days used to calculate the baseline;
- 3) Exclude applicable preceding hours with either CAISO market awards or another ELRP event on the day of the ELRP event when calculating the same-day adjustment (SDA) to the calculated baseline in #2 above; and
- 4) Allow the SDA in #3 above to be +/- 100%.

3.2.1.1 Baseline and Settlement Calculations for Group B

For participation in ELRP under Group B, a DRP must construct a PDR Portfolio consisting of only 1) PDRs with RA assignment or PDRs without RA assignment (but not both), and 2) PDRs limited to SCE's service territory.

The CAISO settled aggregated load during an ELRP event may be modified to count net energy exported to the distribution grid by any customer location within the PDR aggregation, subject to each customer's *net* exporting limit under its Rule 21 interconnection agreement and adherence to each customer's Net Energy Metering tariff, as applicable.

Following an ELRP event, the DRP's scheduling coordinator (SC)² is responsible for determining the following:

- 1) ELRP Event Performance (total load reduction during the ELRP Event) of each PDR in the DRP's PDR Portfolio by applying the applicable ELRP modified baseline to the PDR's modified aggregated load settled during the ELRP event.

² For Sub-Group B.2. (CBP Participants), SCE is the Scheduling Coordinator and DRP.

- 2) ILR of each PDR by subtracting the CAISO scheduled award quantities, inclusive of day-ahead market (DAM) and real-time market (RTM), from the PDR's ELRP Event Performance. If the total market award for the PDR during the ELRP event is zero, then ILR of the PDR equals the ELRP Event Performance.
- 3) The ELRP Event Compensation due for each PDR by adding all interval-specific ELRP Compensations across all applicable intervals of the ELRP event, subject to the following:

- a) The interval-specific ELRP Compensation in each applicable interval of the ELRP event is obtained by subtracting 1) any CAISO market payments for any portion of the load reduction counted in the interval-specific ILR and 2) the interval-specific CAISO Opportunistic Revenue (COR), defined below, from 3) the interval-specific Product of the ECR and the interval-specific ILR (see illustration below).

If the interval-specific ILR is negative, then the interval-specific ELRP Compensation is set to zero in that interval.

If the interval-specific COR is greater than the interval-specific Product, then the interval-specific ELRP Compensation is set to zero in that interval.

- b) The interval-specific COR is the product of the interval-specific Market Eligible Capacity (MEC) (defined below based on the interval-specific CAISO Market Event Performance (MEP) determined under applicable CAISO market baseline) and the interval-specific CAISO Clearing Price Delta (CCPD) (also defined below).

i. Market Eligible Capacity (MEC):

1. If the total CAISO scheduled award quantity in an interval is non-zero and the interval-specific MEP is less than or equal to the total CAISO scheduled award quantity in the interval, then the interval-specific MEC is set to zero.
2. If the total CAISO scheduled award quantity in an interval is non-zero and if the interval-specific MEP is greater than the total CAISO scheduled award quantity in the interval and less than or equal to the Qualifying Capacity (QC)³ of the PDR in that interval, then the interval-specific MEC is equal to the interval-specific MEP minus the interval-specific total CAISO scheduled award quantity.
3. If the total CAISO scheduled award quantity in an interval is non-zero and if the interval-specific MEP is greater than the Qualifying Capacity (QC) of the PDR in that interval, then the interval-specific MEC is equal to the interval-specific QC of the PDR minus the interval-specific total CAISO scheduled award quantity.

If the PDR has no assigned QC in the above cases, then the QC is replaced by the PDR's "PMin" parameter on record in the CAISO Master File applicable to the interval. Additionally, if the PMin value is less than the total CAISO scheduled award quantity in an interval, then the interval-specific MEC is set to zero.

ii. CAISO Clearing Price Delta (CCPD):

³ The QC value is defined as the Supply Plan quantity.

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- Second Quarter consists of August, September, and October. Invoices for the Second Quarter are due by December 31 of the same calendar year.

DRP's shall submit their invoices to SCE's organization responsible for administering Demand Response Auction Mechanism (DRAM) invoices or designee.

The Cumulative Portfolio Level Net Event Compensation of a PDR Portfolio over one Quarter is determined by summing the Portfolio Level Net Event Compensation across all ELRP events in that Quarter. If applicable, any impact on DRAM performance is the responsibility of the third-party DRP or DRAM Seller.

