Date of Hearing: April 11, 2011

ASSEMBLY COMMITTEE ON UTILITIES AND COMMERCE
Steven Bradford, Chair
AB 723 (Bradford) – As Introduced: February 17, 2011

SUBJECT: Energy: public goods charge.

SUMMARY: Extends the sunset date on the public goods charge (PGC) from 2012 to 2016. The electricity PGC is a nonbypassable surcharge imposed on all retail sales to fund public goods research, development and demonstration, and energy efficiency activities.

EXISTING LAW:

1) States the California Public Utilities Commission (PUC) has regulatory authority over public utilities, including electrical corporations.

2) Requires that specified moneys collected between January 1, 2007, and January 1, 2012, from the electrical corporations for public interest research, development, and demonstration, and deposited in the Public Interest Research, Development, and Demonstration Fund be used for the purposes of the Public Interest Research, Development and Demonstration Program.

3) Requires the PUC to order the three largest electrical corporations in the state to identify and charge a separate electrical rate component to fund energy efficiency, renewable energy, and research, development and demonstration programs.

4) Requires that 20% of the funds collected pursuant to the renewable energy PGC be used for programs that are designed 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 during the 2007-2011 business cycle.

FISCAL EFFECT: Unknown.

1) Background: Historically, the three primary investor-owned utilities (IOUs) were completely regulated vertical monopolies; on the wholesale and retail level. The utilities had an obligation to serve every customer who requested service. In return, the CPUC allowed the utilities to charge full recovery for all costs plus a reasonable rate of return for all costs incurred to fulfill their obligation. Because the IOUs had no competition, the PUC authorized the utilities to invest in research, development and demonstration and recover those costs in rates also.

AB 1890 (Brulte), Chaptered 854, Statutes of 1996, deregulated the electricity industry. When AB 1890 was being debated to deregulate the California electricity industry, there was concern that under a perfectly competitive market structure, the utilities would not have incentive to invest in research, unless the research resulted in technological breakthroughs. If the research resulted in success, there was concern that the utility-funded research may remain proprietary, provide the utility a competitive advantage, and would not benefit all California ratepayers. On the other hand, if a utility needed to compete for customers it might choose to keep its costs as low as possible and not take the risk of investing in research. To ensure research continued to be funded to the benefit of the "public interest," AB 1890 required ratepayers to fund a variety of system reliability, in-state benefit, and low-income customer programs at specified levels from 1998 through 2001. This funding was intended to ensure that these "public goods" programs continued in the restructured electric industry.

SB 90 (Sher), Chaptered 905, Statutes of 1997, created the Renewable Resources Trust Fund (RRTF) and directed the PUC to order the IOUs to collect specified amounts to fund each account in the RRTF through 2002. For the Public Interest Energy Research program, SB 90 required the CEC to designate an independent panel of experts to prepare a report on its programmatic recommendations. For in-state Renewable RD&D, SB 90 required the California Energy Commission (CEC) to report to the Legislature a description of the allocation of funds, and the need for the reallocation of money.

SB 1194 (Sher), Chaptered 1050, Statutes of 2000, extended the collection of a PGC from ratepayers until 2012; however, it precluded moneys from being expended between January 1, 2007, and January 1, 2012, without further legislative action. For the Renewable RD&D and PIER programs, the CEC was directed to provide an investment plan to the Legislature that addressed the application of moneys to be collected between January 1, 2007, and January 1, 2012. The Renewable RD&D and PIER program reports were provided to the Legislature and subsequently, SB 1250 (Perata) Chaptered 512, Statutes of 2006, extended the continuation of funding but amended both of the programs focus.

The electricity PGC funds three primary programs: 1) Public Interest Energy Research (PIER)--$62.5 million annually, administered by CEC; 2) Renewable Energy Program --$65.5 million annually, administered by CEC; and 3) Energy Efficiency--$228 million annually, retained by IOUs with PUC oversight. The statute allows for these amounts to be adjusted annually at a rate equal to the lesser of the annual growth in electric commodity sales or inflation.

2) <u>PIER</u>: Utilities collect at least $62.5 million per year for the CEC to administer the PIER program. SB 1250 requires PIER to focus on: 1) advanced electricity generation including systems that generate a dual use from electricity; 2) climate change and the environment; 3) energy efficiency and demand-response strategies that serve to reduce customer demand, 4) renewable energy; and 5) transmission and distribution of power. An additional focus includes transportation-related research.

