PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Agenda Item 10
Agenda ID #12923

ENERGY DIVISION **RESOLUTION E-4655(Rev.1)**
May 15, 2014

R E S O L U T I O N

Resolution E-4655. Southern California Edison Company, Pacific Gas and Electric Company, and San Diego Gas & Electric Company request modifications to the Renewable Auction Mechanism program.

PROPOSED OUTCOME: This Resolution approves Renewable Auction Mechanism pro forma agreements and protocols for Southern California Edison Company, Pacific Gas and Electric Company, and San Diego Gas & Electric Company with modification.

SAFETY CONSIDERATIONS: This Resolution approves revised pro forma power purchase agreements and solicitation protocols that contain provisions requiring the seller to comply with all applicable requirements of law relating to the projects including those related to planning, construction, ownership, and/or operation of the projects. As a result, there are not any expected incremental safety implications associated with approval of this resolution.

ESTIMATED COST: There are no expected costs associated with the changes made to the Renewable Auction Mechanism adopted by this Resolution.

By Southern California Edison Company's Advice Letter 3003-E filed February 7, 2014; Pacific Gas and Electric Company's Advice Letter 4365-E filed February 27, 2014; and San Diego Gas & Electric Company's Advice Letter 2580-E filed February 28, 2014.

SUMMARY

This Resolution implements changes to the Renewable Auction Mechanism (RAM) for the three investor-owned utilities (IOUs): Southern California Edison Company (SCE), Pacific Gas and Electric Company (PG&E), and San Diego Gas & Electric Company (SDG&E).

This Resolution approves in part, and denies in part, SCE's advice letter 3003-E and PG&E's advice letter 4365-E, and approves SDG&E's advice letter 2580-E. The approved substantive and non-substantive changes shall apply only to the specific terms requested by the utility filing the modification, unless stated otherwise.

Within 14 days of the effective date of this Resolution, SCE, PG&E, and SDG&E shall each file a Tier 1 advice letter with the Energy Division demonstrating compliance with the modifications approved in this Resolution.

BACKGROUND

In Decision (D.) 10-12-048 (the Decision or RAM Decision), the California Public Utilities Commission (Commission) adopted a two-year program called the Renewable Auction Mechanism (RAM) with the purpose of lowering transaction costs and promoting the development of system-side renewable distributed generation. The Decision ordered the investor-owned utilities (IOUs) to procure up to 1,000 megawatts (MW) of system-side renewable distributed generation (for individual projects up to 20 MW in size) through a reverse auction using a standard contract. The Decision also ordered the IOUs to hold four auctions over two years and directed the IOUs to submit their bidding protocols and standard contracts through a Tier 3 advice letter to implement the Decision's requirements. On February 25, 2011, the IOUs submitted advice letters for approval of their bidding protocols and standard power purchase agreements. The Commission approved Resolution E-4414 on August 18, 2011 to adopt RAM program implementation details, bidding protocols, and a standard power purchase agreement for each IOU. More recently the Commission approved Resolutions E-4489-E, E-4546, and E-4582, which approved modifications to the

RAM program rules, IOUs' RAM PPAs, and IOUs' RAM protocols.[1] Additionally, in Resolution E-4582, the Commission modified the capacity allocation targets for the fourth RAM auction and authorized a fifth RAM auction.

In D.10-12-048, the Commission delegated to staff the authority to suggest modifications to the RAM program based on experience. Specifically, Ordering Paragraph 5 of the Decision states:

> *The IOUs shall hold a program forum once per year, beginning after the initial RAM auctions are conducted to discuss program design and implementation, and provide opportunities for stakeholder comments. In organizing these forums, the utilities should consult with Energy Division staff and at a minimum notify the service list to this proceeding or subsequent proceedings. The IOUs may use the stakeholder feedback from each forum to develop and submit an advice letter seeking modifications to the RAM program. Similarly, Energy Division may issue a resolution on its own motion to propose program modifications based on information from these program forums or the annual reports developed pursuant to Ordering Paragraph 3 above…*

NOTICE

Notice of SCE's Advice Letter 3003-E, PG&E's advice letter 4365-E, and SDG&E's Advice Letter 2580-E was made by publication in the Commission's Daily Calendar.

SCE states that copies of Advice Letter 3003-E were mailed and distributed in accordance with Section IV of General Order 96-B.

PG&E states that copies of Advice Letter 4365-E were mailed and distributed in accordance with Section IV of General Order 96-B.

SDG&E states that copies of Advice Letter 2580-E were mailed and distributed in accordance with Section IV of General Order 96-B.

[1] E-4489 adopted by the Commission on April 19, 2012; E-4546-E adopted by the Commission on November 8, 2012; E-4582 on May 9, 2013.

PROTESTS

On February 27, 2014, the Commission received timely protests to SCE's advice letter 3003-E from Infigen Energy US Development LLC (Infigen), NextEra Energy Resources, LLC (NextEra), and New Dimension Energy Company (NDEC). SCE replied to the protests on March 6, 2014.

On March 19, 2014, the Commission received timely protests to PG&E's advice letter 4365-E from Clean Coalition and NextEra. PG&E replied to the protests on March 26, 2014.

On March 20, 2014, the Commission received a timely protest to SDG&E's advice letter 2580-E from NextEra. SDG&E replied to the protest on March 27, 2014.

DISCUSSION

The following discussion summarizes the modifications requested by SCE, PG&E, and SDG&E in advice letters 3003-E, 4365-E, and 2580-E, respectively. The substance of the protests and responses from parties are summarized by issue and addressed in this section.

This section is divided into four parts:

(A) Proposed Changes to the RAM Program Rules,

(B) Substantive Proposed Changes to the Individual IOU RAM Pro Forma PPAs,

(C) Non-substantive Proposed Changes to Individual IOU RAM Pro Forma PPAs; and

(D) Substantive and Non-Substantive Proposed Changes to the Individual IOU RAM Solicitation Protocols.

A. Proposed Changes to the RAM Program Rules

PG&E requests three changes to the RAM program rules.[2] First, PG&E requests to increase the extension period for when a facility must achieve its commercial operation or online date (COD) due to regulatory delay from six months to

[2] In AL 4365-E, PG&E describes the first two changes as modifications to its RAM pro forma PPA and RAM protocol. Energy Division views the proposed changes as modifications to the RAM program rules which have been specifically adopted and applied to all three IOUs in D.10-12-048, Resolution E-4414, Resolution E-4489, and Resolution E-4546.

eighteen months. Second, PG&E requests to modify the interconnection eligibility requirement from Phase I interconnection study to Phase II interconnection study. Third, PG&E requests to modify the date by which the IOUs must close their RAM V solicitations. SCE and SDG&E did not request any changes to the RAM program rules. Table 1 is a summary of the proposed RAM program rule changes.

Table 1. Summary of Proposed Substantive Changes to the RAM Program

Subject of Change	Existing RAM Program	Proposed Revision to RAM	Source of Change
(1) ***Commercial Operation (or Online) Date***	Pursuant to Res. E-4489, within 24 months of CPUC approval, with one 6-month extension for regulatory delays.	Modify extension time period for regulatory delay from 6-months to 18-months	PG&E advice letter 4365-E, Section III.A.c
(2) I***nterconnection Application***	Bidder must file interconnection application and have a completed System-Impact Study, Cluster Study Phase 1, or have passed the Fast Track screens	Modify the transmission study requirement from Phase I to Phase II	PGE advice letter 4365-E, Section III.B.a
(3) ***Extension of RAM V Auction Completion Date***	RAM V Auction Completion Date is June 27, 2014	If approval of advice letter 4365-E is after May 1, 2014, the RAM V Completion Date should be 45 days after resolution is approved	PG&E advice letter 4365-E, Section V

Energy Division evaluated the necessity of these changes to the RAM program based on the following criteria:

- Consistency with Decision 10-12-048, as modified by Resolution E-4414 Resolution E-4489, Resolution 4546-E, and Resolution 4582-E.
- Evidence that these changes are needed and will improve the RAM program.

(1) Commercial Operation Deadline

The RAM Decision established the guiding principle that RAM should be designed to attract "projects that are more viable because they are further along in the project development process . . . [the Commission] find[s] that the best approach is to set meaningful time limits."[3] To achieve this goal, that decision adopted a commercial operation deadline of 18 months from the date that the party executed its RAM PPA with the option for a one-time six month extension due to regulatory delays.[4] Based on feedback from parties, the Commission modified this requirement slightly in Resolution E-4414, adopting a deadline of 18 months from the date of Commission approval of the PPA, rather than from the date of PPA execution.[5] Based on the results of RAM I, Resolution E-4489 extended the deadline to attain commercial operation from 18 months to 24 months after CPUC approval.[6] In that Resolution, the Commission found clear evidence demonstrating that it would improve the RAM program to extend the deadline by an additional six months.[7]

In advice letter 4365-E, PG&E requests approval to modify the regulatory delay extension to eighteen months instead of the current six months. The proposed change would result in projects having a COD deadline of 24 months, plus up to an additional 18 months due to regulatory delays. In advice letter 4365-E, PG&E asserts that there are some regulatory delays that exceed six months, such as work period restrictions due to weather or operations.[8] Additionally, PG&E argues that the longer extension will allow sellers additional flexibility before facing an event of default, but sufficient incentive to bring projects online.

In its protest, NextEra argues that an up-to-18 month extension is excessive for projects that are otherwise proposing an online date that is 24 months following

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[3] D.10-12-048, § 9.2.1.2, p. 51.

[4] *Id* at 90.

[5] Resolution E-4414, OP 18, p. 46.

[6] Resolution E-4489, OP 5, p. 19.

[7] *Id* at 18.

[8] PG&E advice letter 4365-E, p. 4.

Commission approval of the PPA.[9] PG&E asserts in its reply that its experience with previous RAM solicitation is that unforeseen delays occur and that the additional time will provide sellers time to navigate these issues without having to face an event of default.[10]

The Commission acknowledges PG&E's request but declines to adopt it at this time in an effort promote one of RAM's guiding principles, that is, the execution of PPAs with projects that can achieve commercial operation quickly. Additionally, PG&E provides no evidence that an extension of the regulatory time period is needed or would benefit the RAM program. As such, and to maintain consistency with the guiding principles for RAM as established by D.10-12-048, the Commission finds that PG&E has not provided sufficient evidence to justify extending the time period for extensions due to regulatory delay. Accordingly, the Commission denies the request to modify the regulatory delay extension time period from six months to eighteen months and accepts NextEra's protest, in part.

(2) Interconnection Application

As stated above, the RAM Decision established the guiding principle that RAM should be designed to attract "projects that are more viable because they are further along in the project development process . . . [the Commission] find[s] that the best approach is to set meaningful time limits."[11] To achieve this goal, that decision adopted an interconnection agreement requirement along with a COD requirement that the bidder show that it has filed an interconnection application.[12] The Commission clarified this requirement in Resolution E-4414, adding that the bidder must also have completed a System-Impact Study, Cluster Study Phase 1, or have passed the Fast Track screens.[13]

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[9] NextEra protest to AL 4365-E, p. 2.

[10] PG&E reply, p. 2.

[11] D.10-12-048, § 9.2.1.2, p. 51.

[12] *Id* at 68.

[13] Resolution E-4414, p. 13.

