

**M e m o r a n d u m**

**Date:** April 12, 2011

**To:** The Commission  
(Meeting of April 14, 2011)

**From:** Edward Randolph, Director  
Office of Governmental Affairs (OGA) — Sacramento

**Subject:** **SB 372 (Blakeslee) – Distributed Generation.**  
**As introduced: February 15, 2011**

**LEGISLATIVE SUBCOMMITTEE RECOMMENDATION: OPPOSE UNLESS AMENDED**

**SUMMARY OF BILL:**

This bill would require the large investor owned utilities (IOUs) and the large publicly-owned utilities (POUs) to provide maps on their website that identify and designate zones that are optimal for deployment of distributed generation (DG). The bill also requires the CPUC to give priority to DG projects from the California Solar Initiative (CSI) or the Small Generator Incentive Program (SGIP) that are located within those zones, and to review interconnection rules to facilitate DG interconnection within those zones.

**SUMMARY OF SUPPORTING ARGUMENTS FOR RECOMMENDATION:**

Despite our recommendation, the CPUC does, however, support the intent of this legislation, which could foster a consistent set of maps across the IOUs and the POUs. However, the CPUC proposes the following three amendments: 1) the CPUC should implement and administer the maps, 2) the language giving priority to the CSI and SGIP projects should be deleted, and 3) the utilities should be required to use new software and analytics to create more accurate maps and help streamline interconnection studies.

The CPUC opposes this bill unless amended since multiple CPUC Decisions have already required the IOUs to provide maps on their website that identify and designate zones that are optimal for deployment of DG and the IOUs already beginning to make this information available. Furthermore, one POU on its own initiative has provided a map indicating designated interconnection zones. Transferring authority and administration of the IOU DG mapping program to the Energy Commission could hinder

the rapid release of these maps since the CPUC has already adopted Decisions formalizing a process for updating and improving IOU maps.

Finally, the bill's requirements to give priority to behind the meter DG projects that are located within the designated zones are not needed and could result in confusion among programs. Current interconnection procedures already provide for a streamlined interconnection process for behind the meter DG projects.

### **SUMMARY OF SUGGESTED AMENDMENTS:**

Amendment 1: Given its prior Decisions, the CPUC should be required to develop consistent, statewide DG mapping guidelines. Thus, subdivision (c)(1) should read: "The Public Utilities Commission, ~~in consultation with the Public Utilities Commission,~~ shall develop guidelines for large electrical corporations and large publicly owned electric utilities to utilize in identifying and designating zones within their service territory that are optimal for deployment of distributed generation." Paragraphs (2), (3) and (4) should also be amended so that the CPUC is the administering agency with respect to IOUs. The Energy Commission should retain jurisdiction over review and approval of the POU maps.

Explanation: Since the CPUC is already administering preferred interconnection maps for the IOUs, keeping the CPUC in this role will provide continuity and minimize the work and costs needed to implement the bill. In addition, it will allow the CPUC to continue its established process of updating and improving the maps.

Amendment 2: Delete Section 2 of the bill, subdivision (a), which requires the CPUC to give priority to CSI and SGIP projects that are located within the designated zones. Subdivision (b) should be amended to read:

"Review current rules, pertaining to interconnection, to facilitate interconnections of distributed generation facilities within zones. Priority shall be given to those distributed generation projects that are proposed to be located within zones designated by an electrical corporation to be optimal for deployment of distributed generation."

Explanation: The purpose of providing designated interconnection zones is to assist distributed generation projects participating in the RPS program so that they can find interconnection sites that will minimize interconnection costs. The CSI and SGIP are customer programs designed to offset customer load, not to sell electricity to the utilities. As a result, projects are located on the customer's site and usually do not have flexibility on where to locate their project. Wholesale DG projects participating in the RPS program, on the other hand, have much more flexibility on where to locate their projects and need the information that would result from the proposed designated zones in order to minimize interconnection costs. Lastly, through Rule 21, the CPUC has already created streamlined interconnection procedures for behind the meter DG projects participating in the CSI and SGIP.

Amendment 3: As renewable DG penetrations continue to increase, the utilities should evaluate, benchmark, and deploy new software tools and analytics to keep pace with the expected increasing interconnection requests for small DG units throughout the electrical system. We recommend an amendment that requires the IOUs to evaluate and deploy new software tools and analytics to identify designated zones and to evaluate how individual interconnection project studies can be automated to provide a reasonable assessment of a DG project's impact on the distribution system.