Current law permits the CEC special exemptions from state contracting guidelines for the PIER program and only requires the CEC to provide the Joint Legislative Budget Committee a 60-day notice of its intent to take a proposed action. The CEC claims that the PIER is unique and standard state processes and contracting rules are not appropriate. This bill would retain this liberty for the electric utility PIER portion. According to the CEC, when the PIER program was created, the CEC worked with the Department of General Services, the state's primary contracting and procurement agency, to work out an agreement and impose parameters that would facilitate and encourage innovative and promising PIER proposals, while ensuring state contracting guidelines and accountability measures were maintained.

The CEC projects the IOUs to collect $69.7 million in 2010-11. The funds are annually appropriated, which means the Legislature reviews the department's spending priorities every year during budget hearings. To date, PIER has funded nearly $700 million for projects that range from building and industrial efficiencies, to environmentally preferred advanced generation.

The PIER investment plan is required to include criteria that will be used to determine whether a project provides public benefits to California that are not adequately provided by competitive and regulated markets. The original PIER investment plan identified policy goals; however, it did not include useful criteria to determine public benefits derived by previous expenditures of PIER funds.

Section 25620.9 of the Public Resources Code directed the CEC to designate a panel of independent experts with special expertise in PIER projects to conduct a comprehensive one-time evaluation of the program. The evaluation was supposed to include a review of the public value, and both monetary and nonmonetary benefits aimed at assisting the Legislature in determining how to proceed. According to the PIER Independent Review Panel Final Report dated June 2005, "… there is no clearly articulated, integrated, agreed upon PIER Strategic Plan that states overall goals, sets specific objectives, establishes priorities, and describes a path forward for meeting California's future energy needs."

To try to find consensus for a PIER Strategic Plan, in 2007, the CEC formed the PIER Advisory Board (Board) to provide strategic guidance. The Board consists of representatives from the PUC, consumer organizations, environmental organizations, the IOUs, and six member of the Legislature or their representatives. The Advisory Board met in 2008 and 2010, and in 2011. The CEC presented its past expenditures and benefits and elicited advice and guidance from the Board on future expenditures. The advice was provided and it is unclear whether the CEC was able to elicit useful guidance from the Board.

3) <u>PIER benefits</u>: According to the CEC, the PIER program has a successful track record of\ delivering benefits to California's electricity ratepayers. New products have been developed and commercialized. Businesses and consumers can now benefit from wireless lighting controls for cost-effective building retrofits; improved water heaters; wireless heating, ventilation and air-conditioning thermostats; improved quality light emitting diodes (LED) fixtures; specialized controls for energy intensive data centers; and radiant cooling designed for hot and dry climates.

Further, the CEC states that five PIER funded research programs has been incorporated in recent building and appliance efficiency standards. It is estimated that these five measures will save $1 billion a year when fully implemented. The bulk of these savings result from television standards and standards for external power supplies - powering devices like cell phones.

The CEC states that PIER helps to transition away from fossil fuels towards renewable sources. For example, a dozen communities from Humboldt County to San Diego are showcasing renewable demonstrations. The projects integrate up to 100 percent indigenous renewable resources, along with storage, electric vehicles and demand response. Each project is testing various technologies and integration strategies to meet unique customer needs, at the lowest cost, without compromised reliability. These solutions allow more renewables that are closer to population centers, alleviating new transmission.

4) <u>PIER evaluation</u>: In August 2010, Senator Alex Padilla wrote a letter to the Legislative Analyst Office (LAO) to request that it conduct an independent evaluation of the PIER program to determine if it is operating successfully, if the program should be reauthorized and, if so, if

modifications are warranted. Pursuant to this request, in January 2011, the LAO evaluated whether there should be a continued state role for PIER, questioned whether the focus is still appropriate, and if appropriate, questioned whether the current process for allocating funds via the CEC is the optimal to achieve tangible ratepayer benefits. The LAO concluded that the CEC has not demonstrated that there had been a substantial payoff from the state's investment. The LOA supported its findings by noting that due to the various energy-related mandates and fiscal penalties if mandates are not met, the IOUs now have a much greater incentive to invest in research. The LAO recommended that any legislation to reauthorize a state-supported research program sunset the program after a determined period of time, perhaps five years, and provide for a periodic evaluation of the results of the research program.

The LAO recommended the Legislature consider how much flexibility and control to give to the IOUs to make research investment decisions and at what level of governmental involvement in the process is deemed appropriate. Three options were presented: 1) continue the PIER program under the CEC with a tighter focus; 2) allow IOU rate recovery of public interest research; and, 3) create a public-private partnership for electricity research.