The invoice shall be accompanied with the supporting data and/or templates as defined by the ELRP Program Administrator, including but not limited to, PDR-specific ELRP Event Performance, ILR, applicable market awards during the event, applicable CAISO market payments for load reductions counted in the ILR, and ELRP Event Compensation.

SCE reserves the right to audit and verify ELRP invoices. SCE will settle the invoice within 60 days of the invoice date absent the need for additional information, which would set the 60 days from the time all additional information is received in order to process the invoice (i.e., SCE will settle invoices within 60 days after a disputed or incomplete invoice has been resolved to SCE's satisfaction).

3.2.1.1.2 Invoicing for Sub-Group B.2.

SCE will be responsible for calculating baselines and settlements and issuing payments to CBP Aggregators and/or Participants pursuant to SCE [Schedule CBP](#).

Attachment F

SDG&E's ELRP Pilot Terms and Conditions for Group A

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

May 1, 2022

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, and D.21-12-015 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

1. Pilot Program Duration

ELRP duration will be five years (2021-2025), 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: 1-hour minimum; 5-hour maximum

Annual dispatch limit: Up to 60 hours

Consecutive day dispatches: No constraints

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 Plants-(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.

If a customer qualifies for the ELRP under both sub-groups A.1. and A.3. criteria described below, the customer will make an election for participating in the ELRP as part of one or the other sub-group at the time of enrollment, or at designated times during the ELRP pilot.

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 50 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),

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with the exception that dual enrollment in SDG&E's Base Interruptible Program (BIP). If an eligible BIP customer is participating with a BIP aggregator, then the BIP customer must participate under Sub-Group A.2.

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) minimum notification time to dispatch the generator, and (4) the capacity of the generator, that may be used during ELRP events.

A.2. Non-Residential Aggregators Eligibility and Enrollment

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

Non-BIP 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

If a non-BIP aggregator chooses not to participate, its non-residential customers may independently participate in ELRP under sub-group A.1 Non-Residential customers subject to the applicable criteria and requirements.

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) minimum notification time to dispatch the generator (4) the capacity of the generator, 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

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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) minimum notification time to dispatch the generator (4) the capacity of the generator, 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, and
- 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.

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 . 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. 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,

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natural gas, battery, etc.), (3) minimum notification time to dispatch the generator (4) the capacity of the generator, 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, and
- 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. Certification to the UL 1741 safety standard is only required for bi-directional equipment with an aggregation.

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 EVSE 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.

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 via a Tier 2 Advice Letter filing. Termination of this pathway would not affect previously interconnected EVSE.

including location, type of fuel used, the capacity of the generator, and the notice or ramp time for the generator 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-BIP 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 “Alert, Warning, Emergency (AWE)”. The AWE 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 not meeting or exceeding the nominated target load reduction during the event.

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).

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.

Any load reduction technology may be used during an ELRP event to achieve ILR. Prohibited resources, except those operated by non-residential customers located in Disadvantaged Communities, 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.

Non-Residential Customer Compensation

Baseline

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

1. Calculate the Customer Specific Energy Baseline (CSEB) – A Customer service account must have at least 10 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 and Adjusted Customer Specific Energy Baseline (ACSEB) will all be calculated at the service account level. The CSEB and ACSEB will be calculated on an hourly basis using a 10-day rolling average energy usage profile

of the immediate past 10 calendar days, including holidays, prior to the ELRP Event. The past 10 calendar days will exclude days when the customer: (1) was subject to an ELRP event, or (2) an event for a dual-enrolled DR program, if applicable, or (3) was subject to a grid outage.

2. 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 last 10 calendar days, excluding days in accordance with Step 1 above.
3. Calculate the Adjusted Customer Specific Energy Baseline (ACSEB) – A service account's ACSEB for an ELRP event is calculated by multiplying the CSEB by the DOA.

Special Considerations

1. In the case of overlapping BIP and ELRP events, only the incremental reduction below the customer's pre-committed firm service level (FSL) 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).
 - 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. 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.
3. 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. BIP Non-Residential Aggregators Compensation

Same guidelines as A.1 apply.

