

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

Order Instituting Rulemaking to Continue
Implementation and Administration, and
Consider Further Development, of
California Renewables Portfolio Standard
Program.

Rulemaking 15-02-020

(Filed February 26, 2015)

**COMMENTS OF THE CLEAN COALITION ON THE
ORDER INSTITUTING RULEMAKING**

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I. INTRODUCTION

The Clean Coalition files these Comments on the Order Instituting Rulemaking to Continue Implementation and Administration, and Consider Further Development, of California Renewables Portfolio Standard Program (“OIR”), pursuant to Rule 6.2 of the California Public Utilities Commission (“Commission”) Rules of Practice and Procedure and to Order #13 of the OIR. The Clean Coalition was an active participant in the last RPS proceeding. The Clean Coalition looks forward to continuing to help make California’s Renewables Portfolio Standard (“RPS”) the most effective in the nation.

II. DESCRIPTION OF THE PARTY

The Clean Coalition is a nonprofit organization whose mission is to accelerate the transition to renewable energy and a modern grid through technical, policy, and project development expertise. The Clean Coalition drives policy innovation to remove barriers to procurement and interconnection of distributed energy resources (DER) – such as local renewables, advanced inverters, demand response, and energy storage – and we establish market mechanisms that realize the full potential of integrating these solutions. The Clean Coalition also collaborates with utilities and municipalities to create near-term deployment opportunities that prove the technical and financial viability of local renewables and other DER.

II. COMMENTS ON THE OIR

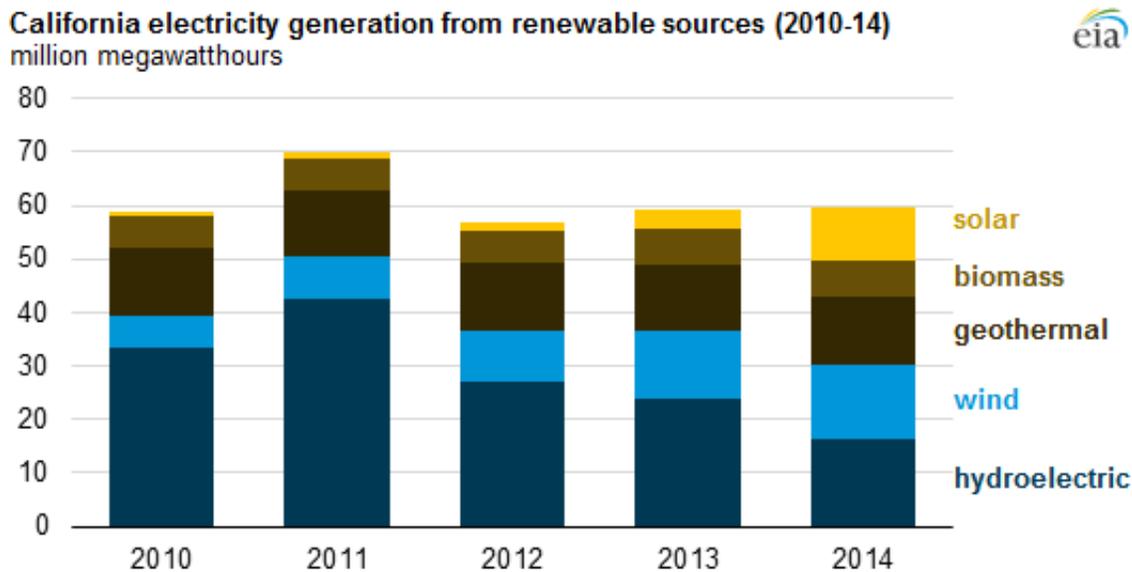
California has recognized the importance of adopting effective policies to manage energy and other natural resources, reflecting the need to address economic and environmental sustainability and climate change. The electricity sector is a prime consumer of non-renewable fuels and contributor to climate change. According to the U.S. Environmental Protection Agency, in 2012 the electricity sector was the largest source of U.S. greenhouse gas emissions, accounting for about 32% of the U.S. total; California has improved upon this average, but has far to go in meeting AB 32 standards and longer term goals. In order to address climate change and other environmental issues, there must be significant improvement electrical generation.

