PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

**ENERGY DIVISION RESOLUTION E-5211**

**October 6, 2022**

RESOLUTION

Resolution E-5211. Rejecting Pacific Gas and Electric Company’s, Southern California Edison Company’s, and San Diego Gas & Electric Company’s Advice Letters providing the specifics of whether and how reductions to a customer’s Limited Generation Profile are determined and narrowing down the scope of future discussions.

PROPOSED OUTCOME:

* This Resolution rejects without prejudice Pacific Gas and Electric Company’s (PG&E), Southern California Edison Company’s (SCE), and San Diego Gas & Electric Company’s (SDG&E) Advice Letters specifying whether and how reductions to a customer’s Limited Generation Profile are determined.
* This Resolution orders PG&E, SCE and SDG&E to participate in a minimum of two full-day workshops to confer with stakeholders on outstanding issues and file new Tier 3 advice letters within 90 days of the issuance of this Resolution to comply with Decision 20-09-035 ordering Paragraph 16.

SAFETY CONSIDERATIONS:

* There are no safety considerations.

ESTIMATED COST:

* There are no estimated costs.

By PG&E Advice Letter 6058-E, SCE Advice Letter 4404-E, and SDG&E Advice Letter 3678-E filed on January 28, 2021.

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# Summary

Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E), collectively the large investor-owned utilities (Large IOUs), submitted Tier 3 Advice Letters (ALs)-- PG&E AL 6058-E, SCE AL 4404-E, and SDG&E AL 3678-E--to comply with Ordering Paragraph (OP) 16 of Decision (D.) 20-09-035 (the Decision).

This Resolution rejects PG&E AL 6058-E, SCE AL 4404-E, and SDG&E AL 3678-E without prejudice. The Commission finds the ALs lack specificity and fail to meet the requirements of all three elements articulated in OP 16 (and OP 15 as referenced in   
OP 16) of the Decision: specificity on (1) whether and (2) how reductions to a customer’s Limited Generation Profiles (LGP) are determined, and (3) inclusion of a description of how the Large IOUs will implement OP 15. The Resolution finds the ALs do not supply specific information on the circumstances under which reduction of an LGP export power will occur, or how reductions to a customer’s LGP are determined, as ordered per OP 16, and do not address that export values may only be lowered to the pre-defined ICA-SG level identified at the time of interconnection, as ordered per OP 15. The Large IOUs are ordered to participate in a minimum of two full-day workshops to confer with stakeholders on topics identified in this Resolution as needing discussion. Additional workshops may be held at Energy Division’s discretion. The workshops shall be recorded and publicly posted on Energy Division’s web site. Within 90 days of issuance of this Resolution, and after the workshops, the Large IOUs are ordered to file new subsequent Tier 3 ALs that meet the requirements of OP 16 of the Decision and address the topics identified in this Resolution.

# Background

1. **Rulemaking 17-07-007**

The California Public Utilities Commission (Commission) initiated Rulemaking   
(R.) 17-07-007 on July 13, 2017 to consider refinements and, if necessary, revise the rules and regulations governing the interconnection of generation, distributed energy resources (DERs) and storage facilities to the electric distribution systems of the Large IOUs. The Large IOUs’ rules and regulations pertaining to the interconnection of generating facilities are set forth in Electric Rule 21 Tariff (Rule 21). As part of   
R.17-07-007 the Large IOUs and other stakeholders participated in four working groups. The working group relevant to the set of ALs discussed in this Resolution is:

* Working Group Two– Working Group Two met in 2018 and discussed issues regarding the application of the Integration Capacity Analysis (ICA)[[1]](#footnote-2) into Rule 21 and streamlining interconnection issues. Proposals from this working group included how to incorporate the ICA into Rule 21 and use Limited Generation Profiles (LGP)[[2]](#footnote-3) to allow DERs to perform within existing ICA hosting capacity to avoid distribution grid upgrades. D.20-09-035 ruled on the proposals from Working Group Two.

D. 20-09-035, issued by the Commission on September 30, 2020, directed the Large IOUs to submit ALs proposing revisions to Rule 21 addressing recommendations of Working Group Two. OP 16 of the Decision states [bold indicates the topics addressed by the ALs submitted and this Resolution]:[[3]](#footnote-4)

* [The Large IOUs] shall **submit a Tier 3 Advice Letter no later than 120 days from the issuance of this decision providing the specifics of whether and how reductions to a customer’s Limited Generation Profile are determined. The Advice Letter shall include a description of how the Utilities will implement Ordering Paragraph 15.** The final resolution of the Advice Letter will be implemented simultaneously with the counter proposal for Issue 9, adopted in Ordering Paragraph 15.

OP 16 references OP 15, which states:

* **The counter proposal from Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company (Utilities) to resolve Issue 9 is adopted with modification.** Within 90 days of the issuance of this decision, Utilities shall commence discussions with the Smart Inverter Working Group [SIWG] focused on implementing the proposal. Within six months of issuance of this decision, Utilities shall submit a Tier 3 Advice Letter providing recommendations (as applicable) regarding the standard review, certification requirements, and interconnection processes necessary for implementation of the proposal. Within 60 days of adoption of a certification scheme for the Limited Generation Profile, Utilities shall modify the Rule 21 Interconnection Application Process to allow a distributed energy resources customer to include a Limited Generation Profile with their application, require the customer to enable generation profile limiting functionality, and allow Utilities opportunity to alter the profile if safety and reliability concerns warrant it. **Retroactive alterations to generation profiles shall not reduce generation to below a pre-defined static level, i.e., the lowest Integrated Capacity Analysis – Static Grid typical profile value identified at the time of the Interconnection Application.** As part of the proposal, Utilities shall: i) allow customers to utilize a smart inverter’s ability to increase its output on a monthly basis; and ii) use a   
  10 percent buffer,which shall be revisited. No later than 18 months after the implementation of this proposal, Utilities shall submit a Tier 3 Advice Letter providing data obtained from Proposals 8b and 8c, adopted below, assessing the effectiveness of the use of the Integration Capacity Analysis values within the interconnection process and addressing whether the Commission should continue use of the 10 percent buffer or adjust it, based on the data.

The Decision resolved Issue 9 from Working Group Two. As stated in the Decision:

Issue 9 looks at the conditions of operations the Commission should adopt to allow distributed energy resources to perform within existing hosting capacity constraints and avoid triggering [distribution grid] upgrades… The purpose of resolving Issue 9, as highlighted by IREC, is to utilize the Integration Capacity Analysis data to allow modern inverters, storage, and other technologies to confidently respond to grid conditions while ensuring safety and reliability.[[4]](#footnote-5)

1. **Issue 9: Limited Generation Profiles (LGP)**

The purpose of LGP is to allow a generator to interconnect generation capacity “which exceeds the minimum annual Interconnection Capacity Analysis-Static Grid (ICA-SG) value while remaining below the maximum ICA-SG at any given time.”[[5]](#footnote-6),[[6]](#footnote-7) The figure below illustrates this at a conceptual level. The blue line depicts the maximum yearly ICA-SG value*.* The red line shows the monthly minimum ICA-SG value, with a 10% buffer added for safety. The *minimum* value of the red line is 1.14 MW in September, while the maximum is 2.80 MW in February.



