ANALYSIS

CALIFORNIA PUBLIC UTILITIES COMMISSION

AB 758 (Skinner)
As Proposed to be Amended

SUMMARY

This bill would, as proposed to be amended, require the California Energy Commission (CEC), by March 1, 2010, to develop a comprehensive energy efficiency program, which may include energy assessments, for existing residential and nonresidential building stock that falls significantly below current Title 24 building standards. This bill would also require the California Public Utilities Commission (CPUC), by March 1, 2010, to investigate the ability of each electrical and gas corporation to provide various energy efficiency financing options to their customers for the purposes of implementing the program. Further, the bill would require the CPUC to provide an assessment of each utility's implementation of the energy efficiency program as part of the CPUC's annual report to the Legislature.

CPUC POSITION AND SUPPORTING ARGUMENTS

NEUTRAL. The proposed amendments to this bill would clarify that "energy assessments" be conducted instead of "energy audits" to ensure a wider array of methods by which to provide relevant information to building owners or occupants on their current energy use and opportunities to make energy improvements. The proposed amendments would also encourage CEC and CPUC collaboration to explore the implementation approaches of both utility and non-utility administration of energy efficiency programs. Finally, the proposed amendments would revise the reporting requirements and make other technical clarifying changes to ensure proper implementation. As a result of this anticipated language, the CPUC's earlier concerns with the bill would be addressed. Therefore, if the proposed amendments are adopted in the bill, the CPUC is willing to remove its opposition and revise its position to neutral on the bill.

The CPUC fully supports the goal of achieving all cost-effective energy efficiency, the reduction of greenhouse gas emissions, and the development of a more comprehensive approach to achieving efficiency savings in existing buildings.

ANALYSIS

- The CPUC has overseen the development and implementation of energy efficiency programs in California for over 30 years. Existing building stock is included in the energy efficiency programs overseen by the CPUC and administered by the investor owned utilities (IOUs). These programs provide a variety of energy efficiency opportunities to building owners, including audits; rebates and incentives; education and training programs; assistance with design and retrofit projects; and in some cases, financing options. The CPUC also oversees comprehensive energy efficiency programs developed and implemented by the utilities pursuant to statutory mandate.

- The term "energy audit" has been historically a costly form of information that typically has not lead to cost-effective energy improvements. This bill, as proposed to be amended, would replace “energy audit” with “energy assessment” to ensure a wider array of methods by which to provide relevant information to building owners or occupants on their current energy use and opportunities to make energy improvements.

- This bill, as proposed to be amended, would encourage CEC and CPUC collaboration to explore the broad range of implementation approaches, including both utility and non-utility administration of energy efficiency programs. In doing so, this will help identify effective business models for achieving widespread adoption of significant levels of energy savings.

- This bill would make one substantive change from last year’s AB 2678 (Nunez) by focusing on residential and nonresidential buildings, and dropping industrial buildings from the scope. Further, the bill would seek to implement the findings of the “AB 549 Report” completed by the Energy Commission in 2005 regarding the actions necessary to increase energy efficiency in existing buildings. The scope of the program, to be developed by the CEC, is expected to include a broad range of activities such as energy audits, building benchmarking or energy ratings, cost-effective energy efficiency improvements, public and private sector energy efficiency financing options, public outreach and education efforts, expanded utility energy efficiency programs, and green workforce training.

- **CPUC is already addressing issues related to utilities providing financing in an existing proceeding.**

  In Decision 07-10-032, the CPUC directed the IOUs to create or continue on-bill financing pilot programs for small commercial customers; to propose on-bill financing programs for institutional customers for the 2009-2011energy efficiency program cycle and to continue to investigate programs for other sectors such as residential customers. The CPUC is currently reviewing a proposed portfolio of energy efficiency programs to be implemented by IOUs in the 2009-2011 program cycle, which includes use of new on-bill financing programs and a consistent statewide energy audit with integrated demand side recommendations.

- **The CEC will coordinate with the CPUC to avoid duplicative programs.**

  The CPUC supports the development of a comprehensive energy audit program that includes such components as site-specific recommendations for energy efficiency, identification of financing options, and a detailed report to the customer, when the components are: 1) accompanied by information or services that will facilitate customer adoption of energy efficiency measures, thus producing actual savings; 2) carried out within an overall portfolio of cost-effective efficiency activities; and 3) uniform across the state.

The roles between the CEC and the CPUC could have been disruptive to the CPUC's utility energy efficiency programs. The CPUC was concerned the bill could be interpreted of requiring the CEC to develop an energy efficiency program for older residential and commercial buildings that it would either direct the CPUC to implement, or result in the CEC implementing parallel energy efficiency programs for those utilities the CPUC now oversees. However, the bill now contains language that requires the CEC to coordinate with the CPUC to avoid duplication of existing CPUC proceedings and programs administered by utilities.

