

November 7, 2011

California Energy Commission Docket Office, MS-4 Re: Docket No. 11-IEP-1G Renewables 1516 Ninth Street Sacramento, CA 95814-5512 docket@energy.state.ca.us



Re: California Energy Commission Docket No. 11-IEP-1G: Comments Related to Executive Summary for "Renewable Power in California: Status and Issues" Staff Report

To Whom It May Concern:

On September 14, 2011, the California Energy Commission ("Energy Commission") released an updated Executive Summary to the Renewable Power in California: Status and Issues Staff Report (the "Draft Executive Summary") as part of the 2011 Integrated Energy Policy Report ("2011 IEPR") Proceeding. Southern California Edison Company ("SCE") appreciates this opportunity to provide these comments on the Draft Executive Summary. SCE also looks forward to working with the Energy Commission to support developing a comprehensive Renewables Strategic Plan that is a reasonable approach to implementing Governor Brown's Clean Energy Jobs Plan.¹

SCE supports the development of a Renewable Strategic Plan to inform the state's efforts to achieve its renewable energy goals and believes that the high-level strategies set forth in the Draft Executive Summary provide a guide for developing a path forward for achieving those goals. As part of the Strategic Plan, the Energy Commission should investigate the total impact of the state's various programmatic efforts to promote renewable generation and assess their practicality and cost-effectiveness.

SCE recommends that the Energy Commission engage in a stakeholder process throughout the development cycle. A robust, dynamic stakeholder process will allow the Energy Commission to more deeply engage stakeholders in these complex issues. Furthermore, adequate stakeholder review and discussion prior to and during the investigation process will allow for a continued knowledge exchange as all parties gain information in these areas.

Additionally, SCE recommends that the overarching strategies more directly address cost containment issues. As was stated at the September 14th workshop, cost containment is essential to ensuring that California achieves its energy policy goals in an economically sustainable fashion, and overlooking this objective could result in losing public support for advancing renewable power in California. SCE would like to take this opportunity to remind the Energy

¹ http://www.jerrybrown.org/Clean_Energy.



Commission that the progress to date toward the state's renewable energy goals has been made almost entirely via the competitive market place, and only a competitive market place can ensure lowest cost renewable energy. These competitive markets work, even for smaller scale local energy resources, and should be the first choice in any policy development to ensure customer cost protections.

Below are SCE's specific comments to each of the five high-level strategies identified in the Draft Executive Summary.

High-Level Strategy #1: Identify and prioritize areas in the state for both renewable utilityscale and distributed generation development. Priority areas should have high levels of renewable resources, be located where development will have the least environmental impact, and be close to planned, existing, or approved transmission or distribution infrastructure. Prioritization should also include increasing efforts between state and local agencies to coordinate local land-use planning and zoning decisions that promote the siting and permitting of renewable energy-related infrastructure.

SCE agrees that identifying and prioritizing development areas is an appropriate and useful objective and especially supports the establishment of priority areas that are close to planned, existing, or approved transmission or distribution infrastructure. SCE encourages the Energy Commission to work directly with the state's utilities to identify priority areas based on their extensive knowledge of their individual systems. Today, SCE's service territory contains a significant portion of the state's installed solar resources and may be viewed as the preferred area to site a majority of the state's additional solar resources. To ensure that customers located in the high priority areas do not bear an inequitable share of the associated integration cost burden, this prioritization should include a mechanism to allocate integration costs to generators, who inevitably pass them on to customers. Doing so will provide the right market signals to minimize the cost of integration.

High-Level Strategy #2: Evaluate the cost of renewable energy projects beyond technology costs, particularly the costs associated with integration, permitting, and interconnection. This evaluation shall be coupled with a value assessment that ultimately monetizes the various system and non-energy benefits attributable to renewable resources and technologies, particularly those benefits that enhance grid stability and reduce environmental and public health costs.

SCE applauds the Energy Commission for its plan to further evaluate the "all-in" costs and benefits of renewable energy projects, including integration, permitting, and interconnection. In addition to the costs listed above, the Energy Commission should explore costs associated with non-dispatchability and intermittency. For example, comparing the cost of an intermittent generator to a conventional generator without considering differences in market revenue will not reflect an essential component of utility procurement practice and can understate the cost of intermittent generation relative to conventional generation, all else being equal.

