Decision 12-02-002 February 1, 2012

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of San Diego Gas & Electric Company for Approval of the SDG&E Solar Energy Project (U902M).

Application 08-07-017 (Filed July 11, 2008)

DECISION PARTIALLY GRANTING SAN DIEGO GAS & ELECTRIC COMPANY'S PETITIONS FOR MODIFICATION OF DECISION 10-09-016 (SEP) AND DECISION 10-12-048 (RAM)

We partially grant two petitions for modification filed by San Diego Gas & Electric Company. The result is to combine the solicitation of photovoltaic and other electricity generated by renewable resources now procured by San Diego Gas & Electric Company via two programs into one program. We do this in a way that promotes simplicity, maximizes program efficiency, and minimizes market disruption. The proceeding is closed.

1. Background

On September 3, 2010, we issued a decision adopting a solar photovoltaic (PV) program for San Diego Gas & Electric Company (SDG&E). (See Decision (D.) 10-09-016 in this proceeding, Application (A.) 08-07-017.) The adopted Solar Energy Project (SEP) is a five-year program to develop up to 100 megawatts (MWs) of solar PV facilities generally in the size range of one to two MWs per project, with projects up to five MWs permitted as along as no major distribution upgrades are required. The SEP is composed of 26 MWs of utility-owned

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generation (UOG) and 74 MWs of power purchase agreements with independent power producers (IPP).

On December 17, 2010, we issued a decision adopting a Renewable Auction Mechanism (RAM) as part of the Renewables Portfolio Standard (RPS) program. (See D.10-12-048 in Rulemaking (R.) 08-08-009.) RAM is a new procurement process for utility purchases of electricity from eligible facilities up to 20 MWs per project. Our initial implementation of RAM is in a two-year program for the three largest investor-owned utilities (IOUs) to purchase at least 1,000 MW of electricity generated by facilities using renewable resources.¹ SDG&E's portion of the total 1,000 MWs is 80.7 MWs.

On April 20, 2011, SDG&E filed a petition for modification of D.10-09-016 (SEP) in A.08-07-017. SDG&E seeks to combine the solicitation of 74 MWs of local PV electricity from IPPs via SEP with the 81 MWs of renewable resource electricity via RAM, for a combined total of 155 MWs. On May 20, 2011, the Division of Ratepayer Advocates (DRA) filed a response in support of SDG&E's proposed restructuring of the SEP to the extent it results in a more cost-effective procurement while maintaining consistency with RAM. Also on May 20, 2011,

¹ The California Energy Commission (CEC) certifies RPS eligibility of generation facilities using one or more of the following 15 CEC-identified categories of renewable resources or fuels, including PV: (1) biodiesel; (2) biogas (including pipeline biomethane); (3) biomass; (4) conduit hydroelectric; (5) digester gas; (6) fuel cells using renewable fuels; (7) geothermal; (8) hydroelectric incremental generation from efficiency improvements; (9) landfill gas; (10) municipal solid waste; (11) ocean wave, ocean thermal, and tidal current; (12) photovoltaic; (13) small hydroelectric (30 megawatts or less); (14) solar thermal electric; and (15) wind. (See Renewables Portfolio Standard Eligibility Guidebook, Fourth Edition, California Energy Commission, Efficiency and Renewable Energy Division, Publication Number: CEC-300-2010-007-CMF; January 2011 at 14.)

Solar Alliance² filed a response in support of combining the SEP and RAM solicitations, but in opposition to certain specific requested elements of the combination. On May 31, 2011, SDG&E filed a reply generally agreeing with DRA and disagreeing with Solar Alliance.

On September 8, 2011, SDG&E filed a petition for modification of D.10-12-048 (RAM) in R.08-08-009. SDG&E says that the petition to modify RAM is a sequential, companion pleading to its petition to modify SEP. By ruling dated September 19, 2011, the Commission notified parties that the petition to modify D.10-12-048 (RAM) will be handled in A.08-07-017, with the deadline for responses shortened to September 23, 2011. On September 23, 2011, Solar Alliance filed a response stating that its position remains the same as in its response to SDG&E's first petition. On October 3, 2011, SDG&E filed a reply largely repeating its earlier reply.

2. Discussion

SDG&E petitions for five modifications to SEP and RAM:

- 1. Combine the solicitation of 74 MWs of local PV via SEP with solicitation of 81 MWs of renewables via RAM.
- 2. Extend the two-year RAM solicitation window to four years.
- 3. Specify that the 74 MWs related to SEP shall be located within SDG&E's service area, from projects of no more than 20 MWs each, selling a local peaking resource adequacy (RA) product, and without requiring notable system upgrades.

