

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Continue
Implementation and Administration of California
Renewables Portfolio Standard Program

Rulemaking 11-05-005
(Filed May 5, 2011)

**OPENING COMMENTS OF SOLARRESERVE, LLC
ON RPS PROCUREMENT PLANS AND NEW PROPOSALS**

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Pursuant to the *Assigned Commissioner's Ruling Identifying Issues and Schedule of Review for 2012 Renewables Portfolio Standard Procurement Plans Pursuant to Public Utilities Code Sections 399.11 et seq. and Requesting Comments on New Proposals* issued April 5, 2012 ("Assigned Commissioner's Ruling" or "ACR"), SolarReserve, LLC ("SolarReserve") hereby submits these comments in accordance with the California Public Utilities Commission's ("Commission's") Rules of Practice and Procedure.

I. INTRODUCTION

SolarReserve is a solar energy project development company developing large-scale concentrated solar power ("CSP") projects with the molten salt power tower technology developed by the Pratt and Whitney Rocketdyne division of United Technologies Corporation.¹ SolarReserve's Rice Solar Energy Project in Riverside County, California has already received all major permits and has signed a power purchase agreement with Pacific Gas & Electric Co. The project will be interconnected to the transmission lines of the Western Area Power Administration and will deliver power into the California Independent System Operator ("CAISO") balancing authority area ("BAA") under the terms of a pilot pseudo-tie agreement with the CAISO.² SolarReserve continues to develop other projects that will enable load serving entities to meet California's renewables portfolio standard ("RPS"). SolarReserve's development portfolio includes projects inside California and outside, and includes a mix of

¹ A description of SolarReserve's technology was included in SolarReserve's filing in this docket on August 8, 2011, as Attachment B.

² The CAISO has filed the agreement with the Federal Energy Regulatory Commission. See FERC Docket ER11-3778-000.

projects that would interconnect directly with transmission lines under the control of California balancing authorities and projects that would dynamically transfer power into California BAAs.

SolarReserve's molten salt storage technology provides a way to store the energy from sunlight before it is delivered to the grid in the form of electricity. As such, a SolarReserve CSP facility is able to provide firm, uninterrupted power from a conventional steam turbine generator, similar to conventional power plants (e.g., a natural gas combined cycle plant), even after the sun has set. Furthermore, SolarReserve is capable of exerting control over its output, ramping up or down, providing ancillary services, and scheduling deliveries with high levels of certainty. These capabilities are fundamentally different from the performance characteristics of other renewable technologies such as wind and photovoltaic generators. SolarReserve's integrated storage solution, which uses sunlight to heat molten salts directly, allows more storage to be more cost-effectively deployed than other CSP technologies do. SolarReserve is currently constructing the 110 MW Crescent Dunes Solar Energy Project in Nevada, which will be the largest molten salt power tower in the world when completed.³

II. OVERVIEW

SolarReserve believes the investor-owned utilities, Pacific Gas & Electric Co. ("PG&E"), Southern California Edison Co. ("SCE"), and San Diego Gas & Electric Co. ("SDG&E") (collectively "utilities"), have made a good faith effort to update their procurement plans in light of new statutory and regulatory developments.⁴ SolarReserve believes, however, that further revisions to the procurement plans are required in light of the significant changes to the RPS law made by SB 2 1x (Simitian, Stats. 2011, ch. 1) and other regulatory developments.

In its comments, SolarReserve will first discuss specific provisions of the procurement plans that it believes should be revised. In particular, SolarReserve is concerned that several statements made by the utilities suggest that they have procurement preferences that are not justified by the RPS statute and will limit competition.

³ The Crescent Dunes Solar Energy Project near Tonopah, Nevada will deliver 110 MW to NV Energy under a 25-year term power purchase agreement. For this project SolarReserve received a loan guarantee from the U.S. Department of Energy.

⁴ SolarReserve's comments focus exclusively on the procurement plans filed by the investor-owned utilities. References to the "PG&E Plan," "SCE Plan," and "SDG&E Plan" are references to the procurement plans filed by the utilities on May 23, 2012.