SCE encourages the Energy Commission to revisit the presentation from the May 16, 2011 workshop on "Improving Techniques for Estimating Costs of California Generation



Resources," which addressed issues related to comparing the costs of intermittent, renewable generation to conventional generation. At the workshop and through written comments, SCE demonstrated how incorporating end of useful life replacement energy and capacity, non-dispatchability, intermittency, and integration costs can change the rank-ordering of resource costs within a levelized cost framework.²

High-Level Strategy #3: Develop a strategy that minimizes integration needs at the distribution level (through the use of remote telemetry and other smart grid technologies) and the transmission level (through improved forecasting, the development of an energy imbalance market, and procurement of dispatchable renewable generation), and that strives for cost reductions and improvements to integration technologies, including storage, and the best use of the state's existing gas-fired power plant fleet.

While minimizing integration needs is important, SCE suggests focusing on minimizing the integration *costs* associated with meeting the state's energy policy goals. Focusing solely on reducing integration needs may inadvertently overlook solutions that manage integration need. For example, market and telemetry enhancements are solutions that do not limit the integration needs imposed on the electricity system by intermittent generators, but enable more efficient management of those needs. The most cost-effective strategy will likely include a set of solutions that both limit and manage need.

Second, it is important for the Energy Commission to engage in its work without presupposing any particular solution or set of solutions. SCE believes the Energy Commission is not intending to limit the strategy to the items listed, however, and deleting all examples included in the text would eliminate the appearance of preferences for specific solutions. Furthermore, the Energy Commission should be aware of timing issues related to the commercial development of the various smart grid solutions that may ease the integration of LER. Many of these technologies are nascent and currently being evaluated for cost and effectiveness. It is essential to complete such efforts prior to full-scale implementation of these solutions.

High-Level Strategy #4: Promote incentives for renewable technologies and development projects that create in-state jobs and support in-state industries, including manufacturing and construction. In implementing this strategy, the state should evaluate how current renewable energy policies and programs are impacting in-state job growth and economic activity and identify which renewable technologies rely on supply chains that provide the best opportunities for California businesses.

In considering the issue of in-state job growth, SCE encourages the Energy Commission to think more broadly than only incentives for supporting efficient renewable development in California. For example, SCE is investing in electricity infrastructure to accommodate additional renewable generation as well as more efficiently manage the electricity grid. Importantly, these efforts are directly contributing toward in-state clean energy job growth.

² http://www.energy.ca.gov/2011_energypolicy/documents/2011-05-

¹⁶_workshop/comments/SCE_Comments_on_May_16_IEPR_Workshop_TN-60893.pdf.



Additionally, SCE supports evaluating how current renewable energy policies are impacting in-state job growth. As part of this analysis, the Energy Commission should be certain to study the total impact of the state's policies. For instance, while renewable development supports construction jobs, higher electricity costs resulting from the policies that drive these investments will likely eliminate jobs in other sectors of the economy.³

High-Level Strategy #5: Promote and coordinate existing state and federal financing and incentive programs for critical stages including research, development, and demonstration; pre-commercialization; and deployment. In particular, the state should maximize the use of federal cash grants and loan guarantee programs by prioritizing the permitting and interconnection of California-based renewable energy projects vying for federal stimulus funds.

SCE supports Energy Commission efforts to maximize the value of existing state and federal financing and incentive programs. Research, development, and demonstration projects that show industry viable, cost-effective potential are vital to ensuring that utility-scale deployments provide real value for California ratepayers. Additionally, any efforts to prioritize projects with regard to interconnection should uniformly integrate with existing interconnection reform efforts (e.g., the CAISO's Generator Interconnection Procedures).

SCE appreciates the opportunity to provide comments on the Draft Executive Summary of the Staff Report and looks forward to working with the Energy Commission to develop the Renewables Strategic Plan in the 2012 IEPR Update.

Sincerely,

/s/ Manuel Alvarez Manuel Alvarez, Manager Regulatory Policy & Affairs

³Donald Vial Center for Employment in the Green Economy, University of California, Berkeley; March 4, 2011 - Executive Summary.