

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION

Agenda ID# 18858
RESOLUTION E-5104
NOVEMBER 19, 2020

R E S O L U T I O N

Resolution E-5104. Approving with Modifications Pacific Gas and Electric Company's Advice Letter 5853-E, Southern California Edison Company's Advice Letter 4229-E, and San Diego Gas & Electric Company's Advice Letter 3555-E requesting approval of New Qualifying Facilities Standard Offer Contracts, pursuant to Decision (D.) 20-05-006.

PROPOSED OUTCOME:

- Approves, with modifications, the Qualifying Facilities Standard Offer Contracts filed by Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E) to comply with CPUC Decision (D.) 20-05-006 implementing the Public Utility Regulatory Policies Act of 1978.
- Orders PG&E, SCE, and SDG&E to file new Tier 1 Advice Letters to comply with CPUC D.20-05-006 and this Resolution.

SAFETY CONSIDERATIONS:

- There are no safety considerations associated with this Resolution.

ESTIMATED COST:

- There are no costs associated with this Resolution.

By Pacific Gas and Electric Company Advice Letter 5853-E, filed on June 15, 2020; Southern California Edison Company Advice Letter 4229-E, filed on June 15, 2020; and San Diego Gas & Electric Company Advice Letter 3555-E, Filed on June 15, 2020.

SUMMARY

This Resolution approves, with modifications, the Qualifying Facilities Standard Offer Contracts filed by Pacific Gas and Electric (PG&E) in Advice Letter (AL) 5853-E, Southern California Edison (SCE) in AL 4229-E, and San Diego Gas & Electric (SDG&E) in AL 3555-E to comply with CPUC Decision (D.) 20-05-006 implementing the Public Utility Regulatory Policies Act of 1978 (PURPA). Therefore, this Resolution also orders PG&E, SCE, and SDG&E to each file new Tier 1 advice letters with Qualifying Facilities Standard Offer Contracts modified to comply with D.20-05-006 and this Resolution.

BACKGROUND

Public Utilities Regulatory Policies Act of 1978

The Public Utility Regulatory Policies Act of 1978 (PURPA) is a federal law enacted to encourage the development of Qualifying Facilities (QFs), which are either small renewable generation facilities or gas-fired cogeneration, and to reduce reliance on fossil fuels nationally. The CPUC has a long history of PURPA implementation over nearly four decades, and many of the State's first investments in renewable and efficient natural gas generation stem from CPUC implementation of PURPA. Under PURPA, a utility is required to purchase energy, capacity, or both, from a QF that is no greater than a certain MW threshold. The requirement that the utilities purchase this power is known as the "must-take" requirement. PURPA requires that the amount that a utility pays a QF for this purchase - known as avoided cost rates - to be the incremental cost to the electric utility of alternative electric energy to ensure ratepayer indifference to whether the capacity or energy comes from the utility or a QF. QFs fall into two categories: small power production facilities whose primary energy source is renewable, biomass, waste or geothermal; and cogeneration facilities that sequentially produce electricity and another form of useful thermal energy in a way that is more efficient than the separate production of both forms of energy.

Recent CPUC Proceeding Addressing PURPA

On December 6, 2017, a federal district court found that the Qualifying Facility and Combined Heat and Power Program Settlement Agreement Standard Offer Contract for QFs 20 MW or Less approved by the CPUC pursuant to Decision (D.) 10-12-035 failed to provide QFs the option to choose avoided cost rates determined either at the time of contract execution or at the time of delivery. In response, the CPUC opened Rulemaking (R.) 18-07-017, to establish a new QF Standard Offer Contract (SOC) with all required price terms.

Resulting from Rulemaking (R.) 18-07-017, Decision (D.) 20-05-006 adopts requirements for a New Qualifying Facilities Standard Offer Contract (New QF SOC) that will be available to any QF of 20 megawatts or less seeking to sell electricity and/or capacity to PG&E, SCE, or SDG&E pursuant to PURPA. Decision (D.) 20-05-006 also adopts pricing methodologies for both capacity and energy calculated at the time of contract execution and at the time of delivery.

D.20-05-006 established the following contract pricing methodologies and specifically ordered PG&E, SCE, and SDG&E to submit Advice Letters calculating the various prices.

- When the seller elects pricing at time of contract execution:
 - The **energy price** is calculated using a three-year average of publicly available California Independent System Operator (CAISO) locational marginal prices for the PNode specific to the QF, calculated on a monthly basis with periods based on the Commission's most recently approved standard time-of-use periods specific to a utility, and a collar based on prices at the relevant Energy Trading Hub.
 - The **capacity price** is calculated using a five-year weighted average of publicly available resource adequacy prices, shaped to time periods based on generation capacity allocation factors adopted by the Commission and applied to updated time-of-use periods, with a 2.5% escalation factor for each year of the contract term after the last year included in the average.
- When the seller elects pricing at time of delivery:

- The **energy price** is calculated using locational marginal prices from the CAISO's day-ahead market for the node specific to a qualifying facility.
- The **capacity price** determined is set by the same methodology used for capacity price at time of execution, but with the price recalculated annually based on changes in the cost of resource adequacy and/or capacity allocation factors, and time-of-use periods.

If a seller elects to provide energy as it is available, pursuant to D.20-05-006, the price will be calculated using the time of delivery energy price methodology.

The maximum term for the New QF SOC is twelve years for new facilities and seven years for existing facilities, and the contract shall be made available until suspended by the CPUC's Executive Director. The New QF SOC incorporates non-price terms from the QF Settlement SOC set forth in D.10-12-035,¹ such that any non-price terms of the QF Settlement SOC not expressly modified in D.20-05-006 are carried over to the New QF SOC. The QF Settlement Standard Offer Contract remains unchanged and an available option for QFs.