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

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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 aggregator selected CPUC approved baseline for SDG&E's CBP is utilized and modified to account for exported energy, to the extent allowed by a site's Rule 21 export permit, during non-event days and count exported energy in ILR.

The baseline method stated above may be used in conjunction with a meter or sub-meter embedded within a storage system (such as, an internal sub-meter within the battery inverter) that directly measures the energy flows into/out of the storage device to determine the ILR for the ELRP settlement. 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

SDG&E will use a 5 in 10 baseline for residential customers. The baseline method for sub-group A1 applies to non-residential customers.

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. The EVSE sub-meter must meet applicable standards established by the CPUC when adopted.

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)

Attachment G

SDG&E's ELRP A.6 Residential Terms and Conditions

San Diego Gas and Electric

ELRP A.6. Residential Customers

Participation Terms and Conditions

Thank you for your participation in the San Diego Gas and Electric ELRP Residential (“Pilot”). On March 26, 2021, the California Public Utilities Commission (“CPUC”) issued Decision D.21-03-056 which approved the Emergency Load Reduction Program (“ELRP”) pilot. The CPUC subsequently issued D.21-12-015 making modifications to the ELRP which included a large-scale program for residential customers. Participation is legally bound by the Pilot’s participation terms and conditions (“Terms”).

1. The Pilot. The Pilot includes Participants who have been automatically enrolled or elect to participate for the Demand Response (DR) season for Pilot event hours (“Event”) as defined below. SDG&E will use each Pilot Participant’s interval meter data to measure performance across the Pilot Events.

2. Participant Eligibility. SDG&E shall determine in its sole discretion Participant’s eligibility which must include:

- i* Participant receives electric service on a residential rate.
- ii* Participant has an active service agreement with SDG&E.
- iii* Participant has an interval data meter.
- iv* Participant is not enrolled in any other SDG&E, Demand Response Provider (“DRP”), Community Choice Aggregator (“CCA”), or third-party supply-side DR program.
- v* Participant is not an electric customer of a CCA who has opted out of being included in the Pilot.

3. Pilot Enrollment Period. The Pilot shall continue until at least December 31, 2023, unless extended, or Participant’s enrollment is terminated sooner (“Pilot Enrollment Period”) or eligibility changes resulting Participant unenrollment.

4. ELRP A.6. Residential Customers Events. ELRP A.6. Residential Customers events will be triggered the day-ahead by a CAISO Flex Alert or by a CAISO EEA watch. Events may occur between May 1st and October 31st and the event hours will be between 4:00 PM and 9:00 PM.

5. Pilot Incentives.

Participants who have participated in events will receive an incentive for Event participation in 2022 and 2023. The incentive value has been set by the CPUC at \$2 per kilowatt hour as based on the incremental load reduction during Event hours. SDG&E retains sole discretion for the calculation of the incremental load reduction. The incentive will likely be paid as a bill credit to Participants who have an active service agreement.

6. Communications. Participant has the option to provide and maintain a valid email address or cellular phone number for Pilot communications, accepts responsibility for the receipt of these communications and any consequences of not receiving them. Participant may not unsubscribe from the pilot e-mail communications associated with their account or bill but may terminate pilot enrollment at any time for any reason contacting DRP@SDGE.com in which case the participant will no longer receive Pilot communications. Participant by unsubscribe from Pilot text notifications at any time by following instructions in event notifications or as directed on the website. It may take up to 10 days for the Participant to stop receiving text notifications.

7. Participant Information. I consent to allow SDG&E to share my energy usage and associated account and billing data to carry out the Pilot’s purpose. Such information includes, but is not limited to, my energy

consumption and billing data, SDG&E billing records, billing history, meter usage data, and rate information. My checking account and payment information will not be shared. I understand and acknowledge that SDG&E may also be required to disclose my energy usage information to its regulators, such as the California Public Utilities Commission, or other authorities, upon request. I understand that SDG&E will maintain the confidentiality of my energy use data and other personal information in accordance with its privacy and security policies and applicable law.

8. Costs. SDG&E is not responsible for providing any costs associated with equipment that might aid Participant in the Pilot, *i.e.*, devices, internet access, or, if any, impact to Participant’s electric bills.

9. No Warranty; Disclaimer. SDG&E expressly disclaims all warranties of any kind relating to the Pilot, whether express, implied or statutory (including, without limitation, any implied warranties for conditions or merchantability, fitness for a particular purpose, title, non-infringement or misappropriation of intellectual property rights).