² On January 5, 2012, Solar Alliance notified the Commission that, effective January 1, 2012, it had merged with the Solar Energy Industries Association (SEIA), and that for all purposes going forward the name SEIA should be used in place of the name Solar Alliance. For references after January 1, 2012, the name SEIA is used herein.

- 4. Lift the price cap of \$235 per megawatt-hour (MWh) applicable to the 74 MWs of SEP and allow market pricing for these 74 MWs consistent with the market pricing approach in RAM.
- 5. Allow in–process bilateral transactions, if executed, to offset on no less than a one to one basis the 74 MWs related to SEP.

We largely grant the two petitions. We make limited changes, for the reasons explained below. We do this to promote simplicity, maximize program efficiency, and minimize market disruption. Specifically, we combine the two programs as requested by SDG&E but do not extend the solicitation window under RAM to four years. We lift the price cap adopted in D.10-09-016 for the 74 MWs related to SEP to allow market pricing for these 74 MWs consistent with the market pricing approach in RAM. We decline to specify that the 74 MWs related to SEP shall be located within SDG&E's service area from projects selling a local peaking RA product without requiring notable system upgrades, but endorse SDG&E applying RAM criteria which will tend to produce that result. Finally, we do not allow bilateral transactions to apply to the 155 MWs in the combined program.

2.1. Combine 74 MWs of SEP and RAM

In considering SDG&E's request to combine the 74 MWs related to SEP with RAM, we also consider whether we should combine the 74 MWs with either the qualifying facilities (QF) program or SDG&E's Feed-In Tariff (FIT). On balance, we conclude that the most reasonable merger of SEP is with RAM and, for the reasons explained below, we grant SDG&E's unopposed request to merge SEP with RAM.

The QF program has been implemented since 1979 pursuant to provisions of both state and federal law.³ It involves cogeneration and small power production facilities over a wide range of sizes, including an obligation that utilities purchase output from QFs that are 20 MWs and less.⁴ SEP projects can self-register as QFs. A simple approach is to rely on the mandatory purchase obligation at full avoided cost under federal law to promote economically efficient and equitable development of the 74 MWs at issue here. The California program, however, has largely been suspended with respect to new facilities by a series of orders beginning in 1984.⁵ We adopted a Settlement Agreement in 2010 with the goal of opening the program to new facilities upon the completion of two conditions. (See D.10-12-035). Those conditions were recently met. (See D.11-10-016, D.11-10-043.) We decline to further consider combining the 74 MWs related to SEP here with the QF program given its new status.

SDG&E's FIT has been implemented since 2007 pursuant to Pub. Util. Code § 399.20. (See D.07-07-027 and D.08-09-033.) SDG&E's current FIT provides for purchase by SDG&E of up to a total of 40 MWs pursuant to a

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³ Both the California Public Utilities Code and the federal Public Utilities Regulatory Policies Act of 1978. (See D.91109, 3 CPUC2d 1.)

⁴ On June 16, 2011, the Federal Energy Regulatory Commission (FERC) removed the purchase obligation for most California utilities with regard to facilities that are greater than 20 MW. (135 FERC ¶ 61,234 (2011).)

⁵ The suspension was in response to enormous success in the quantity of subscriptions (over 15,000 MW), with resulting concerns regarding potential oversupply and price. See, for example, D.84-10-098, 16 CPUC2d 362; D.85-04-075, 17 CPUC2d 521; D.85-07-021, 18 CPUC2d 315; D.86-05-024, 21 CPUC 2d 124. The Commission's reopening of the program to new facilities in the 1990s was set aside by the Federal Energy Regulatory Commission in 1995. (70 FERC ¶ 61,215; reconsideration denied 71 FERC ¶ 61,269 (1995).)

standard contract at a price equal to the market price referent from projects up to 1.5 MW each. We decide not to merge SEP with FIT, because we are in the process of examining whether or not to increase the capacity of FIT program or project size in R.11-05-005.

RAM was adopted in December 2010, and the first auction occurred in 2011. (D.10-12-048.) RAM involves all types of eligible renewable facilities up to 20 MW. We are persuaded by SDG&E that the combination of SEP with RAM offers the reasonable potential for economic and administrative efficiencies. We agree with DRA that it makes sense to apply a more coordinated approach in a single program rather than two separate programs with overlapping criteria and goals. Combining SEP with RAM promotes simplicity and efficiency, and is reasonable.

2.2. RAM Solicitation Timeframe

SDG&E proposes that the two-year RAM solicitation window be extended to four years. SDG&E asserts that because the combined amount of power is nearly doubled, the amount of time for procurement should be doubled. DRA agrees as long as the 81 MWs under RAM continues to be procured over two years. Solar Alliance disagrees, contending that incorporation of SEP into RAM should follow RAM protocols (i.e., two-year procurement). In the alternate, Solar Alliance proposes a four-year combined solicitation as follows: Year 1 of 59 MWs; Year 2 of 59 MWs, Year 3 of 19 MWs, and Year 4 of 18 MWs. In response, SDG&E agrees with DRA, and disagrees with Solar Alliance.