The decision ordered PG&E, SCE, and SDG&E to each file a Tier 2 advice letter with their New QF SOCs within 30 days of the decision, including a redline version comparing the contract with the superseded prior contract.

Summary of Utility Advice Letters Implementing CPUC PURPA Decision

In PG&E's AL 5853-E, SCE's AL 4229-E and SDG&E's AL 3555-E, all three IOUs seek approval of:

¹ See Exhibit 6 to Attachment A of D.10-12-035:

https://docs.cpuc.ca.gov/PublishedDocs/WORD_PDF/FINAL_DECISION/128624.PDF.

1. A pro forma Standard Offer Contract that will be made available to QFs of 20 megawatts (MW) or less pursuant to Ordering Paragraph (OP) 17 of D.20-05-006.

In D.20-05-006, the CPUC ordered the IOUs to submit a New QF SOC consistent with the Decision as a Tier 2 advice letter to the CPUC for approval. The three IOUs submitted largely identical versions of the New QF SOC, except for provisions PG&E added related to its Chapter 11 bankruptcy.

2. A proposal that a separate advice letter approval be required for any PPA with a QF paired with energy storage.

In the New QF SOC, all three IOUs added two additional provisions related to energy storage-paired QFs, including any hybrid or co-located energy storage resources associated with the QF. Section 9.02(j) adds a covenant that the QF will not cause energy from the CAISO-controlled grid to be stored by the QF, and Section 9.04(i) requires the QF to indemnify the IOU for any costs related to withdrawals of energy from the CAISO-controlled grid. PG&E argues that this language is necessary because federal regulations impose stipulations on how an energy storage system may qualify as a QF, and neither D.20-05-006 nor D.10-12-035, upon which the New QF SOC is based, consider these stipulations or the increasing prevalence of storage. SCE and PG&E propose that should an energy storage-paired QF request to sign the New QF SOC, the CPUC should require them to submit a Tier 2 advice letter with the mutually negotiated and agreed modified New QF SOC that adequately addresses the storage issues.

In addition, in AL 5853-E PG&E also seeks approval of Proposed new hours for its TOD periods and update its Capacity Allocation Factors (CAFs):

1. Updated Time-of-Day (TOD) periods to be used for the New QF SOC

Initial energy and capacity prices pursuant to Ordering Paragraphs (OPs) 1, 2 and 6 of D.20-05-006.²

In D.20-05-006, the CPUC established energy and capacity price methodologies for the New QF SOC, and ordered the IOUs to submit those prices to the CPUC within 30 days of the Decision via a Tier 2 advice letter. In AL 5853-E, PG&E provides those initial energy and capacity prices for review.

PG&E proposes updates to its TOD periods to be used solely for the New QF SOC to determine both capacity and energy prices, pursuant to Ordering Paragraph (OP) 7 of D.20-05-006. PG&E states the proposed updates to the TOD periods will better align with hourly price patterns currently seen in the market to reflect PG&E's avoided cost.

2. Updated Capacity Allocation Factors to be used for the New QF SOC

PG&E also proposes updates to its CAFs to align with recent market RA prices and shaping the annual RA price to the individual months based on the monthly weighted average RA price in the 2018 Resource Adequacy Report published by the CPUC. PG&E's proposes that because existing CAFs were approved over two decades ago in D.97-03-017 they need to be updated to reflect changes in how capacity is valued in California.

² TOD periods used in the old SOC available on the IOUs' QF/CHP Settlement pages. PG&E: https://www.pge.com/en_US/for-our-business-partners/energy-supply/electric-procurement/qualifying-facility-and-combined-heat-and-power-program-settlement/qualifying-facility-and-combined-heat-and-power-program-settlement.page; SCE: <https://www.sce.com/procurement/solicitations/chp/qf-chp-settlement>; and SDG&E: <http://sdge.com/node/708>.

NOTICE

Notice of PG&E AL 5853-E was made by publication in the Commission's Daily Calendar. PG&E states that a copy of the Advice Letter was mailed and distributed in accordance with Section 4 of General Order 96-B.

Notice of SCE AL 4229-E was made by publication in the Commission's Daily Calendar. SCE states that a copy of the Advice Letter was mailed and distributed in accordance with Section 4 of General Order 96-B.

Notice of SDG&E AL 3555-E was made by publication in the Commission's Daily Calendar. SDG&E states that a copy of the Advice Letter was mailed and distributed in accordance with Section 4 of General Order 96-B.

PROTESTS

ALs 5853-E, 4229-E, and 3555-E were protested.

PG&E's AL 5853-E was timely protested on July 6, 2020, by the California Public Utilities Commission's Public Advocate's Office (Cal Advocates) and jointly by Vote Solar and the California Wind Energy Association (CalWEA). PG&E responded to both protests on July 13, 2020.

SCE's AL 4229-E was timely protested on July 6, 2020, by Cal Advocates, jointly by Vote Solar and CalWEA, and by Green Power Institute (GPI). SCE responded to all three protests on July 13, 2020.

SDG&E's AL 3555-E was timely protested on July 6, 2020, by Cal Advocates and jointly by Vote Solar and CalWEA. SDG&E responded to both protests on July 13, 2020.

These protests are summarized below.