PG&E requests in advice letter 4365-E that the interconnection agreement requirement be modified from a Phase I interconnection study to a Phase II interconnection study. PG&E asserts that the modification is reasonable for the same reasons that the Commission adopted a Phase II study requirement for bids in the 2013 RPS solicitation, which were that the requirement would provide more certainty regarding transmission cost and timing and minimize failure risk.[14]

In its protest of PG&E advice letter 4365-E, the Clean Coalition opposes PG&E's proposed modification to require projects have a Phase II study. The Clean Coalition argues that PG&E has provided no evidence of the need or impact of the proposed modification.[15] Additionally, Clean Coalition argues that there is no need for the modification because the current RAM selection process already has screens that require bidders to demonstrate their ability to achieve the required 24-month COD. Lastly, the Clean Coalition argues that the proposal is contrary to an efficient functioning interconnection study process and unlikely to have significant benefit due to the majority of applicants already having completed Phase II studies. In its protest of PG&E's advice letter 4365-E, NextEra supports PG&E's proposal.[16] Additionally, in NextEra's protest of SDG&E advice letter 2580-E, it recommends that SDG&E's RFO protocol be revised to require a Phase II study requirement to improve project viability by providing greater certainty of timing for completion of required transmission upgrades.[17]

In its reply to the Clean Coalition, PG&E asserts that requiring a Phase II interconnection study is reasonable because the certainty regarding the timing of network upgrades provided by having a Phase II study requirement makes sense given the near-term online dates required in the RAM program.[18]

In its reply, SDG&E asserts that NextEra's protest to SDG&E advice letter 2580-E should be rejected because it will: 1) negatively impact the market by disrupting

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[14] PG&E advice letter 4365-E, p. 5.

[15] Clean Coalition protest, p. 4.

[16] NextEra protest to PG&E AL 4365-E, p. 3.

[17] NextEra protest to SDG&E AL 2580-E, p. 1.

[18] PG&E reply, p. 4.

eligibility requirements that are and have been the market rules and 2) limit the number of eligible market participants.[19] Further, while SDG&E agrees with NextEra's argument that a Phase II requirement will reduce uncertainty and ratepayer exposure related to network upgrade costs, SDG&E asserts that NextEra's proposal will reduce the price competitiveness of the RAM solicitation and that SDG&E's proposed interconnection condition precedent should alleviate ratepayer risk related to network upgrade costs.

As the Clean Coalition noted, the RAM program already has several screens in place to minimize project failure and that there is no evidence at this time that a modification of the interconnection requirement is necessary. The Commission agrees with the Clean Coalition and finds that there is no evidence at this time to modify the RAM program interconnection requirement. The need and benefit of a Phase II requirement to the RAM program may be further considered, however, in the Commission's review of the RAM program.[20] As such, and to maintain consistency with the previous RAM auctions, the Commission finds that PG&E has not provided sufficient evidence to justify modifying the interconnection requirement. Accordingly, the Commission accepts the Clean Coalition's protest and denies both PG&E's request to require that projects have a Phase II study to participate in RAM V and NextEra's protest to SDG&E AL 2850-E.

(3) PG&E Requests Extension of RAM V Auction Completion Date

In Resolution E-4582 the Commission established a RAM V auction completion date of June 27, 2014. In advice letter 4365-E, PG&E proposes that if the Commission is unable to approve its advice letter by May 1, 2014, then the June 27, 2014 deadline for completing its RAM V auction should be modified to 45 days following the date on which the resolution approving its advice letter is approved. PG&E asserts that the change in deadline will provide the Commission additional time to consider PG&E's advice letter, provide PG&E

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[19] SDG&E reply, p. 3.

[20] On December 31, 2013, a Ruling was issued requesting comments on the RAM program regarding the review and potential extension of the RAM program. http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M084/K331/84331873.PDF.

additional time to submit its compliance filing, and additional time to solicitation participants.[21]

While the Commission agrees that additional time could be beneficial, PG&E did not provide sufficient evidence that the change will improve the RAM program. If PG&E needs additional time to comply, it may file a request pursuant to Rule 16.6 of the Commission's Rules of Practice and Procedure. Accordingly, the Commission denies PG&E's request to change the RAM V Auction Completion Date.

The RAM Program Rules, as established by D.10-12-048 and modified by Resolution E-4414, Resolution E-4489, Resolution E-4546, and Resolution E-4582, are summarized in Appendix D of this Resolution.

B. Substantive Proposed Changes to the Individual IOU RAM Pro Forma PPAs

SCE, PG&E, and SDG&E requested substantive changes to their RAM pro forma agreements for the RAM V Auctions. Where the IOUs request approval of the same or similar modification, the issues are addressed together. Table 2 below is a summary of the IOUs' proposed substantive changes to their RAM pro forma agreements.

Table 2: Summary of Proposed Substantive Changes to IOUs' RAM Pro Forma PPAs

Subject of PPA Change	Relevant RAM Pro Forma PPA Section	Proposed Revision to RAM Pro Forma PPA	Source of Change	Disposition
(1) ***Safety***	**SCE:** **Section 3.11(e)** **SDG&E:** **Section3.5(a)**	Addition of Section 3.11(e) to require that prior to commencement of any construction activity on the project site, the seller must provide a certified written plan for the safe construction and operation of the generation facility. Modification to further include safety as a general element of operation and require reporting of any accidents	SCE advice letter 3003-E (Section A.1.) SDG&E advice letter 2580-E (Section III.1)	Approve

[21] PG&E advice letter, 4365-E, p. 6.

(2) ***Network Upgrade Cost Cap and Seller's "Buy-Down Right"***	**SCE:** **Sections 2.02(b)(5), 2.03(a)(ii), 3.17(a), and Exhibit A** **SDG&E:** **Section2.3(b)**	Modification and addition of Sections 2.02(b)(5), 2.03(a)(ii), 3.17(a) to provide a termination right for SCE if estimated network upgrade costs exceed the Network Upgrade Cost Cap and provide the seller an option to "buy down" the costs above the Network Upgrade Cost Cap. Addition of Section 2.3b and related definitions to provide for a condition precedent regarding the project's electrical interconnection date and cost.	SCE advice letter 3003-E (Section A.2.) SDG&E advice letter 2580-E (Section III.2)	Approve
(3) ***Curtailment***	**SCE:** **Sections 3.03, 3.12(g), 4.01, and Exhibit A** **PG&E:** **Section 3.1(p)**	SCE: Deletion of Section 4.02 and addition of Sections 3.03, 3.12(g), 4.01 to simplify and streamline curtailment provisions regarding when SCE will and will not pay for curtailed energy. PG&E: Deletion of 100 hour cap per year on buyer curtailment and replace with unlimited amount	SCE advice letter 3003-E (Section A.3.) PG&E advice letter (Section III.A.a)	Approve Reject
(4) ***Resource Adequacy and Full Capacity Deliverability Status***	**SCE** **Sections 3.02, 6.01(b)(xxi), and Exhibit A** **PG&E** **Section 3.4(a)(i)(B) and Protocol Section VI**	Modification of Sections 3.02 and 6.01(b)(xxi) such that payments to Full Capacity Deliverability Status (FCDS) projects will be calculated using the FCDS time of delivery (TOD) factors regardless of whether the seller is actually able to provide any RA benefits. Modification of requirement to achieve FCDS by December 31, 2021 to December 31, 2024 for FCDS projects	SCE advice letter 3003-E (Section A.4.) PG&E advice letter 4365-E (Section III.A.b)	Approve
(5) ***Shared Facilities***	**SCE:** **Sections 3.05, 3.11(c)(xxiv), 3.30, 6.01(b)(xxii)-(xxiv), 8.04(e)-(f),**	Addition of Sections 3.05, 3.11(c)(xxiv), 3.30, 6.01(b)(xxii)-(xxiv), 8.04(e)-(f), 10.18, and Exhibit A to integrate provisions related to shared interconnection facilities that	SCE advice letter 3003-E (Section A.5.) PG&E AL 4365-	Approve

	10.18, and Exhibit A **PG&E: Section 3.6**	were previously part of a separate consent agreement. Addition of requirement that Sellers provide separate high-side metering and separate step-up transformers for each project.	E (Section III.A.d)	
(6) In-Service and Test Energy Date Provisions	**Sections 3.9(c)(i) and 4.4**	Addition of provisions limiting test energy to no sooner than nine months prior to Guaranteed COD (GCOD) and COD no sooner than six months prior to GCOD	SDG&E advice letter 2580-E (Section III.3)	Approve

Energy Division evaluated the necessity and reasonableness of these proposed changes to the RAM pro forma PPAs based on the following criteria:

- Consistency with Decision 10-12-048, as modified by Resolution E-4414, Resolution E-4489, Resolution 4546-E, and Resolution 4582-E.
- Consistency with other Commission decisions, rules, and policies.

(1) Safety Provisions

In advice letter 3003-E, SCE requests Commission approval to add safety provisions to its pro forma PPA. The new proposed terms require that prior to beginning construction activities the seller must provide SCE an independent engineer report that certifies that the seller has a written plan for the safe construction and operation of the generating facility. SDG&E also requests modification and addition of safety provisions. Specifically, SDG&E proposes to include safety as an element of the general operation of the project and require that the seller provide SDG&E a safety and health report listing all accidents, any resulting work stoppages, and work stoppage impact on construction of the project. Both SCE and SDG&E state that in D.13-11-024 the Commission approved similar changes in their 2013 RPS pro forma PPAs.[22]

Safety is a priority for the Commission and finds that <u>the proposed modifications are consistent with the utilities' responsibilities regarding safety</u>. Accordingly, <u>SCE's and SDG&E's proposed modifications to Section 3.11(e) and Section 3.5(a), respectively, of their RAM V pro forma PPAs are reasonable</u>.

[22] SCE advice letter 3003-E, p. 4. and SDG&E advice letter 2580-E, p. 3.

(2) Network Upgrade Cost Cap and Seller's "Buy-Down Right"

Network upgrade cost cap provisions were previously addressed in Resolutions E-4414, E-4489, and E-4546. In these previous resolutions the Commission expressed some support of the concept, but ultimately declined to accept utility proposals to include provisions in various forms that could or would terminate RAM PPAs if transmission network upgrade costs exceeded certain caps.

In advice letter 3003-E, SCE revisits its request for Commission approval to add provisions for a Network Upgrade Cost Cap with a termination right for SCE and "buy-down right" for the seller. The termination and buy-down rights would be applied if estimated network upgrade costs were to exceed the PPA's Network Upgrade Cost Cap. SCE asserts that the proposed provisions have been market-tested and used in SCE PPAs, and that similar language was previously approved by the Commission in SCE's 2011 RPS pro forma PPA, SCE's 2013 RPS pro forma PPA, and the IOUs' joint Feed-in Tariff PPA.[23]

In NextEra's protest of SCE advice letter 3003-E, NextEra recommends that the timeframe for the seller to elect its buy down right be extended from 10 business days to 60 days to allow the seller time to review study results or interconnection agreement, perform financial analysis, and address applicable corporate approvals.[24] In SCE's reply, SCE agrees with NextEra that a longer amount of time to determine whether or not to exercise the network upgrade cost buy down right is reasonable and accepts NextEra's recommendation to change the time period to 60 days instead of 10 days.[25]

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[23] SCE advice letter 3003-E, p. 4.

[24] NextEra protest to SCE AL 3003-E, p. 1.

[25] Proposed revised Section 3.17(a):

(a) Within ten (10) Business Days of receipt thereof, copies of any Interconnection Study or the interconnection agreement tendered to Seller by the Transmission Provider and, concurrently with the provision of the first Interconnection Study or interconnection agreement tendered to Seller by the Transmission Provider that may give rise to a termination right of SCE under Section 2.03(a)(iii). Within sixty (60) Business Days of receipt thereof, seller shall also provide SCE a Notice of its irrevocable election to exercise or not exercise its right to assume financial responsibility for any Excess Network Upgrade Costs pursuant to Section 2.03(a)(iii), with a failure to provide such an election deemed to be an election not to exercise such rights.

