

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION

RESOLUTION E-4496

May 24, 2012

R E S O L U T I O N

Resolution E-4496. Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southern California Edison Company, CALPECO and PacifiCorp request approval of tariffs and power purchase agreements for eligible combined heat and power facilities less than 500 kW in capacity.

PROPOSED OUTCOME: This Resolution approves with modifications tariff sheets and standard offer contracts provided by Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southern California Edison Company, CALPECO and PacifiCorp for the purchase of excess power from eligible combined heat and power facilities less than 500 kW in capacity. This Resolution requires the named utilities to file Tier 1 compliance advice letters with approved modifications to the tariff sheets and contracts within thirty (30) days of Resolution approval.

ESTIMATED COST: Actual costs are unknown at this time.

By Advice Letters: PG&E 3971-E; SDG&E 2317-E; SCE 2676-E; PacifiCorp 463-E; CALPECO 14-E, filed on December 16, 2011.

SUMMARY

In response to the Waste Heat and Carbon Reduction Act (Assembly Bill 1613), the California Public Utilities Commission (CPUC or the Commission) opened Rulemaking 08-06-024. AB 1613 requires the Commission to establish a feed-in tariff (FiT) for combined heat and power (CHP) systems that are small (less than 20 megawatts), new, and highly efficient. Commission Decision (D.) 09-12-042, as modified by D.10-04-055, D.10-12-055 and D.11-04-033, required the Investor Owned Utilities (IOUs) to submit advice letters with tariff sheets and contracts to implement AB 1613. This resolution adopts, with modifications, pro forma

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500 kW Contracts and corresponding tariff sheets submitted by Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), Sierra Pacific Power Corp. (now CALPECO) and PacifiCorp.

BACKGROUND

Assembly Bill 1613 (Blakeslee 2007) as amended by Assembly Bill 2791 (Blakeslee 2008) directed the California Energy Commission, the California Public Utilities Commission (the Commission or CPUC), and the Air Resources Board (ARB) to implement the Waste Heat and Carbon Emissions Reduction Act. Codified in PU Code 2840, Assembly Bill (AB) 1613 requires the Commission to establish a feed-in tariff (FiT) for specified combined heat and power (CHP) systems that are small (less than 20 megawatts), new and highly efficient.

In response to AB 1613, the Commission opened Rulemaking (R.) 08-06-024 and on December 17, 2009, the Commission issued Decision (D.) 09-12-042, which established the rules for the tariff, price and two standard offer contracts for the AB 1613 program: one for facilities up to 20 MW (Standard Contract) and one for facilities exporting no more than 5 MW (Simplified Contract). Most relevant to this resolution, D.09-12-042 also ordered PG&E, SCE and SDG&E (collectively the Joint IOUs) to file an advice letter to implement a further simplified contract for small CHP facilities less than 500kW in capacity (500 kW Contract) within 6 months of the effective date of D.09-12-042.¹ CALPECO and PacifiCorp were separately ordered to file an advice letter and tariff sheets within 6 months of the effective date of D.09-12-042 to implement either the 5 MW Simplified Contract approved in D.09-12-42,² or a further simplified contract for CHP facilities less than 500 kW in capacity.³

¹ D.09-12-042, as conformed by D.11-04-033, Ordering Paragraph 11.

² The simplified contract is Attachment B to D.09-12-042 as conformed by D.11-04-033.

³ D.09-12-042, as conformed by D.11-04-033, Ordering Paragraphs 9 and 11.

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Following issuance of D.09-12-042, the AB 1613 program was challenged through multiple petitions for modification, applications for rehearing and petitions at the Federal Energy Regulatory Commission (FERC), as summarized in D.11-04-033. This has led to further development of the program and multiple iterations of the contracts.

Because of the challenges to the program and delays in program implementation, the Joint Utilities requested several extensions to the development of the standard form 500 kW Contract. In consideration of these delays, the CPUC Executive Director granted multiple extensions for IOUs to comply with Ordering Paragraphs 9 and 11 of D.09-12-042 as conformed by D.11-04-033. On November 8, 2011, the CPUC Executive Director granted a final extension to comply with D.09-12-042 as conformed by D.11-04-033 until December 16, 2011.

Following these extensions, on December 16, 2011, the Joint Utilities each filed an advice letter with a standard form 500 kW Contract and tariff sheets for CHP facilities with a capacity of 500 kW and under participating in the AB 1613 program. On this same date, CALPECO and PacifiCorp each filed a 500 kW Contract and tariff sheets in their respective advice letters. Review and disposition of all of these advice letters is the subject of this Resolution.

NOTICE

Notice of PG&E's AL 3971-E, SDG&E's AL 2317-E, SCE's AL 2676-E, PacificCorp's AL 463-E, and CALPECO's AL 14-E was made by publication in the Commission's Daily Calendar. PG&E, SCE, SDG&E, CALPECO, and PacifiCorp state that a copy of their respective Advice Letters was mailed and distributed in accordance with Section 3.14 of General Order 96-B.

PROTESTS

Advice Letter 3971-E was protested.