Summary of Cal Advocates' Protests

Cal Advocates filed similar protests against all three investor owned utilities' (IOUs) New QF SOC advice letters and therefore the protests against the three utilities advice letters, PG&E's AL 5853-E, SCE's AL 4229-E, and SDG&E's AL 3555-E, are summarized together below. Specifically, Cal Advocates asserts that:

1. Proposed Energy Storage-Paired QF Provisions are not Authorized by the PURPA Decision.

All three IOUs proposed in their ALs at SOC sections 9.02(j)³ and 9.04(i)⁴ new language for the New QF SOC that would apply to QFs paired with energy storage systems. The language the IOUs added at sections 9.02(j) and 9.04(i) applies to QFs that are paired with energy storage systems to prohibit a QF from storing energy from the grid and to indemnify the IOUs from any associated costs related to withdrawals of energy from the grid. Cal Advocates asserts such language be rejected because it is not authorized by D.20-05-006. Cal Advocates asserts that the IOUs have no authority to request these substantive modifications because the CPUC did not authorize them to do so in D.20-05-006. Cal Advocates states that the proposed language is impermissible under General Order (GO) 96-B, General Rule 5.1 because it is not authorized by state or Commission order. Thus, Cal Advocates argues the language should be rejected.

2. Energy Storage-Paired QF Modifications to the New QF SOC Should be Litigated in the Appropriate Commission Proceeding.

³ 9.02(j) reads: "Throughout the Term, Seller shall not cause any energy from the Transmission Provider's electrical system or the CAISO Controlled Grid to be stored by the Project or any hybrid of co-located storage facility associated with the Project."

⁴ 9.04(i) reads: "Seller shall defend, save harmless, and indemnify Buyer against any costs or charges, including any CAISO Charges, associated with withdrawals of energy from the Transmission Provider's electrical system or the CAISO Controlled Grid to be stored by the Project or any hybrid or co-located storage facility associated with the Project."

Cal Advocates asserts that D.20-05-006 did not contemplate issues related to energy storage and therefore the decision did not consider whether changes related to storage in the New QF SOC would impact the CPUC's compliance with PURPA, whether such modifications would impact a generator's QF status, what are appropriate definitions for terms, and what impacts such changes or definitions may have on other proceedings, among other concerns. Cal Advocates states that no party raised energy storage in the proceeding, and thus it is improper to consider these issues for the first time in an advice letter. Cal Advocates notes that in its November 18, 2018, Assigned Commissioner's Scoping Memo and Ruling, the CPUC asked "[a]re there any other issues that the Commission must address to adopt a New QF SOC that complies with PURPA?" Cal Advocates also notes that no parties raised energy storage as a concern, nor has any party sought rehearing of D.20-05-006. Thus, Cal Advocates argues the added language in sections 9.02(j) and 9.04(i) of each utilities' proposed New QF SOC should be rejected.

Replies of the Investor Owned Utilities to Cal Advocates' Protest

The IOUs' replies make similar arguments to one another that while D.20-05-006 does not address storage, and the New QF SOC must include language clarifying what is and is not permissible for battery storage. In its reply, PG&E agrees with Cal Advocates that D.20-05-006 did not contemplate charging, and thus PG&E made a 'good faith' addition to the New QF SOC that codified its understanding that storage was not considered, and thus would require additional modifications related to a QF charging from the grid that the CPUC did not contemplate. PG&E argues that due to its must-purchase obligation from any QF of 20 MW or less, should a grid-charging QF approach PG&E, the New QF SOC would need to be modified anyway to accommodate that grid-charging QF while ensuring the CPUC's compliance with PURPA. PG&E states that the language added to SOC sections 9.02(j) and 9.04(i) merely adds transparency and avoids unnecessary disputes between PG&E and grid-charging storage-paired QFs. PG&E suggests that the CPUC approve the proposed language in the New QF SOC as a base form, and require it submit Tier 2 advice letters when seeking approval of a New QF SOC modified to accommodate grid-charging QFs.

In its reply, SCE contends it added the language at New QF SOC sections 9.02(j) and 9.04(i) to allow QFs with energy storage charged exclusively from renewable energy resources the ability to execute the New QF SOC and prevent disputes. SCE further states that other provisions, such as metering requirements, would be required to ensure that grid charging meets eligibility requirements to remain PURPA compliant. Alternatively, SCE states that it would support further proceedings to adjudicate this issue.

In its reply, SDG&E concedes that D.20-05-006 did not authorize the language it added at New QF SOC sections 9.02(j) and 9.04(i). Indeed, SDG&E echoes many of Cal Advocates' concerns regarding battery storage as it relates to PURPA, including lack of guidance on how such battery storage may charge from the grid, and a lack of California Independent System Operator (CAISO) adopted tariff provisions, such as provisions relating to siting, interconnection, metering, charging, discharging, and charging energy audits. However, SDG&E argues that because D.20-05-006 did not contemplate battery storage, the language at 9.02(j) and 9.04(i) should be included in order to clarify that battery storage-paired facilities are not eligible for the New QF SOC, and would need to negotiate additional terms with the IOUs to ensure PURPA compliance and protect ratepayers.

Summary of Vote Solar and CalWEA Protests

Vote Solar and CalWEA jointly filed similar protests against all three IOUs' New QF SOC advice letters and therefore the protests against the three utilities advice letters, PG&E's AL 5853-E, SCE's AL 4229-E, and SDG&E's AL 3555-E, are summarized together below. Specifically, Vote Solar and CalWEA assert that:

1. QFs should be eligible for partial pro-rated Resource Adequacy (RA) capacity payments

Vote Solar and CalWEA highlight that capacity payments in the New QF SOC are in part based on Net Qualifying Capacity (NQC) as calculated by the CAISO. The joint protest also highlights that Exhibit D Section 3(a) of the utilities New QF SOC state that a QF is eligible for capacity payments only if the IOU as

Buyer is able to apply the entire NQC towards its Resource Adequacy Requirement (RAR) showings. Vote Solar and CalWEA request that the CPUC allow QFs to receive partial pro-rated RA capacity payments when an IOU can apply less than the entire NQC towards its monthly RAR filing.

