



ANALYSIS

CALIFORNIA PUBLIC UTILITIES COMMISSION

AB 1536 (Blakeslee) As Amended June 23, 2009

SUMMARY OF BILL:

AB 1536 would rename the existing Self-Generation Incentive Program (SGIP) (Public Utilities Code 379.6) to the distributed energy resources incentive program, modify the program's purpose to "deploy distributed energy," expressly allow stand-alone storage facilities with a capacity of 10 mega-watts or less used on customer sites to be funded under the program, and establish a \$83 million annual program budget limit. **The Commission's position is Support with Amendments.**

SUMMARY OF SUPPORTING ARGUMENTS FOR RECOMMENDATION:

This bill provides an expansion of the existing SGIP program, namely allowing stand-alone storage to be eligible for the program. Current statute limits program eligibility to only wind and fuel cell generating technologies. In 2008, the Commission modified the program to provide an additional incentive to wind and fuel cell technologies coupled with storage. Storage technologies support the integration of renewable energy and can help meet the peak load reduction goals of the program.

SUMMARY OF SUGGESTED AMENDMENTS (IF ANY):

Allow the CPUC to determine technology eligibility consistent with the State's renewable energy and greenhouse gas emission goals. Currently, AB 1536 limits the program to wind, fuel cell and storage technologies. This limitation misses opportunities to support other distributed energy technologies that may provide substantial benefits and require financial incentives to achieve greater market adoption. The program should instead focus on supporting distributed energy technologies that support the State's renewable energy and greenhouse gas emissions goals and allow the CPUC to determine eligibility.

The statutory removal of all combustion technologies from SGIP eligibility as of 2008 has limited the potential peak load reduction and GHG savings from SGIP. Combined heat and power (CHP) facilities funded by SGIP facilities delivered 70% of the electricity from SGIP projects historically. In 2007, the program delivered over 720,000 MWh of electricity to California's electricity system; enough electricity to power over 60,000 homes for one year. In addition, of all the technologies in the program at the time of Itron's August 2007 Impact Evaluation, the technologies that reduced the most GHG emission per MWh of electricity produced were biogas generators.¹ Biogas micro turbines, engines and fuel cells on average reduce 2.7 tons of CO₂ per MWh of

¹ Itron, *CPUC Self Generation Incentive Program Sixth Year Impact Evaluation*, August 2007

electricity produced. The GHG emissions savings of biogas generators reduced over 38,000 tons of CO₂ equivalent. Biogas generators provided more GHG savings per kwh of electricity produced than wind, solar, or natural-gas fired CHP (all of which have been funded by the SGIP program.)

Remove the budget cap provision. Since the inception of SGIP in 2001, the CPUC has had authority to determine the budget for the program. The budget has been adjusted over time to reflect changes in the program and the market for distributed energy technologies. An annual budget, as included in the current version of the bill, limits the CPUC's ability to respond to changes. If the Legislature feels a budget cap is appropriate, a more reasonable approach would be to cap total program expenditures over the remainder of the program or for a longer period of time (i.e. three or five years).

Extend the program through 2016 or 2020. The California Solar Initiative is currently authorized through 2016. The Legislature is currently considering establishing a 33% RPS by 2020. If the goal of this program is to support the broader energy policy goals of the State, then it would be appropriate to extend it accordingly. The program currently sunsets January 1, 2012.

DETAILED ANALYSIS OF BILL'S PROVISIONS:

Adds energy storage technologies to list of SGIP eligible technologies. Energy storage technologies must meet any one of the following functional requirements:

- (1) Support the integration of an eligible renewable energy resource
- (2) Respond to CAISO commands to absorb/dispatch electricity
- (3) Provide frequency control to integrate intermittent renewable energy resources
- (4) Store energy to dispatch at a later time

Advanced energy storage (AES) is already eligible for a \$2/watt incentive as ordered in Decision (D.) 08-11-044, but only if used in conjunction with a wind turbine or fuel cell. Stand alone energy storage and storage coupled with solar PV are not allowed in the program at the present time.

Provides a system size cap of 10 MW for storage projects

This change is non-substantive as the current SGIP system size cap established by the CPUC for all technologies is 5MW.

Deletes out-of-date statutory language related to combined heat and power facilities (which were previously eligible for SGIP) and a report that was ordered to be written by the California Energy Commission (which has been completed.)

These changes are inconsequential and appear to be "clean up." But elimination of reference to CHP may be ill advised if CHP is added back to the program some other time as the Commission hopes; the CHP language had specified that only ultraclean CHP qualified for SGIP.

BACKGROUND INFORMATION ON IMPACTED PROGRAMS, PRACTICE OR POLICY:

The Self-Generation Incentive Program was established in 2001 in response to AB 970 (Ducheny, 2000), which gave the Commission the authority to develop a program to pursue peak load control. SGIP is one of the largest distributed generation incentive programs in the United States, with approximately 1,200 projects totaling 300 megawatts on-line at the end of 2007. The program provides up-front, capacity-based incentives for clean, distributed generation technologies at customer sites.

Historically SGIP eligibility has been determined by the CPUC and has included both renewable and highly efficient fossil fuel powered systems.² Eligible technologies have included solar photovoltaics (PV), wind, fuel cells, microturbines, internal combustion engines and small gas turbines. With the passage of SB 1 (Murray, 2006) and the creation of the California Solar Initiative in 2007, solar PV was removed from SGIP. AB 2778 (Lieber, 2006) further limited SGIP eligibility to wind and fuel cell technologies only, effective January 1, 2008.

Per D. 08-11-044, SGIP now provides incentives for energy storage systems that are coupled with eligible SGIP technologies, currently wind and fuel cell technologies. Due to limitations established in AB 2778, energy storage systems not connected with wind or fuel cells (for example, stand-alone storage or storage coupled with solar) are not eligible under the program.

From 2001 to 2006, the annual statewide budget for SGIP, authorized by the Commission, was \$125 million. Since the creation of the California Solar Initiative in 2007, and the removal of incentives for solar from SGIP, the annual budget has been reduced to \$83 million.

RELEVANT PENDING LITIGATION OR LEGAL ISSUES (if any):

None

LEGISLATIVE HISTORY:

- AB 44 (Blakeslee, 2009) is a companion storage bill that authorizes the CPUC to increase a utility's rate of return for investment in specified energy storage technologies and requires the CPUC to develop a time-variant tariff to incentivize those same technologies. AB 44 is now a two-year bill.
- SB 412 (Kehoe, 2009) would expand eligibility of SGIP to include any clean technologies, which the CPUC determines support the state's AB 32 related goals.

OTHER STATES' OR FEDERAL INFORMATION:

None.

REPORTING REQUIREMENTS (IF ANY):

² All fossil fuel powered combustion technologies that have participated in SGIP have been required to operate in a combined heat and power application, which maximizes operating efficiency by capturing and utilizing waste heat.

None.

FISCAL IMPACT ON THE CPUC:

Minor and absorbable.

LEGISLATIVE STAFF CONTACT

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