PG&E Advice Letter AL 3971-E was timely protested by North Coast Solar. PG&E Advice Letter AL 3971-E was late protested by California Clean DG Coalition (CCDC) on January 6, 2012. Energy Division has accepted CCDC's late-filed protest.

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PG&E filed a response to the protests of North Coast Solar and CCDC on January 13, 2012. Energy Division has accepted PG&E's response.

DISCUSSION

Energy Division reviewed the investor owned utilities' (IOU) advice letter filings, parties' protests, and responses from the IOUs. In their advice letters, the IOUs each submitted a proposed 500 kW Contract and corresponding tariff sheets. SCE, SDG&E and CALPECO submitted an identical 500 kW Contract that was based on the 5 MW Simplified Contract approved by D.09-12-042 and modified by Resolution E-4424. PG&E states that it collaborated with SCE and SDG&E "on the drafting of a common form 500 kW PPA."⁴ Though PG&E's proposed 500 kW Contract is substantially the same as the standard form 500 kW Contract proposed by SCE, SDG&E and CALPECO (Standard 500 kW Contract), PG&E's contract differs in parts. However, all specific sections of PG&E's 500 kW Contract protested by CCDC, as discussed below, are equivalent to corresponding sections in the Standard 500 kW Contract.

PacifiCorp submitted a proposed 500 kW Contract that substantially differs from all other IOU contracts. However, some protested provisions in PG&E's 500 kW Contract exist in similar form in PacifiCorp's 500 kW Contract.

Though parties only protested PG&E's 500 kW Contract, if Energy Division (ED) finds that modifications to PG&E's 500 kW Contract are warranted, we find it reasonable to make similar modifications to the corresponding provisions in the Standard 500 kW Contract submitted by SCE, SDG&E and CALPECO, and PacifiCorp's 500 kW Contract. ED has therefore decided to treat similar provisions in the 500 kW Contracts proposed by PG&E, SCE, SDG&E, CALPECO and PacifiCorp equally. To the extent that ED finds a protest has merit and a revision to PG&E's contract is warranted, ED directs that such a revision apply to the proposed Standard 500 kW Contract and, if applicable, to PacifiCorp's proposed 500 kW Contract.

⁴ PG&E Advice Letter 3971-E, p. 2.

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Protests by parties contest a number of provisions included in 500 kW Contracts. The following discussion summarizes the IOUs' conformity with Commission orders to file a 500 kW Contract and addresses each of the substantive issues raised in protests. Based on consistency with Commission decisions issued in this proceeding, this resolution either accepts, rejects, or modifies each protested issue in the IOU advice letters.

Consistency with D.09-12-042 as conformed by D.11-04-033

The Joint Utilities were ordered to convene a working group with CHP parties to establish a "further simplified contract,"⁵ compared to the 5 MW Simplified Contract approved by D.09-12-042 and modified in Resolution E-4424, for CHP systems less than 500 kW in capacity. On October 18, 2011, the Joint Utilities submitted a draft 500 kW Contract to the service list of R.08-06-024.

In response to a request by the California Clean DG Coalition (CCDC), SCE invited parties to discuss the proposed 500 kW Contract via a webinar held on November 10, 2011.⁶ In addition to participating in the webinar, CCDC, North Coast Solar and Tecogen submitted written comments about the proposed 500 kW Contract to the service list of R.08-06-024 on November 21, 2011. CCDC appended these comments to its protest of PG&E's Advice Letter 3971-E. On December 12, 2011, the Joint Utilities held a teleconference to discuss comments by CCDC and North Coast Solar on the proposed 500 kW Contract. The teleconference was attended by representatives of North Coast Solar, Tecogen, Liberty Utilities, Trane, the Commission, the California Air Resources Board, the California Energy Commission (CEC) and the IOUs.⁷

In its advice letter filing, SCE submitted a summary of substantive differences and a redline version of all changes between the proposed Standard 500 kW Contract and the 5 MW Simplified Contract.⁸ Energy Division has considered

⁵ D.09-12-042 as conformed by D.11-04-033, Ordering Paragraph 11.

⁶ PG&E AL 3971-E, December 16, 2011 p. 3.

⁷ PG&E AL 3971-E, December 16, 2011, p. 3.

⁸ SCE Advice Letter 2676-E, December 16, 2011, p. 5-7.

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the public comment on the Joint IOUs proposed Standard 500 kW Contract and evaluated the proposed revisions to the Standard 500 kW Contract compared to the 5 MW Simplified Contract.

We find that the filing of a 500 kW Contract for eligible CHP facilities by PG&E, SCE and SDG&E is consistent with the requirements of Ordering Paragraph 11 in D.09-12-042, as conformed by D.11-04-033.

Furthermore, we find that the filing of a 500 kW Contract for eligible CHP facilities by CALPECO and PacifiCorp is consistent with the requirements of Ordering Paragraph 9 in D.09-12-042, as conformed by D.11-04-033.

Simplified Terms and Conditions in the 500 kW Contract

North Coast Solar and CCDC protested PG&E's proposed 500 kW Contract on grounds that the contract is unnecessarily onerous and was not meaningfully simplified compared to the 5 MW Simplified Contract.

