

Date of Hearing: April 25, 2011

ASSEMBLY COMMITTEE ON UTILITIES AND COMMERCE

Steven Bradford, Chair

AB 1150 (V. Manuel Perez) – As Amended: April 25, 2011

SUBJECT: Self-generation incentive program.

SUMMARY: Extends the sunset date for the annual collection of the Self Generation Incentive Program (SGIP) through December 31, 2016 and authorizes the Public Utilities Commission (PUC) in consultation with the California Energy Commission (CEC) to continue to administer the program until January 1, 2018. Specifically, this bill:

- 1) Extends the sunset date for the SGIP through December 31, 2016 to authorize the investor owned utilities (IOUs) to continue the annual collection of \$83 million in ratepayer funds for SGIP and extends the administration of the program through January 1, 2018.
- 2) Provides that the PUC may adjust the amount of SGIP incentives and evaluate other public policy interest such as, job development, technology competitiveness, maximizing fund development across all technologies, localized energy generation deployment, protection of ratepayers, energy efficiency, peak load reduction, load management, and environmental interests.
- 3) The bill also caps the maximum amount of incentives a company can earn to no more than 25% of the annual amount of money collected for SGIP and restricts the per watt rebate to \$2.50.
- 4) Includes intent language signaling that the program should increase deployment of distributed generation and distributed storage systems to facilitate integration of those resources into the electrical grid and reduce ratepayer costs.

EXISTING LAW:

- 1) Authorizes the PUC to administer the SGIP to provide rebates for distributed generation (DG) technologies until January 1, 2016, and to authorize electrical corporations to annually collect not more than the amount authorized for the SGIP in the 2008 calendar year through December 31, 2011.
- 2) Limits eligibility for incentives to distributed energy resources that the PUC in consultation with the State Air Resources Board, determines will achieve reductions in emission of greenhouse gases pursuant to the California Global Warming Solutions Act of 2006.

FISCAL EFFECT: Unknown.

COMMENTS: According to the author of the bill, “AB 1150 will permit the extension of a vital program for incentivizing the development of distributive on-site renewable energy facilities. These are needed to meet increasing statewide demand for electricity, to reduce peak demand pressures on the grid and help meet California public policy goals of reducing greenhouse gas emissions and increase the supply of clean renewable energy.” The bill is sponsored by the Foundation Windpower and they claim that, “under current law, SGIP will receive no new funds after 2011 and, while the program itself will not expire until 2016, the Public Utilities Commission projects will have little or no funds left in the program after 2011.” Therefore, AB 1150 is needed to “authorize the collection of new ratepayer funds through 2018 and would extend the period for making incentive payments available through 2016.

BACKGROUND: During the 2000-01 energy crisis the PUC was directed to create a program of incentives for renewable and super clean, gas-fired distributed generation resources to reduce electricity demand. As a result, the PUC established the SGIP in March 2001 which has offered rebates for installation of technologies such as photovoltaics, wind, fuel cells, waste gas, and ultra-clean and low emission gas-fired distributed generation (combined heat and power, CHP). Legislation adopted in 2004 eliminated CHP from the program as of January 1, 2008. In 2006 photovoltaic incentives were moved out of the SGIP to the California Solar Initiative (CSI) effective January 1, 2007. With the passage of AB 2778 (Lieber) Chapter 617, Statutes of 2006, only fuel cell and wind technologies were eligible for incentives. AB 2267 (Fuentes) Chapter 537, Statutes of 2008, established a 20% rebate incentive bonus for California suppliers and SB 412 (Kehoe) Chapter 182, Statutes of 2009, extended SGIP to 2016 and charges PUC with selecting eligible GHG reducing technologies for inclusion in SGIP.

SGIP Funding. The program is funded by a charge on all ratepayers (CARE customers are excluded) which is reflected in the distribution charges paid in each billing. This costs the ratepayer less than \$5 dollars per year. According to the PUC, the SGIP program has completed 1,320 self-generation projects for 355MW and still has an additional 169 pending projects for 82 MW. Since the inception of the program in 2001 until now, \$865 million has been available to customers under SGIP. The SGIP budget was initially set at \$125 million per year in 2001, with cost responsibility allocated across ratepayers of the Investor-Owned Utilities (IOUs). With the creation of the California Solar Initiative (CSI) in 2006, the PUC redirected the portion of the SGIP budget that supported solar photovoltaic incentives into the CSI program, which does not include SoCalGas, since it does not have a CSI program. As a result, the SGIP budget was reduced to \$83 million per year for 2007 and 2008 to reflect the elimination of the solar photovoltaic incentives that CSI now funds. That budget level was maintained for 2010 and 2011 by D.09-12-047; the PUC adopted an annual budget of \$83 million for the SGIP in 2010 and 2011. In that decision, the PUC ordered the PA’s to obtain an independent entity to conduct an audit of the SGIP expenditures and ratepayer collections to ensure expenditures do not exceed authorized budgets and the proper management of carryover funds (will be discussed later).