2. The definition of 'Economic Dispatch Down' creates uncertainty in the calculation of 'Deemed Delivered Energy' and produces a potential conflict with the principle that the Seller should be compensated for economically curtailed energy.

CalWEA and Vote Solar argue that any instruction from the CAISO is "CAISO action or inaction," including instruction to curtail under the 'Economic Dispatch Down' definition. CalWEA and Vote Solar request that a portion of the definition of 'Deemed Delivered Energy' be modified to exclude the phrase "CAISO action or inaction" as it is imprecise and creates uncertainty into the calculation of 'Deemed Delivered Energy.'

3. The newly defined terms 'Power Product Curtailment' and 'Economic Dispatch Down' introduce ambiguity as to when a QF may be compensated for economically curtailed energy.

Vote Solar and CalWEA assert that the terms that define curtailment conditions eligible for Seller compensation, referred to as 'Power Product Curtailment' and 'Economic Dispatch Down,' are ambiguous in their definitions. Vote Solar and CalWEA find that the two definitions appear to be circular and the definition for 'Power Product Curtailment' is extremely broad. Vote Solar and CalWEA request that the definitions be revised to clarify the conditions that warrant Seller compensation, and that conditions that meet both 'Economic Dispatch Down' and 'Power Product Curtailment' definitions should be deemed an 'Economic Dispatch Down.'

4. The definition for "Deemed Delivered Energy" creates uncertainty in calculating a Seller's payment for economically curtailed energy.

Vote Solar and CalWEA state that placing a limitation on the Buyer's (i.e. utility's) obligation to pay for 'Deemed Delivered Energy,' as outlined in Exhibit

U of the New QF SOC, would be inappropriate and inconsistent with the requirement to compensate the Seller for economically curtailed energy in D.20-05-006. Vote Solar and CalWEA request the word “may” be changed to “shall” in Exhibit U’s language to ensure that the Seller is eligible for ‘Deemed Delivered Energy’ payments for the volume of energy not delivered subject to ‘Economic Dispatch Down.’ The sentence in question in Exhibit U reads as follows:

“If a Generating Facility is subject to delivery curtailments under Economic Dispatch Down in any Settlement Interval, Seller **may** be eligible for Deemed Delivered Energy payments for the volume of energy not delivered subject to the Economic Dispatch Down.”

Replies of the Investor Owned Utilities to Vote Solar and CalWEA’s protest

In its reply, PG&E states that Vote Solar and CalWEA’s proposal to allow a QF to unilaterally provide only part of its NQC to the IOU as Buyer would adversely affect the IOU’s ability to manage its RA positions and thus would create additional risk, decrease the value of those RA benefits to the IOU, and increase costs for ratepayers. PG&E states that approving Vote Solar and CalWEA’s proposal would increase costs for ratepayers because the IOU may have to (1) replace a megawatt shortfall to meet its RA Requirement on short notice, (2) face noncompliance fines if it cannot replace such a deficiency, or (3) procure more than its actual RA Requirement to account for unexpected deficiencies. PG&E argues this portion of the protest should be dismissed.

PG&E also addresses Vote Solar and CalWEA’s claims regarding curtailment language by clarifying that the economic curtailment provisions are consistent with language previously authorized by the CPUC in other Renewables Portfolio Standard (RPS) Long-Term Model Power Purchase Agreements (PPAs). To address Vote Solar and CalWEA’s more specific concerns, PG&E explained that ‘Deemed Delivered Energy’ quantifies the energy Seller could have reasonably delivered to Buyer as an outcome of ‘Economic Dispatch Down.’ Further, the economic curtailment provisions are clear in that an economic bid is an action by the Buyer which is not a scenario under ‘Power Product Curtailment.’ ‘Power

Product Curtailment’ defines any curtailment instruction by CAISO in which there is no compensation to the Seller, therefore it is not considered in the calculation of ‘Deemed Delivered Energy.’ PG&E requests that the CPUC reject Vote Solar and CalWEA’s request to modify the definitions of ‘Economic Dispatch Down,’ ‘Power Product Curtailment,’ and ‘Deemed Delivered Energy,’ and argues that the definitions are appropriate and consistent with D.20-05-006.

In its reply, SCE argues that the language requiring a QF to provide its entire NQC to the IOU as Buyer in exchange for capacity payments is to ensure that the IOU as Buyer is able to rely upon the entire NQC of a QF in its RA Requirement filing and not be exposed to the uncertainty of additional procurement costs. SCE notes that Section 3.01(c)(iii) of the proposed SOC requires the QF as Seller to commit its entire NQC to the IOU as Buyer, while Sections 3.01 and 3.02 indicate that the IOU as Buyer has exclusive rights to generating capacity to meet its RA obligations, and the QF may not grant, pledge, assign or otherwise commit any portion of RA benefits to any other entity. SCE states that the result of choosing not to comply with these provisions should be no payment at all. SCE thus argues this portion of the protest should be dismissed.