North Coast Solar's arguments were of a general nature: the proposed under 500 kW Contract is too long; it disadvantages small CHP systems compared to renewable energy systems of a similar size; compliance with the CAISO Tariff is not necessary for under 500 kW CHP systems and, furthermore, small CHP owners do not have the capacity to comply with the CAISO Tariff. North Coast Solar claims that the complexity of the proposed 500 kW Contracts defeats the intent of AB 1613 by making it too costly for small CHP systems to take advantage of the FiT.

CCDC argues similarly that the proposed Standard 500 kW Contract results in no meaningful improvements for small CHP systems compared to the 5 MW Simplified Contract. CCDC appended to its protest redlined edits to the draft Standard 500 kW Contract that its member company, Tecogen, submitted to the Joint IOUs on November 21, 2011. CCDC contends that PG&E did not make "any simplifications to the under 500 kW PPA in consideration of feedback from CCDC and other interested parties."⁹

⁹ CCDC Protest to PG&E AL 3971-E, January 6, 2012, p. 2.

Specific protests by CCDC and North Coast Solar are addressed below.

(i) Applicability of CAISO Tariff and Forecasting and Outage Reporting Requirements to CHP Facilities Under 500 kW

Sections 3.08 and 3.12 (b) and Exhibits C and D of the Standard 500 kW Contract set forth requirements that CHP facilities comply with applicable provisions of the California Independent System Operator FERC Electric Tariff (CAISO Tariff), submit 30-day forecasts with weekly and as-needed updates, and submit planned outage schedules. CCDC argues that Exhibits C and D, and any mention of the CAISO Tariff, are irrelevant since generators with a rated capacity of less than 500 kW are not eligible to participate in CAISO markets and are exempt from Section 4.6 of the CAISO Tariff. CCDC recommends that Exhibits C and D, along with other unspecific references to CAISO Tariff requirements, be deleted from the Standard 500 kW Contract on grounds that the CAISO Tariff is inapplicable to CHP facilities less than 500 kW in capacity, and, further, that small CHP owners should not have the burden of determining which CAISO Tariff provisions are applicable unless there is a need to do so.¹⁰

Utility Position

In its response to protests, PG&E argues that CHP facilities must provide generation forecasting and outage scheduling in order to provide resource adequacy (RA) value and to justify the FiT price offered in the Contract. PG&E further contends that IOUs may need to aggregate and schedule small CHP facilities with the CAISO to maintain the economic efficiency and reliability of their generation portfolios. PG&E is particularly concerned about the potential need to aggregate small CHP facilities given the increase of distributed generation (DG) in California and the absence of a cap on the amount of procurement allowed under AB 1613. If an IOU were to aggregate individual CHP facilities and register the aggregate resource with the CAISO, PG&E asserts, the individual CHP facilities would need to comply with the CAISO Tariff and meet the forecasting and outage reporting provisions of Exhibits C and D of the proposed Standard 500 kW Contract. Therefore, PG&E believes these provisions should remain intact. SCE and SDG&E further argue in comments that the

¹⁰ CCDC Protest to PG&E Advice Letter 3971-E, January 6, 2011, p. 2.

CAISO Tariff will apply to all AB 1613 generators, irrespective of size or interconnection tariff, because AB 1613 generators are “Eligible Customers” under the CAISO Tariff.¹¹

Discussion

a. Applicability of the CAISO Tariff

We agree with protestors’ argument that, at present, the 500 kW Contracts should not compel CHP facilities smaller than 500 kW in capacity to comply with the CAISO Tariff if such facilities interconnect through a non-FERC-jurisdictional interconnection tariff.

This program and the proposed Standard 500 kW Contract provide for the sale of power from CHP facilities less than 500 kW in capacity to the host utility at avoided cost.¹² The program also requires that participating facilities meet federal standards for Qualifying Facilities (QFs).¹³ The Commission is thus implementing this program within the exception granted under the Public Utilities Regulatory Policies Act of 1978 (PURPA),¹⁴ which permits state public utilities commissions to set an avoided cost rate for utilities’ purchase of power from the participants in this program.¹⁵ Given these present characteristics of the program’s design, Electric Rule 21 (Rule 21) will be the applicable interconnection tariff when participants in this program interconnect to the utility distribution system.

¹¹ “Eligible Customers” is defined in CAISO Tariff, Appendix A.

¹² D.09-12-042 (setting avoided cost rate for the AB 1613 program); D.10-12-048 (rejecting jurisdictional challenge to the avoided cost rate for the AB 1613 program).

¹³ See proposed Standard 500 kW Contract at Sec. 1.02 and Appendix A (definition of “Eligible CHP Facility” requiring participants to meet QF requirements as set out in 18 C.F.R. § 292.201).

¹⁴ PURPA is codified in scattered sections of 16 U.S.C., including, § 796, § 824a-3 and §§ 2601, et seq.

¹⁵ 16 U.S.C. § 824a-3(b); 18 C.F.R. § 292.304(a)(2).

