BACKGROUND

The Public Interest Energy Research (PIER) program, administered by the California Energy Commission California (CEC), was established in 1996 for the purpose of ensuring continuation of public interest energy research after deregulation of the state's wholesale electricity markets. The PIER program is one of several programs funded by electricity ratepayers through a surcharge generally known as the "Public Goods Charge." Current law that requires collection of the Public Goods Charge and that directs how the CEC awards PIER funds sunsets on January 1, 2012.

Last month, the Legislative Analyst's Office (LAO) issued a report based on its independent review of the PIER program. The LAO finds that the CEC has not demonstrated a substantial payoff in ratepayer benefits from the more than $700 million in PIER-funded research since 1996. The LAO nonetheless concludes that continued investment by the private sector *and* the state in public interest energy research is necessary if California is to make the technological breakthroughs that will enable it to achieve its ambitious goals for increasing energy efficiency, expanding use of renewable energy, and reducing greenhouse gas emissions. LAO proposes three potential approaches for reforming the state's role in energy research:

- Continue the existing surcharge and retain CEC as administrator of the program but improve the strategic focus of research funded.

- Discontinue the existing surcharge and the current program administered by CEC and instead direct utilities to conduct their own research programs and recover their research costs in rates.

- Continue the existing surcharge but discontinue the current program administered by CEC and instead direct utilities to conduct their own research programs with input from a new coordinating council with representatives of state energy officials.

The Public Goods Charge and PIER – The Public Goods Charge was established by AB 1890 (Brulte) of 1996, which deregulated electricity markets. The bill directed the three large independently owned utilities (IOUs) – San Diego Gas and Electric Company, Southern California Edison Company, and Pacific Gas and Electric Company – to collect the following funds for public interest energy activities:

$228 million per year for energy efficiency and conservation activities;
$65.5 million per year for renewable energy; and
$62.5 million per year for research, development and demonstration.[1]

The $62.5 million collected for the PIER program represents about 18 percent of the total Public Goods Charge collected annually from ratepayers. The Public Goods Charge is the sole source of funding for the PIER program. The portion of the Public Goods Charge designated for energy efficiency and for renewable energy represents only a portion of funds dedicated to those program areas.[2]

The CEC is required by statute to award PIER grants to fund research projects that "advance science or technology" and that are "not adequately provided for by competitive and regulated energy markets."[3] The rationale for PIER was that IOUs in a newly deregulated electricity market would no longer fund this research and that overall energy research by the private sector and federal government was in decline. The stated goal of the program is to develop, and help bring to market, energy technologies that provide increased environmental benefits, greater system reliability, lower system costs, and "tangible benefits" to electric utility customers. The CEC is required to give preference to "California-based entities" when awarding PIER grants. The CEC is authorized to negotiate with PIER grant recipients for the state to collect an equitable share of rights in any intellectual property derived as a result of PIER-funded research.

Natural Gas PIER Program – The CEC also administers, in tandem with the electric PIER program, a public interest energy research program funded by a surcharge on natural gas ratepayers at an annual level of $24 million per year. AB 1002 (Wright) of 2000, which established the natural gas program, gave authority for the program to the California Public Utilities Commission (CPUC), but the CPUC, by decision, appointed the CEC to administer in it, although the University of California also was considered a potential administrator.[4] The CPUC adopts an annual resolution approving the CEC's award of natural gas research funds. In the 2004 decision appointing CEC the administrator, the CPUC stated that "after four years" it would assess the program, a review the CPUC commenced in 2010 and is still ongoing.

Total Funds of $700 Million – Through 2010, the CEC had awarded nearly $700 million in ratepayer funds for public interest energy research under the electric and natural gas PIER programs. The attached spreadsheets, prepared by the CEC, present the annual revenue and expenditures for the electric PIER program (Attachment A) and the natural gas PIER program (Attachment B). The CEC's overhead costs for administering the program are reflected in support items under Expenditures. Additional overhead costs are included with individual

[1] The Public Goods Charge, also known as a "system benefits charge" is established in Public Utilities Code Section 399.8.
[2] The $65.5 million collected for renewable energy is deposited in the Renewable Resource Trust Fund, which the CEC is authorized to expend for the Renewable Energy Resources Program, pursuant to Public Resources Code Sections 25740 to 25751. The $228 million that the IOUs collect for energy efficiency is not dedicated by statute to any particular program, but, according to the CPUC, is included in the IOUs' three-year energy efficiency program portfolios that the CPUC approves.
[3] The PIER program is governed by Public Resources Code Sections 25620 through 25620.15.
[4] D. 04-08-010

grants, with some recipients such as the University of California having standard contracts that require specified amounts to cover overhead.

Publicly Owned Utilities – In addition to requiring the IOUs to collect the Public Goods Charge that funds the electric PIER program administered by the CEC, SB 1890 also required the publicly owned utilities (POUs) to collect a usage-based charge, in an amount commensurate with the IOU Public Goods Charge, to fund any or all of the following: energy efficiency and renewable energy programs, public interest energy research, rate discounts and programs for low-income customers. POUs do not remit their funds to the CEC but instead independently administer their own programs. In addition, some POUs have been awarded PIER funds for specific programs. Because of these requirements for POUs are tied to the statute governing the IOU Public Goods Charge, they also sunset on January 1, 2012.

Legislation – Several bills have been introduced in this session to address the sunset of the Public Goods Charge:

- SB 35 (Padilla) is a spot bill that would extend the authority to collect the Public Goods Charge and the PIER program for one year.
- SB 410 (Wright) extends sunset on public goods charge and PIER for 10 years to 2022.
- AB 723 (Bradford) extends sunset on public goods charge and PIER for four years to 2016.
- AB 1302 (Williams) expresses the intent of the Legislature to establish a program to support emerging renewable technologies in distributed generation.
- AB 1303 (Williams) extends Public Goods Charge until 2020 and requires specified use of 20 percent of charge collected for renewable energy.

Prior hearings and review of PIER – This committee held an informational hearing on the PIER program on August 10, 2010. Review of the PIER program and recommendations for improvement were made by the Department of Finance in 2009, the Assembly Utilities and Commerce Committee in 2008, and the California Council on Science and Technology in 2004 and 2005. This committee submitted questions about the PIER program to the CEC in April 2010, and the CEC responded in June 2010, with additional responses in December 2010. All of these documents, along with the January 2011 LAO report, are available on the committee's web site under the August 10th informational hearing at:
http://www.sen.ca.gov/ftp/SEN/COMMITTEE/STANDING/ENERGY/.

List of PIER Awards – The complete list of PIER grants awarded by the CEC appears starting on page 191 of Part Two of the June 2010 CEC responses to the committee, which are posted on the committee's web site under the August 10th hearing:
http://www.sen.ca.gov/ftp/SEN/COMMITTEE/STANDING/ENERGY/_home/.