The growth of renewable energy generation provides real environmental benefits. Certain states are leading the way in terms of adopting renewable energy. California has one of the most effective standards of support of renewable energy, requiring investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from renewable energy resources to 33% of total procurement by 2020. However, the trajectory beyond that rapidly approaching date is not firmly established. Guidance from the Commission is needed for both procurement planning and the ability of suppliers to be prepared to meet future demand. Renewable energy development in California is facing costly uncertainties as current procurement targets reach fulfillment, discouraging further investment in the sector. In his 2105 inaugural address, California's Governor Brown called for an increase in the RPS, to 50% of total procurement by 2030. The Clean Coalition supports Governor Brown's call for a higher RPS. The Commission should exercise the authority, provided by AB 327, to increase the RPS¹, and to establish a predictable and reliable deployment trajectory for doing so.

California's RPS does not include large hydro-electric generation, which is a major contributor to the State's GHG reduction plans. However, both multi-decadal cyclic precipitation patterns in the State, and major reductions in snow mass accumulation associated with warming trends and related climatic change, have been greatly reducing the contribution of hydroelectricity in our generation, as illustrated in the following chart from the U.S. Energy Information Administration. Drier conditions are projected for the entire US Southwest for the

¹ See Cal. Pub. Util. Code § 399.15(b)(3).

next few decades. Increased reliance on non-hydro RPS resources will be required to offset unavoidable reductions in hydroelectric generation even before RPS resources can actually reduce the emissions from fossil fuel generation. These factors should be explicitly included in setting future RPS levels.



a. Distributed Energy Resources Should Be Used to Facilitate a Higher RPS.

Although renewables provide great environmental benefits, energy security, price stability, and long term economic value, we recognize that increasing the RPS is not a simple task, and there are many issues that must be addressed. High levels of renewable energy will require substantial changes in the operation of the grid on both the supply and demand side to avoid potential issues of reliability and the inefficient addition or operation of generating capacity. Adoption of high levels of renewable energy must take place concurrently with policies that increase the efficiency of the electricity grid, and better integrate renewables into the electricity grid.

High levels of renewable energy must be properly planned and integrated into the electricity grid, so that issues of reliability are resolved. The Clean Coalition has long advocated for distribution resources planning and is actively participating in the Commission proceeding now addressing this issue (R.14-08-013) and related working groups. Proper planning at the

distribution level is essential to realizing the very high potential for renewable energy at the distribution level, and efficiently deploying these resources.

The Clean Coalition believes that local renewable energy, connected to the distribution grid, continues to offer a very large opportunity to cost effectively meet increases in the RPS, while reducing integration costs, the need for new transmission capacity, and the environmental footprint associated with large generation facilities located far from the loads they serve. Proper planning allows for a local renewable project to be placed specifically where it meets a local system need. The Clean Coalition has worked with utilities across California and the U.S. to develop modeling methodologies to evaluate distribution grid hosting capacity and optimize use of distributed energy resources (“DER”), demonstrating that local renewables can provide at least 25% of the total electric energy consumed within the distribution grid, while maintaining or improving grid reliability.

As California moves to integrating electric vehicles (“EVs”) and net zero energy building requirements, each of which inherently occur at the distribution level, localized DER resources and local balancing of generation and load becomes increasingly important. Distribution Resource Plans will identify local system needs associated with these and other factors, and opportunities for net ratepayer benefits achievable through incenting addition specific DER. At the same time, DER control and communication standards and functionality being developed through the Rule 21 Smart Inverter Working Group and elsewhere is enabling DER resources to provide grid services with speed and precision, enhancing their value, reducing integration challenges, and supporting much higher penetration levels of local resources. These distribution level resources, features, and capabilities should be specifically included in RPS planning and procurement.

b. The Commission Should Explore Methods of Improving the ReMAT Procurement Tool.

As discussed above, small renewable projects may be optimally located within a distribution grid in order to provide benefits specifically where a local system needs them. Planning for system needs is shifting from a centralized, transmission-centric basis to a distributed basis, to both accommodate and utilize DER. However, in order for small renewable

projects to be part of this strategy, there must be a proper procurement tool for small renewables. There must also be a viable market for small renewables.