Explanation: The CPUC required similar language in D.10-12-048 in order to improve the IOU interconnection maps over time and to improve the efficiency and transparency related to the IOU interconnection studies. Due to resource constraints, the CPUC has not yet implemented this part of the decision, but believes that more sophisticated models and software tools can help reach the goals of this bill. While the current maps provide developers an indication of an acceptable interconnection site, the developer would still need to submit an interconnection request, the analysis of which could recommend expensive upgrades to facilitate interconnection. Thus, while the maps are a helpful tool for identifying sites, there is no guarantee the project will be given the "green light" in an interconnection study. If the IOUs were to use more sophisticated analytical tools, there could be a higher correlation between the information in the maps and successful interconnections. Furthermore, more sophisticated analytics could be used to actually conduct an interconnection study, leading to more streamlined, efficient, and expedited review of each project.

#### **DIVISION ANALYSIS (Energy Division):**

The bill codifies existing CPUC policy though it would transfer administration of the IOU interconnection maps from the CPUC to the Energy Commission. It also requires the maps to be available on or before December 31, 2012. In fact, the IOU interconnection maps are available now and may be improved upon through the implementation of the Renewable Auction Mechanism (RAM) program, established in Decision 10-12-048, which required publication of the interconnection maps. Thus, the bill is not necessary to require this information from the IOUs. The CPUC has been administering these maps since 2010; thus, transferring administration to the Energy Commission will disrupt the process the CPUC has established to continually improve and optimize the maps.

#### **PROGRAM BACKGROUND:**

The Decisions establishing distributed generation solar PV programs for each IOU (D.09-06-049, D.10-04-052, D.10-09-016) required the IOUs to provide preferred locations on the grid where the deployment of DG could help address anticipated peak load growth or help congestion. Based on these decisions, each IOU created a map to assist solar PV developers in finding a site with low interconnection costs. The CPUC required the IOUs to provide more detailed maps in D.10-12-048, including the "available capacity" at the substation and circuit level, which is defined as the total capacity minus the allocated and queued capacity for that substation or circuit. The

Decision required the IOUs to provide this information in map format and to update this information on a monthly basis. 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.

Some IOUs submitted their maps to the CPUC on February 25<sup>th</sup> 2011 through their advice letter filings required to implement D.10-12-048. Stakeholders submitted protests or responses to the advice letters and provided input on how the IOUs could improve their maps. CPUC staff is currently working on a Resolution to resolve the advice letter protests and could order the IOUs to improve their maps based on the comments. Furthermore, the IOUs are required to hold program forums after each solar PV and RAM auction where project developers have the opportunity to provide the IOUs feedback on all aspects of the programs, including the maps.

The IOU interconnection maps are available here:

PG&E:

<http://www.pge.com/b2b/energysupply/wholesaleelectricssolicitation/PVRF/O/pvmap/>

SCE: <http://www.sce.com/EnergyProcurement/renewables/renewable-auction-mechanism.htm>

SDG&E: Will be available the week of April 11.

SMUD: <http://www.smud.org/en/community-environment/solar-renewables/Documents/InterconnectionMap.pdf>

#### **LEGISLATIVE HISTORY:**

N/A

#### **FISCAL IMPACT:**

We estimate a fiscal impact of \$155,190 for one PY (PURA V) to implement the requirements of the bill since the work is very technical in nature and requires strong quantitative analytical skills. Existing staff is already working at full capacity and cannot take on any new tasks and responsibilities without new positions.

#### **STATUS:**

SB 372 is scheduled to be heard in the Senate Committee on Energy, Utilities and Communications on April 28, 2011.

#### **SUPPORT/OPPOSITION:**

None on file.

**STAFF CONTACTS:**

Dan Chia, Deputy Director, OGA (916) 327-3277 [dc2@cpuc.ca.gov](mailto:dc2@cpuc.ca.gov)

Dated: April 12, 2011

**BILL LANGUAGE:**

BILL NUMBER: SB 372      INTRODUCED  
BILL TEXT

INTRODUCED BY    Senator Blakeslee

FEBRUARY 15, 2011

An act to add Section 25235 to the Public Resources Code, relating to electricity.

LEGISLATIVE COUNSEL'S DIGEST

SB 372, as introduced, Blakeslee. Distributed generation.