As noted above, the Commission has addressed this issue of termination rights related to transmission network upgrade costs in several previous reviews of the RAM program and RAM pro forma PPAs. In each of those instances, the requests to include provisions were denied. SCE notes, however, that the Commission has approved similar language in other RPS programs. We agree with SCE that similar terms have been found reasonable and approved. Accordingly, the Commission finds SCE's proposed Sections 2.02(b)(5) and 2.03(a)(ii), and revised proposed Section 3.17(a) are reasonable and authorizes PG&E and SDG&E to adopt the same revised provisions. Additionally, the Commission accepts NextEra's protest to SCE AL 3003-E, in part.

In advice letter 2580-E, SDG&E requests Commission approval to add an electrical interconnection condition precedent. The proposed condition precedent would require that the seller enter into a Generator Interconnection Agreement by a certain agreed upon date for the RAM contract to be effective. SDG&E asserts that the purpose of the modification is to align the transmission costs of each project with the evaluation and selection done at the time of the RFO.[26] SDG&E further asserts the provision or similar provisions have already been reviewed in proceedings and used in its 2009 and 2012 RPS PPAs and its 2013 RPS pro forma PPA.

The Commission agrees with SDG&E's assertion that the same or similar provisions were previously found reasonable and approved. Accordingly, the Commission finds SDG&E's proposed modification to add a condition precedent related to interconnection agreement date and interconnection costs is reasonable and authorizes SCE and PG&E to adopt the same provisions.

(3) Curtailment

Curtailment terms in RAM pro forma PPAs were previously addressed in Resolution E-4546. In Resolution E-4546, the Commission found that the record on SCE's and PG&E specific economic (or buyer) curtailment proposals was insufficient. Both SCE and PG&E request approval of modified curtailment terms in their respective RAM V advice letters.

[26] SDG&E advice letter 2850-E, p. 4.

In advice letter 3003-E, SCE proposes to modify its curtailment terms to the terms that were approved as part of its 2013 RPS pro forma PPA. Specifically, the proposed terms would place a cap on the number of hours each year that it may curtail and not compensate the seller, with exceptions. The exceptions are if the curtailment is for on-peak hours or if SCE has used all of the hours within the annual cap, then SCE will compensate the seller for the generation that would have occurred. SCE asserts that the proposed modifications simplify and streamline the curtailment terms while improving their contract administration.[27]

In its protest, NextEra states support for SCE's proposed revisions due to the terms being simpler to administer and consistent with its 2013 RFO pro forma agreement.[28] However, NDEC recommends rejection of SCE's proposed curtailment provisions. NDEC argues that it is not appropriate to categorically exempt peak-period resources from curtailment while exposing non-peaking resources to unpaid curtailment.[29] In its protest NDEC further argues that as a result of the proposed provisions non-peaking resources will need to raise their prices to mitigate the risk that they will be curtailed; this will result in SCE customers having to pay for the full cost of potential curtailment regardless of whether SCE actually curtails the generation. In its reply, SCE asserts that its proposed curtailment revisions are not discriminatory because its proposed provisions would apply to both peaking and non-peaking resources.[30]

In advice letter 4365-E, PG&E proposes to eliminate its 100 hour per year cap on economic containment such that it would not have a cap on the number of economic curtailment hours PG&E would pay for all energy that would have been delivered if it had not been economically curtailed by PG&E. PG&E asserts that a resource needs to be unrestricted in the number of hours it may be curtailed to be fully and most efficiently bid into California Independent System Operator (CAISO) markets.[31] PG&E further reasons that the flexibility of

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[27] SCE advice letter 3003-E, p. 5.

[28] NextEra protest to SCE AL 3003-E, p. 2.

[29] NDEC protest, p. 2.

[30] SCE reply, p. 2.

[31] PG&E advice letter 4365-E, p. 3.

unrestricted number of hours provides PG&E the ability to bid its resources without restriction in order to avoid or limit negative pricing and/or over-generation situations protecting customers from negative CAISO market prices.

In NextEra's protest to PG&E advice letter 4365-E, it supports PG&E's elimination of the 100 hour cap on economic curtailment. NextEra asserts that the provisions provide appropriate dispatch flexibility while protecting sellers by providing payment for generation that would have otherwise been delivered.[32] However, NextEra recommends clarification of the definition of Curtailment Order in Section 1.56(a) of PG&E's RAM pro forma PPA. Specifically, NextEra recommends that any curtailment by PG&E in response to a request by CAISO to manage over-generation conditions be designated as economic curtailment. In its reply, PG&E argues that a clarification is not needed because the language is consistent with pro forma PPA language that was approved in its 2013 RPS pro forma PPA and its RAM IV pro forma PPA and CAISO Tariff requirements. Additionally, PG&E argues that the definition of "Curtailment Order" does not apply to PG&E's actions as buyer, but instead to the actions of the CAISO.

The Commission acknowledges the need for economic curtailment provisions and the challenges of establishing such provisions, particularly given the uncertainty in forecasting future transmission and generation development, load growth, and market conditions. The Commission first addressed the issue of economic curtailment in the 2011 RPS procurement plan decision, and as noted above, has previously addressed this issue in the RAM program in Resolution 4546-E.[33] In both instances, the Commission found that the record was lacking and particularly noted in D.11-04-030 that Parties failed to present estimates of the likely locations or amounts of curtailment over the contract duration. We note that this continues to be the case. However, given that SCE's and PG&E's proposed revisions were recently reviewed as part of the 2013 RPS procurement plan process, <u>the Commission finds that it is reasonable for SCE and PG&E to modify their RAM V pro forma PPA economic curtailment provisions to be consistent with their 2013 RPS pro forma PPA, as approved in D.13-11-024.</u> Accordingly, <u>SCE's request to modify its curtailment provisions with simplified</u>

[32] NextEra protest to PG&E AL 4365-E, p. 1.

[33] D.11-04-030.

economic curtailment provisions is reasonable and PG&E's request to eliminate its 100 hour per year cap on economic curtailment is denied. Additionally, NDEC's protest is denied.

(4) Resource Adequacy and Full Capacity Deliverability Status

In advice letter 3003-E, SCE proposes modifying provisions related to resource adequacy (RA) and full capacity deliverability status (FCDS). Specifically, SCE proposes that payments for FCDS sellers be calculated using the FCDS time of delivery (TOD) factors starting on the RA Guarantee Date instead of when the project has achieved FCDS. SCE asserts that the proposed changes represent an improvement because it aligns the RA benefits of each project with the offer evaluation and selection methodology.[34] Additionally, SCE argues that it provides sellers with more certainty about their revenue streams by specifying the exact date on which the seller will begin to receive payments based on the FCDS TOD factors.

Infigen filed a response supporting this proposed modification because it would ensure that sellers are appropriately compensated for the RA benefits they provide prior to achieving FCDS status, and it would eliminate a double penalty for failing to provide RA benefits.[35] Infigen further recommends that SCE be allowed to apply the modifications to existing RAM 3 and RAM 4 contracts.

In its protest, NextEra supports the modifications, but recommends additional changes to Section 3.02. First, NextEra recommends that Guaranteed RA Quantity be based on Qualifying Capacity instead of a seller specified amount. Second, NextEra recommends that RA Deficit Payments should be applied only if there is a shortfall in Net Qualifying Capacity as compared to Qualifying Capacity. NextEra argues that the proposed language will cause unintended consequences for the seller of either greater RA Deficit Payments or less than full RA value in bid evaluations because the specified amount of RA could be higher or lower than the Qualifying Capacity or Net Qualifying Capacity.[36] To address

[34] SCE advice letter 3003-E, p. 7.

[35] Infigen response, p. 1.

[36] NextEra protest to SCE AL 3003-E, p. 2.

the above recommendations, NextEra recommends that SCE replace its proposed provisions with the provisions approved for its 2013 RPS solicitation. Third, NextEra recommends additional minor revisions to Section 3.02 for clarification purposes related to RA Deficit Payment calculations. Fourth, NextEra recommends that SCE's pro forma PPA be modified to account for the increasing number of projects obtaining interim and partial deliverability such that they be recognized and treated as FCDS with regards to RA Guarantee Date and TOD factors.[37]

In its reply, SCE states that it will accept incorporating NextEra's recommendation of incorporating its 2013 RPS pro forma agreement terms, but not NextEra's clarification recommendation because it is not necessary as the language already incorporates NextEra's concept.[38] Additionally, SCE asserts that it is not appropriate to further change its RAM pro forma PPA to accommodate interim and partially deliverable projects. SCE states in its reply that it believes that the pro forma PPA already reasonably addresses both types of projects with respect to RA Deficit Payment provisions and to make further changes to accommodate partially deliverable projects would be counter to the purposes of the RAM program to have a streamlined standard contract.[39] SCE alternatively recommends that projects with those types of deliverability

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[37] *Ibid*, p. 3.

[38] Revised proposed SCE RAM pro forma PPA, Section 3.02:

{SCE Comment: If Seller's offer included the guaranteed delivery of Resource Adequacy Benefits.} Commencing on the *[later of]* the Commercial Operation Date *[and the Date bid as the RA Guarantee Date]* (*[such later date,]* the "RA Guarantee Date") and throughout the *[remainder of the]* *{if Seller's offer included delivering Resource Adequacy Benefits commencing on a date later than the Commercial Operation Date}* Term, in each month, Seller shall pay to SCE an amount (the "RA Deficit Payments") equal to the product of (a) the difference, expressed in kW, of (i) the Qualifying Capacity of the Generating Facility for the applicable month, minus (ii) the Net Qualifying Capacity of the Generating Facility for the applicable month, multiplied by (b) the then-current CPM Capacity price as listed in Section 43.7.1 of the CAISO Tariff or its equivalent successor (the "Multiplier"), expressed in $/kW-month. Should the CPM Capacity price cease to be published by the CAISO and no equivalent successor is published, the Multiplier shall be equal to the last CPM Capacity price listed in the CAISO Tariff and escalated by two percent (2%) every twelve (12) months thereafter. In any event, the Multiplier may not exceed $120/kW-year.
{SCE Comment: Only Generating Facilities providing guaranteed delivery of Resource Adequacy Benefits.}

[39] SCE reply, p. 6.

participate in its annual solicitation where the PPA's terms and conditions may be negotiated. Lastly, SCE argues that while it appreciates Infigen's position regarding RAM III and RAM IV contracts, its recommendation to apply the changes to SCE's RAM III and RAM IV contracts is out of the scope of advice letter 3003-E. SCE adds, however, that if the Commission should determine that such a change should be offered, the Commission could authorize SCE to make an amendment available to existing contracts.

The Commission accepts both NextEra's protest and Infigen's response, in part. SCE stated in its reply that it will conform its FCDS and Guaranteed RA quantity provisions to its 2013 RPS pro forma PPA provisions as recommended by NextEra. However, SCE notes that additional clarifications and modifications to its provisions are not needed and further modification would be inconsistent with the RAM program goal of a streamlined procurement process. While we agree with NextEra that there are more projects obtaining interim or partial deliverability, it is not clear that accommodating those projects within RAM is necessary at this time. Accordingly, we agree with SCE and the Commission finds that SCE's revised proposed pro forma PPA terms related to FCDS and Guaranteed RA Quantity are reasonable for its RAM V pro forma PPA.

The Commission declines to adopt Infigen's recommendation to extend SCE's FCDS and Guaranteed RA Quantity provisions to RAM III and RAM IV contracts. While we agree with Infigen's assertions that there are currently detrimental effects due to SCE's prior FCDS and Guaranteed RA provisions in existing RAM III and RAM IV contracts, we also agree with SCE that those contracts are not the subject of advice letter 3003-E. The Commission, however, authorizes SCE to offer an amendment to PPAs executed as a result SCE's RAM III and RAM IV solicitations to align the FCDS and RA Guarantee provisions with those approved in this Resolution. Within 30 days of the effective date of this resolution, SCE may file a Tier 2 advice letter requesting approval of amendments made to its executed RAM III and RAM IV PPAs to conform the PPAs to the FCDS and Guaranteed RA provisions approved in this Resolution.