SolarReserve is also concerned about some statements concerning what will be required in bid packages for projects that will not be interconnected in the CAISO BAA.⁵ In particular:

- The plans should provide guidance concerning what interconnection studies are required for projects that will not be interconnected in the CAISO BAA.
- The plans should not require generators to demonstrate at the time a bid is submitted that the agreements between balancing authorities required for dynamic transfers or the agreements required for firm transmission service are in place.

SolarReserve will also offer comments regarding some of the proposals put forward in the Assigned Commissioner’s Ruling. In particular:

- With respect to the proposed Net Market Value Formula, SolarReserve agrees that the procurement process should take into account integration costs and ancillary services, but is concerned that the formula may not adequately capture the positive system benefits of certain renewable technologies such as solar thermal with storage.
- With respect to use of actual transmission cost estimates for evaluation, SolarReserve agrees that actual transmission costs should be taken into account. In addition, SolarReserve believes the Commission should require the utilities to compare the transmission costs of projects that will interconnect in the CAISO BAA with those that will interconnect in other BAAs. Such comparisons will make it possible to more effectively evaluate whether ratepayer costs will be minimized by selecting projects interconnecting in the CAISO BAA or projects interconnecting in other BAAs.
- With respect to resource adequacy and efforts to minimize the costs of new transmission, SolarReserve points out that the ruling and procurement plans fail to recognize that costs are being driven up by CAISO rules regarding allocation of import capability at the interties for resource adequacy purposes. SolarReserve believes the Commission should take steps to minimize the impact of the CAISO rules regarding allocation of import capability at the interties, such as requiring the utilities to enter into power purchase agreements for projects which provide for

⁵ In these comments references to “interconnection” of projects in the CAISO BAA and in other BAAs are intended to be references to interconnection on transmission lines rather than on distribution lines.

substitution of resource adequacy benefits from sources other than the projects if necessary.

III. DETAILED COMMENTS

A. Comments Regarding Specific Provisions of Procurement Plans

1. Location Preferences Are Inconsistent with the Statute

The changes made by SB 2 1X included the creation of three portfolio categories, the first of which will be required to be no less than 75% of the utility portfolio in the third compliance period which begins in 2017. Pub. Util. Code § 399.16. Thus, the emphasis of the procurement plans is on acquisition of resources that will be in the first portfolio category.

Although the Assigned Commissioner’s Ruling and the procurement plans place a heavy emphasis on projects that intend to interconnect in the CAISO BAA, this emphasis is not consistent with what is required for eligibility for the first portfolio category, since the statute refers to all “California balancing authorities.” The first portfolio category includes:

(1) Eligible renewable energy resource electricity products that meet either of the following criteria:

(A) Have a first point of interconnection with a California balancing authority, have a first point of interconnection with distribution facilities used to serve end users within a California balancing authority area, or are scheduled from the eligible renewable energy resource into a California balancing authority without substituting electricity from another source. . . .

(B) Have an agreement to dynamically transfer electricity to a California balancing authority.

Pub. Util. Code § 399.16 (b)(1). Moreover, in SB 2 1X the legislature imposed a new requirement on the CAISO and the balancing authority of each area in California to “[w]ork cooperatively to integrate and interconnect eligible renewable energy resources to the transmission grid by the most efficient means possible.” Pub. Util. Code § 399.26 (b).

The legislature’s decision to include all projects interconnecting in California BAAs, scheduling power into California BAAs, or by agreement dynamically transferring power into California BAAs was a deliberate choice that is likely to have positive effects on the RPS program. The provisions expand the scope of possible project locations and hence the number of potential projects significantly beyond what would be the case if the only projects that were eligible were projects that interconnect in the CAISO BAA. Expanding this scope will benefit California ratepayers by increasing competition.

Although the legislature has made it clear that in order for the output of projects to count toward the first portfolio category it is not necessary for them to be interconnected in the CAISO BAA, all of the procurement plans indicate that the utilities will prefer projects in their own service territory or projects interconnected in the CAISO BAA.