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Rule 21 sets out the technical operating standards, including metering, required of a generating facility for parallel operation with the utility distribution system.¹⁶ We note that the proposed Standard 500 kW Contract requires participants in this program to install a CAISO-approved meter.¹⁷ Finally, this Commission approved an interim deliverability status for resources participating in this program and interconnecting pursuant to a non-FERC-jurisdictional tariff.¹⁸

We find that at present, the technical standards set out in Electric Rule 21 and the 500 kW Contract sufficiently identify the requirements for parallel operation without requiring that program participants comply with the CAISO Tariff. Should the design of the program, commercial arrangements, or technical operating requirements change in the future, this question may be revisited.

It is possible that some CHP facilities participating in this FiT will interconnect pursuant to a FERC-jurisdictional interconnection tariff, in which case CAISO Tariff compliance is required.

PG&E, SCE and SDG&E argue that the CAISO tariff compliance provisions in the proposed Standard 500 kW Contract should remain because the IOUs may deem it necessary, at some time in the future, to aggregate and schedule these resources with CAISO to maximize the value of these facilities. If the IOUs were to aggregate these resources and integrate them into the CAISO market, it is possible that highly precise generation forecasts and outage scheduling would be beneficial to the IOUs in their role as scheduling coordinators for aggregated resources. However, given the early phase of AB 1613 implementation, the intent of AB 1613 to encourage the development of CHP resources, and the lack of evidence, at present, that unaccounted energy from small CHP facilities will adversely impact ratepayers or grid reliability, it is unreasonable to require small

¹⁶ See, for example, Pacific Gas and Electric Company Electric Rule No. 21, Sec. F. The terms of Rule 21 for each of PG&E, SCE, and SDG&E are substantively similar.

¹⁷ See proposed Standard 500 kW Contract, Sec. 3.10(a).

¹⁸ Resolution E-4424 at 18.

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CHP facilities interconnecting through Rule 21 to comply with the CAISO Tariff simply because IOUs may deem it beneficial to aggregate these facilities at an unspecified time in the future.

The proposed Standard 500 kW Contract should only require a Seller to comply with the CAISO Tariff, as applicable, if the Seller interconnects pursuant to a FERC-jurisdictional interconnection tariff.

Consequently, the Standard 500 kW Contract should explicitly state in Section 3.08, Section 3.12 (b), and Exhibits C and D that compliance with the CAISO Tariff, as applicable, is only required if the Seller interconnects pursuant to a FERC-jurisdictional interconnection tariff.

b. Applicability of Forecasting and Outage Requirements

We disagree with PG&E's claim that the forecasting and outage reporting requirements specified in Exhibits C and D of the Standard 500 kW Contract are required for CHP facilities less than 500 kW in capacity in order for those facilities to provide resource adequacy (RA) value. The interim solution outlined in Resolution E-4424 finds that CHP facilities interconnecting at the distribution level through a non-WDAT process, as we anticipate for most facilities participating in this FiT, reduces an IOU's RA obligation without requiring full deliverability status from CAISO. In addition, the RA provisions in Section 3.02 of the proposed Standard 500 kW Contract are consistent with Resolution E-4424, and in our view they adequately address Buyer and Seller commitments relevant to RA issues.

We appreciate that generation forecasts and outage scheduling provide utilities with data useful to the reliable and prudent management of load and generation. Yet we also agree with protestors that the forecasting and outage scheduling requirements in the Standard 500 kW Contract are excessive given the operating and staffing characteristics of small CHP facilities less than 500 kW in capacity.

We find that the Scheduling and Reporting requirements as included in Exhibits C and D of the proposed Standard 500 kW Contract are unnecessarily detailed and onerous.

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In contrast, Exhibit D-1 of PacifiCorp's proposed 500 kW Contract requires only that Sellers provide an engineer-certified monthly estimate of the facility's net energy output at the time the 500 kW Contract is signed.

Exhibit D-1 of PacifiCorp's proposed 500 kW Contract provides a reasonable balance between a utility's need for generation and outage forecasts with a small CHP facility's limited resources.

Additionally, Section 6.6 of PacifiCorp's proposed 500 kW Contract reasonably addresses reporting requirements in the event a CHP facility experiences an unplanned outage.

The contents of Exhibit C(2) of the Standard 500 kW Contract should be replaced in their entirety by Exhibit D-1 Section A of PacifiCorp's proposed 500 kW Contract, making formatting changes as necessary to specify that the table requires monthly energy delivery forecasts, not outage and maintenance scheduling.

The contents of existing Exhibit D(2) in the Standard 500 kW Contract should be replaced in their entirety by Exhibit D-1 Section A of PacifiCorp's proposed 500 kW Contract, making formatting changes as necessary to specify that the table requires outage and maintenance scheduling, not monthly energy deliveries. In the updated Exhibit D(2) of the Standard 500 kW Contract, the IOUs may choose to include the provisions for unplanned outages specified in Section 6.6 of PacifiCorp's proposed 500 kW Contract.

If an IOU finds that a Seller's annual generation forecast differs by twenty percent (20%) from the Seller's actual annual output, then the IOUs may request, on an annual basis, the Seller to provide an updated generation forecast and outage schedule.