In the last RPS proceeding, the Commission made changes to the Renewable Auction Mechanism (“RAM”), such that it could be used to procure smaller renewable projects. The Commission noted the original purpose of RAM:

The Commission adopted RAM to create a simplified market based procurement process for smaller RPS generation projects, between >3 MW and 20 MW, for the purpose of promoting competition within this smaller market segment².

The legislature required the Commission under SB 32 to establish a procurement process which was designed to encourage electrical generation from small renewable distributed generation projects, with a nameplate capacity under 3 MW.³ The Commission created the Renewable Market Adjusting Tariff (“ReMAT”) for this purpose, recognizing that these smaller projects constitute a distinct category, and the differences in procurement participation and contractual requirements reflect practical differences in the development of smaller projects – precisely those projects located close to the loads they serve and the benefits that the legislature seeks to identify in the Distribution Resource Planning processes currently underway. Thus, ReMAT, not RAM, was the procurement tool established to serve the market for small distributed renewable projects.

In the last RPS proceeding, the Commission found that there was a robust response to the RAM auctions, and that “the market today for smaller renewable procurement around 20 MW has matured.”⁴ The Commission ordered one additional RAM auction, RAM 6, but afterwards allowed the utilities greater discretion and authority for scheduling RAM auctions according to their needs.⁵ The Commission also eliminated all size limitations on RAM projects, such that the RAM could be used to procure projects smaller than 3 MW.⁶

² D.14-11-042, p. 87.

³ See D.15-01-051, pp. 23-24, citing Cal. Pub. Util. Code § 399.20.

⁴ See D.14-11-042, p. 91.

⁵ See D.14-11-042, pp. 91-97.

⁶ See D.14-11-042, pp. 93-94.

In eliminating the size restrictions on the RAM, the Commission may have created a situation where the ReMAT will be underutilized. However, the continued growth of renewable energy will need to be driven by diverse procurement tools. Moreover, as we demonstrate below, small distributed generation is better served by ReMAT, even after RAM's size limitations have been removed. The record demonstrates that the price paid for energy procured under ReMAT is comparable to levels achieved through RAM, and ReMAT can offer greater value to ratepayers due to the closer proximity to demand possible for smaller facilities. The Commission should examine strategies to improve ReMAT as a procurement tool for small distributed renewable generation.

The distinct nature of the ReMAT and RAM programs attract different kinds of renewable projects. The Commission created separate procurement mechanisms because it recognized the differences between these markets. Even when ReMAT sized projects will be allowed to participate in future RAM procurement, the disproportionate burden of doing so will effectively exclude them from doing so, as evidenced in the RAM results, which are heavily skewed toward the maximum size. In D.14-11-042, the Commission found that the market for small renewable procurement "around 20 MW" in size had matured. However, the Commission did not make a such a finding pertaining to smaller distributed renewable generation, such as the <3 MW projects served by ReMAT.

The Commission should examine strategies to ensure that ReMAT remains a viable procurement tool. Small distributed projects cannot rely on only the RAM mechanism, with no certainty as to when auctions will be held, what pricing will succeed, or their position in queue to be offered a power purchase agreement. The ReMAT procurement mechanism is always available to project developers. Thus, assuming it is offering procurement, it is often more accessible and attractive to developers, especially if they are developing smaller projects.

One manner of facilitating continuing and greater procurement of small distributed renewable projects and their contribution to the RPS is to increase the procurement opportunities available from each utility through the ReMAT.

c. The Commission Should Include Locational Value in the Valuation of Projects.

This proceeding will consider revisions of the process for determining least-cost best-fit (“LCBF”) valuation of renewable energy resources.⁷ In the last RPS proceeding, the Commission gave some consideration to Clean Coalition’s recommendation that it include avoided transmission access charges and avoided line losses in valuation.⁸ The Commission chose to continue using the same valuation methodologies currently in use, in order to maintain continuity.⁹ However, the Commission “encourage[d] parties to explore and improve on the valuation methodology in the RPS proceeding when it reviews LCBF.”¹⁰ The Commission should now ensure proper valuation of projects, especially small distributed generation, by properly providing for locational value such as avoided transmission access charges (“TACs”), pro-rata contributions to TAC rates, and avoided congestion charges and line losses. Current 20 year levelized TAC rates approach 3¢/kwh, driven by the cost of infrastructure required to transmit energy to serve loads from remote points of generation, however this “cost of delivery” is not currently considered in LCBF. Choosing projects that do not rely upon transmission to deliver energy to load avoids increasing future transmission investment, and will result in lower future TAC rates on all energy than would otherwise occur.