10. Limitation of Liability. To the fullest extent permitted by applicable law, under no circumstances shall SDG&E be liable for any indirect, incidental, special or consequential damages, arising in connection with the Pilot. If Participant is dissatisfied with the Pilot, any of these Terms, or believes SDG&E has breached these Terms in any way, Participant’s sole and exclusive remedy is to discontinue participation in the Pilot.

11. Pilot Participation Termination.

- i. Termination By SDG&E.* SDG&E has the sole discretion to terminate the Pilot, or Participant’s participation in the Pilot, at any time without cause by providing Participant written notice.
- ii.* A customer participating in ELRP A.6 is permitted, at any time, to enroll in a market-integrated DR program offered by the IOU, third-party DRP, or CCA. After SDG&E becomes aware that the Participant’s service account has been enrolled in a market-integrated DR program, SDG&E will de-enroll the service account from ELRP A.6.
- iii. Termination by Participant.* Participant may terminate their enrollment in the Pilot at any time for any reason contacting DRP@SDGE.com.

13. General.

- i Entire Agreement.* These Terms are the entire agreement between SDG&E Participant concerning the Pilot’s eligibility and participation requirements.
- ii No Assignment.* These Terms may not be assigned by Participant without SDG&E’s prior written consent.
- iii Severability and Waiver.* If any provision herein is invalid or unenforceable, the remaining provisions will remain in full force and effect.
- iv. Survival.* Termination of the Participant’s enrollment in the Pilot’s will not affect the parties’ obligations and rights under these Terms which by their sense and context are intended to survive such termination.
- v. CPUC Jurisdiction.* These Terms shall be subject to all legal and regulatory requirements applicable to ELRP (including, without limitation, any decisions, orders or rules of the CPUC).
- vi. Amendments.* These Terms may be changed by SDG&E from time to time and any changes will be published in revisions to this document and/or posted to SDG&E’s website.

Attachment H

SDG&E's ELRP Pilot Terms and Conditions for Group B

San Diego Gas and Electric Company
Emergency Load Reduction Program
(ELRP) Pilot Terms and Conditions
Pursuant to California Public Utilities
Commission Decision 21-03-056

May 24, 2021

Group B

Contents

1. Program Overview	3
2. Program Eligibility and Enrollment	4
2.1. Program Participant Criteria	4
2.1.1 Sub-Group B.1 – Third Party Demand Response Providers (DRPs).....	4
2.1.2 Sub-Group B.2 – Capacity Bidding Program (CBP) PDR Resources	5
3. Program Parameters	6
3.1 Program Availability.....	6
3.2 Program Trigger.....	6
4. Compensation	8
4.1 Incentive Rate.....	9
4.2 Incentive Calculation	9
4.2.1 Group B.....	9
4.2.2 Baseline and Settlement Calculations for Group B	10

1. 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, an out-of-market demand response (DR) resource.

These are the Terms and Conditions of the ELRP for potential participants and other interested parties and can change in whole or in part subject to CPUC approval. Any changes made to the ELRP Terms and Conditions will be published in revisions to this document and/or posted at SDGE's ELRP website. 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.

The ELRP 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 after October 31, 2025.

The ELRP does not provide capacity or enrollment incentives; rather, incentives are a non-penalty 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 the California Energy Commission (CEC) peak forecast framework. ELRP does not have any California Independent System Operator (CAISO) market obligations.

These terms and conditions are meant to enhance the understanding of the ELRP pilot. These terms and Conditions are only for Group B of the ELRP. Group A is covered in a separate Terms and Conditions Document. Group B is defined as follows:

Group B: Market-integrated proxy demand response (PDR) resources

- Sub-Group B.1. – Third-party DR Providers (DRPs)
- Sub-Group B.2. – SDG&E Capacity Bidding Programs (CBPs)

2. Program Eligibility and Enrollment

2.1. Program Participant Criteria

ELRP eligible participants are divided into two groups (Group A and Group B), each of which is further divided into sub-groups. All customers must be located in SDG&E’s service territory and must have an SDG&E approved interval meter or Smart meter that can measure energy consumption, at least hourly, and if applicable, can measure exported energy. The following terms and conditions pertain to Group B and its two sub-groups (a separate set of terms and conditions has been provided for Group A), as defined in Attachment 1 to D.21-03-056.