SCE also addresses Vote Solar and CalWEA’s claims regarding the curtailment language by asserting that the New QF SOC does conform with the economic curtailment provisions in existing RPS agreements, as directed by D.20-05-006. Further, SCE clarifies that the definitions of ‘Deemed Delivered Energy,’ ‘Economic Dispatch Down,’ and ‘Power Product Curtailment’ (referred to as ‘System Dispatch Down’ in existing RPS PPAs) were adopted from SDG&E’s 2018 RPS Long-Term Model PPA template. SCE states that the intent of Exhibit U’s definition for ‘Deemed Delivered Energy’ is to provide a calculation of the payment for energy that would have been delivered had it not been reduced through a market bid by the Buyer, but not by any curtailed energy instructed by CAISO. It is possible that the calculation for ‘Deemed Delivered Energy’ results in zero payment to the Seller dependent on a QF’s election to use either the CAISO Participating Intermittent Resource Program forecast or the Seller’s day-ahead forecast updated for outages, and SCE asserts that the use of the word

“shall” would eliminate the contingency requirements. Further, in the definition for ‘Deemed Delivered Energy,’ SCE explains that the phrase “CAISO action or inaction” is intended to clarify that the term “CAISO fault,” which is used in SDG&E’s 2018 RPS Long-Term Model PPA, is meant to reference any CAISO instruction, or lack thereof, with respect to intended curtailment. SCE finds that “CAISO action or inaction” is clearer than “CAISO fault.”

In its reply, SDG&E states that Vote Solar and CalWEA’s protest is inconsistent with D.20-05-006, regarding the claim at pages 46-47 that capacity payments should be based on the QF’s NQC and that as a result the IOU as Buyer should receive the full NQC. SDG&E also characterizes Vote Solar and CalWEA’s proposal as an “operational and logistical nightmare” for IOUs managing their RA compliance and CAISO Scheduling Coordinator status. SDG&E also states that Vote Solar and CalWEA’s protests do not offer clear benefits. SDG&E thus argues that the protest should be rejected.

SDG&E also addresses Vote Solar and CalWEA’s claims regarding curtailment language by arguing that the definitions for ‘Economic Dispatch Down’ and ‘Power Product Curtailment’ are mutually exclusive and clarify the circumstances for which power curtailments are eligible for payment as ‘Deemed Delivered Energy.’ SDG&E argues that excluding energy volumes curtailed by CAISO or the transmission operator from ‘Deemed Delivered Energy’ eligibility protects customers from having to pay for curtailed energy that did not result from energy bids. SDG&E adds that the economic curtailment language in the New QF SOC was adopted from SDG&E’s 2018 RPS Model contract, as directed by D.20-05-006, and has already been reviewed and approved by the Commission. The inclusion of the phrase “CAISO action or inaction” reinforces the concept of economic curtailment, and SDG&E emphasizes that payment for ‘Deemed Delivered Energy’ is not intended for non-economic related circumstances such as grid emergency or overgeneration conditions. SDG&E argues that Vote Solar and CalWEA’s position that an economic curtailment represents a CAISO “action or inaction” is inappropriate and should only arise

when the facility's energy bids into the CAISO market result in the facility not being dispatched during affected time intervals.

Summary of GPI's Protest

The Green Power Institute (GPI) filed a protest against only SCE's AL 4229-E. The protest is summarized below.

First, GPI highlights language in SCE's AL 4229-E which prohibits material modifications to QFs. GPI states that no further explanation for the change is provided in AL 4229-E, and thus GPI fails to see why it is warranted.

Accordingly, GPI requests SCE remove such language.

Second, GPI notes that SCE's language in AL 4229-E may indicate that SCE believes battery storage may be eligible for the New QF SOC. GPI believes that in order to encourage renewables, promote accessibility, and eliminate doubt, SCE should add language additionally clarifying that energy storage projects may qualify as QFs should they meet the required criteria.

Third, GPI notes that the New QF SOC adds curtailment language from existing RPS contracts. GPI requests that SCE clarify that negative market pricing should only impact QFs that opt for pricing determined at time of product delivery, because pricing determined at time of SOC execution pricing does not fluctuate with market prices, and that the language be modified to make clear that curtailment provisions to mitigate the risk of negative market pricing only apply to those QFs that are subject to negative market prices.

Finally, GPI notes that it appears that there is some confusing language in SCE's AL 4229-E. First, "D.20-05-06" on page 5 should be "D.20-05-006". Second, GPI states that SCE's use of document names leads to confusion. Various, SCE references the "PURPA contract," the "Standard Offer Contract," and the "New QF SOC." GPI recommends that the phrase "New Standard Offer Contract" or "New QF SOC" be used throughout, rather than "the Agreement" or "PURPA Contract," for the sake of clarity and consistency.

Reply of SCE to GPI's protest

In reply, SCE first notes that language prohibiting material modification of a QF previously existed in a now-defunct section of the old SOC. SCE notes that such language is necessary to prevent modifications to an existing QF that would result in it being deemed a new QF. Second, SCE replies that the storage language GPI requests be added that would detail whether a project is eligible for the New QF SOC is a matter of federal law and is not appropriate as a contract provision. Third, SCE points to Exhibit M of the New QF SOC, which states that the section is applicable only when SCE as Buyer is not the scheduling coordinator. If SCE is not the scheduling coordinator and the QF continues to generate despite negative pricing in the real-time market, SCE is entitled to recover any associated charges. Finally, SCE notes that the "PURPA Contract" language included in the New QF SOC is synonymous with "New QF SOC" itself, and was retained to maintain consistency with the preexisting QF SOC, and that there is no reason to change the language.

DISCUSSION

Staff has reviewed the advice letters, the protests, and the replies, and finds that the advice letters submitted are largely consistent with the provisions of D.20-05-006. Staff finds that the protest of Cal Advocates has merit, whereas we reject the protests of Vote Solar and CalWEA and GPI. In response to the concerns raised in Cal Advocates' protest, the IOUs shall file Supplemental Tier 1 advice letters within 7 days with revised New QF Standard Offer Contracts consistent with D.20-05-006 and this resolution, as described below.