- PG&E: “Projects in PG&E’s service territory are preferred...” PG&E Plan at 13.
- SCE: “SCE has a strong preference for . . . projects that are or will be interconnected to the CAISO’s Balancing Authority Area.” SCE Plan, Appendix E.1, at 3. *See also* SCE Plan, Appendix E.1, at 6.
- SDG&E: While SDG&E does not clearly state that it has a “preference” for projects within SDG&E’s service territory, its least-cost-best-fit (“LCBF”) methodology in effect includes a preference for projects within its service territory because only such projects will not get a deliverability adder. SDG&E Plan, Appendix C, at 3-4.⁶

These preferences are contrary to the provisions of the statute that define the first portfolio category. Moreover, the utilities do not attempt to explain why having these preferences is consistent with the statute. These unjustified preferences make it less likely that projects interconnecting outside of the CAISO BAA will make bids, thus limiting potentially available projects. Thus, these preferences are likely to hurt not only those who are not eligible for them, but also ratepayers who may have to pay higher prices because the preferences limit competition. In addition, it is possible that the preferences will hinder development of environmentally preferable sites.

These preferences do not reflect the legislature’s direction, and would frustrate its policy objectives. Thus, the Commission should order the utilities to eliminate preferences for projects that will be interconnecting in the CAISO BAA.

2. The Procurement Plans Should Be Revised to Clarify Eligibility Requirements for Projects that Will Not Be Interconnected in the CAISO BAA

In order for proponents of projects that will not interconnect in the CAISO BAA to participate in the RFO process, the procurement plans should also be revised to make it clear what proponents of such projects will be required to submit and to remove unreasonable requirements.

⁶ SDG&E also gives itself “sole discretion on a case-by-case basis for offer does not have CAISO system impact study or 2012 TRCR participation.” SDG&E Plan, Appendix A, at 5.

a. Interconnection Studies

The CAISO provides a Phase I Interconnection Study and a Phase II Interconnection Study. Outside of the CAISO, transmission providers (including other California balancing authorities) supply different types of interconnection reports and transmission studies. While the procurement plans are clear with respect to what interconnection studies are needed for projects that will interconnect in the CAISO BAA, the plans are vague with respect to what interconnection and transmission studies will be required for projects that will not be interconnecting in the CAISO BAA. For example:

- PG&E states that “PG&E’s 2012 RPS Solicitation will require that Sellers have at least the equivalent of a Phase I study from the CAISO.” PG&E Plan at 57. For a project that will not be interconnecting in the CAISO BAA, does PG&E consider the “equivalent” to be a System Impact Study or a Facilities Study? Also, will a study for transmission service to get electricity to the CAISO be required?²
- The Assigned Commissioner’s Ruling proposes that “[s]hortlisted bids that have obtained CASIO Phase II study results” or have “achieved the equivalent interconnection progress” can be put on a primary short-list. ACR at 20 and n. 21. Thus, several of the procurement plans also refer to use of cost estimates from the CAISO Phase II Interconnection Study. What is the “equivalent” interconnection progress for a project that will not be interconnected to the CAISO?

Greater clarity is needed. Clarity will assist project proponents (and transmission providers other than the CAISO) to know what work should be done before or shortly after bids are to be submitted. Greater clarity will thus encourage competition by enabling more projects to be bid effectively. Moreover, greater clarity will make it more likely that utilities and the Commission have the information they need in a timely fashion.

b. Dynamic Transfers

For projects that are not directly interconnecting in the CAISO BAA, it will also be important to know what will be required to establish eligibility for bid purposes if: (1) the output will be scheduled into a California balancing authority; or (2) a dynamic transfer arrangement will be made. In its decision regarding portfolio categories the Commission provided little

² SCE is clear that “All Projects must have an interconnection study (e.g., System Impact Study, Facilities Study, Phase I or Phase II Interconnection Study, or documentation showing that the project has passed Fast Track screens) or signed Interconnection Agreement in order to be considered.” SCE Plan, Appendix E.1, at 9.