The existing Warren-Alquist State Energy Resources Conservation and Development Act establishes the State Energy Resources Conservation and Development Commission (Energy Commission). Existing law requires the Energy Commission to undertake a continuing assessment of trends in the consumption of electricity and other forms of energy and to analyze the social, economic, and environmental consequences of those trends and to collect from electric utilities, gas utilities, and fuel producers and wholesalers and other sources, forecasts of future supplies and consumption of all forms of energy.

This bill would require each large electrical corporation, as defined, and large local publicly owned electric utility, as defined, to identify and designate zones within their service territory that are optimal for deployment of distributed generation, and to provide this information to the Energy Commission by December 31, 2012. The bill would require the Energy Commission, in consultation with the Public Utilities Commission (PUC), to develop guidelines for those electrical utilities to utilize in identifying and designating those zones. The bill would require the Energy Commission to review each electrical utility's designation of zones that are optimal for deployment of distributed generation and approve or disapprove the designation of zones made by each electrical utility. The bill would require that, upon approval by the Energy Commission, that each electrical utility make this information available on its Internet Web site.

Under existing law, the PUC has regulatory authority over public utilities, including electrical corporations, as defined. Existing law requires the PUC, in consultation with the Energy Commission, to administer, until January 1, 2016, a self-generation incentive program for distributed generation resources and to separately administer solar technologies pursuant to the California Solar Initiative.

This bill would declare the intent of the Legislature that in supervising and administering the California Solar Initiative and self-generation program, that the PUC give priority to those distributed generation projects that are proposed to be located within zones designated by an electrical corporation to be optimal for deployment of distributed generation. The bill would additionally

state the intent of the Legislature that the PUC review current rules, pertaining to interconnection, to facilitate interconnections of distributed generation facilities within those zones.

Vote: majority. Appropriation: no. Fiscal committee: yes.  
State-mandated local program: no.

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Section 25235 is added to the Public Resources Code, to read:

25235. (a) For purposes of this section, the following terms have the following meanings:

(1) "Large electrical corporation" means an electrical corporation as defined in Section 218 of the Public Utilities Code, that has 100,000 or more service connections.

(2) "Large local publicly owned electric utility" means a local publicly owned electric utility as defined in Section 224.3 of the Public Utilities Code, that has 100,000 or more service connections.

(b) In order to advance the state's policy to promote efficient and effective investments in renewable, ultra-clean, and low emission distributed generation, and in order to ascertain the potential benefits and impacts of future deployments of distributed generation, each large electrical corporation and large local publicly owned electric utility shall identify and designate zones within their service territory that are optimal for deployment of distributed generation so as to not conflict with federal electrical reliability standards, while achieving at least one of the following objectives:

(1) Relieve congestion on the local electrical distribution grid.

(2) Provide more economical generational resources than what is currently available.

(c) (1) The commission, in consultation with the Public Utilities Commission, shall develop guidelines for large electrical corporations and large publicly owned electric utilities to utilize in identifying and designating zones within their service territory that are optimal for deployment of distributed generation.

(2) On or before December 31, 2012, each large electrical corporation and large publicly owned electric utility shall provide the commission with information identifying those zones within their service territory that it determines are optimal for deployment of distributed generation. The commission shall review each utility's designation of zones that are optimal for deployment of distributed generation and approve or disapprove the designation of zones made by each utility. If disapproved, the commission shall indicate in what manner the designation should be revised and order the utility to promptly submit a designation that corrects the deficiency.

(3) Upon approval by the commission, each large electrical corporation and large publicly owned electric utility shall make this information available on its Internet Web site so that it appears when a term search is performed on that Internet Web site using the term "distributed generation."

(4) Each large electrical corporation and large publicly owned electric utility shall periodically update its designation of zones that are optimal for deployment of distributed generation, as circumstances change, and provide this information to the commission and make that information available on the utility's Internet Web site.

(d) An electrical corporation that is not a large electrical corporation, or a local publicly owned electric utility that is not a large local publicly owned electric utility, may identify and designate zones within their service territory that are optimal for deployment of distributed generation.

SEC. 2. The Legislature finds and declares that the Public Utilities Commission should do both of the following:

(a) In supervising and administering the California Solar Initiative, pursuant to Article 1 (commencing with Section 2851) of Chapter 9 of Part 2 of Division 1 of, and the self-generation program pursuant to Section 379.6 of, the Public Utilities Code, give priority to those distributed generation projects that are proposed to be located within zones designated by an electrical corporation to be optimal for deployment of distributed generation pursuant to Section 25235 of the Public Resources Code.

(b) Review current rules, pertaining to interconnection, to facilitate interconnections of distributed generation facilities within those zones.