Compliance with D.20-05-006

Energy Division staff evaluated whether the New QF SOCs in PG&E's AL 5853-E, SCE's AL 4229-E and SDG&E's AL 3555-E complied with D.20-05-006's non-price terms. Since PG&E's AL also included pricing terms and proposed updates to TOD periods and CAFs, staff also analyzed whether PG&E's AL 5853-E complied with D.20-05-006's pricing options.

Compliance with Non-Price Terms of D.20-05-006

Pursuant to Ordering Paragraph 12, non-price terms not expressly modified in D.20-05-006 are to be consistent with the discussion in Section 6 of the decision. D.20-05-006 required the IOUs to incorporate non-price terms from the QF Settlement SOC set forth in D.10-12-035, including the following modifications to non-price terms:

- Specifying that the IOU as Buyer has no obligation to provide substitute RA or minimize RA Availability Incentive Mechanism penalties in the event of an outage (section 6.3.1 of D. 20-05-006);
- Specifying that a QF as Seller must provide a seventy-five day notification before the first month of commercial operation in order to receive a capacity payment for that month (section 6.4.1 of D. 20-05-006);
- Specifying that the QF as Seller shall receive (1) CAISO revenues and charges associated with the delivery of any additional dispatchable capacity into CAISO markets and (2) any RA Availability Incentive Mechanism benefits and charges (section 6.5.1 of D. 20-05-006);
- Specifying that the New QF SOC shall allow for economic curtailment provisions consistent with existing RPS agreements (section 6.7.1 of D. 20-05-006); and
- Clarifying that for any non-price issues not expressly addressed in the New QF SOC, the applicable provisions of the QF Settlement Term Sheet approved with the SOC in D.10-12-035, as modified by D.15-06-028, shall control (section 6.8 of D. 20-05-006).

ED staff reviewed PG&E's AL 5853-E, SCE's AL 4229-E and SDG&E's AL 3555-E and found that the non-price terms provided in each advice letter are consistent with decision D.20-05-006..

Additionally, Staff note that PG&E included in its New QF SOC language related to its then current Chapter 11 bankruptcy status, from which it has since emerged. Due to its emergence from Chapter 11 bankruptcy, the language PG&E included is now moot and no longer needed. PG&E shall file a Tier 1 Advice

Letters with the Energy Division modifying the New QF SOC submitted in PG&E's AL 5853-E to remove the language modified pursuant to its then current Chapter 11 bankruptcy status, as well as the additional changes discussed below.

Assessing Protest of Cal Advocates and Replies of PG&E, SCE and SDG&E

We find Cal Advocate's protest that the proposed provisions at SOC sections 9.02(j) and 9.04(i) are not authorized by D.20-05-006 and should be removed to has merit. As a threshold issue, D.20-05-006 did not authorize additional language related to battery storage. Thus, this language proposed for the New QF SOC is beyond the scope of the decision and should not be allowed, per GO 96-B, Rule 5.1. PG&E and SDG&E both concede that D.20-05-006 did not authorize any storage-related language. As Cal Advocates notes, no parties raised energy storage as a non-price term concern in the proceeding, nor has any party sought rehearing. As SCE notes in its reply, additional provisions may possibly be required to ensure that grid charging QFs meet eligibility requirements to ensure California's implementation of PURPA is compliant. However, a Tier 2 advice letter is not the appropriate vehicle to adjudicate a complex and rapidly developing policy issue such as hybrid storage projects. Therefore, we affirm the concern raised in Cal Advocates' protest. The New QF SOC's submitted in PG&E's AL 5853-E, SCE's AL 4229-E, and SDG&E's AL 3555-E shall be modified to remove proposed sections 9.02(j) and 9.04(i). Each IOU shall file a Tier 1 Advice Letter within 7 days to modify the New QF SOC to make the revisions prescribed by this Resolution.

Assessing Protest of Vote Solar and CalWEA and Replies of PG&E, SCE and SDG&E

We do not find Vote Solar and CalWEA's protest to have merit as it relates to its capacity payment proposal. In their protest Vote Solar and CalWEA claim that a QF that provides a portion of its capacity is still providing some RA value and should thus receive a partial capacity payment. In response, the IOUs all articulate how and why such a framework would create additional risk and uncertainty. Additionally, as SDG&E notes, D.20-05-006 at pages 46-47 bases capacity payments on the QF's NQC because "capacity only has value to the

extent that it is accepted for compliance with a Load-Serving Entity's RA obligation." As above, we look to GO 96-B, Rule 5.1, which notes that advice letters are for utility requests "that are expected neither to be controversial nor to raise important policy questions." Vote Solar and CalWEA's proposal to base capacity payments on partial pro-rated RA is controversial and was not previously authorized by D.20-05-006. As a party to the proceeding, CalWEA did not previously raise this proposal at any time. We thus reject the capacity payment proposal included in Vote Solar and CalWEA's protest.

Turning to the curtailment language issues raised in the Vote Solar and CalWEA protest, we find that the definitions of 'Economic Dispatch Down' and 'Power Product Curtailment' are consistent with the economic curtailment provisions in existing RPS agreements as directed by D. 20-05-006, including the clear example of SDG&E's 2018 RPS Long-Term Model PPA provided in the decision.

Additionally, we find the New QF SOC consistent with the direction of D. 20-05-006 compensates the Seller for 'Deemed Delivered Energy' in the event of 'Economic Dispatch Down,' economic curtailment of energy resulting from the Buyer submitting a self-schedule or an economic bid in the CAISO market and not being scheduled or awarded. Exhibit U in the New QF SOCs outlines how a QF receives payment of "Deemed Delivered Energy" under "Economic Dispatch Down." In the case of 'Power Product Curtailment,' or curtailment ordered by CAISO, it is consistent with existing RPS agreements and D.20-05-006 to not compensate the Seller for curtailment directed by CAISO that is not defined as economic curtailment, or 'Economic Dispatch Down.' For these reasons, we reject Vote Solar and CalWEA's protest relating to the economic curtailment language in the New QF SOC.