SGIP provides \$83 million (\$75 million for incentives, \$8 million for program administration) per year until December 31, 2011 when collection of the funds sunsets. Incentive budget splits 50% for renewable and 50% for non-renewable. SGIP offers upfront incentives to offset the cost of capital investment. Incentive payments are \$1.50 per watt for wind turbines, \$2.50 per watt

for fuel cells, \$4.50 per watt for biogas fuel cells, \$2.00 per watt for storage, and \$2.50 for natural gas. According to the PUC, the maximum eligible system size is 5 MW per site, or the load limited system size whichever is less. For systems larger than 1 MW, the maximum incentive is capped at 3 MW per site. However, incentives are lower for projects above 1 MW on the portion of their SGIP funded system(s) that exceed 1MW for that site based upon a tiered incentive structure approved by the PUC.

**SGIP Program Budget Status, \$ Millions (Compiled on February 2, 2011)**

	<b>Reported Budget Available as of 12/22/2010</b>	<b>Received Between 12/22 and 12/31/2010</b>	<b>Budget as of 12/31/2010 if Motion is Effective 12/31/10</b>	<b>2011 Budget</b>	<b>Budget Remaining including 2011 Budget</b>
<b>Renewable Budget</b>	\$ -17.40	\$ 24.37	\$ -41.77	37.5	-4.27
<b>Non-Renewable Budget</b>	\$ 110.37	\$ 41.60	\$ 68.77	37.5	106.27
<b>Cumulative Budget</b>	\$ 92.97	\$ 65.96	27.00	75.0	102.0

Note: All figures in \$ Millions. A negative number implies a waitlist figure.

Implementation of SB 412: On October 11, 2009, the Governor signed SB 412 (Kehoe), Chapter 182, Statutes of 2009, into law to take effect in January 2010 which extended the administration of the SGIP program until 2016 but sunsets the collection of the funds in 2011, SB 412 did not extend authorization to collect funds for the program. Importantly, SB 412 authorizes the PUC, in consultation with the California Air Resources Board (CARB), to determine eligible technologies for the SGIP based on the requirement that they “achieve reductions of greenhouse gas emissions pursuant to the California Global Warming Solutions Act of 2006 and consider adding additional technologies to the program that meet these requirements.

Pursuant to SB 412, the PUC opened a new rulemaking, R.10-05-004 to continue to handle matters related to the SGIP and CSI programs and revise the staff proposal intended to assess eligible technologies, incentive levels, and incentive structure. The purpose of the Energy Division Staff Proposal is to recommend modifications to the SGIP program. PUC staff used the opportunity provided by SB 412 to take a broader look at SGIP and consider a full range program modifications intended to improve program outcomes which could address some of the concerns mentioned above. The proposal would only provide preliminary recommendations on the SGIP program goals and principles and staff intends to update certain identified portions of this proposal in response to information expected in the future. On January 7, 2010, the PUC hosted a workshop to take ideas from parties on how to modify the program in response to SB 412. This proposal is still pending and until now has not been released.

PG&E Motion to Temporary Suspend SGIP: On May 6, 2010, the Pacific Gas and Electric (PG&E) and the SGIP Program Administrators (PA) including Southern California Edison, Southern California Gas Company, and the Center for Sustainable Energy requested that the PUC temporarily suspended the SGIP program to become effective December 22, 2010, until the decision of implementing SB 412 is approved by the PUC and takes effect. They were concerned that unless a moratorium on new applications is put in place, projects of currently eligible technologies could consume all available SGIP funding. According to the PUC, applications submitted in the 2010 program year were granted due process rather than suspending the program as PG&E requested. However, new applications for the 2011 year were suspended. The PUC reported that some SGIP PAs stopped accepting applications as of December 22, 2010. However, there was still a waitlist for \$17 million in renewable projects and \$24 million more renewable projects received in last nine days of the year. As of December 22, 2010, there was \$110 million available for non-renewable projects, and \$41 million were received in the last nine days of the year.

PUC's Independent Audit Report: Under existing law, SGIP encourages merit-based competition on a first come first serve basis among distributed energy technologies, promoting technology innovation and allowing Californians to install the clean energy solution that best meets their needs. However, it was represented that certain technologies were benefiting from incentives more than others and that there were inaccuracies in reporting. As a result, the PUC ordered participating utilities to have a third party audit the SGIP budget to resolve any questions about available funds.