specific information regarding what would be required for the upfront showing for power purchase agreement approval. The Commission left working out the details to the Energy Division.⁸

To date, the Energy Division has not provided guidance regarding what will be needed for the upfront showing. In the absence of Energy Division guidance, SCE has suggested:

Seller must reasonably demonstrate to SCE as part of its submitted Proposal package that the full output of the proposed Out-of-CBA Generating Facility can in fact be scheduled on an hourly or sub-hourly basis into a California Balancing Authority without substituting electricity from another source or dynamically transferred into a California Balancing Authority. Such reasonable demonstration may include, for example, a Dynamic Scheduling Host Balancing Authority Operating agreement as defined in the CAISO Tariff.

Seller will be required to have firm transmission rights to the Delivery Point within the CAISO's Balancing Authority Area or to the respective CAISO Intertie for the duration of the term of the Final Agreement.

SCE Plan, Appendix E.1, at 6.

SolarReserve submits that SCE's guidance is too restrictive and that the guidance the Energy Division is to develop should be prepared as soon as possible to avoid having the utilities impose unduly restrictive requirements on bidders. In particular, SolarReserve is concerned about SCE's suggestion that it would be appropriate for project proponents to provide Dynamic Scheduling Host Balancing Authority Operating Agreements at the initial bid submission stage. *See* SCE Plan, Appendix E.1, at 6. As the Commission recognized in D. 11-12-052, at 27, these agreements are between balancing authorities, so generators cannot provide them. As part of bid solicitation packages, SCE should be willing to accept only the possibility that such an agreement could be executed before the commercial operation date. In addition, SCE indicates that bidders will be required to have firm transmission rights, which is beyond what the Commission required in its decision regarding portfolio categories. *Compare* SCE Plan, Appendix E.1, at 6 *with* D. 11-12-052 at 26-27. If SCE will require firm transmission rights and other transmission agreements before accepting a bid, this will substantially limit bids from

⁸“The Director of Energy Division is authorized to develop a methodology for both the upfront showing and the compliance determination, for all procurement claimed to meet any of the criteria of § 399.16(b)(1).” D.11-12-052 at 42.

projects not interconnected to the CAISO, particularly when there is a long time delay between the bid submission date and the desired commercial operation date.

B. Comments Relating to New Proposals

1. Proposed Net Market Value Formula

In the Assigned Commissioner's Ruling the use of standardized variables in a net market value formula is proposed. SolarReserve's solar thermal technology with storage has substantial benefits for the electric grid when compared to intermittent renewable technologies. Thus, SolarReserve is pleased that in the proposed formula for determining the net market value there will be a deduction for "integration costs" for intermittent resources. SolarReserve is also pleased that calculation of an adjusted net market value will be required when a project can provide ancillary services.

Taking into account integration costs and the ability of some renewable technologies to provide ancillary services costs is consistent with new provisions of the RPS law. New Public Utilities Code Section 399.13(a)(4)(A)(i) provides that the Commission shall adopt LCBF criteria that take into account "[e]stimates of indirect costs associated with needed transmission investments and ongoing electrical corporation expenses *resulting from integrating and operating eligible renewable energy resources.*" (emphasis added). Taking into account the expenses resulting from integrating intermittent renewable resources is also consistent with new initiatives at the Commission and the CAISO to make sure there is adequate flexible resource capacity to meet system needs.

The utilities also appear to support consideration of integration costs and ancillary services. In their procurement plans and comments all of the utilities support use of an integration adder if one is approved by the Commission. PG&E suggests the adder should be \$7.50/MWh in 2008 dollars, which is \$8.50/MWh in 2013 dollars, although PG&E also suggests that the integration costs may be lower for some projects and intends to determine what the adder will be on a case-by-case basis. PG&E Plan at 63 and note 43 and PG&E Plan, Appendix 6, at 25-26. The utilities also indicate that the value of ancillary services should be taken into account.

Since the manner in which the utilities intend to treat integration costs and value ancillary services does not appear to be uniform and is of substantial importance, SolarReserve suggests

that the Commission provide additional guidance to the utilities concerning how integration costs and ancillary services should be valued.