Group B: Market-integrated proxy demand response (PDR) resources

- Sub-Group B.1. – Third-party DR Providers (DRPs)
- Sub-Group B.2. – SDG&E Capacity Bidding Programs (CBPs) Additional descriptions for each sub-group in Group B are provided below.

2.1.1 Sub-Group B.1 – Third Party Demand Response Providers (DRPs)

A third Party DRP with a market-integrated Proxy Demand Resource (PDR) is eligible to participate in the ELRP.

For each registered service account, the third-party DRP must provide information about the service account’s back-up generation (BUG) location, type of fuel used, the capacity of the generator, and the minimum notification time required to dispatch the generator and the capacity of the generator that may be used during ELRP events. See Compensation in Section 4 for baseline, settlement, and invoicing requirements pertaining to the third-party DRP’s PDR Resource ID.

2.1.2 Sub-Group B.2 – Capacity Bidding Program (CBP) PDR Resources

Third-party aggregators (Aggregators) or self-aggregated customers (Participants) enrolled and participating in SDG&E’s Capacity Bidding Program are eligible to participate in the ELRP.

Third Party Providers involved in Sub-Group B are requested to affirm their intent to Participate in the ELRP, including acceptance of the Terms and Conditions and any agreements that may be developed to support third- party providers participation in the ELRP.

For each nominated account, the CBP Aggregator or Participant must provide information about the customer’s back-up generation (BUG) location, type of fuel

used, and the capacity of the generator, and the minimum notification time required to dispatch the generator and the capacity of the generator that may be used during ELRP events.

See Compensation in [Section 4](#) for baseline, settlement, and invoicing requirements.

3. Program Parameters

3.1 Program Availability

- An ELRP event can be dispatched from May 1 through October 31 each year for the five-year pilot period (2021-2025).
- An ELRP event can occur any day of the week (Sunday – Saturday) during the hours of 4:00 p.m. to 9:00 p.m.
- ELRP events shall be a minimum of one (1) hour and a maximum of five (5) hours.
- ELRP will have an annual dispatch maximum limit of sixty (60) hours.

3.2 Program Trigger

ELRP may be activated after the CAISO issues or declares a day-ahead (DA) Alert. A CAISO Alert is defined by the “Alert, Warning, Emergency (AWE)” process in CAISO Operating Procedure 4420. There is presently no Group B Day-Of (DO) trigger for the ELRP.

An ELRP event cannot be triggered by SDG&E for a localized transmission or distribution emergency.

The duration of the ELRP event (*e.g.*, the start and end time) shall follow the possible system reserve deficiency stated in the Alert Notice. For example, in the Statewide Alert Notice below, CAISO forecasted a possible system reserve deficiency between the hours of 17:00 (5 p.m.) and 21:00 (9 p.m.). Therefore, in this example, an ELRP Event for Group B would be from 17:00-21:00 (5 p.m. to 9 p.m.). Sample below:

STATEWIDE ALERT NOTICE [202002418]

The California ISO hereby issues a CAISO Grid
ALERT Notice,
effective 08/14/2020 17:00 through
08/14/2020 21:00.

Reason:

The CAISO is forecasting a possible system
reserve deficiency between the hours of
1700-2100 and is requesting additional
Ancillary Service and energy bids.

In the future, when the CAISO completes the transition from the current AWE process to the North American Electric Reliability Corporation (NERC) Energy Emergency Alert (EEA) standards, then the AWE declarations shall be replaced with the equivalent NERC EEA level notice.

3.2.1 Group B Event Notifications

SDG&E will **not** notify Group B participants of the start time and duration of the ELRP event. ELRP Events for Group B participants will be specified in the CAISO Alert Notice.

3.3 Group B Test Events

There are no ELRP Test Events for Group B participants.

4. 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.

The 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 may be used 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).

There are no penalties for non- or under-performance.

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. Data will be collected in 2021 and 2022. Participants are required to provide information about the location, type of fuel used, the capacity of the generator, and the notice or ramp time for the generator that may be used during ELRP events.

4.1 Incentive Rate

The ELRP Compensation Rate (ECR) is \$2 per kilowatt-hour (\$1/kWh) for verified load shed.