The PUC commissioned the audit based on budget discrepancies between expenditures and ratepayer collections for the period 2001-2009. The PUC released its audit and placed it on its website on April 13, 2011. The audit cost \$250,000 and was paid for by the SGIP administrative, measurement, and evaluation budget. PUC decisions set the SGIP budget at an annual maximum of 10 percent for each Program Administrator (PA) for administration costs. However, the audit reported that there has been some unspent administration monies that have been transferred to the incentive budgets. Due to the different reporting styles of some of the PAs it is unclear to know if all carryover administration funds have actually been used for incentives. PG&E, for example had unspent admin monies in the amount of \$56 million which were transferred to incentive budgets between 2001 and 2009. The biggest issue identified was a need for more consistent reporting and better accounting (e.g., recording incentives paid in the year a reservation of incentives is granted as opposed to the year an application is received). Many of the discrepancies between reservation amounts and actual incentives paid can be explained by changes in project size after a reservation is granted or limitations on maximum incentives that can be paid.

Accountability: Currently, the PUC requires PAs to report their portfolio quarterly. Perhaps better accountability from the PUC and PAs needs to be addressed to ensure that there are no discrepancies and ensure that if there are unused administration funds that they be transferred to be used for incentives. The PUC has already started implementing some of the audit's recommendations including, revamping the PUC's statewide database, which will facilitate automated reporting, include an interactive database, and most importantly, impose uniform

reporting requirements. As for the PG&E office remodeling that was reported in the audit, while it may not seem like an appropriate administrative expense, utilities usually seek cost recovery for this type of activity in their general rate cases. PUC should not allow this to happen and provide more oversight over the PAs.

Who Pay's and Who Benefits: According to critics of the SGIP program, this \$83 million is ratepayer money that is being used to subsidize large companies. The proponents argue that the SGIP program has substantial benefits to ratepayers such as providing construction and operation jobs within the state; reducing stress on the grid during peak consumption hours; mitigating the expensive cost of transmission and distribution lines; and providing incentives to promote localized clean power near the load center. Additionally, SGIP was intended to incentivize market transformation for those technologies that meet the policy goals of promoting in-state manufacturing and ensuring GHG emission reductions. In this way, SGIP is public policy that benefits all Californians regardless of whether they participate in the program directly or not. Those who do participate directly lower their energy bills on site while everyone benefits from that participation in the ways outlined above. SGIP is a smart investment for ratepayers because it provides upfront incentives for customers who install clean energy projects, with the customers still covering the majority of the costs. Without these incentives most projects would not go forward. Large scale utility procurement projects often cost in the billion dollar range, with high transaction costs and where the ratepayer most often bares all the cost risk. By making smaller investments that leverage private equity, the ratepayer and the customer see reduced transaction costs. More importantly, with the help of SGIP, customers like Adobe, eBay, Safeway, Staples, and others, are reducing their electricity costs which enables them to become more competitive in the global economy and enables them to keep prices down for their customers

Benefit to the Residential Ratepayer: SGIP program costs the residential ratepayer less than \$5 a year and supports residential applications. For example, Clear Edge Power a company from Portland, Oregon, provides fuel cell for residential applications. In one year there have been about 83 applications for this product by residential customers. As other companies scale, they will lower their costs and be able to sell a residential product as well. Furthermore, the programs is helping grow our economy since these ratepayer funded incentive dollars, leveraged by over \$1 billion dollars of capital investment from investors around the world, have fueled thousands of jobs and significant economic impact into our state's economy.

For instance, Bloom Energy's advanced fuel cell technology was invented in California, is manufactured in California and is generating clean distributed power for Californians. Because of the growing customer demand enabled by SGIP, Bloom Energy grew its California employee base by 70% in 2010, and over 525% over the past four years. Ten years ago Bloom was 8 people; now Bloom is responsible for 1,000 California jobs. Bloom's California manufacturing and operations footprint grew four times over the past year and Bloom has gone from manufacturing one fuel cell system per month two years ago to one system per day in 2011. If the SGIP customer is a business all of those who do transactions with that business will also see lower prices down stream. For example, if ABC Grocery, for instance, reduces its energy costs the customer of ABC Grocery also sees reduced costs as ABC Grocery would otherwise pass on high energy costs to their customer.

Stakeholder's Concerns:

PG&E currently does not have a position on the bill, but they do believe that the implementation of SB 412 will answer many of the questions about what technologies should qualify and how incentives should be determined and allocated.

Bloom Energy, TechNet, Environmental Defense Fund, and a coalition of consumers strongly support the extension of the SGIP program to continue to promote and enable clean energy engineering, manufacturing and installation jobs in California. They also suggest that the PUC should ensure a fair allocation of the SGIP funding so that no company's technology monopolizes SGIP funding but strongly opposes and encourages to "delete incentive caps from AB 1150." They believe SGIP legislation should take a technology-neutral approach; and that it should authorize the PUC to continue to enable increased diversity in our state's energy mix, and may include declining incentives as appropriate to ensure ratepayer subsidies support market transformation, not a long-term crutch.