SolarReserve notes, however, that using a formula which only captures the integration costs associated with use of intermittent renewable resources and the value of ancillary services will not adequately capture all of the benefits of its technology, solar thermal with storage. Dispatchable solar energy, such as the type that SolarReserve provides, contributes valuable benefits to the buyer and ratepayer when integrated into the electrical grid. The benefits are as follows:

1. High Capacity Factor. Molten salt energy storage enables SolarReserve’s technology to operate at a higher capacity factor than most other solar technologies, improving its ability to meet peak summer periods for multiple hours, even after the sun has set.⁹ As the transmission system is built to serve peak loads, a generator with a higher capacity factor will utilize transmission assets more effectively by operating at peak capacity more often. By delivering more megawatt-hours of renewable energy per megawatt of transmission capacity reserved, this should result in lower overall transmission costs.
2. High Capacity Value. A recent NREL publication, entitled *Capacity Value of Concentrating Solar Power Plants*, shows that CSP with high amounts of molten salt storage should generally receive a capacity value in excess of 95%.¹⁰ This compares to 10-15% for wind generation and 25-30% for photovoltaic generation.¹¹ A higher capacity value – entailing higher reliability – would allow the utility to spend less on other transactions required to satisfy their peak load requirements, which protects the ratepayer from additional costs.
3. Value as a System Resource. In its certification of SolarReserve’s Rice Solar Energy Project, the California Energy Commission (“CEC”) recognized the facility’s value as a system resource. As the CEC found: “The evidence shows that the Rice Solar

⁹ The National Renewable Energy Laboratories has compared the capacity factors for wind, solar PV, and a solar thermal technology with six hours of storage capability. See National Renewable Energy Laboratories, *Western Wind and Solar Integration Study* (2010), available at: http://www.nrel.gov/wind/systemsintegration/pdfs/2010/wwsis_final_report.pdf.

¹⁰ National Renewable Energy Laboratories, *Capacity Value of Concentrating Solar Power Plants* (2011), at “Executive Summary” and 38, available at <http://www.nrel.gov/docs/fy11osti/51253.pdf>.

¹¹ See National Renewable Energy Laboratories, *Western Wind and Solar Integration Study*(2010), at 308, available at http://www.nrel.gov/wind/systemsintegration/pdfs/2010/wwsis_final_report.pdf.

project will provide reliable, renewable energy on hot summer afternoons and evenings, when it is most needed. The evidence characterizes this as a ‘noteworthy project benefit.’”¹² When the Commission adopted a resolution approving the power purchase agreement for the project in 2010 it also acknowledged the benefits of the technology for the system noting: “The use of molten salt and storage provides greater value to the purchasing utility, and the transmission system.”¹³

The procurement plans indicate that the utilities want the flexibility to take into account such system benefits. For instance, PG&E notes that, in addition to taking into account integration costs, it intends to make adjustments to its “Portfolio-Adjusted Value” to reflect uncertainty regarding project output. As PG&E states:

Managing a resource that produces energy in patterns that do not predictably match the resource’s schedule adds cost to PG&E’s bundled electric portfolio. Offers from resources with greater certainty in energy production will have higher [portfolio-adjusted value] than comparable resources that have greater uncertainty in energy production. PG&E accounted for this in previous RPS solicitations in the Portfolio Fit criterion, which differentiated between firm and intermittent deliveries.

PG&E Plan at 62-63. SCE notes, “[i]n making its final bid selection, an IOU should have the flexibility to take into account additional variables that may not be as easy to standardize (e.g. storage value . . .).” SCE Comments on Assigned Commissioner’s Proposals at 2.

SolarReserve concurs with PG&E and SCE that in assessing net market value there are additional factors that should be taken into account. SolarReserve further recognizes that these value factors have not been fully addressed in the past and encourages all utilities to assess them as thoroughly as possible in order to provide the best value to the ratepayer.