Figure 1: Conceptual Illustration of the use of Limited Generation Profile.[[7]](#footnote-8)

As conceptually illustrated above, a photovoltaic (PV) system, using a controlled generation export profile, would be able to take advantage of the available ICA-SG hosting capacity as published at the time of interconnection to determine a varying export profile at different times of the year so as not to exceed the ICA-SG values and therefore avoid triggering costly grid upgrades. The use of LGP (henceforth referred to the “LGP-option”) limits export of power to the electric grid. Throughout this Resolution, discussion of curtailment will refer to export power to the Large IOUs’ grid, not generation.

In the Working Group Two Report the Large IOUs proposed a seasonal change to the power export profile of a generating facility with a 20 percent (%) ICA buffer. The Decision instead adopted a monthly change to the power export profile of a generating facility with a 10% ICA buffer. The IOU counter proposal adopted by D.20-09-035 would “Allow Interconnecting DER To Be Evaluated and Operate Under Limited Generation Operation Limits Leveraging Smart Inverter Phase III Function 3 (Limit Maximum Real Power Mode).”[[8]](#footnote-9) According to the Working Group Two Report the proposal requires the:

Update [of] the interconnection procedures to allow customers which have certified [smart inverter functions] Phase III inverters to use Phase III Function 3 (Limited Maximum Real Power Mode) in order to limit maximum power output based on seasons of the year. This functionality must account for future changes in load profiles, which may require the Function 3 limits to be updated in order to prevent distribution safety and reliability issues.[[9]](#footnote-10)

This allows DER customers to use a system’s ability to increase monthly generation output during times of the year when a higher level of ICA hosting capacity is available and decrease it during times when it is not available. As part of using the LGP-option, a DER customer would agree to enable smart inverter functionality of Phase II communications and Phase III Function 3 “to ensure actual operations conform to the submitted Limited Generation Profile.”[[10]](#footnote-11) A customer also would agree to “to allow future reductions to generation profile. Determination of such reductions would be made by IOUs under defined circumstance.”[[11]](#footnote-12) Furthermore, “the proposal acknowledges future grid conditions could result in actual hosting capacity being below the published [ICA-SG]. Under such circumstances, the utility may need to reduce generation to ensure safe and reliable service without grid upgrades.”[[12]](#footnote-13) In adopting the Large IOUs’ counter proposal, the Decision “allow[s] Utilities opportunity to alter the profile if circumstances warranted.”[[13]](#footnote-14) The Decision adopted this concept stating “Accordingly, we adopt the element that the utility may need to reduce generation to ensure safe and reliable service without grid updates.”[[14]](#footnote-15)

1. **PG&E Advice Letter 6058-E, SCE Advice Letter 4404-E, and SDG&E Advice Letter 3678-E (the OP 16 ALs)**

PG&E Advice Letter 6058-E, SCE Advice Letter 4404-E, and SDG&E Advice   
Letter 3678-E were submitted on January 28, 2021 to comply with the requirements of OP 16 of the Decision. OP 16 ordered the Large IOUs to submit specific information on whether and how reductions to a customer’s LGP are determined and how OP 15 would be implemented.

In the ALs the Large IOUs identified a set of initial factors that could contribute to a customer’s revised LGP.[[15]](#footnote-16)

The Large IOUs:

propose continued, ongoing discussions to achieve consensus with the SIWG. The Utilities will submit supplemental advice letters incorporating the outcome of the discussions. The Tier 3 advice letter to be submitted pursuant to OP 15 will describe how a Limited Generation Profile can be evaluated and studied in the interconnection process.[[16]](#footnote-17)

The Large IOUs also state “The factors [identified] are subject to change based on the outcome of upcoming preplanned discussions on this topic.”[[17]](#footnote-18)

More details on these factors are contained in the “Discussion” section of this Resolution.

# Notice

Notice of PG&E AL 6058-E, SCE AL 4404-E, and SDG&E AL 3678-E were made by publication in the Commission’s Daily Calendar. The Large IOUs state that they served copies of the ALs to the interested parties on the GO 96-B, R.11-09-011, and R.17-07-007 service lists.

# Protests/RESPONSES

The California Solar & Storage Association (CALSSA) and the Interstate Renewable Energy Council, Inc. (IREC) submitted separate timely protests on February 17, 2021 to the ALs. The Large IOUs submitted timely responses on February 24, 2021. Protested issues include:[[18]](#footnote-19)

* The lack of specificity on the retroactive reductions in limited generation profiles and non-compliance with D.20-09-035 to provide specific, defined conditions under which reductions to Limited Generation Profiles may occur.
* The applicability of export power curtailments for LGP customers, and request to confine the export power curtailments to emergencies and outages.

More in-depth detail of the protested issues and the Large IOUs’ responses are included in the Discussion section of this Resolution.

# Discussion

1. **SUMMARY**

PG&E AL 6058-E, SCE AL 4404-E, and SDG&E AL 3678-E, submitted to comply with OP 16 (and OP 15 as referenced in OP 16) of the Decision, are rejected without prejudice (further mention of compliance with OP 16 shall be interpreted as also compliance with the reference to OP 15 contained in OP 16). The Commission finds merit in the protests of CALSSA and IREC that assert that these ALs contain material omissions and do not meet the requirements of D.20-09-035 OP 16. The Commission finds that these ALs fail to meet the requirements of all three elements articulated in OP 16 of the Decision—the ALs lack specificity on whether and how reductions to a customer’s LGP are determined and do not include a description of how the Utilities will implement OP 15. The ALs do not supply specific information on the circumstances under which reduction of an LGP export power will occur, or how reductions to a customer’s LGP are determined, as ordered per OP 16, and do not address that export values may only be lowered to the pre-defined ICA-SG level identified at the time of interconnection, as ordered per OP 15 for future grid conditions.

Therefore, the Large IOUs are directed to participate in at least two full-day workshops to address outstanding topics identified in this Resolution’s discussion section. The Large IOUs are expected to address topics identified by Energy Division as needing discussion and prepare relevant presentations, including criteria and standards for LGP export power reductions. The Large IOUs shall issue presentations ahead of the workshops to allow parties to prepare for the workshops. Deadlines for workshop materials shall be coordinated by Energy Division. Agenda items may also be discussed through the SIWG ahead of the scheduled workshops and the IOUs are directed to attend and participate in these discussions. We delegate to Energy Division to determine whether subsequent workshops shall be held beyond the two days initially required by this Resolution; we also delegate to Energy Division the option to reduce the timing of the workshops to less than full-days if warranted. Workshops will be noticed to the R.17-07-007 service list and announced through the SIWG or other appropriate venues. The workshops shall commence no later than 40 days after issuance of this Resolution. The workshops shall be recorded and publicly posted on Energy Division’s web site. The Large IOUs are ordered to submit subsequent Tier 3 ALs no later than 90 days after the issuance of this Resolution to comply with OP 16 of D.20-09-035 and address the topics identified in this Resolution as well as those raised in the workshops. These ALs shall specify which items have reached consensus within the workshop participants and which items have not reached consensus. If an item has not reached consensus, the Large IOUs shall provide details as to the bases for lack of consensus and the alternative proposals, if any.

1. **PG&E AL 6058-E, SCE AL 4404-E, and SDG&E AL 3678-E**

In the ALs the Large IOUs listed three factors that could contribute to a customer’s revised Limited Generation Profile:[[19]](#footnote-20)

* Factor 1: The Utilities need to reduce generation to ensure safe and reliable service without grid updates.
* Factor 2: Future grid conditions resulting in actual hosting capacity being below the published Integration Capacity Analysis-SG.
* Factor 3: A determination by the utility that the system does not operate as approved. For example, there is no buffer or the actual buffer is determined to be less than 10%.