In AL 4365-E, PG&E requests approval to modify the date by which FCDS projects must achieve FCDS from December 31, 2021 to December 31, 2024. PG&E asserts that the modification is consistent with its original RAM pro forma

PPA and is consistent with the time required for network upgrades to be completed.[40] In its protest to PG&E AL 4365-E, NextEra supports the proposed modification asserting that the change maintains consistency in the relevant time period across RAM PPAs.[41]

The Commission agrees with PG&E and NextEra that it is reasonable to modify the date given that it is being extended by three years and it is three years later than when the provision was first implemented. Therefore, the Commission finds that PG&E's requested modification for modifying the date by which projects must achieve FCDS is reasonable and authorizes SCE and SDG&E to adopt the same provision.

(5) Shared Facilities

In advice letter 3003-E, SCE requests approval to integrate its previously separate consent agreement regarding shared facilities into its RAM pro forma PPA. SCE asserts that adding these terms simplify the contracting and approval process as well as ensure that all offerors are informed as to the program requirements and RAM provisions related to shared interconnection facilities.[42]

In advice letter 4365-E, PG&E requests the addition of a requirement that sellers provide separate high-side metering and separate step-up transformers for each project. PG&E asserts that the modification ensures that sellers are not breaking up or subdividing larger projects and that the interconnection study costs are not allocated across multiple projects.[43]

In its protest to PG&E advice letter 4365-E, NextEra supports PG&E's proposal as being consistent with the RAM program, but also notes that it would support PG&E adopting SCE's approach because it may result in lower costs due to it not requiring installation of separate step-up transformers. In PG&E's reply, PG&E

[40] PG&E advice letter, p. 4.

[41] NextEra protest to PG&E AL 4365-E, p. 2.

[42] SCE advice letter 3003-E, p. 7.

[43] PG&E advice letter, p. 5.

argues that NextEra's recommended alternative would lead to the same outcome as PG&E's proposal.[44]

The Commission agrees that SCE's proposed modifications simplify its process, and PG&E's proposed modifications add assurances against subdividing projects for RAM program. While there may be some benefit for SCE and PG&E to have the same provisions, as suggested by NextEra, there is no evidence that that is needed at this time. Accordingly, SCE's integration of provisions into its RAM pro forma PPA related to shared interconnection facilities that were previously a separate consent agreement is reasonable. Additionally, PG&E's proposed revisions regarding shared interconnections facilities are reasonable and NextEra's protest to PG&E advice letter 4365-E is denied, in part.

(6) In-Service and Test Energy Date Provisions

In advice letter 2580-E, SDG&E proposes modifications related to its in-service and test energy provisions. Specifically, SDG&E is proposing the addition of provisions limiting test energy to no sooner than nine months prior to Guaranteed COD (GCOD) and COD no sooner than six months prior to GCOD. SDG&E asserts that from a procurement planning and ratepayer benefit perspective, SDG&E has an interest in projects achieving COD at or near their estimated COD to maximize its portfolio's value and protect ratepayers.[45] Additionally, SDG&E claims that the proposed parameters should not materially affect a seller's ability to achieve COD.

The Commission agrees with SDG&E that from a ratepayer benefit perspective, it is reasonable to have projects achieve CODs at or near their estimated COD. Accordingly, the Commission finds SDG&E's proposed In-Service and Test Energy Date provisions are reasonable for its RAM V pro forma PPA and authorizes the other IOUs to adopt the requirement.

C. Non-Substantive Proposed Changes to Individual IOU RAM Pro Forma PPA

In addition to the substantive proposed changes to their RAM pro forma PPAs addressed above, SCE, PG&E, and SDG&E have also requested several non-

[44] PG&E reply, p. 2.

[45] SDG&E advice letter 2580-E, p. 4.

substantive changes to their individual RAM pro forma PPAs. The IOUs assert that the purpose of many of these changes is to make their respective RAM 5 pro forma PPAs consistent with their 2013 RPS pro forma PPAs approved in D.13-11-024.

The changes adopted in this section do not impact the RAM program universally, and thus will only apply to the particular IOU that proposed the modification. The non-substantive changes proposed by each of the three IOUs are summarized in the appendices at the end of this Resolution. These summaries can be found here:

- **Appendix A:** SCE's Proposed Non-Substantive Changes
- **Appendix B:** PG&E's Proposed Non-Substantive Changes
- **Appendix C:** SDG&E's Proposed Non-Substantive Changes

These changes include, but are not limited to the following: updates the Green Attribute standard term and condition pursuant to D.13-11-024, updates time of delivery periods and factors, updates to schedules, and updates to Seller reporting requirements. The Commission notes that few of the protests or responses filed to the IOUs' advice letters addressed the non-substantive issues considered in this section. That said, proposed modifications that were addressed in protests or responses are discussed below.

Proposed Non-Substantive Changes

(a) Development Security

In its protests to SCE advice letter 3003-E and PG&E advice letter 4365-E, NextEra recommends modification to their development security provisions. Specifically, NextEra recommends that SCE and PG&E require that one-half of the development security be required within five business days following PPA execution instead of one-half within thirty days following the effective date in SCE's pro forma PPA or the full amount within five business days of the effective date (CPUC approval) in PG&E's pro forma PPA. NextEra asserts that the shorter timeframe will allow SCE and PG&E to have additional time prior to filing for approval of the RAM contracts which could be used to execute a PPA with a project on the waitlist, if needed.[46] SCE did not comment on this issue in

[46] NextEra protest to SCE AL 3003-E, p. 4 and protest to PG&E AL 4365-E, p. 3.

its reply. In its reply, PG&E asserts NextEra's recommendation is not necessary because the RAM program has an accelerated CPUC approval process and the other half of the development security is due upon CPUC approval.[47]

The Commission denies NextEra's protest, in part. While we agree with NextEra's argument that their proposed change could provide SCE and PG&E with knowledge regarding a project's ability to move forward sooner in the process, NextEra has not provided any evidence that the current timing is problematic. This issue may be further examined in the future as a part of the Commission's review of the RAM program. Therefore, the Commission denies NextEra's protests to SCE advice letter 3003-E and PG&E advice letter 4365-E regarding development security, in part.

(b) Damage Payment

In PG&E advice letter 4365-E, PG&E requests modification to section 4.58 of its RAM V pro forma PPA. The modification changes the "damage payment" to be based on the Delivery Term Security instead of Project Development Security. Project Development Security is $60/kW for as-available resources multiplied by the capacity of project (or $90/kW for baseload resources). Project Delivery Term Security is five percent of expected total project revenues over the delivery term. In its protest to PG&E advice letter 4365-E, NextEra recommends rejection of the modification because the potential damage payment is not commercially reasonable and out of proportion to the harm that may result.[48] In its reply, PG&E asserts that modified damage payment is a reasonable approximation of damages that PG&E ratepayers would suffer and is consistent with the damage payment definition approved in its 2013 RPS pro forma PPA.

While consistency across PG&E's RAM and 2013 RPS solicitation is generally supported by the Commission, in this instance the Commission does not believe that it is necessary given the different risk in the contracts. Pursuant to PG&E's RAM V pro forma PPA the damage payment is required if the seller fails to achieve Guaranteed Commercial Operation Date (COD). Per the RAM program, projects are to achieve operation within 24 months, whereas PG&E's 2013 RPS

[47] PG&E reply, p. 3.

[48] NextEra protest to PG&E AL 4365-E, p. 2.

solicitation requested CODs beginning in 2020, which is six years after PPA execution. These different time frames between execution and COD represent different risk to PG&E ratepayers should the seller not meet its Guaranteed COD. Thus, it is reasonable that the requirements regarding the damage payment be different as well. Accordingly, PG&E's requested modification to Section 1.58 of its RAM V pro forma PPA is denied and NextEra's protest is accepted, in part.

(c) Meteorological Stations

In its protest, NextEra recommends rejection of SCE's proposed modifications to its meteorological stations and reporting requirements, Section 3.08(f) and Exhibit P-2b. NextEra argues that the proposed changes impose numerous new requirements on seller's physical equipment and associated maintenance.[49] In SCE's reply, it argues that the proposed language represents a smaller burden to sellers and lowers the cost of equipment installation, maintenance and contract compliance because it requires a smaller quantity of sensors and allows a lower quality of sensors.[50]

The Commission agrees with SCE that the proposed modification is reasonable due to it reducing the seller's burden with regards to meteorological stations and not imposing new requirements as asserted by NextEra. Accordingly, the Commission finds that SCE's proposed Section 3.08(f) and Exhibit P-2b are reasonable and NextEra's protest is denied, in part.

[49] *Ibid.* p. 5.

[50] SCE reply, p. 10.

(d) Material Changes to Generating Facility

In its protest, NDEC recommends rejection of SCE's proposed modification to Section 3.11(d), which addresses material changes to the Generating Facility. NDEC asserts that SCE's proposed modification is unreasonable because the modification introduces a new market condition for SCE's PPAs that is overly broad and unnecessary due to other existing provisions that protect the buyer.[51] Further, NDEC recommends revisions to the proposed revision. In its reply, SCE asserts that the proposed modification to Section 3.11(d) is a clarification that SCE does not have an obligation to amend the RAM PPA to make material changes to the Generating Facility at the behest of the seller. Further, SCE argues that the proposed modification does not represent a new market condition as it has been included in concept in all of its PPAs in the form of Exhibit B, which is a detailed description of the generating facility.

The Commission agrees with SCE that its proposed modification is a clarification of its pro forma PPA with regards to any changes to Exhibit B would need to be agreed upon by both the seller and SCE. Accordingly, the Commission finds SCE's proposed modifications to Section 3.11(d) are reasonable and NDEC's protest is denied.

(e) Assignment to Financing Providers

In PG&E advice letter 4365-E, PG&E proposes modifications to Section 10.6(b) of its RAM V pro forma PPA. In its protest to PG&E advice letter 4365-E, NextEra argues that the modification creates unnecessary constraints that could limit an actual Consent to Assignment required by lenders and recommends that the modification should not be approved. In its reply, PG&E asserts that the modification does not add any new obligation or burden on the seller and is a clarification with respect to the non-modifiable PPA. The Commission agrees with PG&E that the proposed modification is consistent with the RAM program aspect of a non-modifiable PPA. Accordingly, the Commission finds that proposed Section 10.6(b) of PG&E's RAM V pro forma PPA is reasonable and NextEra's protest is denied, in part.

[51] NDEC protest, p. 3.

(f) Insurance provisions

In SCE advice letter 3003-E, SCE proposes updates to the insurance provisions of its RAM V pro forma PPA, Section 10.11. In its protest to SCE advice letter 3003-E, NextEra opposes some of SCE's proposed modifications to Sections 10.11(c), 10.11(d), and 10.11(f). NextEra asserts that the proposed modifications to Sections 10.11(c) and 10.11(d) may be impossible to comply with and unnecessary.[52] NextEra also asserts that Section 10.11(f) is unreasonable as it assumes a level of wrongful intent for failure to comply with the terms of Section 10.11 and that the legal relationship and contractual obligations between insurers and customers are much different than those between a seller and SCE. In SCE's reply, SCE proposed revisions to Sections 10.11(c) and 10.11(d), which SCE asserts address NextEra's protest.[53] SCE did not, however, propose any revisions to Section 10.11(f) and argues that its proposed modifications to Section 10.11(f), which require the Seller, if it has failed to meet its insurance obligations as required in Section 10.11, to be held to the same legal standards as an insurer, are reasonable because they limit the harm to SCE and its customers.