2. Comments Regarding Use of Transmission Cost Study Estimates

The Assigned Commissioner’s Ruling proposes that “to the extent transmission cost estimates from CAISO GIP studies (or equivalent) are available, the IOUs rely on this data for their LCBF evaluations rather than the cost estimates from the TRCRs to more accurately reflect a bid’s value to ratepayers.” ACR at 19.

¹² California Energy Commission, *Final Decision on Application for Certification of the Rice Solar Energy Project*, CEC-800-2010-019 CMF, Docket No. 09-AFC-10 (2010), at Section IV. C at 5.

¹³ Resolution E-4340 (2010) at 11.

In their comments the utilities generally support the use of transmission cost estimates to the extent they are available. SolarReserve also supports the use of transmission cost estimates, but with two significant caveats:

- The cost estimated in CAISO interconnection studies must be supplemented with additional information to determine the true cost of interconnection in the CAISO BAA.
- The Commission should require the utilities to compare transmission costs for projects that intend to interconnect in the CAISO BAA and projects that do not intend to interconnect in the CAISO BAA.

SCE has already noted in its comments that determining transmission costs for projects interconnecting in the CAISO BAA from only interconnection studies will not capture all CAISO transmission costs. SCE Comments on Assigned Commissioner's Proposals at 5-6. In particular, the interconnection studies do not capture the cost of the delivery network upgrades authorized through the transmission planning process. While in the CAISO these costs are paid for by all ratepayers through the transmission access charge, rather than by utilities, they are nonetheless transmission costs borne by the ratepayer that should be taken into account rather than hidden. Inclusion of all transmission costs for projects that will interconnect in the CAISO BAA is important for comparison with the costs of transmission for projects that will not interconnect in the CAISO BAA.

In addition to taking into account the cost of delivery network upgrades authorized through the transmission planning process, the utilities should also be instructed to take into account the costs of transmission service in the CAISO. This is necessary to appropriately compare the transmission costs of projects interconnecting in the CAISO BAA and projects interconnecting in other BAAs. Such costs are often overlooked for projects interconnecting in the CAISO BAA, since the CAISO does not provide point-to-point transmission service as its neighbors do and these costs are paid by all users of the CAISO grid. Nonetheless these costs are real costs that should be taken into account when comparisons are made with projects that are not interconnecting in the CAISO BAA. Outside the CAISO BAA, generators often pay substantial transmission service and/or wheeling charges.

Having a sound comparison of the transmission costs for projects will be an important tool for minimizing the overall transmission costs for the utilities to meet RPS requirements.

This is particularly true now that the first portfolio category includes energy scheduled into a California balancing authority or by agreement dynamically transferred into a California balancing authority. For instance, having information which permits a direct comparison between the actual costs of transmission for projects interconnecting in the CAISO BAA with comparable costs for projects that will interconnect in other BAAs will help to identify situations where overall RPS costs can be reduced by opting not to pay for new transmission in the CAISO, but instead selecting projects that will deliver energy into the CAISO BAA. Moreover, having such information will enable comparisons between competing projects when none intends to interconnect in the CAISO BAA.¹⁴

3. Comments Regarding Proposal to Minimize Transmission Costs

The Assigned Commissioner's Ruling also includes a new proposal for utilizing the RPS procurement process to minimize transmission costs. First the Assigned Commissioner's Ruling discusses the origin of the problem. In particular, the ruling observes that the utilities have placed value on the resource adequacy component of bids and that, as a result, developers must either include resource adequacy benefits as part of their projects in their bids or include substantial discounts. As the ruling indicates:

The result is that developers of potentially desirable generation projects are impeded from obtaining power purchase agreements and even project financing because the large interconnection queue volume and the de facto requirement to provide RA capacity are tying their deliverability status to costly, long lead-time network upgrades many of which may never be built.

ACR at 26. Second, the Assigned Commissioner's Ruling includes a significant new proposal regarding coordination of the procurement process with the transmission planning process to avoid construction of the unnecessary delivery network upgrades.