The Utility Reform Network (TURN) has concerns with the authorization to continue the collection of \$83 million a year for another five years to spend on the SGIP program. Their primary concern is that ratepayers do not benefit from this program since most of the SGIP projects are almost exclusively installed by larger commercial and industrial customers to generate electricity for their own use. TURN also mentions that to spend another \$415 million or more on this program is "unfair to residential utility customers and violates the deal struck in SB 412." They recommend that the problem could be fixed by requiring that the costs of this program be allocated to the customer's class whose members benefit from the program subsidies.

The Sonoma County Water Agency believes AB 1150 should provide equal incentives for all renewable energy sources since the current language in the bill could be interpreted to favor one type of renewable energy over another by offering a higher incentive rates for certain technologies. They recommend that the same incentive be offered for all renewable technologies including biogas projects using biodigester and landfill gas energy sources. They also believe that the SGIP program should increase allowable project size since currently the program sets declining incentive rates for projects larger than 1MW. They recommend that the allowable project size limit be removed, and that the full incentive be made available for up to 5MW of power generation, and that projects be sized to serve all or a portion of the host customer's power load regardless of location.

Are we playing leap frog? The PUC is currently in the process of implementing SB 412, which may address some of the issues brought up in this bill such as, adjusting the current SGIP incentive levels. According to the PUC's initial staff proposal, they are working to consider changes in incentive tiers, similar to the declining CSI incentive design, which declines the incentive as more solar is developed. In 2007, when the CSI program began, the incentive for solar PV was \$2.50 per watt now it is as low as \$0.35 per watt in some service territories. However, for the SGIP program this structure might not work since there are different technologies and the relatively small number of projects of each technology makes it difficult to

establish a MW trigger for declining incentives but the PUC can have technology specific declining incentives. Even if this staff recommendation is preliminary, the PUC is looking to adopt a 10% incentive decline starting on January 1, 2012 which should decline by 10% annually. Placing a cap of 25% per company and a \$2.50 per watt incentive essentially takes away the PUC's authority to adjust the incentive level (which they are working on) and placing it in statute will create a precedent which will require legislative modification of the incentive levels. This committee is interested in seeing that the PUC will ensure equitable distribution of funding to all eligible technologies and program participants and that the PUC should assess technology penetration in underserved regions of the state affected by environmental blight and economic stress. The author and this committee may wish to amend this bill to remove the 25% per company cap and the \$2.50 per watt cap. The committee may also wish to amend the bill to require the PUC to periodically evaluate the program to adjust the amount of rebates and other program design elements to ensure that there is equitable distribution of incentives to all eligible technologies and program participants and assess technology penetration in underserved areas of the state that are environmentally blighted and economically stressed.

#### Prior Legislation

Last year, SB 412 (Kehoe) extended the sunset date of the Self-Generation Incentive Program (SGIP) through January 1, 2016, restricted the amount the PUC can direct the utilities to collect, and expanded the eligible resources to include all self-generation technologies PUC determines will support the state's goals for the reduction of emissions of greenhouse gases, that meet specified efficiency standards.

#### REGISTERED SUPPORT / OPPOSITION:

##### Support

A123 Systems, Inc.  
Associated General Contractors of America  
Bloom Energy (if amended)  
California Business Properties Association  
California Energy Storage Alliance (CESA)  
California Institute of Technology (Caltech)  
California Large Energy Consumers Association (CLECA)  
California Manufacturers & Technology Association (CMTA)  
CALMAC Manufacturing Corporation  
CalWEA  
Capstone Turbine Corporation  
Cemex  
Clean Power Campaign (if amended)  
Debenham Energy LLC  
Deeya Energy, Inc.  
EnerVault Corporation  
Fluidic Energy

Foundation Windpower (Sponsor)  
Fuel Cell and Hydrogen Energy Association (FCHEA)  
Greensmith Energy Management Systems, LLC  
Ice Energy, Inc.  
LightSail Energy, Inc.  
Mitsubishi Cement Corporation  
Pacific Environment  
Pacific Environment  
Powergetics, Inc.  
Prudent Energy Corporation  
RES Americas, Inc.  
Saft America  
Samsung SDI America, Inc.  
Seeo, Inc.  
Silent Power, Inc.  
Solar Turbines Incorporated (if amended)  
Sonoma County Water Agency (if amended)  
Sumitomo Electric  
SunEdison  
Sunverge Energy, LLC  
SustainX, Inc.  
UTC Power Corporation (if amended)  
Xtreme Power, Inc.  
Yunicos, Inc.

Opposition

The Utility Reform Network (TURN) (unless amended)

Analysis Prepared by: Crystal Quezada / U. & C. / (916) 319-2083