- **CPUC staff and resources will be needed to participate in CEC proceeding.**

  CPUC staff would be expected to commit time to participate in the CEC's standards-setting and program development proceeding in order to explain current CPUC policies and/or cost constraints guiding program designs. Currently, the CPUC provides broad direction to utilities that in turn commit the staff resources to program development and implementation management. Both the utilities and CPUC staff likely would now need to become engaged in a new CEC proceeding.

- **The CPUC would be required to open a new proceeding or can amend an existing proceeding on energy efficiency financing.**

  Public Utilities Code Section 381.2 (SEC. 3 of the bill) most likely would require the CPUC to open a new proceeding to "investigate the ability of electrical corporations to provide various energy efficiency financing options to its customers" for purposes of implementing the program developed by the CEC. As noted above, the CPUC has addressed, and will continue to address, utility-provided financing in the context of its current energy efficiency proceeding. Accordingly, a new proceeding would be entirely duplicative of ongoing CPUC efforts. However, the bill does allow the CPUC to amend an existing proceeding if needed.

- **The CPUC would be required to provide an assessment of the energy efficiency program as part of the CPUC's annual report to the Legislature.**

  The current version of the bill would require the CPUC to report annually to the Legislature and the CEC on building audits, including the number of buildings audited and the amount of actual energy savings resulting from the energy efficiency improvements. Depending on the number and type of audits performed, the requirement that actual energy savings be reported annually would result in additional utility and CPUC staff costs for reporting, and potentially non-trivial costs for possibly expanded evaluation, measurement and verification work.

  As proposed to be amended, this bill would require the CPUC to provide an assessment of each utility's implementation of the energy efficiency program as part of the CPUC's annual report to the Legislature. Using the annual report would be more cost-effective.

PROGRAM BACKGROUND:

- **Strategic Approach to Energy Efficiency.** On October 18, 2007, the CPUC adopted a comprehensive, long-term strategic approach to energy efficiency and demand side management commencing with the 2009-2011 energy efficiency program period cycle.[1] In D. 07-10-032, the CPUC directed that the strategies program, emphasis for the 2009-2011 energy efficiency programs and beyond, must promote maximum energy savings through the coordinated actions of utility programs, market transformation, and codes and standards, alongside strategies for the reduction of greenhouse gases. To carry out this approach, the IOUs prepared a draft strategic plan under the joint authority of the CPUC and CEC, with input from a variety of stakeholders.[2]

  The plan targets the development of expanded commercial and residential retrofit programs as well as integrated building audits that combine energy efficiency, demand response, and distributed generation and offer coordinated recommendations and incentives. The CPUC is currently in the process of reviewing the submitted portfolio of energy efficiency programs for the 2009-2011 program period, which will continue traditional energy efficiency programs, including a statewide uniform commercial and residential audit program and retrofit programs, as well as begin implementation of the strategic approach set forth in the plan.

- **Commercial Building Benchmarking, Audits, and Retro-commissioning.** Many of the energy efficiency programs geared toward existing commercial buildings offer onsite assessments. For example, the utilities' commercial retro-commissioning (RCx) programs "apply a systematic process for improving and optimizing larger sized building operations and for supporting those improvements with enhanced documentation and training. The process focuses on the operation of mechanical heating, ventilating, and air-conditioning (HVAC), refrigeration, lighting, domestic hot water (DHW) and related controls. The RCx process is intended to optimize how equipment operates as a system. RCx projects produce typical savings of 12-15% of total building energy costs, with a simple payback from energy savings alone averaging less than 2 years."[3]

  The utilities also provide onsite audits as part of their commercial facilities programs. For the 2006-2008 program period cycle, SCE provides on-site audits, design assistance, and incentives for qualifying measures to all nonresidential customers, through its Business Incentives and Services Program.[4] PG&E also includes onsite audits in its large commercial facilities program[5] and its small business program.[6] SDG&E's nonresidential standard performance contract program includes audits, design assistance and incentive payments for selected nonresidential customers.[7]

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[1] Decision 07-10-032, available at http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/74107.pdf.
[2] The Draft Strategic Plan is available at www.californiaenergyefficiency.com/docs/California_Energy_Efficiency_Strategic_Plan_June.pdf.
[3] SCE Commercial Retro-commissioning Project Proposal, 2006-2008 portfolio, available at http://www.californiaenergyefficiency.com/calenergy_old/sce/2508.pdf. RCx participation is not free. The building owner/occupant must pay to participate, and may qualify for a utility incentive toward that cost.