(ii) Maintenance and Reporting of Daily Operating Records

Section 3.12(f) of the Standard 500 kW Contract requires CHP owners to maintain daily operating records, including real and reactive power production, changes in operating status, protective apparatus operations, and any unusual conditions found during inspections. These provisions are equivalent to those included in the 5 MW Simplified Contract. CCDC objects to this section, arguing that the

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requirement to maintain daily operating records is unduly burdensome and unnecessary for small CHP systems, and, further, that meter readings can provide IOUs with the necessary operating information.

Utility Position

In its response to protests, PG&E asserts that daily operating records provide information about a CHP facility's operating efficiency that is necessary for IOUs to effectively schedule these facilities.¹⁹ SCE and SDG&E argue in their comments that daily operating records will help demonstrate that AB 1613 generators are operating as baseload resources.

Discussion

Though only PG&E's proposed 500 kW Contract was protested, Section 6.7 of PacifiCorp's 500 kW Contract has operational reporting requirements that are arguably more onerous compared to the Standard 500 kW contract. PacifiCorp's 500 kW Contract specifies that sellers provide on a monthly basis "all operational data requested by PacifiCorp with respect to the performance of the Facility and delivery of Net Output,"²⁰ whereas the Standard 500 kW Contract identifies specific data needs and only requires operating records within 20 days of notice from the Buyer.

We partly agree with protestors that certain provisions of Section 3.12(f) are burdensome given the limitations of what data a small CHP system is likely to automatically record on a daily basis, the personnel limitations likely faced by organizations operating small CHP systems, and the data available to the IOUs via CAISO-approved meters. It is our view that the purpose of requiring daily operational records is to assist the IOUs and CHP facility owners in determining the cause of any unexpected deficiency in a CHP facility's performance or any adverse effects the facility's operation may have on the grid, and the effect of such requirements should not needlessly burden or dissuade CHP facilities from participating in this FiT.

¹⁹ PG&E Reply to Protests of Advice Letter 3971-E, January 13, 2012, p. 3.

²⁰ PacifiCorp Advice Letter 463-E, proposed 500 kW Contract Section 6.7, December 16, 2011.

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However, we also partly agree with the IOUs that operating records can provide useful information about a facility's performance and operating efficiency. The Commission requires the IOUs in D.10-12-035 (the CHP Settlement) to report their progress toward meeting greenhouse gas (GHG) emissions reductions goals and installed capacity goals specific to CHP facilities. In order for the IOUs to properly account for GHG reduction goals from CHP facilities, it is appropriate for CHP facilities to report, on an annual basis from the effective date of the contract, the following annualized data: total annual electricity generation (MWh/year), total annual useful thermal output (MMBtu/year), total annual fuel use (MMBtu-HHV), and the fuel conversion factor (pounds of CO₂ per million BTU) for the CHP facility. To ensure that CHP facilities are operating as expected, it is appropriate for CHP facilities to record the following daily operating characteristics: power production, changes in operating status, and unusual conditions found during inspections. To avoid creating undue burdens, IOUs should not request that CHP facilities provide daily operating records more frequently than once per month.

In consideration of the GHG and installed capacity goals set forth in the CHP Settlement and the limitations of small CHP facilities, the IOUs should replace the contents of Section 3.12(f) of the proposed Standard 500 kW Contract and section 6.7 of PacifiCorp's proposed 500 kW Contract with the following language, making formatting changes as appropriate:

"On an annual basis from the Effective Date, Seller shall provide electronically or in hard copy to Buyer, within 20 days of a request by Notice from Buyer, the following annualized operating records: total annual electricity generation (MWh/year), total annual useful thermal output (MMBtu/year), total annual fuel use (MMBtu-HHV), and fuel conversion factor (pounds of CO₂ per million BTU). Seller shall also maintain and provide electronically or in hard copy to Buyer, within 20 days of a request by Notice from Buyer but not more than once per month, a copy of daily operating records limited to real power production, changes in operating status, and unusual conditions found during inspections."

(iii) Insurance Requirements

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CCDC asserts that the insurance requirements of Section 7.10 of the Standard 500 kW Contract are burdensome and unnecessary for under 500 kW CHP systems. CCDC proposes that Section 9 of PG&E's Small Renewable Generator contract, Form 79-1103, provides a more reasonable framework for insurance requirements and should be used instead of the existing proposed Standard 500 kW Contract Section 7.10. Though CCDC does not protest PacifiCorp's proposed 500 kW Contract, Section 12.2.6 of PacifiCorp's 500 kW Contract requires excess liability insurance of \$20,000,000 per occurrence whereas the Standard 500 kW Contract only requires \$4,000,000 per occurrence.

Utility Position

PG&E argues that the insurance requirements of the Standard 500 kW Contract are necessary to mitigate the risk faced by IOUs that unforeseen events may prevent CHP facilities from providing IOUs with the expected level of RA contracted under the PPA. SCE and SDG&E argue in comments that they do not expect the insurance requirements in the proposed Standard 500 kW Contract to place an additional burden on the organizations installing CHP generators since these organizations likely already maintain comparable levels of insurance. They further explain that the Standard Contract for Qualifying Facilities with a Power Rating that is Less Than or Equal to 20 MW contains insurance provisions consistent with those in the proposed Standard 500 kW Contract.

