

April 23, 2012

California Energy Commission  
Docket Office, MS-4  
Sacramento, CA 95814-5512

[docket@energy.state.ca.us](mailto:docket@energy.state.ca.us)

<b>DOCKET</b>	
<b>12-IEP-1D</b>	
DATE	APR 23 2012
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Re: California Energy Commission Docket No. 12-IEP-1D Lead Commissioner Workshop on  
Evaluating and Capturing the Benefits of Renewable Energy for California

To Whom It May Concern:

On April 12, 2012, the California Energy Commission (“Energy Commission”) held a Lead Commissioner Workshop on Evaluating and Capturing the Benefits of Renewable Energy in California (“the Workshop”). The Workshop was part of the Energy Commission’s 2012 Integrated Energy Policy Report Update (“2012 IEPR Update”) process. Southern California Edison Company (“SCE”) participated in the Workshop and appreciates the opportunity to provide these written comments.

SCE agrees that renewable generation can provide a number of benefits to the State’s electricity customers. SCE has aggressively pursued achieving the State’s renewable energy goals using many innovative approaches and is committed to providing the lowest-cost renewable energy to our customers through competitive processes that are open to all eligible resource types. Through these processes, SCE evaluates the relative costs and benefits for every potential renewable contract and selects those with that provide the greatest benefit at the lowest cost to its customers. SCE is committed to supporting programs that promote market-based procurement and allow SCE to maximize customer value.

At the Workshop, there were many presentations on a number of potential indirect benefits that renewable energy can provide. These benefits are often very difficult to quantify and values can range widely depending on assumptions and methodology. How these benefits should be incorporated or addressed is complex and often subjective. In order to properly address these issues, the Energy Commission should consider the following concerns:

- Double Counting,
- Practicality, and
- Fairness.

### **Double Counting**

*Recommendation: The Energy Commission should consider that existing programs already capture some benefits of renewable energy.*

In an effort to promote renewable energy, the State set renewable portfolio goals and created a number of procurement programs to achieve them. These programs are working as intended and the State is making clear progress. For instance, the Renewables Portfolio Standard established a goal of 20% procurement from renewable resources. By 2010 and by 2011, renewable generation was roughly 21.1% of SCE's retail load. There are many opportunities for renewable technologies to compete for long-term contracts with the State's utilities and project developers are taking advantage of these opportunities.

Although the State created these goals primarily to reduce greenhouse gas ("GHG") emissions, other additional benefits are also accounted for through the following procurement programs:

- SCE's annual RPS solicitation to meet state RPS goals
- Renewable Auction Mechanism ("RAM") program for renewable generators from 1 to 20 MW
- Solar Photovoltaic Program ("SPVP")
- Section 399.20 renewable Feed-in-Tariff program (currently called CREST; will be a new program pending resolution of the current § 399.20 implementation proceeding, now called the Renewable Market Adjustment Tariff or "Re-MAT")
- The PURPA PPA for Qualifying Facilities ("QFs") up to 20 MW

By design, these procurement targets take into account the external benefits of renewable technologies, which is reflected in the above-market cost of these contracts as outlined in SCE's presentation at the workshop.<sup>1</sup> This is referred to as the "renewable premium." Additionally, results from the 2010 Long-Term Procurement Plan indicate that the levelized average per-ton cost of greenhouse gas ("GHG") emissions reductions from 2011 to 2020 for the RPS program is between \$217 and \$271,<sup>2</sup> a cost that is substantially greater than expected pricing for compliance with the California Air Resources Board's Cap and Trade Program, which to be around \$20 per ton.<sup>3</sup> These observations indicate that the State is willing to continue procuring renewable generation in recognition of other benefits not captured by the metrics included in these evaluations.

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<sup>1</sup> [http://www.energy.ca.gov/2012\\_energy\\_policy/documents/2012-04-12\\_workshop/presentations/19\\_Ulrich\\_SCE.pdf](http://www.energy.ca.gov/2012_energy_policy/documents/2012-04-12_workshop/presentations/19_Ulrich_SCE.pdf)

<sup>2</sup> R.10-05-006 Track I 2010 LTPP - IOU-1 Joint SCE SDGE PGE IOU Track I Testimony

<sup>3</sup> See California Air Resources Board Proposed Regulation to Implement the California Cap-and-Trade Program, Part I, Volume I, Staff Report: Initial Statement of Reasons ("ISOR"), at V.1

SCE is concerned that more programs will create administratively burdensome and duplicative processes. Specifically, most renewable project types and technologies have at least five separate SCE procurement programs from which to choose. SCE makes an effort to inform developers of the programs for which they may be eligible and posts this information on its website.<sup>4</sup> The management of these numerous programs is already complex and can create redundant procurement efforts and gaming opportunities. To avoid these outcomes, the Energy Commission should recognize that existing programs already capture many of the benefits created by renewable generation, and should avoid recommending additional policies or programs that could interfere with existing programs.