We accept the primary recommendation of Solar Alliance and decline to extend the RAM window to four years. One goal in combining programs is to facilitate efficiencies. These efficiencies will be frustrated by having subsets of RAM separated into two- and four-year portions as suggested by DRA. Another

goal is to not disrupt market expectations. Potential RPS sellers expect a two-year initial RAM solicitation. Changing that window to four years for SDG&E disrupts expectations. It would create an inconsistency with the two-year solicitation for Pacific Gas and Electric Company (PG&E) and Southern California Edison Company (SCE). We agree with Solar Alliance that incorporating SEP into RAM means adopting RAM protocols, including its two-year duration. This is simple, efficient, and promotes consistency with market expectations for RAM, along with RAM program implementation for PG&E and SCE.

We are also not persuaded by SDG&E that solicitation of 155 MWs over two years via this combined SEP/RAM program (approximately a doubling of the 81 MWs in RAM) justifies doubling the duration of the solicitation window. SDG&E presents no evidence that its system cannot reasonably integrate an additional 74 MWs in two rather than four years, nor does it identify what problems, if any, are created. Further, we have no evidence that SDG&E cannot address these integration problems, if any, in reasonable ways. For example, if the 74 MWs threatens to create a surplus, SDG&E can decline to short-list or execute other contracts that might become available via the annual RPS solicitations (2011 or later), bilateral negotiations or other purchase opportunities.

SDG&E is also concerned that substantially increasing procurement over a short amount of time could aggravate problems which may occur in the initial year of RAM auctions and lead to suboptimal results. SDG&E does not state what problems might occur, and we do not expect problems in the first year of RAM auctions. We have no reason to make a four-year subset within the initial two-year RAM program to avoid unexpected, unknown problems.

Finally, the RAM program already includes protections that are designed to avoid problems and suboptimal results. For example, utilities have discretion to reject RAM contracts when justified.⁶ All executed contracts are reviewed by the Commission via a Tier 2 advice letter. The Commission has the opportunity to reject contracts that are problematic or produce suboptimal results.

2.3. Location of Projects and 20MW Project Size

SDG&E proposes that 74 MWs of the 155 MWs total be located within SDG&E's service area, consistent with the requirements in its approved SEP. Specifically, SDG&E proposes that these 74 MWs, in individual projects of no more than 20 MWs each, be attributable to a local-peaking RA product and connected to SDG&E's transmission or distribution (T or D) system without notable system upgrades. DRA agrees, as long as the 81 MWs of RAM are allowed to be anywhere in the service areas of the three IOUs, consistent with the broader location requirements in the approved RAM.⁷ Solar Alliance disagrees, contending that incorporation of the SEP 74 MWs into RAM should follow the broader location eligibility in RAM protocols. SDG&E replies in agreement with DRA and disagreement with Solar Alliance.

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⁶ For example, IOUs have "...discretion to reject bids from an auction under two circumstances: there is evidence of market manipulation, or the prices are not competitive. An IOU may reject an entire auction's results based on such an assessment or reject individual bids even before their allocated capacity cap has been reached. In other words, an IOU may evaluate the supply curve of bids received in an auction and assess whether any of the bid prices are unreasonable and uncompetitive relative to the IOU's other reasonable opportunities." (D.10-12-048 at 36; also see D.10-12-048, Appendix A, page 2, item 2.a.vi.)

⁷ A project located in the service area of any one of the three IOUs may bid in the RAM auction of any one, two, or all three IOUs. (D.10-12-048, Appendix A, page 3, item 3, bullet 1.)

We adopt RAM service area provisions and project size up to 20 MWs for the combined 155 MWs. This promotes simplicity and administrative efficiencies by having only one set of criteria, as opposed to two subsets of criteria within a combined program. At the same time, SDG&E can reasonably incorporate the goals of both SEP and RAM in the combined program. SDG&E can do this by seeking a large portion of its 155 MWs combined capacity from its non-firm peaking product (which SDG&E says will tend to be filled by solar technologies⁸), and from projects that do not require significant interconnection upgrades (which will likely be from smaller projects—less than 5 MWs—and in SDG&E's service area⁹). This permits SDG&E to continue to pursue the goals and efficiencies of the SEP program with relative simplicity and minimal market disruption.

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⁸ Each IOU was directed to specify the amount of each product (firm, non-firm peaking, non-firm non-peaking) for the initial four auctions in its first advice letter filed pursuant to D.10-12-048. (D.10-12-048, Appendix A, page 2, item 2.b, bullet 1.) SDG&E should file an advice letter to specify the amount of each product it will solicit in each auction for the 74 MW of increased capacity resulting from this decision.