Assessing Protest of GPI and Reply of SCE

We reject the protest of GPI, however we note that GPI is correct that the SCE AL 4229-E in one instance uses an errant decision number. First, we find that the language regarding material modification of a QF that GPI objects to originates

from the QF Settlement SOC, as pointed out in the reply by SCE, and is not modified by D. 20-05-006. It appears that SCE merely moved the language in question relating to material modifications to a new section within the New QF SOC. D.20-05-006 directed the IOUs to use non-pricing terms consistent with Section 6 of that decision, and if non-pricing terms are not modified in Section 6, to incorporate the QF Settlement SOC and term sheet. Per GO 96-B, Rule 5.1, the IOUs were not authorized to change other non-price terms in D.20-06-005, we do not find moving the location of a contract term to be inconsistent with the decision, and thus we reject this request.

Second, as previously discussed in assessing the protest of Cal Advocates, D.20-05-006 did not authorize additional language in the New QF SOC related to energy storage, and thus should not be allowed, per GO 96-B, Rule 5.1. We thus reject this request.

Third, in response to GPI's concern about negative real-time pricing, SCE rightly points to Exhibit M of the New QF SOC, which states that Exhibit M is only applicable when SCE as Buyer is not the scheduling coordinator. As such, if SCE is not the scheduling coordinator and the QF continues to generate despite negative pricing in the real-time market, SCE is entitled to recover charges associated with those actions. We thus reject this request.

Finally, GPI notes that in SCE's AL 4229-E, "D.20-05-06" on page 5 should be "D.20-05-006". SCE does not contest this in its reply, and we agree. SCE ought to correct this error in its new QF SOC Advice Letter, but find the error harmless and de minimis such that we do not find that we need to explicitly order this. Additionally, while GPI expresses confusion over various terms used in SCE's advice letter to describe the New QF SOC, we do not see sufficient cause to order a change. While SCE's language is inconsistent, we find that SCE's use of 'PURPA Contract' in the SOC is understandable as the New QF SOC implements D.20-05-006 and therefore the name change is harmless. We thus reject this request.

PG&E's Compliance with Price Terms of D.20-05-006

PG&E's AL 5853 included price terms in addition to the New QF SOC. ED staff find that PG&E's AL 5853-E complied with D.20-05-006 by correctly calculating in accordance with the decision:

- The energy price identified at the time of contract execution by use of a three-year average of publicly available California Independent System Operator locational marginal prices for the PNode specific to a qualifying facility, calculated on a monthly basis with periods based on PG&E's proposed time-of-use periods specific to a utility, and a collar based on prices at the relevant Energy Trading Hub.
- The capacity price identified at the time of contract execution by use of a five-year weighted average of publicly available resource adequacy prices, shaped to time periods based on generation capacity allocation factors proposed by PG&E and applied to updated time-of-use periods, with a 2.5% escalation factor for each year of the contract term after the last year included in the average.
- The capacity price determined at the time of delivery by the same methodology used for capacity price at time of execution.

Staff also found that PG&E's AL 5853-E complied with Ordering Paragraph 7 of D.20-05-006 when it filed AL 5853-E as a Tier 2 Advice Letter seeking CPUC approval of updates to TOD periods used for the New QF SOC. PG&E's proposed TOD periods are intended to align with time periods used for standard forward energy products and recent hourly price patterns. Staff evaluated the hourly market price patterns between 2017 and 2019 that PG&E provided in Appendix C, and find that it is appropriate for TOD periods to reflect the price patterns found in the historical average prices.⁵

⁵ PG&E's proposed TOD periods for the New QF SOC are found in AL 5853 -E Appendix C.

However, staff found that PG&E's AL 5853 did not comply with D.20-05-006 when it sought to modify the CAFs. D.20-05-006 did not authorize PG&E to seek modification of CAFs via Tier 2 advice letter. PG&E's request to modify the CAFs is rejected.

Additionally, as expressed in the Appendix to D.20-05-006, PG&E correctly calculates the hourly capacity price for capacity payments at time of execution as follows:

$$CP_{TOE} = (CAF_m / H) \times RA:$$

Where:

CP_{TOE} = Hourly Capacity Price at Time of Execution (\$/kWh)

CAF_m = Capacity Allocation Factor for the applicable month.

H = The number of delivery hours that comprise the applicable Time-of-Delivery period for the applicable year during the applicable month.

RA = Capacity Price in \$/kW-year, as calculated in Table 7: Aggregated RA Contract Prices, derived from the latest publicly available Resource Adequacy Report prepared by the Commission.

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 was neither waived nor reduced. Accordingly, this draft resolution was mailed

to parties for comments, and the resolution will be placed on the Commission's agenda no earlier than 30 days from today.