Proper valuation of projects requires that projects be credited for the locational value (also known as locational grid benefits). Some locational value of projects may be decided in other Commission proceedings, especially in the recently instituted R.14-08-013, but the scope of each proceeding is limited. Clean Coalition identifies this proceeding as one where locational value factors may be recognized and additional decisions about value may be made or directed. We seek to ensure that all locational benefits of projects are included in the valuation of projects.

The Clean Coalition has previously advocated that avoided transmission access charges (TACs) is a significant benefit of small distribution interconnected projects that should be evaluated as part of the benefits of a project. All energy delivered through the transmission

⁷ See OIR, p. 5.

⁸ See D.14-11-042, p. 98.

⁹ See D.14-11-042, pp. 98-99.

¹⁰ See D.14-11-042, p. 99.

system incurs fixed TACs, at tariff rates set by the California Independent System Operator (CAISO). TACs are a significant cost element, for example within PG&E, resulting in charges in 2013 of about 1.5¢/kWh. However, TACs are continually increasing, as demonstrated by the 20 year levelized TAC rates approaching 3¢/kwh. The avoidance of TACs are a significant factor in the valuation of distributed energy resources.

1. TACs Are Charged Even if the Transmission System Is Not Used; this Misapplication Should Be Remedied.

Energy delivered to customers directly through the distribution grid does not use the transmission system. With proper distribution resources planning, as will take place pursuant to R.14-08-013, utilities may determine which projects avoid the transmission system. Now is the appropriate time in which to properly credit distributed energy resources for avoided TACs.

The Clean Coalition has previously recommended that energy that avoids the transmission system should not incur TACs. However, the manner in which TACs are currently levied by CAISO on utilities that are also Participating Transmission Owners (“PTOs”) (such as PG&E, SDG&E and SCE) is problematic. CAISO applies the TAC to *all electricity* billed to customers. Every kWh that PTOs bill to customers has a TAC as part of the rate. This is problematic in that it fails to differentiate between projects that avoid the transmission system and those that do not, and the benefit of avoided transmission are not accounted for under the current processes. Even so, avoiding contributing to the growth in TAC charges is significant and should be accounted for even if the TAC is still applied to the energy delivered.

It is not the Commission, but CAISO that establishes the guidelines that govern the charging of TACs. Current CAISO policy regarding TACs requires—for PTO utilities that also own transmission lines—that all electricity delivered to customers be fully charged for TACs, regardless of whether the electricity travelled over transmission lines or not.¹¹ The Clean Coalition believes that this handling of TACs is erroneous, and should be corrected to match the

¹¹ This full debiting of TACs for all PTO electricity is a situation that was recently discovered by Clean Coalition. Previous undisputed testimony and filings from Clean Coalition assumed a situation where electricity that did not utilize transmission lines would not be charged TACs. The Clean Coalition regrets this error. However, as the Commission in previous proceeding has not ruled substantively on the issue of avoided TACs, there has not been any prejudice to the decisions of the proceeding.

treatment afforded non-PTO utilities which are charged TAC only on the energy delivered through the transmission node, not for energy locally generated and consumed within the distribution system. Electricity that does not utilize transmission lines should not be charged TACs. The Clean Coalition is engaging with CAISO in order to change the guidelines regarding TACs.

The Clean Coalition urges the Commission to note the current misapplication of TACs on distributed generation serving local loads. Proper valuation of distributed renewable generation requires a correction of this process. The Commission should coordinate with CAISO to ensure that this correction takes place. The Clean Coalition will also seek to have the benefit of avoided TACs recognized in a Commission proceeding, this proceeding and/or within R.14-08-013, so that avoided TACs can be properly evaluated.

III. PARTY CONTACT

The Clean Coalition consents to and prefers “email only” service. Service of notices, orders, and other correspondence in this proceeding should be directed to the Clean Coalition at the address set forth below:

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III. CONCLUSION

The Clean Coalition looks forward to participating fully in this proceeding.

Respectfully submitted,

/s/Enrique Gallardo
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