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[52] NextEra protest to SCE AL 3003-E, p. 4.

[53] Revised proposed Sections 10.11(c) and 10.11(d) of SCE's RAM pro forma PPA:

(c) All policies required by Sections 10.11(a)(i) through 10.11(a)(vi) shall be written "per project" or "per contract" basis. If the Seller is unable to obtain such insurance on a "per project" or "per contract" basis then the Parties shall negotiate in good faith to specify mutually agreeable policies to be provided by the Seller.

(d) Within ten (10) Business Days after the Effective Date, and within ten (10) Business Days after coverage is renewed or replaced, Seller shall furnish to SCE certificates of insurance evidencing the coverage required above, written on forms and with deductibles reasonably acceptable to SCE. Additionally, upon request of SCE, Seller shall provide to SCE policy forms, including endorsements within ten (10) Business Days from the date of SCE's request. All deductibles and co-insurance retentions applicable to the insurance above shall be paid by Seller. Seller, or its insurance broker or agent, shall provide SCE with at least thirty (30) days' prior written notice in the event of cancellation of coverage. SCE's receipt of certificates that do not comply with the requirements stated herein, or Seller's failure to provide certificates, shall not limit or relieve Seller of the duties and responsibility of maintaining insurance in compliance with the requirements in this Section 10.11 and shall not constitute a waiver of any of the requirements in this Section 10.11.

The Commission denies NextEra's protests to SCE advice letter 3003-E, in part. SCE's proposed revisions to Sections 10.11(c) and 10.11(d) appear to reasonably address NextEra's concerns. Thus, NextEra's recommendation to strike all or a portion of Sections 10.11(c) and 10.11(d) is denied. Accordingly, the Commission finds SCE's proposed revised Sections 10.11(c) and 10.11(d) are reasonable and NextEra's protest is denied, in part.

While the Commission agrees with SCE's intent for proposing the modifications to Section 10.11(f), the Commission agrees with NextEra with regards to its assertion that the relationship between insurers and customers is different than those between a seller and SCE. Therefore, SCE shall modify Section 10.11(f) such that language requiring the seller to be held to the same legal obligations as an insurer is removed, as shown below, and NextEra's protest is accepted, in part.

> (f) If Seller fails to comply with any of the provisions of this Section 10.11, Seller, among other things and without restricting SCE's remedies under the law or otherwise, shall, at its own cost and expense, act as an insurer and provide insurance in accordance with the terms and conditions above. With respect to the required Commercial General Liability, Umbrella/Excess Liability and Commercial Automobile Liability insurance, Seller shall provide a current, full and complete defense to SCE, its subsidiaries and affiliates, and their respective officers, directors, shareholders, agents, employees, assigns, and successors in interest, in response to a third-party claim in the same manner that an insurer would have, had the insurance been maintained in accordance with the terms and conditions set forth above. In addition, alleged violations of the provisions of this Section 10.11 means that Seller has the initial burden of proof regarding any legal justification for refusing or withholding coverage ~~and Seller shall face the same liability and damages as an insurer for wrongfully refusing or withholding coverage in accordance with the laws of California~~.

In PG&E advice letter 4365-E, PG&E also proposes modifications to the insurance provisions of its RAM V pro forma PPA, Section 10.10. In its protest to PG&E advice letter 4365-E, NextEra made two recommendations for modifications to PG&E's pro forma PPA insurance provisions. First, NextEra recommends elimination of the "per project basis" or "material objection" language in section

10.10(b)(ii) because it may not be possible to meet the requirement in the future due to insurance market conditions changing over time.[54] Second, NextEra recommends that PG&E's proposed modification to require "delayed opening coverage" (section 10.10(d)) is unnecessary because PG&E is already protected through Project Development Security requirements, Damage Payment, and Termination Payment. In its reply, PG&E asserts that Section 10.10(b)(ii) should not be modified because the provision ensures that each project maintain sufficient coverage and that the provision was approved in both PG&E's RAM IV and 2013 RPS pro forma PPA.[55] Regarding Section 10.10(d), PG&E asserts that the provision is a benefit to sellers and increases the likelihood that a project will be completed, but is willing to remove the provision.

The Commission denies NextEra's protests to PG&E advice letter 4365-E, in part. As PG&E notes in its reply, Section 10.10(b)(ii) was previously approved. NextEra's protest has not provided any evidence as to what conditions have changed that now make the previously approved provision unreasonable. Also, given that PG&E is willing to remove Section 10.10(d) as requested by NextEra, the Commission finds this modification reasonable. Accordingly, the Commission finds that PG&E RAM V pro forma PPA Section 10.10(b)(ii) is reasonable and NextEra's protest to PG&E advice letter 4365-E is denied and accepted, in part.

D. Substantive and Non-Substantive Proposed Changes to the Individual IOU RAM Solicitation Protocols

SCE and SDG&E each requested one substantive change to their RAM protocols. Table 3 below is a summary of their proposed changes. In addition, there was one protest which recommends a modification to SCE's RAM V protocol. Table 4 below is a summary of the proposed change.

[54] NextEra protest to PG&E AL 4365-E, p. 4.

[55] PG&E reply, p. 4.

Table 3: Summary of Proposed Substantive Changes to IOUs' RAM Protocols

Subject of Protocol Change	Relevant RAM Protocol Section	Proposed Revision to RAM Protocol	Source of Change	Disposition
(1) ***Project Subdivision***	**SCE:** **Section 2.05** **SDG&E:** **Section 5**	Addition of section to specify policy that SCE will not execute more than one RAM contract if any other megawatts in the same interconnection study are already under contract to SCE. Addition of language in Evaluation Criteria to clarify SDG&E's that SDG&E will not execute more than one RAM contract if any other megawatts in the same queue position are already under contract in RAM or in another program.	SCE advice letter 3003-E (Section B.1.) SDG&E advice letter 2580-E (Section IV.4)	Approve

Energy Division evaluated the necessity of these changes to the RAM protocols based on the following criteria:

- Consistency with Decision 10-12-048, as modified by Resolution E-4414 Resolution E-4489, Resolution 4546-E, and Resolution 4582-E.
- Consistency with other Commission decisions, rules, and policies.

(1) Project Subdivision

In D.10-12-048, the Commission instructed the IOUs to administer their RAM program such that large projects are not subdivided into smaller projects such that they circumvent the 20 MW capacity participation restriction. The IOUs have taken different approaches in implementing this directive. SCE and SDG&E each propose modifications to their RAM V protocols to address project subdivision.

In advice letter 3003-E, SCE describes its proposal to add a section to its RAM protocol that specifies that SCE will not execute more than one RAM contract if any other megawatts in the same interconnection study are already under contract to SCE. SDG&E similarly proposes in advice letter 2580-E to add language stating that it will not execute more than one RAM contract if any other megawatts in the same interconnection queue position are already under

contract in RAM or in another program. Both SCE and SDG&E assert that the purpose of the modifications is to provide clarity to the market.[56]

NextEra supports SCE's proposed modifications as being consistent with encouraging individual projects under the RAM program. In SCE's reply, it proposes additional clarification to its RAM protocol regarding the subdivision of projects. Specifically, SCE seeks to clarify that it will allow multiple RAM PPAs from projects that utilize the same interconnection queue position as long as the projects are less than 20 MW in aggregate.[57] SCE asserts that the proposed revision ensures that multiple projects in the same location are not unduly penalized.[58]

The Commission was concerned when it adopted D.10-12-048 that a seller might attempt to subdivide projects to meet the RAM program project size requirements. To date the IOUs have administered their RAM programs consistent with this aspect of RAM program. We agree with SCE and SDG&E that the proposed changes described above are additional clarifications that are consistent with past RAM protocols and D.10-12-048. Accordingly, the Commission finds SCE's revised proposed and SDG&E's proposed project subdivision sections of their RAM protocols are reasonable.

As noted above, one party commented on the IOUs' RAM protocols. Table 4 summarizes the protest.

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[56] SCE advice letter 3003-E, p. 10 and SDG&E advice letter 2850-E, p. 6.

[57] SCE's proposed revised Section 2.05 of RAM protocol:

> The maximum contract size for this RFO is 20 MW. SCE will not enter into contracts with multiple projects that utilize the same interconnection queue number if the result would be a total of more than 20 MW under contract, whether through RAM or another program. Similarly, if an Offeror bids multiple projects to RAM 5 that total more than 20 MW from the same queue position, SCE will consider only the offer(s) with the lowest PTAR score(s) until the next project will exceed 20 MW, and SCE will screen the other (s) out.

[58] SCE reply, p. 12.

Table 4: Summary of Protesters Proposed Changes to IOUs' RAM Protocols

Subject of Protocol Change	Relevant RAM Protocol Section	Proposed Revision to RAM Protocol	Source of Proposal
(1) ***Submission of Offers – Resource Adequacy***	**SCE:** **Section 3.05**	Modification of Section 3.05 to allow queue cluster 6 projects bidding as FCDS	NextEra protest (Section 6)

In SCE's RAM protocol it notes that FCDS offers from queue cluster (QC) 6 projects will not be considered as FCDS because projects applying for FCDS interconnection in QC 6 will not be allocated deliverability available from any Area Delivery Network Upgrades (DNUs) approved through the CAISO's annual Transmission Planning Process in time for incorporation in the RAM V RFO selection process. In NextEra's protest, it recommends modification of SCE's RAM protocols to allow for QC 6 FCDS projects because the projects could choose to pay for and receive non-reimbursable Area DNUs or potentially pay RA Deficit Payments if the seller selects an RA Guarantee Date if FCDS is not provided.[59] In SCE's reply, SCE asserts that the proposed revisions are the same approach as RAM IV and that a better alternative to NextEra's proposal is a six month delay of the RAM V auction to expand the pool of eligible FCDS projects.[60]

While the Commission agrees with NextEra that is it possible for projects in QC 6 to obtain FCDS eventually either through CAISO's annual Transmission Planning Process or by electing Option B under its interconnection study process, we agree with SCE that its proposed approach remains reasonable. Additionally, SCE received 126 offers in its RAM IV auction resulting in 10 executed RAM PPAs, which indicates that the auction was sufficiently robust with a similar restriction.[61] Accordingly, the <u>Commission finds that SCE's proposed revisions to Section 3.05 of its RAM V protocol reasonable and denies NextEra's protest, in part</u>.

[59] NextEra protest to SCE AL 3003-E, p. 3.

[60] SCE reply, p. 8.

[61] SCE's First Compliance Report on the Renewable Auction Mechanism Program, January 17, 2014, p. 6.

The non-substantive changes proposed by each of the three IOUs to their RAM V protocols are summarized in the appendices at the end of this Resolution. These summaries can be found here:

- **Appendix A:** SCE's Proposed Non-Substantive Changes
- **Appendix B:** PG&E's Proposed Non-Substantive Changes
- **Appendix C:** SDG&E's Proposed Non-Substantive Changes

The non-substantive modifications proposed by the IOUs, as summarized in Appendix A for SCE, in Appendix B for PG&E, and in Appendix C for SDG&E, are reasonable and are approved.

PUBLIC SAFETY

California Public Utilities Code Section 451 requires that every public utility maintain adequate, efficient, just, and reasonable service; instrumentalities; equipment; and facilities to ensure the safety, health, and comfort of the public. In furtherance of that, and other safety requirements, the SCE pro forma agreement considered herein has the added requirement that an independent engineer review the seller's written plan(s) for the safe construction and operation of the generating facility. Additionally, SDG&E is now including safety as an element of the general operation of the project and requiring the seller to provide a report that includes all accidents, any resulting work stoppages, and work stoppage impact on construction of the project.