The ALs were protested by CALSSA and IREC. Specific details of the protests are discussed further below.

In responses to protests the “Utilities’ recognize that additional discussion is warranted regarding the safe and reliable implementation of a Limited Generation Profile with members of the Smart Inverter Working Group [SIWG]…[and] look forward to additional discussion with the SIWG.”[[20]](#footnote-21) In the ALs the Large IOUs also propose continued discussions with the SIWG with the intent to achieve consensus on these issues, and to submit supplemental ALs incorporating the outcomes of the discussions.[[21]](#footnote-22)

1. **Issue 1: Compliance with OP 16 of the Decision.**

In its protest, CALSSA argues that the ALs include three initial factors but no specifics as required by OP 16.[[22]](#footnote-23) IREC argues the Large IOUs have only identified factors that could contribute to revisions of a customer’s Limited Generation Profile but not provided an exclusive list of conditions.[[23]](#footnote-24)

**Resolving Issue 1: Compliance with OP 16 of the Decision—The ALs are rejected without prejudice. The Large IOUs are directed to participate in workshops and file subsequent Tier 3 ALs within 90 days of issuance of this Resolution to meet the requirements of OP 16 and address topics identified in this Resolution.**

We evaluate the ALs in terms of compliance with OP 16 of the Decision which states the ALs should provide “the specifics of whether and how reduction to a customer’s Limited Generation Profile are determined.” OP 16 further directs that “The Advice Letter shall include a description of how the Utilities will implement Ordering Paragraph 15.”[[24]](#footnote-25) OP 15:

…allow[s] Utilities [the] opportunity to alter the profile if safety and reliability concerns warrant it. Retroactive alterations to generation profiles shall not reduce generation to below a pre-defined static level, i.e., the lowest Integrated Capacity Analysis – Static Grid typical profile value identified at the time of the Interconnection Application.[[25]](#footnote-26)

To determine compliance with OP 16 and to address the topics that need to be resolved we clarify the use of the terminology “whether” and “how.” We clarify that “whether” means the circumstances that lead to a reduction of export (e.g., a “yes or no” response to a specific scenario or question) and that “how” means the procedure to determine the level of reduction of export power (e.g., the process to determine an updated LGP and what changes are required to interconnection agreements or the grid).

The Commission rejects the ALs as filed without prejudice. Given the clarification above, we find that the Large IOUs have failed to meet the requirements of OP 16. The Large IOUs have listed factors that may affect the LGP reductions, but have not supplied specific information on the circumstances under which reduction of an LGP export power will occur, nor how reductions to a customer’s LGP are determined, as ordered per OP 16, or addressed that export values may only be lowered to the   
pre-defined ICA-SG level identified at the time of interconnection, as ordered per OP 15 for future grid conditions. We also find that the Large IOUs statement that future working group discussions are needed to comply with the Decision’s order is not an acceptable substitute for obeying clear direction set forth by the Commission.[[26]](#footnote-27) Therefore, we agree with CALSSA and IREC that the ALs lack specificity and conclude they do not comply with the requirements of the Decision.

We also agree with IREC and find the ALs fail to include a “floor curtailment” as ordered by the Decision: the Large IOUs have not provided information regarding the requirement that “Retroactive alterations to generation profiles shall not reduce generation to below a pre-defined static level, i.e., the lowest Integrated Capacity Analysis – Static Grid typical profile value identified at the time of the Interconnection Application”[[27]](#footnote-28) as stated in OP 15. Hence, we conclude the ALs have failed to include a “description of how the Utilities will implement Ordering Paragraph 15.” We reiterate our direction for the Large IOUs to comply with this requirement in the subsequent ALs as directed in the prior Decision as well as the workshop requirements in this Resolution. The Large IOUs, however, submitted separate ALs as directed per OP 15 and 51[[28]](#footnote-29) of the Decision— PG&E AL 6141-E, SCE AL 4455-E, and SDG&E AL 3721-E (the OP 15/51 ALs). This separate set of ALs provide recommendations for implementing the LGP adopted in OPs 15 and 51. The OP 15/51 ALs are still pending disposition and are the subject of a future resolution. While the OP 15/51 ALs provide greater detail on the interconnection process for LGP, they do not address the topics posed within this Resolution of whether and how reductions to a customer’s LGP are determined, nor do they discuss that the retroactive alterations to generation profiles shall not be reduced below a pre-defined static level as ordered per OP 15. Nothing in this Resolution prejudges the outcome of the OP 15/51 ALs.

In the absence of specific information, we recognize that further discussions are needed, as the Large IOUs have proposed. Because the SIWG meets every other week and only for an hour and a half, however, we conclude that the SIWG does not provide sufficient opportunity to address the topics identified in protests and discussed in this Resolution in a timely fashion. We therefore direct the Large IOUs to participate in two full-day workshops, at a minimum, dedicated to these topics. The Large IOUs are expected to address topics identified by Energy Division as needing discussion and prepare relevant presentations. The Large IOUs shall issue presentations ahead of the workshops to allow parties to prepare for the workshops. Deadlines for circulating the agenda and presentations shall be coordinated with Energy Division. Agenda items may also be discussed through the SIWG ahead of the scheduled workshops and the IOUs are ordered to attend and participate in these discussions. Subsequent workshops will be held at Energy Division’s discretion—should Energy Division determine that an additional time is needed, workshops may be added accordingly. The workshops shall commence no later than 40 days after issuance of this Resolution. The workshops shall be recorded and publicly posted on Energy Division’s web site. Within 90 days of the issuance of this Resolution, the Large IOUs are ordered to file subsequent Tier 3 ALs. These Tier 3 ALs shall fulfill the direction given in OP 16 by articulating specific and defined conditions (the “whether”) under which a LGP customer may be required to reduce export power to the lowest ICA-SG value identified at the time of interconnection or other value and shall propose a process (the “how”) to reduce a customer’s LGP. These conditions and this process proposal shall be actionable and described at a level of detail such that they do not require further stakeholder discussions to address policy or technical questions for implementation.

We discuss the “whether” and “how” separately below as Issue 2A and Issue 2B. In so doing, we address specific issues brought up in protests, and address topics that will likely benefit from discussion in the workshops. To resolve the protests for the ALs we rely on (1) the set of criteria for what can serve as basis for a protest as set forth in General Order (GO) 96-B,[[29]](#footnote-30) (2) the Decision language, and (3) the Public Utilities Code:

Criteria for Protests

General order 96-B Section 7.4.2[[30]](#footnote-31) sets out the proper criteria for protest to an advice letter. In disposition of these ALs, we consider specifically criteria three which states “The analysis, calculations, or data in the advice letter contain material errors or omissions.”

Decision Language

In describing Issue 9, the Decision states that “Issue 9 looks at the conditions of operations the Commission should adopt to allow distributed energy resources **to perform within existing hosting capacity constraints and avoid triggering upgrades** [emphasis added].”[[31]](#footnote-32) In discussing future grid conditions that could result in actual hosting capacity being below the published ICA-SG the Decision ”adopt[s] the element that **the utility may need to reduce generation to ensure safe and reliable service without grid upgrades** [emphasis added].”[[32]](#footnote-33) In discussing retroactive changes to a customer’s LGP, the Decision states “We reiterate that profile reductions may only be allowed for safety and reliability reasons. Furthermore, retroactive alterations to generation profiles shall not reduce generation to below a pre-defined static level, i.e., the lowest Integrated Capacity Analysis – Static Grid typical profile value identified at the time of the Interconnection Application”[[33]](#footnote-34).