Discussion

As we have previously discussed, the interim solution outlined in Resolution E-4424 and Section 3.02 of the proposed Standard 500 kW Contract ensures that the IOUs will receive RA credit for CHP facilities participating in this FiT. Therefore, we disagree with PG&E's argument that the proposed insurance provisions are necessary to protect against lost RA value.

CCDC references insurance provisions in PG&E's Small Renewable Generator PPA, Form 79-1103, that was approved by the Commission in Resolution E-4137 pursuant to D.07-07-027 for renewable energy facilities up to 1.5 MW in capacity. These insurance requirements are less onerous than the provisions outlined in the proposed Standard 500 kW Contract and in PacifiCorp's proposed 500 kW Contract, and they specify general liability insurance requirements that vary depending on the nameplate size of the facility - an approach that seems reasonable, considering this FiT is available to potentially very small CHP facilities. The IOUs have provided insufficient evidence to persuade us that the

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Commission-approved insurance provisions in PG&E's Small Renewable Generator PPA for facilities up to 1.5 MW in capacity are inappropriate for CHP facilities less than 500 kW in capacity.

We find that insurance provisions in the proposed 500 kW Contracts are relatively more burdensome than similar provisions in Commission-approved PPA contracts for similarly-sized generators that sell excess electricity, and we find it reasonable to substitute Section 9 of PG&E's Small Renewable Generator PPA, Form 79-1103, for the existing insurance provisions of the IOUs proposed 500 kW Contracts.

(iv) Obligation to Pay Threshold

Section 4.01(a) of the Standard 500 kW Contract sets forth a requirement that IOUs are not obligated to pay CHP owners until the net amount due exceeds \$5,000.00. In the redlined 500 kW Contract attached to their protest, CCDC/Tecogen argue that a \$100 threshold is more appropriate.²¹

Utility Position

In written comments to ED, the IOUs agreed that a \$5,000 payment threshold may delay payment to small CHP facilities. The IOUs recommend lowering the payment threshold to \$50 so the provision corresponds with a similar \$50 threshold in the draft Joint IOU Small Renewable Generator contract being developed pursuant to R.11-05-005.

Discussion

Section 4.01(a) of the Standard 500 kW Contract sets an unreasonably high payment threshold that will delay payment to small CHP facilities and is inconsistent with a corresponding provision in the draft Joint IOU Small Renewable Generator PPA being developed pursuant to R.11-05-005. PacifiCorp's proposed 500 kW Contract does not include a payment threshold.

To ensure that CHP facilities are paid without delay, a minimum payment threshold of \$50.00 is appropriate for the proposed Standard 500 kW Contract.

²¹ CCDC Protest to PG&E Advice Letter 3971-E, January 6, 2012, Attachment p. 10.

(v) Adoption of a Different Commission-Approved Contract

CCDC and North Coast Solar both argue that the Standard 500 kW Contract is too long and complicated and that other Commission-approved contracts would serve as better models for small CHP facilities. In particular, North Coast Solar recommends that the Commission base the 500 kW Contract on the Standard Offer 3 QF PPA developed in the 1980s, which is no longer in use, and CCDC recommends the Commission use PG&E's Small Renewable Generator PPA, Electric Form 79-1103.

Utility Position

PG&E asserts that the 500 kW Contract must be based on the 5 MW Simplified Contract approved in D.09-12-042 and revised in Resolution E-4424 "in order to set forth the eligibility, pricing and RA terms that apply to all AB 1613 generators."²²

Discussion

We agree with the IOUs that the protestors' arguments are insufficient to justify the outright rejection of the proposed Standard 500 kW Contract in favor of another contract. The proposed 500 kW Contracts contain many provisions specific to CHP - including the establishment of avoided cost price, contract payment calculations and RA requirements - that reflect language consistent with D.09-12-042 and Resolution E-4424. CCDC's protest references a Small Renewable Generator PPA that does not address these issues with respect to CHP. Similarly, the Standard Offer 3 PPA was developed over 30 years ago, prior to the establishment of the California Independent Service Operator, the California RA program, modern interconnection procedures and a number of other now-standard PPA provisions. It would be unreasonable and inconsistent with the intent of D.09-12-042 for Staff to reject the proposed 500 kW Contracts in favor of complete replacement by a contract specific to renewables, such as PG&E Form 79-1103, or an already outdated contract, such as the Standard Offer 3 QF PPA.

²² PG&E Reply to Protests of Advice Letter 3971-E, January 13, 2012, p. 2.

It is reasonable to base the proposed Standard 500 kW Contract on the 5 MW Simplified Contract approved in D.09-12-042 and modified by Resolution E-4424.

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 and comment prior to a vote of the Commission. Section 311(g)(2) provides that this 30-day period may be reduced or waived upon the stipulation of all parties in the proceeding.

The 30-day comment period for the draft of this resolution was neither waived nor reduced. Accordingly, this draft resolution was mailed to parties for comments on April 24, 2012.

Timely comments on the draft resolution were submitted by PG&E, SCE, SDG&E, and CCDC on May 14, 2012. All comments were considered and, to the degree necessary, included in the discussion above.