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 11, 2014.

Comments were filed in a timely fashion on April 30, 2014 by NextEra, SDG&E, and PG&E.

We carefully considered comments which focused on factual, legal or technical errors and made appropriate changes to the draft resolution. Below, we address new issues which were raised in comments.

SDG&E comments that the draft resolution is unclear in addressing PG&E's request to modify the date by which projects much achieve FCDS

In its comments, SDG&E requests that the Commission clarify whether or not the approval of PG&E's request to modify the date by which projects must achieve FCDS is extended to the other two IOUs. In recognition of this comment the draft resolution has been modified.

NextEra comments that permitting amendments of approved, standardized contracts undermines the RAM program efficiencies

In its comments, NextEra argues that allowing amendments of Commission approved, standardized contracts after an auction has closed undermines the administrative efficiencies of the RAM program and that any changes should only apply on a prospective basis. NextEra also alternatively argues that if the amendments are allowed to occur that they should also include price amendments to ensure that ratepayers are held harmless by the amendments.

As stated in the discussion above, the proposed purpose of SCE's modified provisions are to better align the RA benefits of a project with offer evaluation and selection methodology. To the extent that previous terms of RAM III and RAM IV contracts are not consistent with how their offers were evaluated and thus will not receive payments for the RA benefits that will actually be provided to SCE and/or the previous terms result in the sellers being unintentionally double-penalized, it is reasonable that the RAM III and RAM IV contracts are amended in a limited fashion. Accordingly, the draft resolution will not be modified.

NextEra comments that SCE and PG&E should modify their development security provisions

In its comments, NextEra argues that to remedy wasted resources and to ensure RAM auction efficiency and project success SCE and PG&E should modify their development security provisions such that one half of the project development security should be required within five days of PPA execution. NextEra asserts that there have been several instances from RAM III and RAM IV where contracts were terminated due to failure to provide development security. Additionally, NextEra notes, that while not able to verify, there are likely several other terminations that were also a result of sellers failing to post development security.While, NextEra has provided several examples of termination due to failure to post development security, it is not clear that there is a systemic problem or that changing when project development security is due would have

avoided those terminations or prevent them from occurring in the future. Accordingly, the draft resolution will not be modified.

FINDINGS AND CONCLUSIONS

1. PG&E has not provided sufficient evidence to justify extending the time period for extensions due to regulatory delay.
2. PG&E has not provided sufficient evidence to justify modifying the RAM program interconnection requirement.
3. The Commission accepts the protest of the Clean Coalition regarding the RAM program interconnection requirement.
4. The Commission denies the protest of NextEra Energy Resources to SDG&E advice letter 2850-E regarding the interconnection application requirement.
5. The Commission denies PG&E's request to modify the RAM V Auction Completion Date.
6. Section 3.11(e) of SCE's RAM V pro forma power purchase agreement and Section 3.5(a) of SDG&E's RAM V pro forma power purchase agreement are reasonable.
7. Sections 2.02(b)(f) and 2.03(a)(ii), and revised Section 3.17(a) of SCE's RAM V pro forma power purchase agreement are reasonable and the other IOUs should be authorized to adopt the same provisions.
8. The Commission accepts NextEra Energy Resources' protest to SCE advice letter 3003-E regarding network upgrade cost cap and seller's "buy down right."
9. SDG&E's proposed modification to add a condition precedent related to interconnection agreement date and interconnection costs is reasonable and the other IOUs should be authorized to adopt the same provision.
10. It is reasonable for the utilities to modify their RAM V pro forma power purchase agreement economic curtailment provisions to be consistent with their 2013 RPS pro forma PPAs, as approved in D.13.11-024.

11. SCE's request to modify its curtailment provisions with simplified economic curtailment provisions is reasonable.
12. PG&E's request to eliminate its 100 hour per year cap on economic curtailment is not reasonable.
13. New Dimension Energy Company's protest to SCE's economic curtailment provisions is denied.
14. NextEra Energy Resource's protest to PG&E's economic curtailment provisions is denied.
15. SCE's revised RAM V pro forma power purchase agreement provisions related to full capacity deliverability status and guaranteed resource adequacy quantity are reasonable.
16. Within 30 days of the effective date of this resolution, SCE may file a Tier 2 advice letter requesting approval of amendments made to its executed RAM auction III and RAM auction IV power purchase agreements to conform those executed power purchase agreements to the full capacity deliverability status and guaranteed resource adequacy provisions approved in this Resolution.
17. The Commission finds PG&E's requested modification for modifying the date by which projects must achieve full capacity deliverability status is reasonable and the other IOUs should be authorized to adopt the same provision.
18. SCE's integration of provisions into its RAM pro forma power purchase agreement related to shared interconnection facilities that were previously a separate consent agreement is reasonable.
19. PG&E's proposed revisions regarding shared interconnections facilities are reasonable.
20. NextEra Energy Resources' protest to PG&E advice letter 4365-E regarding shared interconnection facilities is denied.

21. The Commission finds SDG&E's proposed in-service and test energy date provisions are reasonable for its RAM V pro forma power purchase agreement and authorizes the other IOUs to adopt the requirement.
22. The Commission denies NextEra Energy Resources' protests to SCE advice letter 3003-E and PG&E advice letter 4365-E regarding development security.
23. PG&E's requested modification to Section 1.58 of its RAM V pro forma power purchase agreement regarding damage payment is denied.
24. NextEra Energy Resources' protest to PG&E's advice letter 4365-E regarding damage payment is accepted.
25. The Commission finds that SCE's proposed Section 3.08(f) and Exhibit P-2b of its RAM V pro forma power purchase agreement regarding meteorological stations are reasonable.
26. NextEra Energy Resources' protest to SCE advice letter 3003-E regarding meteorological stations is denied.
27. The Commission finds SCE's proposed modifications to Section 3.11(d) of its RAM V pro forma agreement regarding material changes to generating facility are reasonable.
28. New Dimension Energy Company's protest regarding material changes to generation facility is denied.
29. The Commission finds that proposed Section 10.6(b) of PG&E's RAM V pro forma power purchase agreement regarding assignment to financing providers is reasonable.
30. NextEra Energy Resources' protest to PG&E advice letter 4365-E regarding assignment to financing providers is denied.
31. SCE's revised Sections 10.11(c) and 10.11(d) of its RAM V pro forma power purchase agreement regarding insurance requirements of seller are reasonable.

32. NextEra Energy Resources' protest to SCE advice letter 3003-E regarding SCE RAM V pro forma agreement Section 10.11(c) and 10.11(d) is denied.
33. SCE's Section 10.11(f) of its RAM V pro forma agreement power purchase agreement regarding seller's legal obligations as an insurer is not reasonable.
34. NextEra Energy Resources' protest to SCE advice letter 3003-E regarding SCE RAM V pro forma power purchase agreement Section 10.11(f) is accepted.
35. PG&E's Section 10.10(b)(ii) of its RAM V pro forma power purchase agreement regarding required insurance coverage is reasonable.
36. NextEra Energy Resources' protest to PG&E advice letter 4365-E regarding PG&E's insurance revisions is accepted, in part.
37. The non-substantive modifications proposed by the IOUs that are not discussed above, as summarized in Appendix A for SCE, in Appendix B for PG&E, and Appendix C for SDG&E are reasonable and approved.
38. SCE's revised section of its RAM V protocol regarding project subdivision is reasonable.
39. SDG&E's section of its RAM V protocol regarding project subdivision is reasonable.
40. SCE's Section 3.05 of its RAM V protocol regarding full capacity deliverability status offers is reasonable.
41. NextEra Energy Resources' protest to SCE advice letter 3003-E regarding full capacity deliverability status offers is denied.
42. The non-substantive modifications that the IOUs proposed to their RAM V protocols, as summarized in Appendix A for SCE, in Appendix B for PG&E, and in Appendix C for SDG&E, are reasonable and approved.
43. SCE's AL 3003-E should be approved with the modifications discussed herein.
44. PG&E's AL 4365-E should be approved with the modifications discussed herein.

45. SDG&E's AL 2850-E should be approved.

THEREFORE IT IS ORDERED THAT:

1. Pacific Gas and Electric Company shall modify Section 3.9(c) of its Renewable Auction Mechanism V pro forma power purchase agreement and Section III.B.5 of its Renewable Auction Mechanism V protocol such that the extension time period for regulatory delays is six (6) months.
2. Pacific Gas and Electric Company shall modify Section III.B.1 of its Renewable Auction Mechanism V protocol such that the interconnection eligibility requirement is a Phase I interconnection study.
3. Pacific Gas and Electric Company shall modify Section 3.1(p) of its Renewable Auction Mechanism V pro forma power purchase agreement such that the terms are consistent with its 2013 RPS pro forma power purchase agreement as approved in D.13-11-024.
4. Pacific Gas and Electric Company shall modify Section 1.58 of its Renewable Auction Mechanism V pro forma power purchase agreement such that it is based on project development security as defined in Section 1.194 of Pacific Gas and Electric Company's Renewable Auction Mechanism V pro forma power purchase agreement.
5. Southern California Edison Company shall modify Section 10.11(f) of its Renewable Auction Mechanism V pro forma power purchase agreement as directed in this Resolution.
6. Each of the investor-owned utilities is authorized to include provisions in its Renewable Auction Mechanism V pro forma power purchase agreement allowing the utility to adopt provisions regarding network upgrade cost cap and seller's "buy down right," as found reasonable in this Resolution.
7. Each of the investor-owned utilities is authorized to include a condition precedent related to interconnection agreement date and interconnection costs, as found reasonable in this Resolution.

8. Each of the investor-owned utilities is authorized to include economic curtailment provisions that were found reasonable in D.13-11-024.
9. Each of the investor-owned utilities is authorized to modify the date by which projects must achieve full capacity deliverability status from December 31, 2021 to December 31, 2024.
10. Each of the investor-owned utilities is authorized to include provisions related to test energy deliveries and commercial online dates, as found reasonable in this Resolution.
11. Within 14 days of the effective date of this Resolution, Southern California Edison Company, Pacific Gas and Electric Company, and San Diego Gas & Electric Company shall file a Tier 1 advice letter with the Energy Division demonstrating compliance with this Resolution.
12. Southern California Edison Company's advice letter 3003-E and Pacific Gas and Electric Company's advice letter 4365-E are approved with modifications.
13. San Diego Gas & Electric Company's advice letter 2580-E is approved.

