STATE OF CALIFORNIA — Public Utilities Commission
San Francisco

M e m o r a n d u m

Date: May 3, 2011

To: The Commission
(Meeting of May 5, 2011)

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

Subject: **AB 1302 (Williams) – Distributed Generation**
As amended: March 31, 2011

LEGISLATIVE SUBCOMMITTEE RECOMMENDATION: OPPOSE UNLESS AMENDED

SUMMARY OF BILL:

As amended March 31, 2011, this bill would require an electrical corporation to complete a distribution grid upgrade plan in order to accommodate the increasing number of wholesale distributed generation projects expected to be created under new and existing renewable energy programs. The first plan is to be filed with the California Public Utilities Commission (CPUC) by July 1, 2012, and every 2 years after that.

On April 27, 2011, this bill was amended to incorporate most of the language in SB 372 (Blakeslee), which required 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). On April 14, the CPUC voted to take an "oppose unless amended" position on SB 372.

Since Senator Blakeslee decided not move SB 372, AB 1302 incorporates most of SB 372's provisions. Thus, this memorandum includes the same analysis and recommendations for SB 372.

SUMMARY OF SUPPORTING ARGUMENTS FOR RECOMMENDATION:

Despite our recommendation, the CPUC supports the intent of this legislation, which could foster a consistent set of DG maps across the IOUs and the POUs. However, we propose the following amendments: 1) the CPUC should implement and administer the maps, 2) 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.

SUMMARY OF SUGGESTED AMENDMENTS:

Amendment 1: Given its prior Decisions, the CPUC should be required to develop consistent, statewide DG mapping guidelines. Thus, subdivision (b)(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 or enforcing 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: 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.

Amendment 3: We also suggest a minor amendment that authorizes the CPUC to include other information or specifications, as deemed necessary, in the mapping guidelines. The bill currently requires information such as nominal circuit voltage, maximum normal circuit capacity in the summer, transformer bank rating in summer.

DIVISION ANALYSIS (Energy Division):

The bill codifies existing CPUC policy though it would transfer development and 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 25th 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/wholesaleelectricsuppliersolicitation/PVRFO/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:

AB 1302 is scheduled to be heard in the Assembly Utilities and Commerce Committee on May 4, 2011.

SUPPORT/OPPOSITION:

Support: None on file.

Opposition: Pacific Gas & Electric Company (PG&E)

STAFF CONTACTS:

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

BILL LANGUAGE:

BILL NUMBER: AB 1302 AMENDED
BILL TEXT

AMENDED IN ASSEMBLY MARCH 31, 2011

INTRODUCED BY Assembly Member Williams

FEBRUARY 18, 2011

~~An act relating to energy.~~ *An act to add Section 713 to the Public Utilities Code, relating to electricity.*

LEGISLATIVE COUNSEL'S DIGEST

AB 1302, as amended, Williams. ~~Energy: renewable energy technologies.~~ *Electricity distribution grid upgrade plan.*

(1) Under existing law, the Public Utilities Commission has regulatory authority over public utilities, including electrical corporations.

The bill would require an electrical corporation to complete a distribution grid upgrade plan, pursuant to a specified schedule, in order to accommodate the increasing number of wholesale distributed generation projects expected to be created under new and existing renewable energy programs.

Because a violation by an electrical corporation of the bill's requirements would be a crime, the bill would impose a state-mandated local program.

(2) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

~~Existing law establishes various programs to encourage the development of renewable energy technologies.~~

~~This bill would state the intent of the Legislature to enact legislation to establish a program to support emerging renewable technologies in distributed generation, with specified objectives.~~

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

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

SECTION 1. Section 713 is added to the Public Utilities Code , to read:

713. (a) As used in this section, "wholesale distributed

generation" means renewable energy generation that interconnects to the distribution grid and provides electricity to an electrical corporation.

(b) An electrical corporation shall complete a distribution grid upgrade plan, extending for a three-year period from the date of completion of the plan, in order to accommodate the increasing number of wholesale distributed generation projects expected to be created under new and existing renewable energy programs. The first plan shall be due no later than July 1, 2012. An updated plan shall be due every two years thereafter. Interested parties shall be allowed to comment on each plan prior to its finalization.

SEC. 2. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.

~~SECTION 1. It is the intent of the Legislature to enact legislation to establish a new program to support emerging renewable technologies in distributed generation, with the objectives of reducing peak demand, reducing greenhouse gas emissions, enhancing grid reliability, and encouraging fuel diversity.~~