Public Utilities Code

The Large IOUs have a fundamental obligation to “promote the safety…of patrons, employees, and the public”[[34]](#footnote-35) in addition to operate its distribution grid in a “safe, reliable” manner.[[35]](#footnote-36)

Based on the criteria set forth in GO 96-B, we find there is no record in the ALs to support the basis for the protests discussed in Issue 2. Because there is lack of information in the ALs (i.e., the ALs lack specificity on whether and how reductions to a customer’s LGP are determined and do not include a description of how the Utilities will implement OP 15), the protests reflect protestants positions rather than address topics presented in the ALs by the Large IOUs. While the topics included in the protests beyond the material omissions may not be proper protests under GO 96-B, we find them to be useful subjects for consideration here and direct them to be further discussed within the workshops.

1. **Issue 2: Specifics of Whether and How Reduction to a Customer’s Limited Generation Profile Are Determined.**
2. **Issue 2A: Specifics of Whether Reductions to a Customer’s Limited Generation Profile are Determined to be Necessary**

CALSSA urges:

The Commission should order utilities to supplement the ALs with details on the conditions under which they would consider reducing a customer’s approved output level…Those conditions should be specific to systems with limited generation profiles and should only be employed when common low-cost alternatives are not available.[[36]](#footnote-37)

CALSSA further argues “Specifications for reducing the allowed level of generation after an interconnection agreement has been issued should be limited to conditions related to limited generation profiles and should only be used when common mitigations are not available.”[[37]](#footnote-38)

and argues that Factor 3:[[38]](#footnote-39)

would be a violation of the interconnection agreement. If a customer has output limits specified in the interconnection agreement and exceeds those limits, it would be a serious offense akin to installing additional capacity without getting approval. This should be addressed by existing rules and does not need to be included in the ALs.[[39]](#footnote-40)

CALSSA also states that “[t]he first two bullets [Factor 1 and Factor 2] are factors that exist for all interconnected systems. They are so general that they would allow utilities to force customers to reduce production in response the normal evolution of circuit conditions.”[[40]](#footnote-41) And:

Once a system is approved for interconnection, the utility normally assumes it will continue to operate as approved. Utilities have many tools available to deal with changing circuit conditions. The Commission should not approve new rules for systems with limited generation profiles in their interconnection agreements that allow utilities to force customers to reduce generation when other common mitigation approaches are available.[[41]](#footnote-42)

IREC states the Commission should not allow curtailment due to normal changes in the load or configuration of a circuit[[42]](#footnote-43) and that the only specific conditions identified by the Large IOUs as appropriate for curtailment are: (1) The Large IOUs should be able to make an “exceptional intervention” to curtail project output in emergency and outage conditions; and (2) When a Generating Facility violates its Interconnection Agreement.[[43]](#footnote-44)

IREC proposes that the Commission only allow utilities the “exceptional intervention” of curtailment when:[[44]](#footnote-45)

* There is a temporary outage, i.e., for ongoing maintenance,
* There is a temporary emergency, or
* A Generating Facility is found to operate in a way that violates its Interconnection Agreement.

IREC further requests that the Commission reject the use of curtailments in ordinary situations (e.g., load and configuration changes) and that the Large IOUs have “failed to justify the use of curtailments in anything but extraordinary circumstances…[and] The Commission has no record before it that supports the use of curtailments in normal circumstances …[and] should move forward with only allowing reductions to Limited Generation Profiles in emergency circumstances.”[[45]](#footnote-46)

**Resolving Issue 2A: Specifics of Whether Reduction to a Customer’s Limited Generation Profile Are Determined**

CALSSA’s protest is two-fold: (1) it requests that Large IOUs address reduction of a customer’s export power level and restrict it to systems with limited generation profiles, and (2) requests that reductions should only be employed when “common low cost [or common mitigation] alternatives” are not available. IREC requests that the Commission narrow down the circumstances under which reduction of export power is allowed.

We have identified two topics within which to classify the protests for this issue—Reduction of a Customer’s Export Power and Mitigation Options—and address them separately.

Reduction of a Customer’s Export Power:

We make a distinction between reducing a customer’s export of power under the LGP-option, and the Large IOUs’ current business-as-usual process[[46]](#footnote-47) to reduce a customer’s export of power. We agree with CALSSA that conditions and specifications related to reduction of a customer’s power export level set forth by these ALs “should be specific [and limited] to systems with limited generation profiles” but clarify that that reduction of export power contemplated to meet the requirements of OP 16 are solely applicable to customer’s choosing the LGP-option and not applicable to the Large IOUs business-as-usual process. We find that changes to the business-as-usual process are out of scope for these ALs.

We agree with CALSSA that existing rules should address circumstances that fall within the business-as-usual process irrespective of whether these apply to non-LGP or to LGP customers. In so doing, we recognize that there is no record within this proceeding or these ALs of the circumstances which currently prompt the Large IOUs to reduce a customer’s export of power. Therefore, for transparency, the Large IOUs shall delineate two sets of categories for circumstances that lead to curtailment of export power in the subsequent ALs. The Large IOUs shall identify any circumstances that are already applicable to generating facilities (i.e., business-as-usual, or existing practices). The Large IOUs shall further identify circumstances that would normally be applicable to existing practices but have specific considerations that are only applicable under the LGP-option (LGP-only practices) and detail the cause for why disparate treatment for LGP-option systems may be necessary.

In discussing future grid conditions that could result in actual hosting capacity being below the published ICA-SG the Decision ”adopt[s] the element that the utility may need to reduce generation to ensure safe and reliable service **without grid upgrades** [emphasis added].”[[47]](#footnote-48) The Decision is silent on the specifics of how this element will be implemented. Therefore, we find that the implementation of reduced generation in response to future grid conditions is a topic needing further discussion.

CALSSA asserts that Factor 1 (The Utilities need to reduce generation to ensure safe and reliable service without grid updates) and Factor 2 (Future grid conditions resulting in actual hosting capacity being below the published Integration Capacity Analysis-SG) are “so general that they would allow utilities to force customers to reduce production in response the normal evolution of circuit conditions.”[[48]](#footnote-49) We note that these two Factors are within the scope of the ALs as they were discussed in the Decision. However, we agree that the Factors listed by the Large IOUs lack the required specificity. In the subsequent ALs the Large IOUs shall discuss specifics of how these two Factors would inform whether and how curtailment should be imposed. Additionally, nothing in the Decision pre-empts the Large IOUs from taking proper action to avoid such curtailments (e.g., circuit reconfiguration) or from utilizing existing mitigations. The use of existing mitigations is discussed in the next section “Low-Cost Alternatives.”

Low-Cost and Common Mitigation Alternatives:

We now address the use of “low-cost” or “common mitigations” alternatives mentioned in CALSSA’s protest. We find there is no record on what these terms entail. The Large IOUs should define and discuss what low-cost and common mitigations are available (and if the mitigations include grid upgrades) to avoid curtailment and under what circumstances they could be applied.