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 May 15, 2014; the following Commissioners voting favorably thereon:

_____
PAUL CLANON
Executive Director

Appendix A

Summary of the Non-Substantive Modifications Proposed by SCE

Summary of SCE's Proposed Non-Substantive Changes to its RAM Pro Forma PPA

Subject of PPA Change	Relevant RAM Pro Forma PPA Section	Proposed Revision to SCE RAM Pro Forma PPA	Source of Change	Disposition
Installed DC Rating	*Section 1.01(i)*	Clarified in Section 1.01(i) that the Installed DC Rating for solar photovoltaic projects may not exceed the figure reflected in the seller's description of the Generating Facility.	SCE advice letter 3003-E (Section A.6):	Approve
Excess Deliveries	*Previously Section 1.06(c)(ii))*	Removed a separate provision limiting payment for deliveries in excess of 110% of the Contract Capacity in any TOD Period (previously Section 1.06(c)(ii)) because this separate limitation is unnecessary in light of the limitation in Section 1.06(c)(i).	SCE advice letter 3003-E (Section A.6):	Approve
Generating Facility Identification Number	*Section 1.12*	Removed Section 1.12 requirement to insert Generating Facility Identification Number because the information is of limited value.	SCE advice letter 3003-E (Section A.6):	Approve
Effective Date and Obligations	*Section 2.01*	Removed Section 2.01, Effective Date and Obligations Prior to Effective Date, because the provision is unnecessary.	SCE advice letter 3003-E (Section A.6):	Approve
Interconnection Queue Position	*Section 2.01(b) (previously Section 2.02(b))*	Clarified in Section 2.01(b) (previously Section 2.02(b)) that the Interconnection Queue Position may not be utilized for the benefit of another PPA without SCE's consent.	SCE advice letter 3003-E (Section A.6):	Approve
Permitting	*Sections 2.01(c)(ii)-(v) (previously Sections 2.02(c)(ii)-(v)) and 3.20*	Simplified permitting requirement language in 2.01(c)(ii)-(v) (previously Sections 2.02(c)(ii)-(v)) and moved certain CEC Certification provisions to Section 3.20.	SCE advice letter 3003-E (Section A.6):	Approve

Subject of PPA Change	Relevant RAM Pro Forma PPA Section	Proposed Revision to SCE RAM Pro Forma PPA	Source of Change	Disposition
Biomethane Standard Term and Condition	***Section 3.01(f)***	Added standard contract language regarding biomethane projects in Section 3.01(f) pursuant to D.13-11-024.	SCE advice letter 3003-E (Section A.6):	Approve
Monitoring Equipment	***Section 3.08(f) and Exhibit P-2b***	Revised Section 3.08(f) and Exhibit P-2b, Meteorological Stations and Reporting Requirements, to add more detailed requirements for solar photovoltaic facilities and to allow for sellers to install fewer pieces of monitoring equipment.	SCE advice letter 3003-E (Section A.6):	Approve
Notice Requirement	***Section 3.11(d)***	Clarified that the notice requirement in Section 3.11(d) does not give sellers the right to make material changes to the Generating Facility without SCE's consent.	SCE advice letter 3003-E (Section A.6):	Approve
Supplier Diversity	***Section 3.17(i)***	Added further requirements and SCE rights to Section 3.17(i) on seller's reporting requirements for women, minority and disabled veteran business enterprise ("WMDVBE") spend.	SCE advice letter 3003-E (Section A.6):	Approve
Confidentiality	***Section 10.10***	Clarified details of the parties' confidentiality obligations in Section 10.10.	SCE advice letter 3003-E (Section A.6):	Approve
Insurance Requirements	***Section 10.11***	Updated insurance requirements in Section 10.11.	SCE advice letter 3003-E (Section A.6):	Approve
Dispute Resolution and Arbitration	***Sections 12.01 and 12.03***	Clarified details of dispute resolution and arbitration procedures and specified a time frame in which a party must commence a dispute and institute arbitration in Sections 12.01 and 12.03.	SCE advice letter 3003-E (Section A.6):	Approve
Definitions	***Exhibit A***	Revised, deleted or added certain defined terms, including: "Capacity Attributes," "Demonstrated Contract Capacity," and "Inverter	SCE advice letter 3003-E (Section A.6):	Approve

Subject of PPA Change	Relevant RAM Pro Forma PPA Section	Proposed Revision to SCE RAM Pro Forma PPA	Source of Change	Disposition
		Block Unit Capacity"		
Product Replacement Damage	***Exhibit F***	Added upper and lower limits to the Product Replacement Damage Amount in Exhibit F.	SCE advice letter 3003-E (Section A.6):	Approve
Time of Delivery Periods and Factors	***Exhibit J***	Updated Product Payment Allocation Factors for Time of Delivery Periods in Exhibit J.	SCE advice letter 3003-E (Section A.6):	Approve

Summary of SCE's Proposed Non-Substantive Changes to its RAM RFO Protocol

Subject of Change	Proposed Revision	Source of Change	Disposition
Requirements for Existing or Repowered Projects	Modification of Section 2.03 to incorporate Section 3.04 for one section regarding requirements for existing and repowered projects	SCE advice letter 3003-E (Section B.2)	Approve
Product Payment Allocation Factors	Modification of Attachment B to update Product Payment Allocation Factors	SCE advice letter 3003-E (Section B.2)	

(END OF APPENDIX A)

Appendix B

List of the Non-Substantive Modifications Proposed by PG&E

List of PG&E's Proposed Non-Substantive Changes to its RAM Pro Forma PPA

Matrix of Changes from RAM 4 to RAM 5

Notes:	2012 Carryover	This identifies an item that had been in previous RPS PPA's but excluded from previous RAM PPA's due to the desire to keep changes to previous RAM PPA's to a minimum.
	2013 New	Item that was introduced in the 2013 RPS PPA that is being carried over to the RAM 5 PPA.
	New	Item that is new to RAM 5 and differes from 2013 RPS PPA. Notes column explains why for each instance.

Section	RPS	Notes
Cover Sheet	New	Added clarification for project size must be > 3 MW and <= 20 MW
Cover Sheet	New	Contract Price updated to include payment of Deemed Delivered Energy
Cover Sheet	New	Added new section (E) Collateral
Cover Sheet	New	Added new section (F) Curtailment Orders
2.2(h)	2012 Carryover	
2.4	2012 Carryover	
2.6(b)	2012 Carryover	
3.1(a)	2013 New	
3.1(c)	2013 New	
3.1(e)	2013 New	
3.1(f)	2013 New	
3.1(f)(ii)	2012 Carryover	
3.1(h)(i)	2012 Carryover	
3.1(i)(iii)	New	Curtailment moved to 3.1(p) to make consistent with RPS
3.1(i)(iv)	2013 New	Deleted in RAM 5 and 2013 RPS
3.1(i)(iv)(A)	New	Curtailment moved to 3.1(p) to make consistent with RPS
3.1(l)(iv)	2013 New	
3.1(l)(vi)	2013 New	
3.1(p)	2013 New	Updated language, plus added in RAM 5 to remove 100 hour limit
3.2(b)	2013 New	
3.3(a)	2013 New	
3.3(e)	New	New to RAM 5 just to add clarity around FCDS
3.4(a)(i)(B)	New	Moved requirement for FCDS from 12/31/2021 to 12/31/2024
3.4(a)(i)(E)	2013 New	
3.4(b)	2013 New	
3.4(c)(ii)	2013 New	
3.4(c)(iii)(D)	2013 New	
3.5(a)	2013 New	
3.6	2013 New	
3.7(g)	2013 New	
3.9(a)	New	(vii) and (viii) adjusted to move progress report from monthly to quarterly until FNTP has been issued, then monthly reports
3.9(c)	New	New to RAM 5. Request for 6 month extension to be moved to 18 month extension.
4.1	2013 New	
4.2	2013 New	
4.3	2013 New	Especially Deemed Delivered Energy related to Curtailment
4.4	2013 New	Especially Deemed Delivered Energy related to Curtailment
4.5	2013 New	Especially Deemed Delivered Energy related to Curtailment
4.6(c)(iii)	2013 New	
4.7	2013 New	What used to be 4.7 (Test Period Payments) has been moved to 4.1(b)
6.1	2013 New	
6.2	2013 New	
8.4(a)(i)	New	Clarification to identify $60 with As-Available and $90 with Baseload
10.6(b)	2012 Carryover	
10.7(a)(vii)	2013 New	
10.10(d)	2013 New	
10.13	New	First sentence removed not applicable for RAM (non-negotiable). Second sentence referred to in earlier section.
11.1(b)(i)	2013 New	

(END OF APPENDIX B)

Appendix C

List of the Non-Substantive Modifications Proposed by SDG&E

Summary of PG&E's Proposed Non-Substantive Changes to its RAM Pro Forma PPA

Section	Explanation of Changes
Cover Sheet	• Clarified to whose attention Notices should be sent
Definitions	• Added definition of Bundled Green Energy to reflect components of both energy and green attributes and that Buyer will pay the lesser of either should they not be equal • Updated Green Attributes definition to reflect new biomethane regulations • Added definition for Generator Interconnection Agreement for new condition precedent 2.3(b)
Transaction Section 3.1(e), (i), (l)	• Added Bundled Green Energy to replace Delivered Energy • Updated Green Attributes language to reflect new biomethane regulations • Updated WREGIS language to allow CAISO on behalf of Seller to upload information directly into WREGIS
New Generation Facility Section 3.9(a)(viii)	• Added right for SDG&E to get Diverse Business Enterprise (DBE) related information
Energy Payment Section 4.1, 4.1(b)	• Added Bundled Green Energy to replace Delivered Energy • Updated TOD factors to match those in SDG&E's 2013 RPS Plan
Sarbanes-Oxley and SEC Requirements Section 13.4	• Section 13.4(a)(v)(b) of the PPA, updated language to correct typographical error
Notices Section 13.13	• Section 13.13 of the PPA, updated notice provisions for clarity purposes
Mobile Sierra Section 13.14	• Section 13.14 of the PPA, updated to include further relevant case law

Summary of PG&E's Proposed Non-Substantive Changes to its RAM Pro Forma PPA and RAM Bidding Protocol

Section	Summary of Changes
Section 1.0 Background	• Provided brief history of prior RAM solicitations and updated targets for current solicitation. • Adjusted/updated the schedule to accommodate for the May RAM Solicitation dates and June 27, 2014 closing. • Updated targets for current solicitation and noted that SDG&E may revise the RAM Procurement Target should existing RAM PPAs be terminated
Section 2.0 Procurement Process	• Updated targets for current solicitation. • Emphasized that Respondents unsure whether their project will achieve FCDS by January 1, 2022 should bid Energy Only.
Section 4.0 RFO Response Instructions	• Adjusted/updated the schedule to accommodate for the May RAM Solicitation dates and June 27, 2014 closing.
Section 5.0 Evaluation Criteria	• Updated TOD factors to match those in SDG&E's 2013 RPS Plan
Section 6.0 RAM RFO Schedule	• Adjusted/updated the schedule to accommodate for the May RAM Solicitation dates, use of a contingent shortlist, and June 27, 2014 closing. • Added language to describe the process by which SDG&E plans to utilize a contingent shortlist.
Section 7.0	• Updated website address

(END OF APPENDIX C)

Appendix D

Summary of RAM Program Rules, Including Cumulative Changes to the Original Rules from Decision 10-12-048, Resolution E-4414, Resolution E-4489, and Resolution E-4582

SUMMARY OF RAM PROGRAM RULES

CPUC Decision 10-12-048 adopted the Renewable Auction Mechanism and established an original set of RAM Program Rules. CPUC Resolution E-4414 adopted these RAM Program Rules with modification. This attachment revises Appendix A of Decision 10-12-048 (as modified previously by Resolutions E-4414, E-4489, and E-4546) to reflect the changes to the rules adopted herein in Resolution E-4582.

Underlined language reflects additions while strike-through reflects deletions. Only the new changes, or deletions, made by Resolution E-4582 are reflected here.

