

RENEWABLE RESOURCES TRUST FUND

This hearing is the third in a series of hearings to review programs funded by the public goods charge (PGC) which will sunset at the end of this year. The PGC was originally authorized as part of the deregulation of the electric industry in the 1990s and required ratepayers to fund a variety of system reliability, in-state benefit, and low-income customer programs at specified levels starting in 1997. This funding was intended to ensure that these "public goods" programs continued in the restructured electric industry. Since that time the use of the PGC has been modified by the Legislature multiple times. The current structure was last reviewed by the Legislature in 2007.

The PGC is collected by the state's investor-owned utilities (IOU) from the customers they serve and is broken down into three components: \$62.5 million for the Public Interest Energy Research Program (PIER) and \$65.5 million for the Renewable Resources Trust Fund (RRTF) both of which are transferred to the California Energy Commission (CEC); and \$228 million for IOU energy efficiency programs directed by the California Public Utilities Commission (CPUC). These funds are supplemented by charges that have been separately ordered by the CPUC and bring the total annual IOU program costs to approximately \$1 billion.

Under current law the RRTF program is divided into three purposes with 20 percent of funds allocated to the Existing Renewables program; 79 percent to the Emerging Renewables Program; and 1 percent to Consumer Education. The CEC also funds administrative overhead associated with its costs related to the Renewables Portfolio Program.

EXISTING RENEWABLES

The Legislature's intent for this program was to:

...achieve fully competitive and self-sustaining existing in-state renewable electricity generation facilities, and to secure for the state the environmental, economic, and reliability benefits that continued operation of those facilities will provide...

The statute mandates that 20 percent of funds be allocated to this program or \$13.1 million annually. As a result of this program is that production-based incentives were made available to biomass, solar thermal, and wind facilities that began commercial operation before September 26, 1996. To receive funding, an eligible facility must apply for funding each year and have a contract

price below a target price in a given month. The incentive rate is paid on a cent-per-kWh basis and is calculated as the difference between the facility's contract price and its market price, up to a predetermined cap.

The current and practical effect of this program is that 680 MW of biomass facilities (primarily in PG&E territory) and 400 MW of solar thermal (in SCE territory) received \$16.5 million in fiscal year 2009-10 for 35 plants which supplemented contracts that the generators have with the IOUs. For most of the facilities the contracts are based on a federally set price called the "short run avoided cost" (SRAC) which is based on the price of natural gas as directed by the federal Public Utilities Regulatory Policies Act of 1978. The SRAC fluctuates and has been as low as 3 cents and as high as 7 cents per kWh. For biomass plants the cost of fuel and transportation costs alone can be 2 to 6 cents per kWh.

According to the CEC:

Despite financial assistance through the Existing Renewable Facilities Program, representatives of the biomass facilities participating in the program have informed staff that they still face difficulties keeping their facilities on-line due to ongoing economic challenges. For example, many of the existing biomass facilities are nearly 30 years old and face financially taxing maintenance issues. As a cost-cutting measure, several facilities have begun curtailing generation, temporarily shutting down operations, or deferring needed maintenance until the financial climate improves. Since January 2009, five biomass facilities in California have temporarily shut down, three of which were still not operating by the end of the fiscal year.

The primary goal of the program was to temporarily support the facilities so that they can achieve sustainability in the competitive RPS marketplace. Sunset review in 2006 noted that the facilities had yet to achieve sustainability yet the program was extended another five years. Little or no progress has been made since 2006 for the biomass plants.

Generation secured by the IOUs to meet their RPS goals is generally secured through competitive wholesale contracts the costs of which are built directly into electric rates. This program is the only program which supplements or funds RPS contract costs and is limited to just a few facilities.

Observations/Questions:

- The biomass plants provide a valuable environmental alternative to land-filling, open-burning, or biodegrading waste. They are the foundation of the RPS program accounting for more than 17% of all RPS generation online.
- The biomass plants have not achieved the program objective of "fully competitive and self-sustaining" facilities; it is not clear why these plants do not have sustainable contracts with the IOUs as other RPS generation does.
- It appears the 400 MW of solar thermal generation are now sustainable on the contracts they have with SCE. This leaves the bulk of the generation from biomass and in PG&E territory. If the PGC was extended or some form of it used to supplement these biomass plants, ratepayers across the state would be subsidizing the cost of generation for the ratepayers of PG&E.

- Although several other technologies originally eligible for this program have achieved sustainability, 27 biomass plants have not done so. What purpose is served by extending the same program when it has failed to achieve its objectives for more than 13 years.
- What incentives do IOUs have, primarily PG&E, to offer competitive contracts to its RPS contractors/producers as long as the state subsidy is available?

EMERGING RENEWABLES

Wind & Fuel Cells

The stated goal of this program is to foster the development of emerging renewable technologies and to use funds for a “multiyear, consumer-based program to foster the development of emerging renewable technologies in distributed applications” using “monetary rebates, buydowns, or equivalent incentives” to offset the costs of installing renewable generation on the customer’s side of the meter. The statute mandates that 79 percent of funds be allocated to this program which would be approximately \$51 million annually. The Legislature later directed the CEC to also fund the New Solar Homes Partnership (NSHP) from this program.