4.2 Incentive Calculation

Compensation for load reduction delivered during an ELRP event is determined by calculating the product of ILR and ECR. The ELRP incentive calculation for Group B varies. Details are provided below.

4.2.1 Group B

To construct the ELRP baseline for measuring a Group B PDR's ILR contribution during an ELRP event, the applicable CAISO baseline will be modified to account for the following:

- 1) Count net exports to the distribution grid by customer locations within the PDR aggregation that comply with Rule 21 and other applicable permits;
- 2) Exclude prior days with other ELRP events when selecting the set of "non-event, but similar" days when calculating the baseline;
- 3) Exclude applicable preceding hours with either CAISO market awards or another ELRP event on the day of the ELRP event when calculating the same-day adjustment (SDA) to the calculated baseline in step 2, and

- 4) Allow the SDA in step 3 to be no greater than +/-100%.

4.2.2 Baseline and Settlement Calculations for Group B

For participation in ELRP under Group B, a DRP must construct a PDR Portfolio consisting of only 1) PDRs with RA assignment or PDRs without RA assignment (but not both) and 2) PDRs limited to SDG&E's service territory (thus, a DRP may have up to six PDR portfolios participating in ELRP).

The CAISO settled aggregated load during an ELRP event is modified to count net energy exported to the distribution grid by any customer location within the PDR aggregation, subject to each customer's exporting limit under its Rule 21 interconnection agreement.

Following an ELRP event, the DRP's scheduling coordinator (SC) is responsible for determining the following:

- 1) ELRP Event Performance (total load reduction during the ELRP event) of each PDR in the DRP's PDR Portfolio by applying the applicable ELRP modified baseline to the PDR's modified aggregated load settled during the ELRP event.
- 2) ILR of each PDR by subtracting the CAISO scheduled award quantities, inclusive of day-ahead market (DAM) and real-time market (RTM), from the PDR's ELRP Event Performance. If the total market award for the PDR during the ELRP event is zero, then ILR of the PDR equals the ELRP Event Performance.
- 3) The ELRP Event Compensation due for each PDR by adding all interval specific ELRP Compensations across all applicable intervals of the ELRP event, subject to the following:
 - a) The interval-specific ELRP Compensation in each applicable interval of the ELRP event is obtained by subtracting 1) any CAISO market payments for any portion of the load reduction counted in the interval-specific ILR and 2) the interval-specific CAISO Opportunistic Revenue (COR), defined below, from 3) the interval-specific Product of the ECR and the interval-specific ILR (see illustration below).

If the interval-specific ILR is negative, then the interval-specific ELRP Compensation is set to zero in that interval.

If the interval-specific COR is greater than the interval-specific Product, then the interval-specific ELRP Compensation is set to zero in that interval.

b) The interval-specific COR is the product of the interval-specific Market Eligible Capacity (MEC), defined below based on the interval-specific CAISO Market Event Performance (MEP) determined under applicable CAISO market baseline, and the interval-specific CAISO Clearing Price Delta (CCPD), defined below.

i. MEC:

1. If the total CAISO scheduled award quantity in an interval is non-zero and the interval-specific MEP is less than or equal to the total CAISO scheduled award quantity in the interval, then the interval-specific MEC is set to zero.
2. If the total CAISO scheduled award quantity in an interval is non-zero and if the interval-specific MEP is greater than the total CAISO scheduled award quantity in the interval and less than or equal to the Qualifying Capacity (QC) of the PDR in that interval, then the interval-specific MEC is equal to the interval-specific MEP minus the interval-specific total CAISO scheduled award quantity.
3. If the total CAISO scheduled award quantity in an interval is non-zero and if the interval-specific MEP is greater than the Qualifying Capacity (QC) of the PDR in that interval, then the interval-specific MEC is equal to the interval-specific QC of the PDR minus the interval-specific total CAISO scheduled award quantity.

If the PDR has no assigned QC in the above cases, then the QC is replaced by the PDR's "PMin" parameter on record in the CAISO Master File applicable to the interval.

Additionally, if the PMin value is less than the total CAISO scheduled award quantity in an interval, then the interval specific MEC is set to zero.