RENEWABLE AUCTION MECHANISM

1. **Price Determination**: Renewable Auction Mechanism (RAM)
   - Projects submit price bids
   - IOUs select projects in order of least-costly first, up to program capacity limit
2. **Auction Design**:
   a. Program Procurement Requirement:
      i. 1,299 MW Capacity Limit
      ii. Adjustment to the Program Capacity Limit: May occur in any appropriate proceeding or through a Tier 3 advice letter/Resolution, or a Resolution on the Commission's own motion
      iii. Capacity Allocation for total RAM program

UTILITY	TOTAL PROGRAM (MW)
SCE	723.4
PG&E	420.9
SDG&E	154.7
TOTAL	**1,299**

      iv. **Number of Auctions per Year**: Two per year, every six months, held concurrently by all three IOUs through the first four auctions; the fifth RAM auction will be held concurrently twelve months after the close of the fourth auction; a project may bid into all three IOU auctions.

v. **Amount per auction**: 25% of the total program allocation will be offered in the initial auction; unsubscribed capacity, or drop out capacity, is added to the next auction.

vi. **Procurement Requirement**: Each IOU must enter into a standard contract with each winning bidder up to the capacity limits in each solicitation and total program capacity limits. IOUs select on the basis of least costly projects first until the IOU fully subscribes its allocated capacity for that auction. IOUs have the discretion to not enter into contracts if there is evidence of market manipulation or if the bids are not competitive compared to other renewable procurement opportunities. The IOU must submit an advice letter explaining its decision not to enter into contracts.

b. **Products and Selection**

- **Products**: Firm (baseload), non-firm peaking (peaking as-available), and non-firm non-peaking (non-peaking as-available) electricity
    - IOU shall specify the amount of each product for the initial four auctions in the first advice letter filed pursuant to this order. Utilities are required to solicit and procure capacity up to the capacity limit for each solicitation.
    - Project must submit eligibility information (e.g., generation profile, project characteristic information) corresponding to the product bid, as established by the IOU
- **Selection**: Products bid into RAM will be bid as either energy-only or with full capacity deliverability status (FCDS); each product is selected on the basis of price, least expensive first until the capacity limit in each solicitation is reached; IOU may normalize (adjust) bids to place bids on an equivalent basis before making least cost selection using method approved, if any, in the advice letter implementing RAM; IOUs should add the estimated transmission upgrade costs to the bids for ranking purposes.
- **Independent Evaluator:** Utilities will employ an Independent Evaluator to assess the competitiveness and integrity of each RAM auction and submit the IE's report with its Tier 2 advice letter requesting approval of contracts resulting from those auctions.

3. **Eligibility:**
   - **Minimum Size**: 3 MW.[62]
   - **Project Vintage**: New and existing projects are eligible for RAM. Existing projects are subject to the limitations imposed by Resolution E-4546.
   - **Location**: Combined IOU service territories (e.g. a project bidding into SCE's auction can be located in either PG&E or SDG&E's service territory).
   - **Retail Customer/Third Party Ownership**: Seller need not be a retail customer and the facility need not be located on property owned or under the control of a retail customer
   - **Utility Applicability**: Southern California Edison Company (SCE), Pacific Gas and Electric Company (PG&E), and San Diego Gas & Electric Company (SDG&E)
   - **Project and Transaction Limit**: 20 megawatts (MW)

     This is the maximum size for any project signing a full buy/sell or excess sales transaction through the RAM.[63]
   - **Full Buy/Sell or Excess Sales**: Seller may elect either full buy/sell or excess sales
   - **Counting Excess Sales**: Capacity associated with the transaction size is applied to the program cap.
   - **Seller Concentration:** IOUs have the discretion to apply a seller concentration limit after the bids are received. PG&E is authorized to apply a seller concentration limit of 20 MW per seller per auction.

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[62] The changes to RAM's minimum eligible project size rules were ordered by D.12-05-035.

[63] If a project elects to pursue excess sales, the total project size, including the capacity associated with the wholesale transaction under RAM as well as the capacity associated with onsite load, is counted as part of the project's capacity for purposes of project eligibility. However, only the capacity associated with the wholesale transaction will count against the capacity limit under RAM.

4. **RAM Standard Contract:**
   - **Contract Language:** IOUs can use their individual contracts, but should start with a contract that is simple, streamlined, and has already been vetted by stakeholders through another CPUC program.
   - **Negotiations:** Price, terms, and conditions are not negotiable.
   - **Contract Terms and Conditions**
     - L**ength of Contract:** 10, 15, or 20 years
     - **Length of Time to COD**: Within 24 months of CPUC Approval, with one 6-month extension for regulatory delays. Seller can request a contract extension by providing a 60-day notice prior to the guaranteed commercial operation date.
     - **Development Deposit**: $60/$90 per kW for intermittent and baseload resources, respectively, refundable upon achieving commercial operation or applied to the performance deposit; development deposit is due on the date ~~of the contract execution~~ <u>specified in the standard contract</u> in the form of cash or letter of credit from a reputable U.S. bank; development deposit forfeited if project fails to come on line within 24 months or other 6-month extension granted by IOU.
     - **Performance Deposit**: 5% of expected total project revenues.
     - **Performance Obligation**:
       - Performance is required to be consistent with good utility (or prudent electrical) practices; project is obligated to have liability insurance against utility losses; the project is liable for an IOU's direct, actual losses; and project must perform consistent with generation profile or other characteristics for the product, to the extent stated in the Commission-adopted contract
       - Minimum deliveries for RAM product performance:
         - *As-Available Non-Peaking:* 140% of expected annual generation over two years production
         - *As-Available Peaking:* 160% of expected annual generation over two years production

- *Baseload:* 90% of expected annual generation over one year production

Small hydro projects should be exempt from these minimum performance requirements.

- **Damages for Failure to Perform**: Damages are limited to actual, direct damages; neither party is liable for consequential, incidental, punitive, exemplary or indirect damages, lost profits or other business interruption damages regardless of cause.
- **Force Majeure and Events of Default**: Each RAM contract shall include a force majeure definition and provision
- **Insurance**: IOU discretion, submitted in implementation advice letter
- **Scheduling Coordinator**: Where possible, the contracting IOU shall be the scheduling coordinator for each project using the RAM, and the IOU shall bear the risk of scheduling deviations if the generator provides the IOU with timely information on its availability; the IOU can decline scheduling coordinator responsibilities only upon a written, affirmative request from the seller that the IOU not be the scheduling coordinator, or if unable to perform these duties

5. Project Viability Requirements

Bidder must demonstrate the following items with its bid. An IOU shall reject a bid that fails to demonstrate the following items. Each IOU shall adopt reasonable definitions and lists, related to:

- **Site Control:** Bidder must show 100% site control through (a) direct ownership, (b) lease, or (c) an option to lease or purchase that may be exercised upon award of the RAM contract
- **Development Experience:** Bidder must show that at least one member of the development team has (a) completed at least one project of similar technology and capacity or (b) begun construction of at least one other similar project
- **Commercialized Technology:** Bidder must show the project is based on commercialized technology (e.g., is neither experimental, research, demonstration, nor in development)

- **Interconnection Application:** Bidder must show that it has filed its interconnection application. In addition, bidder must have completed a System-Impact Study, Cluster Study Phase 1, or have passed the Fast Track screens.

6. Market Elements

a. **Preferred Locations**: The IOUs must provide the "available capacity" at the substation and circuit level, defined as the total capacity minus the allocated and queued capacity. The IOUs should provide this information in map format. If unable to initially provide this level of detail, each IOU must provide the data at the most detailed level feasible, and work to increase the precision of the information over time. This information is to be available in the advice letter implementing RAM and updated on a monthly basis.

   i. Each IOU should examine DG interconnection screening tools currently used to screen DG interconnection applications. The IOUs should evaluate how individual project studies could be automated to provide the requested data and a reasonable assessment of a DG project's impact on the distribution system.

   ii. The IOUs should work with parties and Commission staff through the Renewable Distributed Energy Collaborative (Re-DEC) or other forums in order to improve the data, usefulness of the maps, and to discuss other issues related to the interconnection of distributed resources.

b. **Project Milestones**: Sellers shall submit a project development milestone timeline to the IOU upon RAM contract signing, and progress reports as specified in the standard contract, but at least every six months. The only enforceable milestone is the commercial operation dat~~a~~e (COD) (subject to a one 6-month extension for regulatory delays).

c. **Relationship to Voluntary and Other Programs**: 1,299 MW capacity limit does not include capacity subscribed under the Existing FIT (up to 1.5 MW, subject to expansion to three MW under SB 32). SCE is permitted to draw down its capacity limit with the 21 contracts it selected in November 2010 from the RSC solicitation, if the CPUC approves these contracts.

d. **FERC Certification**: No FERC certification as a QF is required for a project to be eligible for RAM

e. **Conveyance of RECs**: RECs transferred in relationship to the amount of the purchase (for full buy/sell, the IOU buys the RECs coincident with the entire output; for excess sales, the IOU buys the RECs coincident with the purchased excess energy)

7. Regulation and Commission Oversight

a. **Program modifications:** The Commission can modify any element of the program at any time through a Commission resolution.

b. **Advice Letter Review**: All executed RAM contracts from each auction are filed with the Commission in one Tier 2 advice letter.

c. **Program Evaluation**: RAM to be monitored and evaluated annually, with each IOU filing a report each year. The report shall be filed with ED and posted on the IOU's website. ED shall include RAM program information in the Commission's reports to the legislature on the RPS program.

d. **Data**:

Each annual report shall include information and evaluation on all relevant items and characteristics including but not limited to:

- Competition and competitiveness
- Auction design
- Time necessary to complete projects
- Auction timing
- Project status
- Analysis comparing the price and value of contracts with and without resource adequacy
- Anything else determined by ED to be necessary for a complete report

IOUs shall adopt a uniform report template with guidance from Energy Division

The first report shall include each IOU's proposal for a definition of a competitive market, proposed measurements of RPS markets generally, and proposed measurements of this RAM market specifically

As available over time, each report shall include data on:

- Measures of the requirements for a perfectly competitive market
- Measures of market power
- Seller concentration
- Data on each RAM results
- Information on the achievement of project development milestones for all executed RAM contracts
- Any other information necessary to present a complete report

e. **Public release of aggregated Data**:

i. IOUs and ED shall make the maximum amount of RAM data public, including the following:

- Names of participating companies and number of bids per company
- Number of bids received and shortlisted
- Project size
- Participating technologies
- Quantitative summary of how many projects passed each project viability screen
- Location of bids by county provided in a map format
- Information on the achievement of project development milestones for all executed RAM contracts (See Attachment B of D.10-12-048)

f. **Cost Recovery**: RAM costs may be charged to bundled and departing customers consistent with current practice

g. **Program Forum:**

i. IOUs will hold a program forum once per year in order to meet with sellers and discuss seller experience participating in an auction. The IOUs are required to:

- Notice all stakeholders of the date, time, location and methods for participation[64] for each program forum;
- Issue a request for feedback from all stakeholders after the close of each solicitation in order to inform the agenda for the program forum;
- Provide CPUC staff with a draft of the agenda at least 14 days prior to the program forum;
- At the program forum, the IOUs shall provide sufficient time to address key issues identified in the request for feedback and the independent evaluator's report;
- At the program forum, the IOUs shall provide sufficient time for stakeholders to discuss their experience with the solicitation, interconnection process, or the program in general; and
- The independent evaluator should participate in the program forum.

8. **Implementation Advice Letter[65]:** PG&E, SCE, and SDG&E shall file Tier 3 advice letters within 60 days of the date this order. The implementation advice letters shall include:
   - Procurement protocols
   - RAM standard contract
   - Program implementation details
   - Timing of RAM auctions
   - Specific amounts of capacity and type of resources in each auction over the next two years
   - Explanation of any normalization procedures used for bid selection process

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[64] The IOUs should utilize telecom and web-based technologies to facilitate remote participation.

[65] These Advice Letters were filed by the IOUs on February 25, 2011 and were approved with modifications by the Commission in Resolution E-4414.

- Detailed description of the generation profiles and characteristics that correspond with each product bucket
- Description of how IOU-proposed product eligibility requirements will provide reasonable assurance that a bid for one product will, if selected, deliver energy in a manner that corresponds to the generation profile associated with that
- Identify seller concentration limit, if any
- Provide the preferred locations map and a description of how the maps were computed
- Provide a simple methodology to measure the status of project development milestones

(END OF APPENDIX D)