The purpose of the LGP-option is to maximize the use of available hosting capacity on a circuit while avoiding distribution grid upgrades. In describing Issue 9, the Decision states “Issue 9 looks at the conditions of operations the Commission should adopt to allow distributed energy resources **to perform within existing hosting capacity constraints and avoid triggering upgrades** [emphasis added].”[[49]](#footnote-50) In discussing future grid conditions that could result in actual hosting capacity being below the published ICA-SG the Decision ”adopt[s] the element that the utility may need to reduce generation to ensure safe and reliable service **without grid upgrades** [emphasis added].”[[50]](#footnote-51) The application of this requirement raises fairness and cost causation issues. There are three elements that should be discussed: (1) the extent to which the LGP-option allows for performance that avoids triggering upgrades within existing hosting capacity constraints; (2) if future grid conditions reduce the hosting capacity, the extent to which Large IOUs may need to reduce generation to ensure safety and reliability without grid upgrades; and (3) the permanence of that reduction of capacity in generation. That is, if another entity takes future action that reduces hosting capacity for those using the LGP-option, the other entity is the one causing the issue and should ultimately be responsible for the cost of curing the lack of hosting capacity. The ability of LGP customers to dial back production to the grid hosting capacity is a convenient and expedient short-term fix, but this expediency alone is not justification for a permanent reduction of export power. As part of the discussions, the Large IOUs shall present on scenarios that trigger analysis using cost causation principle.

1. **Issue 2B: Specifics of How Reduction to a Customer’s Limited Generation Profile are Determined**

CALSSA requests that the Commission order the Large IOUs to supplement the ALs with clarification of how new LGP levels would be determined under curtailment.[[51]](#footnote-52)

IREC argues:

the Advice Letters fail to include a floor for curtailments, as required by the Decision. D.20-09-035 limited utilities’ discretion by providing that “retroactive alterations to generation profiles shall not reduce generation to below a pre-defined static level, i.e., the lowest Integrated Capacity Analysis – Static Grid typical profile value identified at the time of the Interconnection Application.”[[52]](#footnote-53)

**Resolving Issue 2B: Specifics of How Reduction to a Customer’s Limited Generation Profile Are Determined**

To aid the discussions regarding the lowest ICA-SG value, we clarify the intent of the Decision in reducing an LGP customer’s power export to this pre-determined level. We make a distinction between curtailment of export power during times when the safety and reliability of the grid are a concern due to extra-ordinary circumstances (e.g., wildfires) noting that these extra-ordinary circumstances are temporary, versus curtailment of export (to the lowest ICA-SG value identified at the time of interconnection) of an LGP customer due to future grid conditions, which may also raise concerns related to the safety and reliability of the grid. The Decision states:

Both the CALSSA proposal and the Utilities counter proposal [which was adopted by the Decision] acknowledge that future grid conditions could result in actual hosting capacity being below the published Integration Capacity Analysis-SG and that the utility may need to reduce generation to ensure safe and reliable service without grid upgrades.[[53]](#footnote-54)

The Decision adopts “the element that the utility may need to reduce generation to ensure safe and reliable service without grid updates”[[54]](#footnote-55) and further states:

We reiterate that profile reductions may only be allowed for safety and reliability reasons. Furthermore, retroactive alterations to generation profiles shall not reduce generation to below a pre-defined static level, i.e., the lowest Integrated Capacity Analysis – Static Grid typical profile value identified at the time of the Interconnection Application.[[55]](#footnote-56)

We clarify that nothing in the Decision changes the fundamental obligation of the Large IOUs to continue operation of the grid in a safe and reliable manner during extra-ordinary circumstances or impedes the IOU’s existing right to impose temporary reductions to a customer’s export power for safety and reliability reasons during these circumstances. Therefore, we clarify that the limitation on reducing the export power to the lowest ICA-SG value identified at the time of interconnection applies to the customer’s LGP during future grid conditions (e.g., actual hosting capacity being below the published Integration Capacity Analysis-SG).

We further clarify that the Large IOUs reduction of the export value to the lowest value of the ICA-SG identified at the time of interconnection in response to future grid conditions is a limitation, not a requirement. The Large IOUs shall not request export power reductions in excess of the amount required to preserve safety and reliability and these reductions must be justified by the Large IOUs when giving notice to the LGP customer. We also note that nothing impedes ongoing power reduction to be negotiated by mutual agreement between the generating facility and the Large IOUs. This determination is made without changes to previous orders.

1. **Items to Discuss during the Workshops**

The workshop discussions as ordered in this Resolution shall clearly outline elements of the circumstances that will prompt a reduction of export power and specific reasons for doing so. Any reference to profile reductions needed for ensuring safe and reliable service shall be clearly substantiated and justified. Use cases that would result in such reductions shall be specified and enumerated. The underlying concern, triggering condition(s) and parameters that must be satisfied to justify a reduction in profile values for each prospective use case shall be explicitly specified. The Commission will not entertain arguments from the Large IOUs that merely state a reference to safety and reliability concerns without proper discourse articulating how profile reduction proposals ensure safety and reliability. This discourse shall include clear detailed examples and shall articulate the most likely outcomes of adopting or not adopting the proposals. This requirement applies to any topic where safety and reliability is concerned.

In our discussion of Issues 2A and 2B we identified topics brought up in protests that warrant discussion. In addition to those, here we present a partial list of items we have identified need addressing in the workshop discussions. The list is not inclusive of all topics to be addressed. Energy Division will compile a list of topics from stakeholders and place them on the agenda if they lie within the scope of the ALs or the OPs directing them. The topics initially identified for consideration during workshop discussions are:

* Understanding of the Large IOUs’ current business-as-usual practices on curtailment of export power and how they apply to the LGP-option, including circumstances in which export power may be reduced to below the lowest ICA-SG value identified at time of interconnection;
* Process for curtailment of export power for LGP customers and fairness to non-LGP customers who may have paid for grid upgrades;
* Defining Future Grid Conditions and the effect they may have on LGP customers;
* Defining and evaluating the availability of mitigation options, and how mitigation options differ from upgrade measures;
* Criteria to establish a new LGP and process to implement it.

# Comments

Public Utilities Code section 311(g)(1) provides that this resolution must be served on all parties and subject to at least 30 days public review. Please note that comments are due 20 days from the mailing date of this resolution. Section 311(g)(2) provides that this 30-day review period and 20-day comment period may be reduced or waived upon the stipulation of all parties in the proceeding.

The 30-day review and 20-day comment period for the draft of this resolution were neither waived nor reduced. Accordingly, this draft resolution was mailed to parties for comments, and will be placed on the Commission's agenda no earlier than 30 days from today. The draft resolution was mailed to parties for comments on   
September 1, 2022.