⁹ One reason the Commission adopted RAM is that it encourages "the development of resources that can utilize existing transmission and distribution infrastructure..." (D.10-12-048 at 2.) The Commission requires IOUs to provide information and maps to help bidders locate projects where no or minimal T or D upgrade costs are involved. (*Id.*, Appendix A, page 5, item 6.a.) Smaller, compared to larger, projects will tend to be able to use surplus T and D before triggering upgrades. Economically rational bidders will include T and D costs in their non-negotiable RAM bids, thereby making bids that require T and D upgrade costs relatively less price-competitive. Finally, in evaluating bids, IOUs "shall add the most recent estimated interconnection study costs of transmission network upgrades resulting from the project's interconnection study to bid prices for ranking purposes." (Resolution E-4414, Ordering Paragraph 11 at 46; emphasis in original not included here.)

2.4. Market Pricing

SDG&E proposes removing the \$235/MWh price cap otherwise applicable to the 74 MWs of SEP PV and allowing market pricing for these 74 MWs consistent with the market pricing approach in RAM. No party objects.

We remove the price cap because doing so promotes simplicity and efficiency. It facilitates a reasonable combination of these two programs without creating the complexity of two subsets within the RAM program. It is compatible with the fact that there are 15 potentially eligible category types identified by the CEC with a wide range of costs, not just the one resource type (PV) in SEP.

Moreover, removing the price cap can be done without unacceptable jeopardy to ratepayers given RAM protections. For example, we expect the RAM auction to involve vigorous price competition with an economically efficient and equitable price outcome. If that is not the case, we expect IOUs to use their discretion to reject RAM bids. Finally, the Commission will reject some or all projects within an advice letter seeking approval of RAM contracts if the prices are unjust, inequitable, or unreasonable. These protections allow us to remove the price cap in the combined program.

2.5. Bilateral Transactions

SDG&E proposes that the Commission allow in-process bilateral transactions, if executed, to offset on at least a one to one basis the 74 MWs of SEP PV. SDG&E says these bilateral transactions, if executed, should count toward the SEP subset of RAM as long as the price of these bilateral transactions is lower than the RAM auction price. DRA agrees, but recommends only 74 MWs of these bilateral transactions be allowed under the condition the bilateral

price is equal or less than the price in SDG&E's first RAM auction. Solar Alliance opposes SDG&E's proposal.

We decline for the following reasons to allow counting some or all of the MWs in these bilateral contracts towards the 155 MWs resulting from this order, and do this whether or not the price of the bilateral transactions is lower than the RAM price.¹⁰ First, to promote simplicity and administrative efficiency, we do not create a SEP subset within the expanded RAM.

Second, while we reversed our prohibition of bilateral contracts for projects 20 MWs and less, we declined to apply any future MWs from bilateral transactions to RAM capacity targets.¹¹ (D.11-04-008.) We are not persuaded to make an exception here.

Third, the bilaterals at issue involve approximately 80 MWs of small-scale solar (between 2 and 15 MWs each) from two developers. Application of the MWs from these bilateral transactions to the 74 MWs of SEP would complete the SEP program even before SDG&E held its first SEP solicitation. This would undermine our goal of creating robust competition in RAM, SEP, and in renewable resource procurement generally. We have no convincing evidence that SDG&E has procured such a large quantity of RPS resources that it cannot reasonably procure both these bilaterals and 74 MWs of additional SEP-related capacity transferred to RAM.

¹⁰ Parties do not here identify the specific projects or contracts that comprise the approximately 80 MW at issue. On November 17, 2011 we issued Resolution E-4439, wherein we approved up to 35 MW of facilities that could be 15 MW or less.

¹¹ The exception to that order was identified and addressed in D.11-04-008. SDG&E does not make a sufficient case here for consideration of a further exception.

Finally, SDG&E submits that due to the absence of a Commission approved solicitation mechanism (e.g., 2010 annual RPS solicitation, SEP, RAM), SDG&E contracted bilaterally with these projects. SDG&E contends that its good faith decision to do so in the absence of Commission-approved requests for offers (RFO) is entirely consistent with the Commission's focus on increasing procurement from such projects. The projects in question would have been delayed and in limbo, according to SDG&E, if SDG&E had waited for Commission authorization to initiate either the SEP RFO or the RAM auction, particularly given uncertainty surrounding the availability of federal stimulus and tax incentives beyond 2011. SDG&E says that it only requests these contracts apply toward the merged SEP/RAM program if the negotiated bilateral prices are competitive with successful RAM project prices.

