

STATE OF CALIFORNIA

Public Utilities Commission
San Francisco

M e m o r a n d u m

Date: June 4, 2003

To: The Commission
(Meeting of June 5, 2003)

From: Alan LoFaso, Director
Office of Governmental Affairs (OGA) — Sacramento

**Subject: SB 107 (Bowen) Independent System Operator: report:
demand management: renewable, ultra-clean, low emission
distributed generation resources**
As amended May 5, 2003

Legislative Subcommittee Recommendation: Oppose, unless amended.

Summary: This bill would replace the existing Self Generation Incentives Program with a new program, with specified, narrowed parameters.

Digest: Existing law, Chapter 329, Statutes of 2000 (AB 970, Ducheny, et. al.), required the Commission, in consultation with the Independent System Operator (ISO) and the Energy Commission (CEC), to “adopt energy conservation demand-side management and other initiatives in order to reduce demand for electricity and reduce load during peak demand periods” (Public Utilities Code §379.5 (b), formerly §399.15 (b)), including providing for:

- Incentives for load control and distributed generation to be paid for enhancing reliability.
- Differential incentives for renewable or super clean distributed generation resources. (emphasis added.)

Pursuant to this statute, the Commission implemented distributed generation incentives in its Decision (D.) 01-03-073 by creating the Self Generation Incentive Program (program). In this decision, the Commission also authorized funding for the program from the utilities’ distribution revenue requirement in the amount of \$125 million annually through the end of 2004. The program was officially launched on June 29, 2001, and later modified by the Commission on February 7, 2002 in D.02-02-026.

Existing law, Chapter 515, Statutes of 2002 (SB 1038, Sher), defines “ultra clean and low emission distributed generation” (DG) as electric generation technology that:

- (1) commences initial operation between 1/1/03 and 12/31/05; and
 - (2) produces either (a) zero emission or (b) emissions meeting the 2007 Air Resources Board emission limits for DG, with specified exceptions.
- (Codified in P.U. Code section 353.2.)

This bill would require the Commission to establish an incentive program, to succeed the Self Generation Incentive Program, for “renewable and ultra-clean and low-emission distributed generation resources” with a goal of achieving commercialization of ultra-clean clean and low emission by January 1, 2007.

This bill would further require the Commission, in establishing incentive levels, to consider the amount and duration of existing incentives, including exemption from standby tariffs, exemption from Department of Water Resources (DWR) procurement obligations, and state and federal tax credits and deductions. This bill would also require the Commission to report to the Legislature on the cost, benefits, environmental impacts, and efficiency impacts of the incentive program.

This bill would sunset the Self Generation Incentive Program on January 1, 2007.

This bill would also repeal an obsolete provision requiring the ISO, within six months of its approval by the Federal Energy Regulatory Commission to issue a report regarding reliability. (See P.U. Code sec. 350, as proposed to be repealed.)

Analysis: SB 107 would narrow the parameters of the Commission’s current Self Generation Incentive Program from the undefined term “super clean” DG to conform to the recently enacted definition of “ultra clean” DG. Moreover, the bill would sunset the program at the end of 2006, when there is no ending date now.

The bill would prohibit incentives for DG that do not meet the “ultra-clean and low emission” standard. This prohibition may result in fewer installations of DG resources, impacting efforts to reduce loads during periods of peak demand.

DG enhances system reliability and helps reduce load at periods of peak demand. The Commission’s current Self Generation Incentive Program helps make an array of DG options available, increasing the amount of load served by customer generation.

The existing program is designed to make available generation technology to serve the varying needs of customers. Systems eligible through the program are designed to accommodate:

- Customer’s specific on-site power needs (e.g. peak load shaving or power quality)

- Limitations posed by the location characteristics (i.e. no south facing exposure or limited wind flow)
- Affordability

The flexibility of the existing program allows customers to consider DG installations to address specific power needs by including systems capable of responding to these needs, such as small gas turbines. The criteria established by this bill would make these types of generation ineligible for incentives under the program, potentially impacting the amount of new distributed generation installed in the state.

The non-renewable generation technology eligible for incentives in the existing program also enable customers to install DG resources where the installation of ultra-clean generation would be inappropriate (i.e. a photovoltaic installation in an area without sufficient exposure to the sun). In these instances customers may still be encouraged to install DG resources, such as microturbines, where renewable DG resources would not be an option.

Including incentives for non-renewable DG technologies in the existing program also provide accessibility to customers who would not otherwise be able to afford more expensive renewable DG resources. For example, the average project cost for a photovoltaic system – a system that would meet the “ultra clean” definition – is \$8.67/watt. In comparison, the average project costs for a microturbine operating on a non-renewable fuel source is \$2.22/watt.