Comments on the draft Resolution were timely filed on September 21, 2022 by IREC and, jointly, by PG&E, SCE and SDG&E.In their comments on the draft resolution, IREC is largely supportive of the Draft Resolution and the workshop process but identifies clarifications necessary “to avoid requiring customers to submit a new interconnection application when a different entity requests to curtail their DER’s output [and that the Resolution] not prejudge the process used to implement new LGPs.”[[56]](#footnote-57) IREC states

the Draft Resolution suggests that requiring a new interconnection application may be an appropriate process for implementing new LGPs. IREC does not categorically oppose using new interconnection applications to establish new LGPs, which may be appropriate in certain circumstances, such as when a customer proactively requests to use a new LGP. However, in other circumstances, different processes may be more appropriate. For example, if the utility requests that a customer reduce its LGP, a new interconnection application is likely not the appropriate process because it requires the customer to pay a fee and provide the proposed schedule. Implementation details like these are best developed through discussion in the workshops. Accordingly, IREC suggests that the Resolution not prejudge the appropriate process by suggesting the use of a single process.[[57]](#footnote-58)

IREC notes a second set of ALs (PG&E AL 6141-E, SCE AL 4455-E, and SDG&E AL 3721-E )[[58]](#footnote-59) filed on March 30, 2021 and states that since these ALs are pending resolution, there could be “administrative efficiencies in having the upcoming workshops address other issues concerning the implementation of LGP. The Resolution should provide the Energy Division the flexibility to require utilities to address other issues concerning LGP implementation in the workshops.”[[59]](#footnote-60)

The Large IOUs provide comments identifying stakeholder conversations and the March 30, 2021 ALs submitted per OP 15 of the Decision. Additionally, “the Joint IOUs propose that only one workshop is needed to finalize stakeholder discussions on outstanding issues…[and] respectfully request additional time to hold the workshop and submit the Advice Letters.”[[60]](#footnote-61)

In comments to the draft resolution the Large IOUs request the Resolution to consider PG&E AL 6141-E, SCE AL 4455-E, and SDG&E AL 3721-E. The Large IOUs note that these ALs provided recommendations for implementing the LGP adopted in OPs 15 and 51 of the Decision and note that the Large IOUs held discussions with the SIWG to discuss the implementation of Issue 9. The Large IOUs state these ALs “provide additional detail with sections on Process and Implementation, which address the “whether and how to” questions in OPs 15 and 16”[[61]](#footnote-62) The Large IOUs further point out that these ALs present a draft process that outlines the requirements for (1) Customer Pre-Application Research, (2) Interconnection Request, (3) Technical Review Process, (4) Interconnection Agreement and PTO, and (5) Operational Verification Requirements.

The Large IOUs state that one workshop is sufficient given the discussions to date and the ALs submitted per OP 15 and 51 stating “the process of resolving issues related to the Limited Generation Profile is further along than indicated in [the ALs concerting this Resolution]”[[62]](#footnote-63) and request an extension to start the workshops and submit the subsequent Tier 3 ALs as ordered per this Resolution. The Large IOUs claim the additional time:

prior to the workshop will enable the Joint IOUs to work with Energy Division to ensure all outstanding issues are addressed and presentation materials are complete and useful to stakeholders. Once the workshop is held, the IOUs also request additional time to better vet, align, and prepare the Tier 3 advice letters. Specifically, the Joint IOUs proposes that the workshop commence within 40 days from the adoption of the Resolution and that the Tier 3 Advice Letters be filed within 90 days from the issuance of the Resolution.[[63]](#footnote-64)

The Large IOUs propose:[[64]](#footnote-65)

Table

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Discussion of Comments to Draft Resolution

We agree with IREC that the Resolution should not prejudge the interconnection process, and agree that there could be administrative efficiencies in discussing the ALs submitted per OP 15 and 51--PG&E AL 6141-E, SCE AL 4455-E, and SDG&E AL 3721-E--along with the ALs disposed in this Resolution. We note the ALs submitted per OP 15 and 51 of the Decision are still pending disposition and are the subject of a future resolution. However, should the timing of issues identified within the disposition of those ALs overlap with the discussions ordered herein, Energy Division will have discretion to begin those discussions. We note that those discussions are preliminary discussions until that future resolution disposing of the ALs submitted per OP 15 and 51 is issued.

While we acknowledge the ALs submitted by the Large IOUs per OP 15 and 51 provide greater detail on the interconnection process for LGP, we note that those ALs do not address the topics posed within this Resolution of whether and how reductions to a customer’s LGP are determined, nor do they discuss that the retroactive alterations to generation profiles shall not be reduced below a pre-defined static level as ordered per OP 15. Nothing in this Resolution prejudges the outcome of the March 30, 2021 ALs.

We disagree with the Large IOUs that one workshop will be sufficient to address the topics. Even if all topics are resolved within the first workshop, we believe at a minimum a second workshop will serve to finalize discussions and ensure there are no errors or misrepresentations, and thus possibly avoid protests to the subsequent ALs ordered per this Resolution.

However, we agree an extension of time is warranted. We, therefore, grant the Large IOUs’ request to commence workshops 40 days after issuance of this Resolution and to file the subsequent ALs 90 days after issuance of this Resolution.

Per our discussion of the comments submitted, the appropriate changes have been incorporated into the revised final Resolution.

# Findings

1. D.20-09-035, issued by the Commission on September 30, 2020 directed the PG&E, SCE and SDG&E to submit ALs proposing revisions to Rule 21 addressing recommendations of Working Groups Two.
2. PG&E AL 6058-E, SCE AL 4404-E and SDG&E AL 3678-E were submitted on January 28, 2021 to comply with the requirements of OP 16 of D. 20-09-035.
3. PG&E AL 6058-E, SCE AL 4404-E and SDG&E AL 3678-E were timely protested by CALSSA and IREC.
4. PG&E, SCE and SDG&E submitted timely responses to the protests.
5. In PG&E AL 6058-E, SCE AL 4404-E, and SDG&E AL 3678-E the Large IOUs listed three factors that need further discussion.
6. The Large IOUs have failed to meet the requirements of OP 16. The Large IOUs have listed factors that may affect the LGP reductions, but have not supplied specific information on the circumstances under which reduction of an LGP export power will occur, nor how reductions to a customer’s LGP are determined, as ordered per OP 16; or addressed that export values may only be lowered to the pre-defined ICA-SG level identified at the time of interconnection, as ordered pursuant to OP 15 for future grid conditions.
7. The Large IOUs statement that future working group discussions are needed to comply with a Decision’s order is not an acceptable substitute for obeying clear direction set forth by the Commission.
8. The ALs are rejected without prejudice.
9. While the topics included in the protests beyond the material omissions may not be proper protests under GO 96-B, we find them to be useful subjects for consideration here and direct them to be further discussed within the workshops.
10. Topics as identified in the Discussion section of this Resolution need further discussion.
11. Changes to the business-as-usual process of the IOUs are out of scope for these ALs.
12. The implementation of reduced generation in response to future grid conditions is a topic needing further discussion.
13. There is no record on what the terms “low-cost” or “common mitigations” brought forth in protests entail.
14. It is prudent to continue discussions to address outstanding topics with regards to the ALs submitted to address OP 16.
15. It is prudent for the Large IOUs to participate in a minimum of two workshops instead of holding SIWG meetings to address the outstanding topics because the SIWG does not provide sufficient opportunity to address the topics identified in protests and discussed in this Resolution in a timely fashion.
16. To comply with the requirements of OP 16, the Large IOUs must submit subsequent Tier 3 ALs.
17. PG&E AL 6141-E, SCE AL 4455-E, SDG&E AL 3721-E (Tier 3 ALs) were submitted on March 30, 2021 to comply with OPs 15 and 51 of the Decision. This set of ALs is still pending disposition and will be subject of a future resolution.
18. It is prudent, pending the issuance of the future resolution for the March 30, 2021 ALs submitted to comply per OP 15 and 51 of the Decision, to start discussions of those ALs within the workshops ordered in this Resolution.
19. Nothing in this Resolution prejudges the outcome of the March 30, 2021 ALs.
20. This Resolution does not alter the requirements of D.20-09-035 and direction given herein is given without changes to previous orders.