5) Renewable RD&D: The legislative goals of Renewable RD&D program have been to increase the amount of electricity generated from eligible renewable energy resources per year. In addition, current statute requires the Renewable RD&D program to optimize public investment and ensure that the most cost-effective and efficient investments in renewable resources are strongly pursued.

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

a. Existing Renewables Facilities Program: The legislative goals for this program are 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% of the funds be allocated to this program or $13.1 million annually. This program provides production-based incentives to biomass, solar thermal, and wind facilities that began commercial operation on or before September 26, 1996. 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.

   This resulted in over 600 MW of biomass facilities (primarily in PG&E territory) and 400 MW of solar thermal (in Edison territory) receiving $16.5 million in fiscal year 2009-10 for 35 plants which supplemented contracts that the generators have with the IOUs.

b. Emerging Renewables Program: The legislative goals of this program are to foster the development of emerging renewable technologies and to use funds for a "multi-year, 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. According to statute, 79% of funds are 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 statutory authority for technology support appears broad, the statute does specifically call out small-scale wind and fuel cells. However, 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, 2010, there were reservations for 1,344 kilowatts of projects encumbering $3.1 million.

On March 4, 2011 the CEC 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. During the suspension, the CEC will review its current Emerging Program Guidelines and adopt necessary guideline changes to address deficiencies with the program requirements. The suspension will remain in effect until further notice. The CEC anticipates that it will take 60 to 120 days to review the program guidelines and adopt necessary changes.

c. New Solar Homes Partnership: The New Solar Homes Partnership (NSHP) is part of the comprehensive statewide solar program – the California Solar Initiative (CSI) which has three goals: 1) to install 3,000 megawatts 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 home which equates to 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 CEC and PUC are each responsible for separate elements of the CSI. The CEC administers the NSHP and the PUC administers the program for existing residential, governmental and commercial installations. Both agencies rely on the state's IOUs to collect funds and oversee the program for their respective service areas.

   In 2007, the Legislature ordered 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 PUC 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 incentives structures, one for conventional or market-rate housing and another for qualified affordable housing projects.

d. Consumer Education: The legislative intent for this program is to promote renewable energy and provide 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. According to the CEC, 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, the Western Renewable Energy Generation Information System (WREGIS), to address long-term Renewable Portfolio Standard tracking needs; and other consumer education activities promoting renewable energy.

7) Energy Efficiency Program (EE): This program is authorized by the PUC and administered by the IOUs. Every year, the PUC approves each utility's plan for efficiency programs, which the utility then carries out within its service territory. The EE program objectives are to: 1) leverage private investments in EE with ratepayer funds to encourage a market for EE goods and services; 2) provide customers with financial incentives and rebates to adopt EE technologies; 3) provide information on the costs and benefits of EE measures; 4) reduce market barriers to investments in EE products and services, and 5) support the creation of a sustainable and competitive EE market.

In September 2008, the PUC adopted its Long-Term Energy Efficiency Strategic Plan, which authorizes the utilities to collect $3.1 billion from ratepayers (which include the $228 million) over a three-year period to fund a number of energy efficiency measures. Key to the Plan's success is four specific programmatic goals which are widely viewed as ambitious, high-impact efforts. These goals, the "Big, Bold Energy Efficiency Strategies", were selected not only for their potential impact, but also for their easy comprehension and their ability to galvanize market players. The Big, Bold Energy Efficiency Strategies are: 1) all new residential construction in California will be zero net energy by 2020, 2) all new commercial construction in California will be zero net energy by 2030, 3) heating, ventilation, and air conditioning will be transformed to ensure that its energy performance is optimal for California's climate, and 4) all eligible low-income customers will be given the opportunity to participate in the low income energy efficiency program by 2020.

Several of the energy efficiency measures include goals to achieve 20 percent savings for up to 130,000 homes; provides $175 million for zero-net energy homes and commercial buildings; gradually reduces subsidies for basic compact fluorescent lamps and shifts emphasis toward advanced lighting programs; requires benchmarking of all commercial buildings receiving EE funds; and provides over $260 million in funding for 64 cities, counties, and regional agencies for local efforts that target public sector building retrofits and leading cutting edge EE opportunities.

8) Related legislation: This bill is substantially similar to AB 1303 (Williams) which aims to extend the sunset date for the PIER program and funding for the programs funded by the RRTF from 2012 to 2020.

REGISTERED SUPPORT / OPPOSITION:

Support

California Biomass Energy Alliance (CBEA) (with amendments)

California State Pipe Trades Council
Coalition of California Utility Employees
International Brotherhood of Electrical Workers
International Union of Elevator Constructors
Utility Workers Union of America
Western States Council of Sheet Metal Workers

Opposition

None on file.

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