Subsidizing customer DG purchases via the Self Generation Incentive helps offset the high costs of systems currently available at this stage of development of the DG market. While this DG market is still immature, the program’s incentives help increase customer investment in this technology, potentially leading to more affordable DG options in future.

Finally, SB 107 would also sunset the program, requiring further legislative action in order for the program to continue beyond January 1, 2007. This requirement would create uncertainty for potential DG customers, as well as manufactures and marketers of DG systems.

Amendments:

The language should be amended to give the Commission discretion to include incentives for DG in addition to those meeting the “ultra-clean and low emission.” As such, the bill should be amended not to repeal the current statute (P.U. Code sec. 379.5) that provided for the Self Generation Incentive Program and that program should not sunset. A separate section promoting the goals of ultra-clean and low-emission distributed generation could supplement the current statute.

Amending the bill as follows would achieve this effect:

On page 2, lines 3 through 10, and page 3, lines 1-12, amend as follows:

SEC. 2. ~~Section 379.5 of the Public Utilities Code is amended to read:~~

Section 379.55 of the Public Utilities Code is added, to read:

~~—379.5—~~ 379.55. (a) The commission shall establish an incentive program, to ~~succeed~~ supplement the Self Generation Incentive Program, for renewable and ultra-clean and low-emission distributed generation resources. A goal of the incentive program is to achieve commercialization of ultra-clean and low-emission distributed generation resources by January 1, 2007. In establishing incentive levels, the commission shall consider the amount and duration of existing incentives, including exemption from standby tariffs, exemption from Department of Water Resources electricity procurement obligations, state and federal tax credits, deductions, and exemptions.

(b) The commission shall, by January 1, 2006, report to the Legislature on the costs, benefits, environmental impacts, and efficiency impacts of the incentive program.

(c) This section shall remain in effect only until January 1, 2007, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2007, deletes or extends that date.

LEGISLATIVE HISTORY

Senate Floor: 37-0 (passed to the Assembly) (5/22/2003)

Senate Appropriations: 11-0 (do pass) (5/19/2003)

Senate E.U.&C: 8-0 (do pass) (4/22/03)

SUPPORT/OPPOSITION

Support: None reported.

Opposition: None reported.

LEGISLATIVE STAFF CONTACT

Carlos A. Machado, Deputy Legislative Director
CPUC-OGA

cm2@cpuc.ca.gov
(916) 327-1417

Alan LoFaso, Legislative Director
CPUC-OGA

alo@cpuc.ca.gov
(916) 327-7788

Date: June 4, 2003

BILL LANGUAGE:

BILL NUMBER: SB 107 AMENDED
BILL TEXT

AMENDED IN SENATE MAY 5, 2003
AMENDED IN SENATE APRIL 9, 2003

INTRODUCED BY Senator Bowen

JANUARY 30, 2003

An act to amend Section 379.5 of, and to repeal Section 350 of, the Public Utilities Code, relating to electric power, and declaring the urgency thereof, to take effect immediately.

LEGISLATIVE COUNSEL'S DIGEST

SB 107, as amended, Bowen. Independent System Operator: report: demand management : *renewable, ultra-clean, low emission distributed generation resources* .

(1) The Public Utilities Act requires the Independent System Operator, in consultation with the California Energy Resources Conservation and Development Commission (Energy Commission), the Public Utilities Commission, the Western Systems Coordinating Council, and concerned regulatory agencies in other western states, within 6 months after Federal Energy Regulatory Commission approval of the Independent System Operator, to provide a report with certain information to the Legislature and the Electricity Oversight Board.

This bill would repeal that provision.

(2) Existing law requires the Public Utilities Commission, notwithstanding any other provision of law, on or before March 7, 2001, and in consultation with the Independent System Operator, to take certain actions, including, in consultation with the Energy Commission, adopting energy conservation demand-side management and other initiatives in order to reduce demand for electricity and reduce load during peak demand periods, including, but not limited to, differential incentives for renewable or super clean distributed generation resources. Pursuant to these provisions, the commission has established the Self Generation Incentive Program (Decision 01-03-073, March 27, 2001), which will expire at the end of 2004.