[4] SCE 2517; *see* http://www.californiaenergyefficiency.com/calenergy_old/sce/2517.pdf.
[5] PGE 2007; http://www.californiaenergyefficiency.com/calenergy_old/pge/2007.pdf.
[6] PGE 2074; http://www.californiaenergyefficiency.com/calenergy_old/pge/2074.pdf.
[7] SDGE 3025; http://www.californiaenergyefficiency.com/calenergy_old/sdge/3025.doc.

In 2007, AB 1103 (Saldana, Chapter 533) created a benchmarking system for nonresidential buildings. It requires electric and gas utilities to maintain records of the energy consumption data of all nonresidential buildings to which they provide service, for at least the past 12 months and, when authorized by the customer, to upload that information to the US EPA's Energy Star Portfolio Manager in a manner that preserves the confidentiality of the customer.[8] Commencing January 1, 2010, owners or operators of nonresidential building will be required to disclose the benchmarking data and ratings for the most recent 12-month period to prospective buyers, lessees of entire buildings, or lenders that would finance entire buildings.

- **Home Audit Programs.** For the 2006-2008 program period, and proposed for the 2009-2011 program period, all four investor owned utilities implemented a Home Energy Efficiency Survey (HEES) program.[9] The HEES programs offer mail-in, telephone and web-based surveys to all residential customers and in-home energy surveys to targeted customers. The programs are provided in different languages, including Spanish, Chinese, Vietnamese and Korean. For this program cycle, SoCalGas combined efforts with SCE to develop one product to service shared-territory customers. On completion of an audit, the utility recommends energy efficiency options, including rebates and incentive programs. Utilities report on program achievements, including HEES programs, on a monthly, quarterly and annual basis. [10] For the fourth quarter of 2007, PG&E reported the completion of 13,774 home energy audits; SCE reported completion of 5,303 online surveys, 141 telephone surveys, and 614 in-home surveys; and SDG&E completed 42 mail-in audits and 353 online audits.

- **Low Income Energy Efficiency Program.** No-cost home audits and energy efficiency improvements are also provided by the utilities under the Low Income Energy Efficiency (LIEE) program. More than 5.5 million households, 30 percent of the households in California, qualify for utility low-income programs.[11] In conjunction with the strategic approach to energy efficiency adopted in D. 07-10-032, the CPUC also adopted a programmatic LIEE initiative to provide all eligible LIEE customers the opportunity to participate in LIEE programs and to offer those who wish to participate in all cost-effective energy efficiency measures in their residences by 2020.[12] Thus, for example, for its 2009-2011 LIEE programs, PG&E has proposed to offer comprehensive energy education and measure assessment conducted by its LIEE Energy Specialists when the home is enrolled in the LIEE program to ensure that the home receives all measures for which it qualifies to make it as energy efficient as practical given the building age, type and the customer's energy consumption patterns.[13]

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[8] Stats. 2007, Ch. 533, enacting Public Resources Code § 25402.10.
[9] PGE 2010; SDG&E 3014; SCE 2503; and SoCalGas 3509. Descriptions of the programs are available at http://www.californiaenergyefficiency.com/calenergy_old/2006_08_programs.html.
[10] Utility reports are available at http://eega2006.cpuc.ca.gov/Default.aspx.
[11] LIEE Annual Reports, 2006, for Pacific Gas and Electric Company (PG&E), SCE, San Diego Gas & Electric Company (SDG&E), and Southern California Gas Company (SoCalGas).
[12] Decision 07-12-051 (December 20, 2007), available at http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/77082.pdf.
[13] Pacific Gas And Electric Company, Testimony In Support Of Application for the 2009, 2010, And 2011 Low-Income Energy Efficiency Program And The California Alternate Rates For Energy Program, May 15, 2008.

- **Utility Financing Options.** D. 07-10-032 directed PG&E, SDG&E, SoCalGas and SCE to propose on-bill financing programs for institutional customers for the 2009-2011 program cycle, currently under review by CPUC staff. In addition, D. 07-10-032 directed the utilities to create or continue on-bill financing pilot programs for small commercial customers and to continue to investigate programs for other sectors such as residential customers. SCE, SoCalGas and SDG&E have offered on-bill financing to selected commercial (non-residential) customers as part of their 2006-2008 programs. "On-bill financing" programs allow customers to finance energy efficiency measures through their energy bills at low interest or no interest. On-bill financing allows entities who have limited access to financing to purchase energy efficiency measures provided by utility programs. SDG&E and SoCalGas currently offer on-bill financing for non-owner occupied multi-family units, small businesses and local governments. However, the utilities have raised concerns that on-bill financing programs may violate consumer credit lending laws.

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