The ruling correctly identifies the utility preference for bids that include resource adequacy benefits as the source of the problem. In the new procurement plans, the utilities have

¹⁴ SCE's procurement plan suggests that it does not intend to directly compare transmission costs for projects interconnecting in the CAISO BAA with out-of-state projects. SCE requires delivery to a CAISO intertie and bidders are expected to bid enough to cover their transmission costs. With respect to cost comparisons, SCE explains "SCE customers are not liable for any network upgrades outside of the CAISO (outside of any costs that may be embedded within the contract pricing) so transmission cost adders are zero for out-of-state projects." SCE Plan, Appendix F. 1, at 9. SolarReserve submits that SCE's methodology should be revised. As indicated above, it is important to be able to compare: (1) transmission costs for projects interconnecting in the CAISO BAA and projects that interconnect in other BAAs; and (2) transmission costs associated with multiple competing out-of-state projects.

put forth plans which to varying extents indicate a preference for projects that can provide resource adequacy benefits:

- PG&E indicates it “has a preference for resources that can contribute to PG&E’s Resource Adequacy (“RA”) requirement. In order to contribute toward PG&E’s RA compliance obligation, Projects must have been deemed fully deliverable by the CAISO as of the proposed commercial operation date of the Project.” PG&E Plan, Appendix 6, at 11.
- SCE gives project proponents significantly more flexibility than PG&E with regard to resource adequacy benefits. Developers have the option of bidding projects as energy-only or with full capacity deliverability. SCE Plan at 28. Bidders can also specify the resource adequacy benefit to be provided for each month of the year during the contract term. *Id.* Finally, bidders can propose that resource adequacy benefits will be supplied by sources other than the project. *Id.*
- SDG&E allows projects to be bid as energy-only and then imposes either a “System Deliverability Adder” or a “Full Deliverability Adder” depending on the location of the project. SDG&E Plan, Appendix C, at 3-4. Projects that are located outside of CAISO import point points, unless dynamically scheduled, will get a Full Deliverability Adder. *Id.*

Unfortunately, the Assigned Commissioner’s Ruling and the procurement plans ignore a significant problem associated with having utilities seek contracts for renewable resources that will provide resource adequacy benefits. In particular, they fail to acknowledge that for projects that must transmit power across CAISO interties there are special challenges relating to providing resource adequacy benefits that are driving up RPS costs. For the utilities to count the output of projects that will transmit power over a CAISO intertie, they must have an annual allocation of import capability for resource adequacy purposes for the intertie. It is difficult for the utilities to get such allocations for most interties.

The problem stems from provisions of the CAISO tariff. The CAISO has developed a methodology which reduces the Maximum Import Capability for resource adequacy purposes by deducting capacity that could be used under certain “existing transmission contracts” and “transmission ownership rights.” *See generally* CAISO Tariff at Section 40.4.6.2. Under the CAISO’s methodology, the amount of the import capability available for allocation for resource

adequacy purposes on almost all CAISO interties is zero.¹⁵ Significantly, since the tariff provides for reductions in the amount of the import capability counted for resource adequacy purposes regardless of whether parties are in fact using their contract or ownership rights, it is entirely possible for there to be no import capability available for resource adequacy purposes when there is no congestion at the intertie and there is plenty of available transfer capability.¹⁶

The CAISO's rules for allocating the import capability available at the interties for resource adequacy purposes can lead utilities to make choices regarding competing projects that are not the optimal choices from the perspective of minimizing costs. The rules encourage utilities to pick projects which do not require transmission over interties because of uncertainty regarding whether they will get an allocation of import capability on a particular intertie that will allow them to count the project toward their resource adequacy requirements. Since allocations are only in place for a year at a time, even when it appears likely that at a particular intertie there will be some import capability available for allocation for resource adequacy purposes, neither utilities nor generators can know with certainty that there will be an allocation for the intertie more than a year in advance.

A solution that would minimize the impact of the rules regarding resource adequacy on the interties is for the Commission to recognize that at least with respect to projects that dynamically transfer their output to the CAISO, projects that deliver on interties are subject to the same resource adequacy rules as internal CAISO resources. The Commission recently took a first step in that direction by deciding:

It is reasonable to adopt the Energy Division proposal that, for purposes of qualifying capacity calculations used in the RA program, dynamically scheduled resources and pseudo tie resources should be treated as if they were internal ISO resources.