We are not persuaded that the capacity from certain bilateral transactions was, or should be, so directly linked to the SEP/RAM program. SDG&E's effort to pursue these transactions is consistent with SDG&E's responsibility to meet its RPS target of 33% by 2020. We are not convinced that SDG&E's decision to work bilaterally with these projects was intended to be in lieu of procurement approved in the SEP decision. We are not persuaded that SDG&E's decision to work bilaterally with these projects is reasonably related to its duty to achieve RAM results, nor that SDG&E's potential success relative to these projects should eliminate further procurement from the non-firm peaking product.

Whether or not applied to the 155 MWs here, the bilaterals (if otherwise RPS-eligible and approved by the Commission) will apply to overall RPS targets (e.g., 33% by 2020). We have no evidence that SDG&E is in a position of having so many generation resources and purchases (RPS and others) that it needs to use these bilateral transactions toward its 155 MWs of RAM to reduce future

procurement. We also have no evidence that SDG&E's reasonable management of existing and additional generation resources and purchases is materially affected by whether or not these approximately 80 MWs of bilateral transactions are counted toward the additional 74 MWs added to RAM in this order. Thus, SDG&E fails to make a convincing case why these nearly 80 MWs should apply to the 74 MWs at issue here.

As we have said before, utilities ultimately remain responsible for program implementation, administration and success. We will later judge the extent of that success, including the degree to which each utility implements Commission orders, elects to take Commission guidance, demonstrates creativity and vigor in program administration and execution, and reaches program targets, goals and requirements. (D.11-04-030 at 3-4.) In allowing utilities to fulfill their duties under the RPS program, we follow an approach of "flexibility with accountability." That is, we grant RPS-obligated utilities considerable flexibility in the way they satisfy RPS program goals. (See D.11-04-030 at 11.) Utility election to use bilateral transactions is one element of that flexibility. When employed reasonably, it is part of the entire program to reach the RPS and greenhouse gas goals of the utilities and the state.

3. Conclusion

We approve the two petitions to the extent provided herein, and deny them in every other respect. Specifically, we modify D.10-09-016 and D.10-12-048 to accomplish the following:

- 1. Combine the solicitation of 74 MWs of PV electricity via SEP with 81 MWs of renewable resources via RAM.
- 2. The resulting 155 MWs are to be solicited consistent with RAM protocols, such as:

- a. Within the remaining RAM auctions authorized in D.10-12-048,
- b. From projects up to 20 MWs each,
- c. From one of three products (firm, non-firm peaking, non-firm non-peaking),
- d. Within any of the service areas of the three IOUs, and
- e. At market prices determined via the RAM auction.

We decline to authorize SDG&E to apply certain bilateral transactions to offset any of the 155 MWs of the combined MWs.

Because this decision only changes the SEP and RAM programs going forward, we do not need to change the language in D.10-09-016 or D.10-12-048. Rather, to implement the changes adopted today, we only need to modify each program effective today. We do that by adopting updated appendices attached to this order that summarize each program, as modified. We make no changes to SEP reporting requirements. If there are no SEP Power Purchase Agreements (PPAs) procured via SEP (but the capacity is procured via the 74 MW transferred to RAM), SDG&E need not report SEP PPAs. SDG&E must, however, report the 74 MW as part of its RAM reports, with a cross-reference in its SEP reports to its RAM reports. SDG&E's SEP reports, of course, must still report on the UOG portion of the SEP program.

Finally, in this order we also direct SDG&E to file and serve a Tier 2 advice letter to specify the amount of each product it will solicit in each remaining RAM auction for the 74 MW of capacity added to RAM via today's order, along with its new RAM total of 155 MWs.

4. Comments on Proposed Decision

The proposed decision of Administrative Law Judge (ALJ) in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities

Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. On December 8, 2011, the proposed decision of ALJ Maryam Ebke was filed and served. Timely comments were filed by SDG&E, DRA and SEIA. Timely reply comments were filed by SDG&E and SEIA.

As required by our rules, comments must focus on factual, legal or technical errors and, in citing such errors, must make specific references to the record. Comments which merely reargue positions taken in the proceeding are given no weight. (Rule 14.3.) We find no errors in the proposed decision. As a result, we make no substantive changes to the proposed decision.

5. Assignment of Proceeding

Michel P. Florio is the assigned Commissioner and Maryam Ebke is the assigned ALJ in this proceeding.

Findings of Fact

- 1. The combination of SEP and RAM within one program offers the reasonable potential for economic and administrative efficiencies.
- 2. Efficiencies will be frustrated and market expectations will be disrupted if RAM is divided into two subsets, with a two-year solicitation for two IOUs and a four-year solicitation for one IOU.
- 3. No evidence is presented here to show SDG&E's system cannot reasonably integrate an additional 74 MWs of RPS resources in two rather than four years; what problems, if any, are created by this integration; or that SDG&E cannot reasonably address these integration problems, if any, with tools already at its disposal.
- 4. There is no reason to make a four-year subset within the initial two-year RAM to avoid unexpected, unknown problems that may or may not occur in the initial two years.