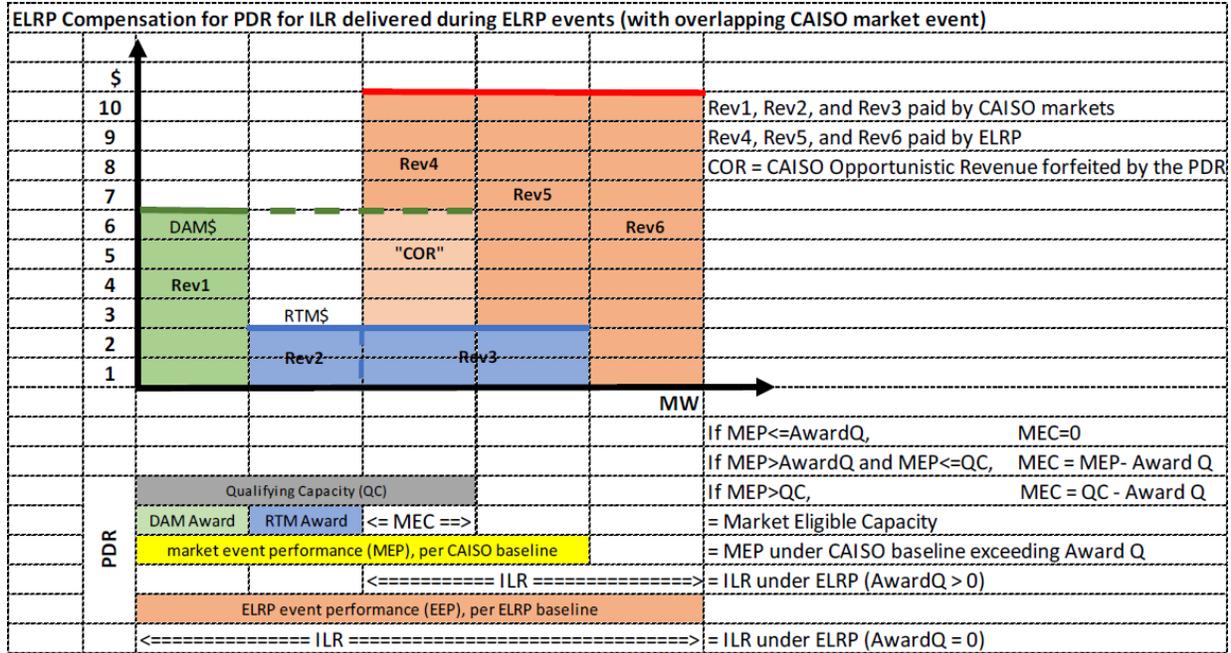
ii. CAISO Clearing Price Delta (CCPD):

For a PDR participating in the DAM only (that is, "long-start" PDR), the

interval-specific CCPD is the DAM clearing price in that interval.

For a PDR participating in the RTM, the interval specific CCPD is equal to the higher of the DAM or RTM clearing price in that interval minus the lower of the DAM or RTM clearing price in that interval.

1. PDR Portfolio Level Net Event Compensation across all PDRs in the DRP's Portfolio.



4.2.3 Invoicing for Sub-Group B.1

To receive ELRP compensation, the DRP shall submit an aggregate invoice each quarter for the Cumulative Portfolio Level Net Event Compensation of each PDR Portfolio.

For the purposes of invoicing, the quarterly period and applicable invoicing dates are as follows:

- First quarter consists of May, June and July. Invoices for the First Quarter period are due by September 30 of the same calendar year.
- Second Quarter consists of August, September, and October. Invoices for the Second Quarter period are due by December 31 of the same calendar year.

DRPs shall submit their invoices to SDG&E's organization responsible for administering Demand Response Auction Mechanism (DRAM) invoices or designee.

The Cumulative Portfolio Level Net Event Compensation of a PDR Portfolio over one Quarter is determined by summing the Portfolio Level Net Event Compensation across all ELRP events in that Quarter. If applicable, any impact on DRAM performance is the responsibility of the seller.

The invoice shall be accompanied with the supporting data and/or templates as defined by the ELRP Program Administrator, including but not limited to PDR-specific ELRP Event Performance, ILR, applicable market awards during the event, applicable CAISO market payments for load reductions counted in the ILR, and ELRP Event Compensation.