SCE would also like to dispel the myth that locational benefits are not considered within existing procurement processes. As outlined in SCE's Workshop presentation, transmission-related upgrade costs are explicitly estimated by SCE and added to a bidder's contract costs. Distribution-related costs are estimated by the bidder and will be included in that bidder's bid price. It should also be noted that other locational costs such as permitting and licensing will be included within a bidder's contract price. As a result, a competitive process is best equipped to evaluate the trade-off between contract price and lower transmission- and distribution-related upgrade costs among potential projects. Any other mechanism risks overpayment to developers for benefits that they do not provide. Further, once an avoided cost is monetized and transferred to the developer, it no longer is avoided by definition. In response to its 2011 RPS solicitation, SCE received more than 1,400 offers from over 500 projects, which demonstrates that renewable markets are robust. As such, the acceptance of a contract is sufficient incentive to locate optimally.<sup>5</sup>

### **Practicality**

*Recommendation: The Energy Commission should focus its efforts on developing policies and programs that have the greatest potential to achieve the desired outcome, taking into consideration the practical difficulties of estimating indirect benefits and the relative ease of other policies that may achieve the desired objective.*

Before initiating an effort to assess and estimate potential indirect benefits, the Energy Commission should consider the quality of the benefit value information and the magnitude of these values relative to other benefits and initiatives. For example, some benefits are difficult to quantify or can only be valued subjectively. In addition, benefits may be so insignificant (\$ value), that they will have no noticeable impact on project selection. Lastly, the Energy Commission should consider alternative actions that may be more impactful than benefit monetization. For instance, the Energy Commission might better serve environmental justice communities by engaging in activities that advance port electrification or electric transportation for two major reasons. First, there is no guarantee that increased solar generation that is located

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<sup>4</sup> [http://asset.sce.com/Documents/Shared/090324\\_Power\\_Purchase\\_Contract\\_Matrix.pdf](http://asset.sce.com/Documents/Shared/090324_Power_Purchase_Contract_Matrix.pdf)

<sup>5</sup> Advice Letter 2650. <http://www.sce.com/NR/sc3/tm2/pdf/2650-E.pdf>

near a fossil generator will reduce the on-peak use of that fossil generator.<sup>6</sup> Second, the electricity sector contributes to less than 1% of the State's nitrogen oxide ("NOx") and particulate matter emissions as Pacific Gas & Electric Company indicated.<sup>7</sup> As a result, there are likely other activities that would better serve the environmental health concerns for these communities.

To the degree that the Energy Commission studies additional, indirect benefits, there should be a concerted effort to make assumptions and methodologies transparent as well as to estimate the uncertainty of the resulting estimates. As the Clean Energy States Alliance observed, these indirect benefits can be grouped into three categories based on uncertainty and impact.<sup>8</sup> SCE agrees that characterizing potential benefits in this manner can keep their estimated values in perspective and help guide the Energy Commission's activities towards efforts that can have a real positive impact.

### **Fairness**

*Recommendation: Renewable generation benefits that do not directly accrue to the electric system should not be included as part of the procurement evaluation.*

More broadly, utility procurement processes should not be relied upon as the sole driver for meeting state energy policy goals. To address these concerns, the Energy Commission should consider ways to overcome non-cost related barriers that may exist, such as information deficiencies, or seek ways to monetize these benefits outside of the utility procurement structure. For example, the Energy Commission might investigate programs to directly offset costs for the developers who provide certain benefits. Doing so will help ensure that customers do not pay for something from which they receive no benefit.

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<sup>6</sup> There are two primary reasons why this might occur. First, the marginal generation that would be displaced by incremental renewable generation, or reduced local load, for any given hour is the last resource dispatched or operating for that hour, often referred to as the marginal resource. For load serving entities participating in the California Independent System Operator's ("CAISO") electricity markets, this resource is determined by the CAISO's market optimization algorithms and considers factors such as unit efficiency and start-up costs. If a resource near a rooftop solar installation is not the marginal resource for a given hour, then any additional solar output from that installation during that hour will not reduce the output from that nearby generating resource if the CAISO determined resource is located somewhere else in the state. Second, under certain load, transmission, and/or generation scenarios, some resources will be required to run for grid reliability purposes. For example, on high load days a certain amount generation is needed to run in the Los Angeles Basin to provide the spinning mass needed to reliability import generation to serve load in that area. These requirements cannot be met by solar photovoltaic systems, which do not provide spinning mass or inertia. There are also other grid reliability considerations that require a specific amount of generation to be located essentially within the LA Basin and any incremental solar generation in the basin will simply displace energy imports from outside the basin or state.

<sup>7</sup> [http://www.energy.ca.gov/2012\\_energypolicy/documents/2012-04-12\\_workshop/presentations/16\\_Johnson\\_PGandE\\_2012\\_04\\_12\\_CEC\\_Wkshop\\_Renewables\\_final.pdf](http://www.energy.ca.gov/2012_energypolicy/documents/2012-04-12_workshop/presentations/16_Johnson_PGandE_2012_04_12_CEC_Wkshop_Renewables_final.pdf)

<sup>8</sup>

[https://energy.webex.com/energy/playback.php?FileName=http://www.energy.ca.gov/2012\\_energypolicy/documents/2012-04-12\\_workshop/20120412\\_workshop\\_webex.wrf](https://energy.webex.com/energy/playback.php?FileName=http://www.energy.ca.gov/2012_energypolicy/documents/2012-04-12_workshop/20120412_workshop_webex.wrf)

SCE supports efforts to quantify appropriate benefits; however, cost and benefits should be incurred by those customers responsible for generating them. For example, benefits to the electric system such as deferred costs of distribution upgrades should accrue to the avoided cost of the generation. Benefits to generation projects such as reduced emissions should accrue to the project bid costs through reduced costs of permits. SCE would like to work with key stakeholders to consider not only methods for quantifying the benefits but their application in the development/procurement process.

As always, SCE appreciates the opportunity to submit its comments. Feel free to contact me at (916) 411-2369 regarding any questions or concerns you may have.

Very truly yours,

/s/ Manuel Alvarez

Manuel Alvarez, Manager  
Regulatory Policy and Affairs