# Therefore it is ordered that:

1. This Resolution rejects Pacific Gas and Electric Company’s Advice Letter 6058-E, Southern California Edison Company’s Advice Letter 4404-E, and San Diego Gas & Electric Company’s Advice Letter 3678-E.
2. Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company are ordered to participate in at least two workshops to discuss all material articulated in the Discussion section of this Resolution. Workshops are to commence no later than 40 days after issuance of this Resolution. The Large IOUs are expected to address topics identified by Energy Division as needing discussion and prepare relevant presentations. The Large IOUs shall issue presentations ahead of the workshops to allow parties to prepare for the workshops. Deadlines for circulating the agenda and presentations shall be coordinated with Energy Division. Agenda items may also be discussed through the SIWG ahead of the scheduled workshops and the IOUs are ordered to attend and participate in these discussions.
3. Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company are ordered to submit subsequent Tier 3 Advice Letters, within 90 days, after issuance of this Resolution. The Advice Letters should contain all material articulated in the Discussion section of this Resolution and shall meet all the requirements of Ordering Paragraph 16 (and OP 15 as referenced in   
   OP 16) of D.20-09-035.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed, and adopted at a conference of the Public Utilities Commission of the State of California held on   
October 6, 2022; the following Commissioners voting favorably thereon:

/s/ RACHEL PETERSON

Rachel Peterson

Executive Director

ALICE REYNOLDS

President

CLIFFORD RECHTSCHAFFEN

GENEVIEVE SHIROMA

DARCIE HOUCK

JOHN REYNOLDS

Commissioners

1. The ICA is a tool developed in the Distribution Resources Plans (R.14-08-013) proceeding and informs developers of the hosting capacity a circuit has (that is, how much capacity is available before a grid upgrade is required). [↑](#footnote-ref-2)
2. The purpose of LGP is to allow a generator to reduce export power to the grid using control devices. Further details are in Section B of this Resolution. [↑](#footnote-ref-3)
3. D.20-09-035 at 209-210 and 224. [↑](#footnote-ref-4)
4. D.20-09-035 at 51. [↑](#footnote-ref-5)
5. Working Group Two Report at 119. [↑](#footnote-ref-6)
6. “There are two types of ICA profiles… [1] ICA-Static Grid (“ICA-SG”) 576 profile: This profile is the minimum ICA values at each of the 576 hours for the most limiting of these categories: thermal, voltage, power quality and protection. [2] ICA-Operational Flexibility (“ICA-OF”) 576 profile: This profile is the minimum ICA values at each of the 576 hours for the most limiting of these categories: thermal, voltage, power quality, protection *and safety*. Where the safety ICA is not the lowest of all the categories, ICA-OF and ICA-SG are the same…The minimum annual ICA-OF value is the ICA’s most conservative assessment of the system’s ability to interconnect new DER. The maximum value for ICA-SG is the least conservative scenario. In between lies…the minimum annual ICA-SG.” Working Group Two Report at 66. [↑](#footnote-ref-7)
7. Source: Adapted from Smart Inverter Working Group January 21, 2021 IOU Presentation “Supporting Ordering Paragraphs 15 (Issue 9 – Step 2) and 51.” *Note*: Step 2 refers to the Decision’s requirement of in OP 15 “Within six months of issuance of this decision, Utilities shall submit a Tier 3 Advice Letter providing: Recommendations (as applicable) regarding the standard review; Certification requirements; Interconnection processes necessary for implementation of the proposal.” [↑](#footnote-ref-8)
8. Working Group Two Report at 125. [↑](#footnote-ref-9)
9. Working Group Two Report at 125. [↑](#footnote-ref-10)
10. Working Group Two Report at 126. [↑](#footnote-ref-11)
11. Working Group Two Report at 126. [↑](#footnote-ref-12)
12. Working Group Two Report at 126. [↑](#footnote-ref-13)
13. D.20-09-035 at 56. [↑](#footnote-ref-14)
14. D.20-09-035 at 59. [↑](#footnote-ref-15)
15. PG&E AL 6058-E at 7, SCE AL 4404-E at 3, and SDG&E AL 3678-E at 3. [↑](#footnote-ref-16)
16. PG&E AL 6058-E at 6, SCE AL 4404-E at 2, and SDG&E AL 3678-E at 2. [↑](#footnote-ref-17)
17. PG&E AL 6058-E at 7, SCE AL 4404-E at 3, and SDG&E AL 3678-E at 3. [↑](#footnote-ref-18)
18. CALSSA Protest of PG&E Advice Letter 6058-E, SCE Advice Letter 4404-E, and SDG&E Advice Letter 3678-E at 1-2, and IREC’s Protest to San Diego Gas & Electric’s Advice Letter 3678-E, Pacific Gas & Electric’s Advice Letter 6508-E, and Southern California Edison’s Advice Letter 4404-E at 2-4. [↑](#footnote-ref-19)
19. PG&E AL 6058-E at 7; SCE AL 4404-E at 3; and SDG&E AL 3678-E at 3. [↑](#footnote-ref-20)
20. PG&E’s Response to Protest of AL 6058-E at 3. *See also* SCE’s Response to Protests of AL 4404-E at 1, and SDG&E’s Response to Protests of AL 3678-E at 2. [↑](#footnote-ref-21)
21. PG&E AL 6058-E at 6, SCE AL 4404-E at 2, and SDG&E AL 3678-E at 2. [↑](#footnote-ref-22)
22. CALSSA Protest of PG&E Advice Letter 6058-E, SCE Advice Letter 4404-E, and SDG&E Advice Letter 3678-E Implementing D.19-03-013 at 1. [↑](#footnote-ref-23)
23. IREC’s Protest to San Diego Gas & Electric’s Advice Letter 3678-E, Pacific Gas & Electric’s Advice Letter 6508-E, and Southern California Edison’s Advice Letter 4404-E at 2. [↑](#footnote-ref-24)
24. D.20-09-035 at 210. [↑](#footnote-ref-25)
25. D.20-09-035 at 209. [↑](#footnote-ref-26)
26. California Public Utilities Code Section 2107 provides that any public utility that fails to comply with any provision of a commission decision, where a penalty has not otherwise been provided, is subject to a penalty of $500 to $100,000 for each offense. [↑](#footnote-ref-27)
27. D.20-09-035 at 209-210. [↑](#footnote-ref-28)
28. OP 15 and OP 51 required the Large IOUs to provide recommendations regarding the standard review, certification requirements, and interconnection processes necessary for implementation of the LGP proposal and allow an inverter approved for non-export and limited-export to be set using different maximum export value settings at different times of the year. [↑](#footnote-ref-29)
29. CPUC, “Commission General Order 96-B,” [*https://www.cpuc.ca.gov/about-cpuc/divisions/water-division/wd-advice-letters-section/wd-commission-general-order-96-b*](https://www.cpuc.ca.gov/about-cpuc/divisions/water-division/wd-advice-letters-section/wd-commission-general-order-96-b) (accessed July 26, 2022) [↑](#footnote-ref-30)
30. Section 7.4.2 sets out the six criteria for protest to an advice letter as follows:

    An advice letter may be protested on one or more of the following grounds:

    1. The utility did not properly serve or give notice of the advice letter;
    2. The relief requested in the advice letter would violate statute or Commission order, or is not authorized by statute or Commission order on which the utility relies;
    3. The analysis, calculations, or data in the advice letter contain material errors or omissions;
    4. The relief requested in the advice letter is pending before the Commission in a formal proceeding;
    5. The relief requested in the advice letter requires consideration in a formal hearing, or is otherwise inappropriate for the advice letter process; or
    6. The relief requested in the advice letter is unjust, unreasonable, or discriminatory, provided that such a protest may not be made where it would require relitigating a prior order of the Commission.