The principal areas of revisions in the text of the draft resolution are noted here:

- Regarding Energy Delivery Forecasts, requirements were revised to clarify that generators must provide a monthly energy delivery forecast at or before execution of the 500 kW Contract.
- Regarding Daily Operating Records, the requirements for CHP generators to maintain daily operating records have been revised to require generators to maintain and provide electronically or in hard copy to the utility, within 20 days of a request but not more than once per month, a copy of daily operating records limited to real power production, changes in operating status, and unusual conditions found during inspections.

FINDINGS AND CONCLUSIONS

1. The filing of a 500 kW Contract for eligible CHP facilities by PG&E, SCE and SDG&E is consistent with the requirements of Ordering Paragraph 11 in D.09-12-042, as conformed by D.11-04-033.

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2. The filing of a 500 kW Contract for eligible CHP facilities by CALPECO and PacifiCorp is consistent with the requirements of Ordering Paragraph 9 in D.09-12-042, as conformed by D.11-04-033.
3. The proposed Standard 500 kW Contract should only require a Seller to comply with the CAISO Tariff, as applicable, if the Seller interconnects pursuant to a FERC-jurisdictional interconnection tariff.
4. The Scheduling and Reporting requirements as included in Exhibits C and D of the proposed Standard 500 kW Contract are unnecessarily detailed and onerous.
5. Exhibit D-1 of PacifiCorp's proposed 500 kW Contract provides a reasonable balance between a utility's need for generation and outage forecasts with a small CHP facility's limited resources.
6. Additionally, Section 6.6 of PacifiCorp's proposed 500 kW Contract reasonably addresses reporting requirements in the event a CHP facility experiences an unplanned outage.
7. The contents of Exhibit C(2) of the Standard 500 kW Contract should be replaced in their entirety by Exhibit D-1 Section A of PacifiCorp's proposed 500 kW Contract, making formatting changes as necessary to specify that the table requires monthly energy delivery forecasts, not outage and maintenance scheduling. Seller shall provide Buyer with a completed monthly energy delivery forecast at or before execution of the 500 kW Contract
8. The contents of existing Exhibit D(2) in the Standard 500 kW Contract should be replaced in their entirety by Exhibit D-1 Section A of PacifiCorp's proposed 500 kW Contract, making formatting changes as necessary to specify that the table requires outage and maintenance scheduling, not monthly energy deliveries. In the updated Exhibit D(2) of the Standard 500 kW Contract, the IOUs may choose to include the provisions for unplanned outages specified in Section 6.6 of PacifiCorp's proposed 500 kW Contract.
9. If an IOU finds that a Seller's annual generation forecast differs by twenty percent (20%) from the Seller's actual annual output, then the IOUs may

request, on an annual basis, the Seller to provide an updated generation forecast and outage schedule.

10. In consideration of the GHG and installed capacity goals set forth in the CHP Settlement and the limitations of small CHP facilities, the IOUs should replace the contents of Section 3.12(f) of the proposed Standard 500 kW Contract and section 6.7 of PacifiCorp's proposed 500 kW Contract with the following language, making formatting changes as appropriate:

“On an annual basis from the Effective Date, Seller shall provide electronically or in hard copy to Buyer, within 20 days of a request by Notice from Buyer, the following annualized operating records: total annual electricity generation (MWh/year), total annual useful thermal output (MMBtu/year), total annual fuel use (MMBtu-HHV), and fuel conversion factor (pounds of CO₂ per million BTU). Seller shall also maintain and provide electronically or in hard copy to Buyer, within 20 days of a request by Notice from Buyer but not more than once per month, a copy of daily operating records limited to real power production, changes in operating status, and unusual conditions found during inspections.”

11. We find that insurance provisions in the proposed 500 kW Contracts are relatively more burdensome than similar provisions in Commission-approved PPA contracts for similarly-sized generators that sell excess electricity, and it is reasonable to substitute Section 9 of PG&E's Small Renewable Generator PPA, Form 79-1103, for the existing insurance provisions of the IOUs proposed 500 kW Contracts.
12. To ensure that CHP facilities are paid without delay, a minimum payment threshold of \$50.00 is appropriate for the proposed Standard 500 kW Contract.
13. It is reasonable to base the proposed Standard 500 kW Contract on the 5 MW Simplified Contract approved in D.09-12-042 and modified by Resolution E-4424.

THEREFORE IT IS ORDERED THAT:

Within thirty (30) days of approval of this Resolution, Pacific Gas & Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), CALPECO, and PacifiCorp shall file a Tier 1 compliance advice letter with finalized 500 kW Contracts and AB 1613 Tariff Sheets that:

- a. For PG&E, SCE, SDG&E and CALPECO, modify existing Section 3.08, Section 3.12(b), Exhibit C(1) and Exhibit D(1) of the 500 kW Contracts to explicitly state that compliance with the CAISO Tariff, as applicable, is only required if the Seller interconnects pursuant to a FERC-jurisdictional interconnection tariff.
- b. For PG&E, SCE, SDG&E and CALPECO, strike existing Exhibit C(2) of the 500 kW Contracts in its entirety, and replace the contents thereof with the contents of existing Exhibit D-1 Section A of PacifiCorp's proposed 500 kW Contract, making formatting changes as necessary to specify that the table requires monthly energy delivery forecasts, not outage and maintenance scheduling. Seller shall provide Buyer with a completed monthly energy delivery forecast at or before execution of the 500 kW Contract. PG&E, SCE, SDG&E and CALPECO may also include the following statement in modified Exhibit C(2): "If Buyer finds that Seller's annual generation forecast differs by twenty percent (20%) from Seller's actual annual metered output, then Buyer may request, on an annual basis, that Seller provide an updated generation forecast schedule."
- c. For PG&E, SCE, SDG&E and CALPECO, strike existing Exhibit D(2) of the 500 kW Contracts in its entirety, and replace the contents thereof with the table included in existing Exhibit D-1 Section A of PacifiCorp's proposed 500 kW Contract, making formatting modifications as necessary to specify that the table requires outage and maintenance scheduling, not monthly energy deliveries. PG&E, SCE, SDG&E and CALPECO may also include the following statement in modified Exhibit D(2): "In the event of an unscheduled outage or curtailment exceeding twenty-five (25) percent of the Power Rating (other than curtailments due to lack of motive force), Seller immediately shall notify Buyer of the necessity of such unscheduled outage or curtailment, the time when such has occurred or will occur and the

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anticipated duration. Seller shall take all reasonable measures and exercise its best efforts to avoid unscheduled outage or curtailment, to limit the duration of such, and to perform unscheduled maintenance during Off-Peak hours.”

- d. For PG&E, SCE, SDG&E and CALPECO, strike existing Section 3.12(f) in its entirety, and replace the contents thereof with the following:

“On an annual basis from the Effective Date, provide electronically or in hard copy to Buyer, within 20 days of a request by Notice from Buyer, the following annualized operating records: total annual electricity generation (MWh/year), total annual useful thermal output (MMBtu/year), total annual fuel use (MMBtu-HHV), and fuel conversion factor (pounds of CO₂ per million BTU). Seller shall also maintain and provide electronically or in hard copy to Buyer, within 20 days of a request by Notice from Buyer but not more than once per month, a copy of daily operating records limited to real power production, changes in operating status, and unusual conditions found during inspections.”

- e. For PacifiCorp, strike the contents of existing Section 6.7 of the 500 kW Contract in its entirety and replace the contents thereof with the following:

“On an annual basis from the Effective Date, Seller shall provide electronically or in hard copy to PacifiCorp, within 20 days of written request from PacifiCorp, the following annualized operating records: total annual electricity generation (MWh/year), total annual useful thermal output (MMBtu/year), total annual fuel use (MMBtu-HHV), and fuel conversion factor (pounds of CO₂ per million BTU).”

- f. For PG&E, SCE, SDG&E and CALPECO, strike existing Section 7.10 of the proposed 500 kW Contracts in its entirety, and insert in lieu thereof the following, making formatting changes and inserting contact addresses and information as appropriate:

“7.10. Insurance

(a) General Liability Coverage.

- (i) Seller shall maintain during the performance hereof, General Liability Insurance of not less than \$1,000,000 if the Facility’s

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CALPECO AL 14-E, PacifiCorp AL 463-E /jph

Nameplate is over 100 kW, \$500,000 if the Facility's
Nameplate is over 20 kW to 100kW or \$100,000 if the Facility's
Nameplate is 20 kW or below of combined single limit or
equivalent for bodily injury, personal injury, and property
damage as the result of any one occurrence.

- (ii) General Liability Insurance shall include coverage for Premises-Operations, Owners and Contractors Protective, Products/Completed Operations Hazard, Explosion, Collapse, Underground, Contractual Liability, and Broad Form Property Damage including Completed Operations.
- (iii) Such insurance shall provide for thirty (30) days written notice to Buyer prior to cancellation, termination, alteration, or material change of such insurance.

(b) Additional Insurance Provisions.

- (i) Evidence of coverage described above in Paragraph (a) shall state that coverage provided is primary and is not excess to or contributing with any insurance or self-insurance maintained by Buyer.
- (ii) Buyer shall have the right to inspect or obtain a copy of the original policy(ies) of insurance.
- (iii) Seller shall furnish the required certificates and endorsements to Buyer prior to commencing operation.
- (iv) All insurance certificates, endorsements, cancellations, terminations, alterations, and material changes of such insurance shall be issued and submitted to the following:"

- g. For PacifiCorp, strike the contents of existing Section 12 of the proposed 500 kW Contract in their entirety, and insert in lieu thereof the insurance provisions specified in ordering paragraph (f) above, making formatting changes as necessary.
- h. For PG&E, SCE, SDG&E and CALPECO, strike "\$5,000.00" from existing Section 4.01(a) of the 500 kW Contracts and include "\$50.00" in lieu thereof.

This Resolution is effective today.

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CALPECO AL 14-E, PacifiCorp AL 463-E /jph

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 05/24/2012; the following Commissioners voting favorably thereon:

PAUL CLANON
Executive Director

MICHAEL R. PEEVEY
President
TIMOTHY ALAN SIMON
MICHEL PETER FLORIO
CATHERINE J.K. SANDOVAL
MARK J. FERRON
Commissioners