- 5. Simplicity and administrative efficiencies are promoted by having one set of criteria for project location (i.e., anywhere within the service areas of the three participating IOUs) and size (i.e., up to 20 MWs) rather than two subsets of criteria within one combined program.
- 6. SDG&E can reasonably incorporate the goals and efficiencies of both SEP and RAM in the combined program (e.g., by seeking a larger portion of its 155 MWs combined capacity from the RAM non-firm peaking product and projects that do not require significant interconnection upgrades).
- 7. Removing the SEP price cap promotes simplicity; efficiency in program administration; reasonable program combination; and, given RAM protections, can be done without unacceptable jeopardy to ratepayers.
- 8. It does not facilitate simplicity or administrative efficiency to create a SEP subset within the combined program for application of capacity from bilateral contracts.
- 9. No persuasive evidence is presented here to justify an exception from our decision to decline applying future MWs from bilateral contracts toward RAM capacity targets.
- 10. Application of the capacity from certain bilateral transactions to the 74 MWs at issue in the combined program would effectively complete the SEP program even before SDG&E held its first SEP solicitation, and would contribute to undermining the Commission's goal of creating robust competition.
- 11. No persuasive evidence is presented that SDG&E's management of existing and additional generation resources and purchases is materially affected by whether or not approximately 80 MWs of bilateral transactions at issue here are counted toward the additional 74 MWs added to RAM in this order.
 - 12. The Commission is reviewing FIT in R.11-05-005.

Conclusions of Law

- 1. The April 20, 2011 SDG&E petition for modification of D.10-09-016, and the September 8, 2011 SDG&E petition for modification of D.10-12-048, should each be granted in part, and denied in all other respects.
 - 2. The petitions should be granted to the extent they:
 - a. Combine SDG&E's solicitation of 74 MWs from IPPs via SEP with SDG&E's solicitation of 81 MWs via RAM, for a combined 155 MWs within RAM.
 - b. Retain RAM criteria (e.g., solicitations over two years; projects may be located anywhere within the service areas of the three participating IOUs; projects up to 20 MWs; three products; preference for use of existing transmission and distribution infrastructure; no price cap).
 - 3. The petitions should be denied to the extent they:
 - a. Propose a four-year solicitation window.
 - b. Specify that the 74 MWs related to SEP shall be located within SDG&E's service territory, and selling a local peaking RA product.
 - c. Propose allowing in-process bilateral transactions to offset any part of the combined capacity in the merged SEP/RAM program.
- 4. This order should be effective today so that the combined program may proceed expeditiously and thereby promote simplicity, maximize efficiency and minimize disruption.

ORDER

IT IS ORDERED that:

1. The April 20, 2011 San Diego Gas & Electric Company petition for modification of Decision 10-09-016, and the September 8, 2011 San Diego Gas &

Electric Company petition for modification of Decision 10-12-048, are each granted in part, and denied in all other respects.

- 2. The Solar Energy Project is modified as shown in Attachment 1 to this order. The Renewable Auction Mechanism program is modified as shown in Attachment 2 to this order.
- 3. Within 14 days of the date of this order, San Diego Gas & Electric Company shall file a Tier 2 advice letter. The advice letter shall specify the amount of each product San Diego Gas & Electric Company shall solicit in each remaining Renewable Auction Mechanism (RAM) solicitation for the 74 megawatts of capacity added to RAM, and the amount of each product in its new total RAM allocation of 155 megawatts.
 - 4. Application 08-07-017 is closed.

This order is effective today.

Dated February 1, 2012, at San Francisco, California.

MICHAEL R. PEEVEY
President
TIMOTHY ALAN SIMON
CATHERINE J.K. SANDOVAL
MARK J. FERRON

Commissioners

Commissioner Michel Peter Florio, being necessarily absent, did not participate.

ATTACHMENT 1

Commission Decision 10-09-016 (September 2, 2010) adopted the Solar Energy Project (SEP). The description of SEP in D.10-09-016 (Appendix A) is updated here to include the most recent changes. In particular, see (a) Power Purchase Agreement Reporting Requirements (fifth bullet), and (b) new section at end regarding procurement via the Renewable Auction Mechanism.