FINDINGS

1. Decision 20-05-006 directed Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE) and San Diego Gas & Electric Company (SDG&E) to each file a Tier 2 advice letter with a New Qualifying Facility Standard Offer Contract.
2. The QF Settlement SOC adopted by D.10-12-035 and the term sheet are incorporated into the New QF SOC except as the non-price terms are modified by D. 20-06-005.
3. PG&E complied with D.20-05-006 in the way that it calculated energy pricing options it submitted in AL 5853-E.
4. PG&E did not comply with D.20-05-006 in the way that it calculated capacity pricing options it submitted in AL 5853-E, since it inappropriately used capacity allocation factors neither approved by the Commission nor for which it had authority to request approval.
5. PG&E, SCE and SDG&E all added language related to energy storage to the New QF SOC by adding sections 9.02(j) and 9.04(i).
6. PG&E AL 5853-E included language related to its past Chapter 11 bankruptcy status that is now moot and unnecessary.
7. D.20-05-006 did not authorize additional language related to energy storage.
8. General Order (GO) 96-B, General Rule 5.1 allows the investor owned utilities (IOUs) to use advice letters to “request to change its tariffs in a manner previously authorized by statute or Commission order, to conform the tariffs to the requirements of a statute or Commission order, or to get Commission authorization to deviate from its tariffs.”
9. Since the IOUs did not receive authorization in D.20-05-006 to add language regarding energy storage, GO 96-B, General Rule 5.1 prohibits the IOUs from requesting modification through the advice letter process.
10. Vote Solar and the California Wind Energy Association protested PG&E’s AL 5853-E, SCE’s AL 4229-E, and SDG&E’s AL 3555-E, and those protests are rejected.

11. Green Power Institute protested SCE's AL 4229-E. GPI is correct that the SCE AL 4229-E does not consistently accurately reflect the relevant decision number. The rest of GPI's protest is rejected.
12. PG&E's AL 5853-E, SCE's AL 4229-E, and SDG&E's AL 3555-E all complied with D.20-05-006 by submitting New QF SOC's within 30 days of the decision.
13. D.20-05-006 did not authorize a QF to receive a partial capacity payment in exchange for providing a portion of its capacity. D.20-05-006 states that a QF should receive a capacity payment based on Net Qualifying Capacity calculated as provided in the annual Resource Adequacy Report.
14. D.20-05-006 requires the New QF SOC to allow for economic curtailment provisions consistent with existing RPS agreements.
15. Language prohibiting material modifications to QFs is consistent with D.20-05-006 as it is a non-price term not modified in the decision from the QF Settlement SOC.

THEREFORE IT IS ORDERED THAT:

1. The request of Pacific Gas and Electric that the California Public Utilities Commission approve its New Qualifying Facility Standard Offer Contract as requested in Advice Letter 5853-E is approved with modifications.
2. The request of Southern California Edison that the California Public Utilities Commission approve its New Qualifying Standard Offer Contract as requested in Advice Letter 4229-E is approved with modifications.
3. The request of San Diego Gas & Electric that the California Public Utilities Commission approve its New Qualifying Facility Standard Offer Contract as requested in Advice Letter 3555-E is approved with modifications.
4. PG&E shall remove the text related to bankruptcy from its New Qualifying Facility Standard Offer Contract submitted in Advice Letter 5853-E, as follows:
 - a. First, the definition of "Chapter 11 Cases" in Exhibit A:
~~"Chapter 11 Cases" means Buyer's Chapter 11 bankruptcy cases pending before the United States Bankruptcy Court for the Northern District of California, Case Nos. 19-30088 (DM) and 19-30089 (DM), which are being jointly administered.~~
 - b. Second, the modifications to Events of Default under Section 6.01(a)(iv) and (v) as the modifications apply to the effective date of the plan of reorganization in the Chapter 11 Cases:

Section 6.01(a)...

(iv): A Party becomes Bankrupt; ~~provided that this Section 6.01(a)(iv) shall not apply with respect to Buyer until the effective date of Buyer's plan of reorganization in the Chapter 11 Cases;~~ or

(v): A Party consolidates or amalgamates with, or merges with or into, or transfers all or substantially all of its assets to, another Person and, at the time of such consolidation, amalgamation, merger or transfer, the resulting, surviving or transferee Person fails to assume all the obligations of such Party under this Agreement to which such Party or its predecessor was a party by operation of law or pursuant to an agreement reasonably satisfactory to the other Party; ~~provided that this Section 6.01(a)(v) shall not apply with respect to Buyer until the effective date of Buyer's plan of reorganization in the Chapter 11 Cases.~~

- c. And third, the modification in Section 9.01(a)(iv) as the modification applies to the effective date of the plan of reorganization under the Chapter 11 Cases:

Section 9.01(a)...(iv) : There is not pending, or to its knowledge, threatened against it or, in the case of Seller, any of its Related Entities, any legal proceeding that could materially adversely affect its ability to perform under this Agreement; ~~provided that this Section 9.01(a)(iv) shall not apply with respect to Buyer until the effective date of Buyer's plan of reorganization in the Chapter 11 Cases;~~

5. PG&E shall revise its capacity pricing options to reflect the capacity allocation factors approved in D. 97-03-017.
6. PG&E, SCE, and SDG&E each shall make revisions to the New Qualifying Facility Standard Offer Contract each utility submitted in its respective Advice Letter to remove the proposed language included at 9.02(j) and 9.04(i) as follows:

9.02(j): ~~Throughout the Term, Seller shall not cause any energy from the Transmission Provider's electrical system or the CAISO Controlled Grid to be stored by the Project or any hybrid or co-located storage facility associated with the Project.~~

9.04(i): ~~Seller shall defend, save harmless, and indemnify Buyer against any costs or charges, including any CAISO Charges, associated with withdrawals of energy from the Transmission Provider's electrical system or the CAISO~~

~~Controlled Grid to be stored by the Project or any hybrid or co-located storage facility associated with the Project.~~

7. PG&E, SCE, and SDG&E shall each file a Tier 1 Advice Letter within 7 days to modify the New QF SOC to make the revisions prescribed by this Resolution.

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 November 19, 2020; the following Commissioners voting favorably thereon:

RACHEL PETERSON
Acting Executive Director