    [↑](#footnote-ref-31)
31. D.20-09-035 at 51. [↑](#footnote-ref-32)
32. D.20-09-035 at 59. [↑](#footnote-ref-33)
33. D.20-09-035 at 60. [↑](#footnote-ref-34)
34. Under Public Utilities Code (P.U. Code) Section (§) 451 (<https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=451&lawCode=PUC>, accessed 8/4/2022) the IOUs:

    …shall furnish and maintain such adequate, efficient, just, and reasonable service… as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees, and the public.

    All rules made by a public utility affecting or pertaining to its charges or service to the public shall be just and reasonable. [↑](#footnote-ref-35)
35. P.U. Code § 399.2 states: “It is the policy of this state, and the intent of the Legislature, to reaffirm that each electrical corporation shall continue to operate its electric distribution grid in its service territory and shall do so in a safe, reliable, efficient, and cost-effective manner.” (https://leginfo.legislature.ca.gov/faces/codes\_displaySection.xhtml?sectionNum=399.2&lawCode=PUC, accessed 8/4/2022) [↑](#footnote-ref-36)
36. CALSSA Protest of PG&E Advice Letter 6058-E, SCE Advice Letter 4404-E, and SDG&E Advice Letter 3678-E at 2. [↑](#footnote-ref-37)
37. CALSSA Protest of PG&E Advice Letter 6058-E, SCE Advice Letter 4404-E, and SDG&E Advice Letter 3678-E at 2. [↑](#footnote-ref-38)
38. The Factors are:

    * Factor 1: The Utilities need to reduce generation to ensure safe and reliable service without grid updates.
    * Factor 2: Future grid conditions resulting in actual hosting capacity being below the published Integration Capacity Analysis-SG.
    * Factor 3: A determination by the utility that the system does not operate as approved. For example, there is no buffer or the actual buffer is determined to be less than 10%.

    [↑](#footnote-ref-39)
39. CALSSA Protest of PG&E Advice Letter 6058-E, SCE Advice Letter 4404-E, and SDG&E Advice Letter 3678-E at 1. [↑](#footnote-ref-40)
40. CALSSA Protest of PG&E Advice Letter 6058-E, SCE Advice Letter 4404-E, and SDG&E   
    Advice Letter 3678-E at 1. [↑](#footnote-ref-41)
41. CALSSA Protest of PG&E Advice Letter 6058-E, SCE Advice Letter 4404-E, and SDG&E   
    Advice Letter 3678-E at 1-2. [↑](#footnote-ref-42)
42. IREC’s Protest to San Diego Gas & Electric’s Advice Letter 3678-E, Pacific Gas & Electric’s   
    Advice Letter 6508-E, and Southern California Edison’s Advice Letter 4404-E – Implementing Limited Generation Profiles Pursuant to Decision 20-09-035 at 4. [↑](#footnote-ref-43)
43. IREC’s Protest to San Diego Gas & Electric’s Advice Letter 3678-E, Pacific Gas & Electric’s   
    Advice Letter 6508-E, and Southern California Edison’s Advice Letter 4404-E – Implementing Limited Generation Profiles Pursuant to Decision 20-09-035 at 3-4. [↑](#footnote-ref-44)
44. IREC’s Protest to San Diego Gas & Electric’s Advice Letter 3678-E, Pacific Gas & Electric’s   
    Advice Letter 6508-E, and Southern California Edison’s Advice Letter 4404-E – Implementing Limited Generation Profiles Pursuant to Decision 20-09-035 at 4. [↑](#footnote-ref-45)
45. IREC’s Protest to San Diego Gas & Electric’s Advice Letter 3678-E, Pacific Gas & Electric’s Advice Letter 6508-E, and Southern California Edison’s Advice Letter 4404-E – Implementing Limited Generation Profiles Pursuant to Decision 20-09-035 at 4. [↑](#footnote-ref-46)
46. See <https://www.pge.com/tariffs/assets/pdf/tariffbook/ELEC_RULES_21.pdf>, PG&E Rule 21 Section D.9 (General, Rules, Rights and Obligations--Curtailment and Disconnection):

    Distribution Provider may limit the operation or disconnect or require the disconnection of a Producer’s Generating Facility from Distribution Provider’s Distribution or Transmission System at any time, with or without notice, in the event of an Emergency, or to correct Unsafe Operating Conditions. Distribution Provider may also limit the operation or disconnect or require the disconnection of a Producer’s Generating Facility from Distribution Provider’s Distribution or Transmission System upon the provision of reasonable written notice: 1) to allow for routine maintenance, repairs or modifications to Distribution Provider’s Distribution or Transmission System; 2) upon Distribution Provider’s determination that a Producer’s Generating Facility is not in compliance with this Rule; or 3) upon termination of the Generator Interconnection Agreement… [↑](#footnote-ref-47)
47. D.20-09-035 at 59. [↑](#footnote-ref-48)
48. CALSSA Protest of PG&E Advice Letter 6058-E, SCE Advice Letter 4404-E, and SDG&E Advice Letter 3678-E Implementing D.19-03-013 at 1. [↑](#footnote-ref-49)
49. D.20-09-035 at 51. [↑](#footnote-ref-50)
50. D.20-09-035 at 59. [↑](#footnote-ref-51)
51. CALSSA Protest of PG&E Advice Letter 6058-E, SCE Advice Letter 4404-E, and SDG&E Advice Letter 3678-E Implementing D.19-03-013 at 2. [↑](#footnote-ref-52)
52. IREC’s Protest to San Diego Gas & Electric’s Advice Letter 3678-E, Pacific Gas & Electric’s Advice Letter 6508-E, and Southern California Edison’s Advice Letter 4404-E – Implementing Limited Generation Profiles Pursuant to Decision 20-09-035 at 3. [↑](#footnote-ref-53)
53. D.20-09-035 at 59. [↑](#footnote-ref-54)
54. D.20-09-035 at 59. [↑](#footnote-ref-55)
55. D.20-09-035 at 60. [↑](#footnote-ref-56)
56. IREC Comments on Draft Resolution E-5211 at 2. [↑](#footnote-ref-57)
57. IREC Comments on Draft Resolution E-5211 at 2-3. [↑](#footnote-ref-58)
58. PG&E AL 6141-E, SCE AL 4455-E, SDG&E AL 3721-E (Tier 3 ALs) were submitted to comply with OPs 15 and 51 of the Decision. OP 15 and OP 51 required the Large IOUs to provide recommendations regarding the standard review, certification requirements, and interconnection processes necessary for implementation of the LGP proposal and allow an inverter approved for non-export and limited-export to be set using different maximum export value settings at different times of the year. [↑](#footnote-ref-59)
59. IREC Comments on Draft Resolution E-5211 at 3. [↑](#footnote-ref-60)
60. Comments of Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company on Draft Resolution E-5211 at 2. [↑](#footnote-ref-61)
61. Comments of Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company on Draft Resolution E-5211 at 4. [↑](#footnote-ref-62)
62. Comments of Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company on Draft Resolution E-5211 at 4. [↑](#footnote-ref-63)
63. Comments of Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company on Draft Resolution E-5211 at 4. [↑](#footnote-ref-64)
64. Comments of Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company on Draft Resolution E-5211 at 5. [↑](#footnote-ref-65)