SDG&E reserves the right to audit and verify the invoice as needed. SDG&E will settle the invoice within 60 days of the invoice date absent the need for additional information, which would set the 60 days from the time all additional information is received in order to process the invoice. (e.g., SDG&E will settle invoices within 60 days after a disputed or incomplete invoice has been resolved to SDG&E's satisfaction).

4.2.4 Invoicing for Sub-Group B.2.

SDG&E will be responsible for calculating baselines, settlements, and issuing payments to CBP Aggregators and/or Participants pursuant to SDG&E Schedule CBP. To receive ELRP compensation, CBP Aggregators and/or Participants shall submit an aggregate invoice each quarter for the Cumulative Portfolio Level Net Event Compensation of each PDR Portfolio.

For the purposes of invoicing, the quarterly period and applicable invoicing dates are as follows:

- First quarter consists of May, June, and July. Invoices for the First Quarter period are due by September 30 of the same calendar year.
- Second Quarter consists of August, September, and October. Invoices for the Second Quarter period are due by December 31 of the same calendar year.

CBP Aggregators and/or Participants shall submit invoices to SDG&E's Accounts Payable.

The Cumulative Portfolio Level Net Event Compensation of a PDR Portfolio over one Quarter is determined by summing the Portfolio Level Net Event Compensation across all ELRP events in that Quarter.

The invoice shall be accompanied with the supporting data and/or templates as defined by the ELRP Program Administrator, including but not limited to, PDR-specific ELRP Event Performance, ILR, applicable market awards during the event, applicable CAISO market payments for load reductions counted in the ILR, and ELRP Event Compensation.

SDG&E reserves the right to audit and verify the invoice as needed. SDG&E will settle the invoice within 60 days of the invoice date absent the need for additional information, which would set the 60 days from the time all additional information is received in order to process the invoice (i.e., SDG&E will settle invoices within 60 days after a disputed or incomplete invoice has been resolved to SDG&E's satisfaction).

**PG&E Gas and Electric
Advice Submittal List
General Order 96-B, Section IV**

AT&T
Albion Power Company

Alta Power Group, LLC
Anderson & Poole

Atlas ReFuel
BART

Barkovich & Yap, Inc.
California Cotton Ginners & Growers Assn
California Energy Commission

California Hub for Energy Efficiency
Financing

California Alternative Energy and
Advanced Transportation Financing
Authority
California Public Utilities Commission
Calpine

Cameron-Daniel, P.C.
Casner, Steve
Center for Biological Diversity

Chevron Pipeline and Power
City of Palo Alto

City of San Jose
Clean Power Research
Coast Economic Consulting
Commercial Energy
Crossborder Energy
Crown Road Energy, LLC
Davis Wright Tremaine LLP
Day Carter Murphy

Dept of General Services
Don Pickett & Associates, Inc.
Douglass & Liddell

East Bay Community Energy Ellison
Schneider & Harris LLP Energy
Management Service
Engineers and Scientists of California

GenOn Energy, Inc.
Goodin, MacBride, Squeri, Schlotz &
Ritchie

Green Power Institute
Hanna & Morton
ICF
International Power Technology

Intertie

Intestate Gas Services, Inc.
Kelly Group
Ken Bohn Consulting
Keyes & Fox LLP
Leviton Manufacturing Co., Inc.

Los Angeles County Integrated
Waste Management Task Force
MRW & Associates
Manatt Phelps Phillips
Marin Energy Authority
McKenzie & Associates

Modesto Irrigation District
NLine Energy, Inc.
NRG Solar

OnGrid Solar
Pacific Gas and Electric Company
Peninsula Clean Energy

Pioneer Community Energy

Public Advocates Office

Redwood Coast Energy Authority
Regulatory & Cogeneration Service, Inc.
SCD Energy Solutions
San Diego Gas & Electric Company

SPURR
San Francisco Water Power and Sewer
Sempra Utilities

Sierra Telephone Company, Inc.
Southern California Edison Company
Southern California Gas Company
Spark Energy
Sun Light & Power
Sunshine Design
Tecogen, Inc.
TerraVerde Renewable Partners
Tiger Natural Gas, Inc.

TransCanada
Utility Cost Management
Utility Power Solutions
Water and Energy Consulting Wellhead
Electric Company
Western Manufactured Housing
Communities Association (WMA)
Yep Energy