The Solar Energy Project

A Solar Photovoltaic Program for San Diego Gas & Electric Company Adopted 2010 (Decision 10-09-016) Modified 2012 (Decision 12-02-002)

General Overview:

The Solar Energy Project (Solar Energy Project) is a five-year program (starting from the date the Commission approves SDG&E's advice letter) to develop up to 100 megawatts (MW) of solar photovoltaic (PV) facilities in the range of one to two MW in San Diego Gas & Electric's (SDG&E) service territory. An independent evaluator (IE) shall oversee all solicitations conducted pursuant to the Solar Energy Project. IE expenses shall be recorded in SDG&E's Independent Evaluator Memorandum Account (IEMA).

Total Size of the Solar Energy Project:

100 MW

Utility-owned Generation (UOG) Portion of the Solar Energy Project:

Size: 26 MW

Cost caps: \$3.50/W with a 10% contingency for capital cost. \$25/kW-yr for operation and maintenance costs escalated at the index for all urban consumers in the west, specifically the CPI published by the U.S. Bureau of Labor Statistics with the series ID CUUR0400SA0 (http://data.bls.gov/cgi-bin/srgate).

Project Size/Type: Primarily one to two MW PV facilities of all technologies and mounting configurations, but projects of up to 5 MW are also allowed as long as no major distribution upgrade is required.

Power Purchase Agreement (PPA) Portion of the Solar Energy Project:

Size: 74 MW

Project Size/Type: Primarily one to two MW PV facilities of all technologies and mounting configurations, but projects of up to 5 MW are also allowed as long as no major distribution upgrade is required.

Project development timeline: 18 months from Commission approval, MWs associated with projects that do not achieve commercial operation within in 18 months after Commercial approval shall be added to the next solicitation.

Location: In SDG&E's service territory.

Price: SDG&E shall hold a competitive solicitation at least once per year to select winning projects.

Cost cap: at SDG&E's time-of-delivery adjusted levelized cost of energy (LCOE) of \$235/MWh based on \$3.50/W.

Reporting Requirements:

SDG&E shall file annual compliance reports in this proceeding. The first report is due 12 months after the start of the Solar Energy Project. The report shall include the independent evaluator's reports regarding all solicitations conducted pursuant to this program over the reporting period and, at a minimum, the following:

Reporting on the PPA portion of the Solar Energy Project

- Documentation of all solicitations issued for PPA projects;
- A description of all bids received from the PPA solicitations, including the name of bidder, location of project, bid price, and description of proposed facility (generating capacity, type of technology, annual average expected generation, interconnection point), and identification of winning bids;
- The total electrical output for all systems under PPAs that are currently selling electricity to SDG&E, for each month of the previous year;
- A description of the project specific distribution and network upgrades, including their costs needed to facilitate the PPA portion of the Solar Energy Project.
- The 74 MW transferred to the Renewable Auction Mechanism (RAM) program must be included in RAM reports, with a reference in the SEP reports to the RAM reports.

Reporting on the UOG portion of the PV Program

- Documentation of all solicitations issued for UOG projects, including the criteria SDG&E established to evaluate bids; a description of the short list of bids, including name of the bidder and final price in the agreement, a description of offer/facility (generating capacity, type of technology, annual average expected generation, interconnection point), and identification of winning bids;
- A description of all UOG facilities for which work has been initiated or completed in the previous year, including: capital costs, and operations and maintenance expenses, generating capacity, type of technology, annual average expected generation, description of the site (existing SDG&E-owned land or newly acquired/leased, land/lease cost, proximity to substation), and progress toward completion;
- Quantification of the UOG capacity that achieved commercial operation in each program year;
- A calculation of the levelized cost of energy (LCOE) for each UOG facility that is completed and interconnected to the grid. This calculation shall include work papers showing actual amounts for all cost and electrical output entries used to calculate the LCOE;
- Electrical output by month for the previous year for each SDG&E-owned UOG facility that is completed and interconnected to the grid; and
- A description of the project specific distribution and network upgrades needed to facilitate the PV PPA Program; the known or projected costs of those upgrades, associated with interconnecting each UOG facility, including all distribution and network upgrades; a listing of the UOG projects identified as triggering the need for network upgrades; and identification of the UOG projects implemented notwithstanding the need for network upgrades, and the cost of those network upgrades.

Power Purchase Agreement (PPA) Portion of the Solar Energy Project Implemented via the Renewable Auction Mechanism:

Size: 74 MW

Project Size/Type/Project Development Timeline: All criteria are consistent with those adopted for the Renewable Auction Mechanism (e.g., up to 20 MW; any qualifying renewable technology; 18 months from Commission approval of contract, with one 6-month extension for regulatory delays; no price cap but prices subject to market; projects located within the service areas of San Diego Gas & Electric Company, Southern California Edison Company, or Pacific Gas and Electric Company).