This bill would modify those provisions to require the Public Utilities Commission ~~, in consultation with the Independent System Operator, to take those actions, including, in consultation with the Energy Commission, adopting those energy conservation demand side management and other initiatives, including, but not limited to, differential incentives for renewable or~~ to establish until January 1, 2007, an incentive program for renewable and ultra-clean and low-emission distributed generation resources , with a goal of achieving commercialization of ultra-clean and low-emission distributed generation resources by January 1, 2007. The commission would, in establishing incentive levels, be required to consider the amount and duration of existing incentives, including exemption from standby tariffs, exemption from Department of Water Resources electricity procurement obligations, state and federal tax credits, deductions,

and exemptions. The bill would require the Public Utilities Commission to report to the Legislature, by January 1, 2006, on the costs, benefits, environmental impacts, and efficiency impacts of the incentive program .

(3) The bill would declare that it is to take effect immediately as an urgency statute.

Vote: 2/3. Appropriation: no. Fiscal committee: yes.
State-mandated local program: no.

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

SECTION 1. Section 350 of the Public Utilities Code is repealed.

SEC. 2. Section 379.5 of the Public Utilities Code is amended to read:

~~379.5.~~

379.5. (a) The commission shall establish an incentive program, to succeed the Self Generation Incentive Program, for renewable and ultra-clean and low-emission distributed generation resources. A goal of the incentive program is to achieve commercialization of ultra-clean and low-emission distributed generation resources by January 1, 2007. In establishing incentive levels, the commission shall consider the amount and duration of existing incentives, including exemption from standby tariffs, exemption from Department of Water Resources electricity procurement obligations, state and federal tax credits, deductions, and exemptions.

(b) The commission shall, by January 1, 2006, report to the Legislature on the costs, benefits, environmental impacts, and efficiency impacts of the incentive program.

(c) This section shall remain in effect only until January 1, 2007, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2007, deletes or extends that date.

~~The commission, in consultation with the Independent System Operator, shall take all of the following actions, and shall include the reasonable costs involved in taking those actions in the distribution revenue requirements of utilities regulated by the commission, as appropriate:~~

~~(a) (1) Identify and undertake those actions necessary to reduce or remove constraints on the state's existing electrical transmission and distribution system, including, but not limited to, reconductoring of transmission lines, the addition of capacitors to increase voltage, the reinforcement of existing transmission capacity, and the installation of new transformer banks. The commission shall, in consultation with the Independent System Operator, give first priority to those geographical regions where congestion reduces or impedes electrical transmission and supply.~~

~~(2) Consistent with the existing statutory authority of the commission, afford electrical corporations a reasonable opportunity to fully recover costs it determines are reasonable and prudent to plan, finance, construct, operate, and maintain any facilities under its jurisdiction required by this section.~~

~~(b) In consultation with the State Energy Resources Conservation and Development Commission, adopt energy conservation demand side management and other initiatives in order to reduce demand for electricity and reduce load during peak demand periods. Those initiatives shall include, but not be limited to, all of the following:~~

~~(1) Expansion and acceleration of residential and commercial~~

~~weatherization programs.~~

~~—(2) Expansion and acceleration of programs to inspect and improve the operating efficiency of heating, ventilation, and air conditioning equipment in new and existing buildings, to ensure that these systems achieve the maximum feasible cost effective energy efficiency.~~

~~—(3) Expansion and acceleration of programs to improve energy efficiency in new buildings, in order to achieve the maximum feasible reductions in uneconomic energy and peak electricity consumption.~~

~~—(4) Incentives to equip commercial buildings with the capacity to automatically shut down or dim nonessential lighting and incrementally raise thermostats during a peak electricity demand period.~~

~~—(5) Evaluation of installing local infrastructure to link temperature setback thermostats to real-time price signals.~~

~~—(6) Incentives for load control and distributed generation to be paid for enhancing reliability.~~

~~—(7) Differential incentives for renewable or ultra-clean and low emission distributed generation resources.~~

~~—(8) Reevaluation of all efficiency cost effectiveness tests in light of increases in wholesale electricity costs and of natural gas costs to explicitly include the system value of reduced load on reducing market clearing prices and volatility.~~

~~—(c) In consultation with the Energy Resources Conservation and Development Commission, adopt and implement a residential, commercial, and industrial peak reduction program that encourages electric customers to reduce electricity consumption during peak power periods.—~~

SEC. 3. This act is an urgency statute necessary for the immediate preservation of the public peace, health, or safety within the meaning of Article IV of the Constitution and shall go into immediate effect. The facts constituting the necessity are:

In order to encourage early compliance with air quality standards established by the State Air Resources Board and ensure that the cleanest, most environmentally sound distributed generation resources are eligible for substantial ratepayer subsidies offered by the Public Utilities Commission, including avoidance of energy crisis cost obligations, it is necessary that this act take effect immediately.