Although the statutory authority for technology support appears broad, the statute does specifically call out small-scale wind and fuel cells. In practical terms the CEC has only been funding wind systems due to lack of demand for small-scale fuel cells. In the 2009-10 fiscal year the CEC paid \$1.6 million for 87 projects totaling 1,534 kilowatts most of which were wind. As of June 30, 210 there were reservations for 1,344 kilowatts of projects encumbering \$3.1 million.

Stepping back the state now has, as a result of legislation, directed both the CPUC and CEC to develop programs that fund wind and fuel cell technologies on the customer’s side of the meter. The CEC has the authority to add other technologies but has not done so; the CPUC was directed by the Legislature in 2009 to broaden its program to all technologies that help the state achieve its greenhouse gas reduction goals but has yet to complete its implementation of the bill. Authorization to collect ratepayer funds sunsets at the end of this year for the CPUC’s program, the Self Generation Incentive Program. However, the CPUC can continue to fund projects with accumulated funds until 2016.

The CEC program was funding small wind projects but recently suspended the program when it discovered that the incentive payments were covering almost all and possibly more than the total costs of the projects using some technologies.

Observations/Questions:

- Since this program was created, the federal government has now made available tax credits and grants equal to 30 percent of the installed costs for most renewable generation technologies. In light of this support, is continued subsidization of wind or any other technology necessary?
- The benefit of using ratepayer funds for this program is not evident. Other subsidy programs which use electric ratepayer dollars for support have very specific goals, such as the CSI which was designed to temporarily support solar technologies so that they could achieve sustainability in the marketplace.

- The CEC and the CPUC each administer programs using ratepayer funds for wind and fuel cells. Is this the most efficient and cost-effective use of ratepayer dollars?

New Solar Homes Partnership

The NSHP is part of the comprehensive statewide solar program – the California Solar Initiative (CSI) which has three goals: 1) to install 3,000 megawatts (MW) of distributed solar electric capacity in California by the end of 2016; 2) to establish a self-sufficient solar industry in which solar energy systems are a viable mainstream option in 10 years, and 3) to place solar energy systems on 50 percent of new homes in 13 years. The NSHP seeks to achieve 400 MW of installed solar electric capacity in California by the end of 2016.

As of July, 2010, a total of 27 MW of solar had been installed on new homes or 6.7 percent of goal. For the 2009-10 fiscal year \$12.7 million in rebates were paid for 6,396 PV systems totaling 15,374 kilowatts. The program allows builders to file an application and reserve funding for three years. As of June, 2010 6,396 reservations have been made encumbering \$42.5 million and 15,374 kilowatts.

The CEC and the CPUC are each responsible for separate elements of the CSI. The CEC directs the NSHP and the CPUC directs the program for existing residential, governmental and commercial installations. However, both agencies rely on the state's IOUs to collect funds and administer the program for their respective service areas.

In 2007 the Legislature directed the CEC to use the RRTF to fund this program. The funds are collected by the IOUs, transferred to the CEC, and then disbursed back to the IOUs and consumers for incentive payments. Funds for the CPUC administered components are collected by the IOUs and remain with the IOUs until the incentive payments are made to consumers.

The NSHP program provides two incentive structures, one for conventional or market-rate housing and another for qualified affordable housing projects.

Observations/Questions:

- The bulk of funding from the RRTF program is dedicated to new solar homes but demand for these program funds has been significantly lower than the available funding since 2007.
- Surplus ratepayer dollars have built up and been transferred for purposes unrelated to the statutory program goals.
- The IOUs administer both the NSHP for the CEC and the CSI for the CPUC. Is this the most efficient and cost-effective administration of the program?
- CSI funds are collected from IOU electric ratepayers as authorized by the Legislature and as demand for the incentives grows. This prevents surplus fund build-up and insulates the funds from transfer to other unintended programs. Would the NSHP benefit from a similar fund structure?

CONSUMER EDUCATION

The last element of the statutes authorizing the RRTF require one percent of the funds (\$650,000 of the annual PGC) to be used for consumer education:

...to promote renewable energy and disseminate information on renewable energy technologies, including emerging renewable technologies, and to help develop a consumer market for renewable energy and for small-scale emerging renewable energy technologies.

The CEC reports that:

...since 1999, the Consumer Education Program has spent or encumbered approximately \$18.6 million to support 3 public awareness campaigns funded through contracts; 21 grant projects awarded for renewable energy information and outreach activities; the development of an electronic tracking system, WREGIS, to address long-term RPS tracking needs; and other consumer education activities promoting renewable energy.

ADMINISTRATION

The CEC also funds the administrative costs associated with its responsibilities under the RPS program which is not specifically authorized by the RRTF statutes. Approximately 8 percent of RRTF program is used by the CEC for 35 program staff and administrative costs of the aforementioned programs as well as costs associated with the Western Renewable Energy Generation Information System, Power Source Disclosure, California Solar Initiative (separate from the NSHP), bioenergy policy, climate change, and the Integrated Energy Policy Report.

RRTF STATUS

The RRTF was originally established in 1997. Its uses have changed over the years as have available balances in the fund due to changing legislative priorities, reduced demand for program dollars, and varied uses by the CEC that may not have been directly intended by the Legislature.

Although fund balances grew since the last reauthorization of the RRTF in 2007 (primarily due to a slump in the new housing market), they were also depleted as a result of legislative appropriations which include \$140.7 million in outstanding loans and transfers to the General Fund and \$67 million in transfers and loans to other state programs including the California Alternative Energy Fund Authority, Department of Fish & Game, and the Consumer Power & Conservation Financing Authority Fund.