Revised Proposed Decision in R.11-10-023, Conclusion of Law No. 9 (voted on affirmatively by the Commission on June 21, 2012). But, for dynamically transferred resources subject to the

¹⁵ Information on CAISO allocations of import capability for resource adequacy purposes is available at <http://www.caiso.com/planning/Pages/ReliabilityRequirements/Default.aspx>. The most recent table indicating the import capability available for allocation by branch group is posted at http://www.caiso.com/Documents/2012Assigned_UnassignedRAImportCapability_BranchGroups-AfterStep6.pdf.

¹⁶ In the order in which FERC approved the tariff provisions, FERC observed: "The CAISO notes that the Import Capability Assignment Amendments do not affect physical transmission capability of the CAISO-controlled grid, transmission rights, or the manner in which transmission service is obtained under the CAISO tariff. Rather, the amendments only apply to the right to "count" resources that require import capability over the interties for resource adequacy reporting obligations as part of a forward planning process." *California Independent System Operator*, Docket No. ER07-648-000, 119 FERC ¶ 61,164, at ¶ 5 (2007).

CAISO's import capability allocation rules for resource adequacy purposes, barriers to full participation in the RPS program remain. While changing Commission and CAISO rules with respect to the process of allocating resource adequacy on the interties appears to be beyond the scope of this proceeding, the Commission should require the utilities to take steps to minimize the impact that the rules have on procurement decisions in order to minimize costs.

There are several steps the Commission can take to minimize the impact of the rules regarding resource adequacy at the interties. For instance, the Commission should require that for projects on interties, the utilities should take into account the CAISO's targeted Maximum Import Capability as Commissioner Ferron did in a ruling regarding how the utilities were to conduct the 2011 RFO with respect to projects interconnecting in the Imperial Irrigation District. *See* "Assigned Commissioner's Ruling Regarding Resource Adequacy Value of RPS Projects in the Imperial Irrigation District Balancing Authority Area," issued June 7, 2011, in Docket R. 11-05-005. The Commission should also require the utilities to take into account estimated future availability of import capability for resource adequacy purposes on the interties.¹⁷

The Commission can also minimize the impact of the rules regarding resource adequacy at the interties by requiring the utilities to enter into power purchase agreements which give project proponents and utilities greater flexibility with respect to how to provide resource adequacy benefits. For example, as SCE has proposed, project proponents should be able to offer substitute resource adequacy from other sources, if necessary. In addition, project proponents should be able to enter into a power purchase agreement which authorizes the utility to procure substitute resource adequacy from other sources, if necessary.

Overall, rather than having the utilities adopt procurement plans that eliminate projects on interties from consideration because of uncertainty regarding whether such projects can provide resource adequacy benefits, the utilities should be instructed to: (1) carefully evaluate the future prospects for availability of import capability for resource adequacy purposes at the interties project developers propose to use; and (2) be flexible with respect to allowing substitution of resource adequacy benefits from other sources.

¹⁷ The CAISO has prepared a table providing advisory estimates of future import capabilities for resource adequacy purposes by branch group which is available at http://www.caiso.com/Documents/AdvisoryEstimates-FutureResourceAdequacyImportCapability_Years2011-2020.pdf.

IV. CONCLUSION

SolarReserve appreciates the opportunity to contribute these comments and to participate in this proceeding.

Respectfully submitted,

By: _____ /s/
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Attorney for SolarReserve, LLC

Dated: June 27, 2012

VERIFICATION

(Rule 1.11)

I am an officer of the corporation submitting the comments herein, and am authorized to make this verification on its behalf. The statements in the foregoing document are true of my own knowledge, except as to matters which are therein stated on information or belief, and as to those matters I believe them to be true.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on June 27, 2012, at Santa Monica, California.

/s/

Tom Georgis
Senior Vice President
SolarReserve, LLC
2425 Olympic Boulevard, Suite 500E
Santa Monica, CA 90404