(END OF ATTACHMENT 1)

ATTACHMENT 2

SUMMARY OF RENEWABLE AUCTION MECHANISM (RAM) PROGRAM RULES

February 2012

Commission Decision 10-12-048 (December 16, 2010) adopted the Renewable Auction Mechanism (RAM). Resolution E-4414 (August 18, 2011) modified the program by adding certain rules. The RAM program was summarized in Attachments B and C to Resolution E-4414. That summary is updated here by (a) combining Attachments B and C to Resolution E-4414 (see last bullet in Section 7.e below), and (b) including the most recent changes (see changes made in Section 2.a.III and Section 2.a.v below).

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. 1,000 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 and per auction	iii.	Capacity Allocation for	or total RAM pr	rogram and per auction
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UTILITY	TOTAL PROGRAM (MW)	PER AUCTION (MW)
SCE	259.4 1 2	65.0
PG&E	420.9	105.2
SDG&E	154.7	44.9^{3}
TOTAL	835.0	215.1

- iv. **Number of Auctions per Year**: Two per year, every six months, held concurrently by all three IOUs; a project may bid into all three 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; SDG&E's proportionate share of the original 1,000 MW RAM program total is increased by 74 MW.
- 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

¹ As described in the text of this decision, SCE's procurement obligation may be reduced by the capacity represented in the 21 contracts it has executed from its 2010 Renewables Standard Contract solicitation. Furthermore, SCE may elect to submit additional contracts resulting from its 2010 RSC solicitation via a Tier 3 advice letter, however, these additional contracts and associated capacity will not reduce SCE's procurement obligations under RAM.

² SCE's revised obligation is contingent upon CPUC-approval of the 21 contracts executed from the 2010 Renewables Standard Contract solicitation. The CPUC has not yet approved those contracts.

³ The additional 74 MW is procured over only the last three RAM auctions. The first auction was 20.2 MW, and the last three are 44.9 MW.

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
 - o 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.
 - o Project must submit eligibility information (e.g., generation profile, project characteristic information) corresponding to the product bid, as established by the IOU.
- **Selection**: 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 network 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: Minimum contract size of 1 MW, but projects 500 kilowatts and greater can aggregate to meet the minimum contract size of 1 MW. Projects can aggregate as long as they interconnect to the same p-node and the contract size does not exceed 5 MW
- Project Vintage: New and existing projects are eligible for RAM
- **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 RAM⁴
- 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.

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
 - o Length of Contract: 10, 15, or 20 years
 - o **Length of Time to COD**: Within 18 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.

⁴ 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.

o **Development Deposit**: \$20/kW for projects 5 MW and smaller, and a \$60/\$90 per kW for intermittent and baseload resources, respectively, for projects greater than 5 MW and up to 20 MW in size, refundable upon achieving commercial operation or applied to the performance deposit; development deposit is due on the date of contract execution 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 18 months or other 6-month extension granted by IOU.

Performance Deposit:

- For projects less than five MW: conversion of development deposit to performance deposit
- For projects five MW and larger: 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 of 140% of expected annual net energy production based on two years of rolling production
- 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
- o **Force Majeure and Events of Default**: Each RAM contract shall include a force majeure definition and provision
- o **Insurance**: IOU discretion, submitted in implementation advice letter
- o **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 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 every six months. The only enforceable milestone is the commercial operation data (COD) (subject to a one 6-month extension for regulatory delays).
- c. **Relationship to Voluntary and Other Programs**: 1,000 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**: 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; reporting requirements are:
 - Project Name
 - Company Name
 - Project Status (Delayed/On Schedule)
 - Product Category/Technology Type
 - Location (County, City)
 - RAM Solicitation in which Project Was Bid
 - CPUC Final, Non-Appealable Approval Date
 - Guaranteed Commercial Operation Date
 - 6-month Regulatory Delay Extension (Yes/No)
 - If Extension, Reason (Force Majeure/Transmission/ Permitting/Interconnection)
 - Actual Commercial Operation Date (if operating)
 - Construction Started? (Y/N)
 - Original Bid Capacity
 - Installed Capacity
 - Full Buy/Sell or Excess Sales
 - All Necessary Permitting/Government Approvals Received? (Y/N)
 - All Necessary Permitting/Government Approvals Filed? (Y/N)
 - If Filed, Expected Date by Which All Necessary Permitting/Government Will Be Approved
 - If Not Yet Filed, Expected Date by Which All Necessary Permitting/Government Will Be Filed
 - Interconnection Agreement Signed? (Y/N)
 - Interconnection Application Deemed Complete? (Y/N)
 - State in Interconnection Process (Studies/Interconnection Agreement Signed/Construction)

- f. **Cost Recovery**: RAM costs may be charged to bundled and departing customers consistent with current practice
- g. **Program Forum:** 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 participation⁵ 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:** 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

⁵ The IOUs should utilize telecom and web-based technologies to facilitate remote participation.

- 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
- 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 ATTACHMENT 2)