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**SENATE COMMITTEE ON ENERGY, UTILITIES AND  
COMMUNICATIONS**  
**Senator Ben Hueso, Chair**  
**2015 - 2016 Regular**

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**Bill No:** AB 802 **Hearing Date:** 9/10/2015  
**Author:** Williams  
**Version:** 9/4/2015 As Amended  
**Urgency:** No **Fiscal:** Yes  
**Consultant:** Jay Dickenson

**SUBJECT:** Energy efficiency

**PURSUANT TO SENATE RULE 29.10 (c)**

**DIGEST:** This bill addresses three distinct energy programs. First, this bill expands the types and level of information the California Energy Commission (CEC) may require to be submitted to it and requires CEC to have reasonable policies and procedures to protect customer information.

Second, this bill abolishes the existing CEC-administered “AB 1103” program of nonresidential building energy consumption disclosure and replaces it with an energy use “benchmarking” program for certain larger commercial and residential buildings.

Third, this bill requires the California Public Utilities Commission (CPUC) to authorize electrical corporations or gas corporations (IOUs) to provide incentives and assistance for measures to conform a building to CEC’s energy efficiency standards for existing buildings and to allow IOUs to recover in rates the reasonable costs of those incentives and assistance.

**ANALYSIS:**

Existing law:

- 1) Requires the CEC biennially to conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices and to use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, and protect public health and safety. The CEC publishes its assessments and forecasts every two years in its Integrated Energy Policy Report (IEPR). (Public Resources Code §25301.)

- 2) Requires each electrical and gas utility to maintain records of the energy consumption of all nonresidential buildings to which it provides service. The utility must upload energy consumption data to a database upon authorization of a nonresidential building owner or operator. The owner or operator of a nonresidential building discloses the benchmarking data and ratings for the building for the most recent 12 months to a prospective buyer, lessee, or lender. This is informally known as the “AB 1103” program. (Public Resources Code §25402.10.)
- 3) Establishes a charge on electricity and natural gas consumption to fund cost-effective energy efficiency and conservation activities. (Public Utilities Code §§381 and 890)
- 4) Requires electrical corporation procurement plans to first meet unmet resource needs through all available energy efficiency, and demand reduction resources that are cost effective, reliable, and feasible. (Public Utilities Code §§454.5 (b)(9)(C))
- 5) Requires the CPUC to identify all potentially achievable cost-effective electricity and natural gas efficiency savings and to establish energy efficiency procurement targets and ratepayer-funded programs for IOUs. Requires a gas corporation to first meet its unmet resource needs through all available natural gas efficiency and demand reduction resources that are cost effective, reliable, and feasible. (Public Utilities Code §§454.55 and 454.56.)
- 6) Requires the CEC to develop and implement a comprehensive program to achieve greater energy savings in California’s existing residential and nonresidential building stock. (Public Resources Code §25943)

This bill:

*Regarding CEC data collection and forecasts:*

- 1) Expands the types of information the CEC, as part of its biennial energy industry assessments and forecasts, may require to be submitted to it to include individual customer historic electric or gas service usage, or both, and individual customer historic billing data, in a format and level of granularity specified by the CEC.
- 2) Requires the CEC to maintain reasonable policies and procedures to protect customer information from unauthorized disclosure.

- 3) Directs the CEC, in consultation with the CPUC, to make all reasonable adjustments to its energy demand forecasts to account for its findings of market conditions and existing baselines.

*Regarding benchmarking:*

- 4) States that building owner should have access to their buildings' energy use to improve building management and investment decisions.
- 5) States the intent of the Legislature that the CEC create a benchmarking and disclosure program through which owners of commercial and multifamily buildings above 50,000 square feet in gross floor area better understand their energy consumption through standardized metrics.
- 6) Abolishes the "AB 1103" program of nonresidential energy use disclosure, administered by the CEC.
- 7) Creates a new energy use benchmarking program for "covered buildings," meaning (a) any building with no residential utility accounts, or (b) any building with five or more active utility accounts, residential or nonresidential.
- 8) Beginning January 1, 2016, requires a utility that sells electricity, natural gas, steam, or fuel oil to a customer for end uses addressed by the United States Environmental Protection Agency's (US EPA's) ENERGY STAR Portfolio Manager system to maintain records for 12 calendar months of the energy usage data of all buildings to which they provide service.
- 9) Beginning January 1, 2017, requires a utility to provide aggregated energy usage data to the owner or operator of a covered building, within four weeks of the owner or operator's request, subject to the following requirements:
  - a. For a covered building with three or more active utility accounts, the utility shall deliver the aggregated energy usage data for all utility customers in the same building for each of the prior 12 months, at a monthly level unless otherwise specified by CEC. The aggregated energy usage data shall not be deemed customer utility usage information or confidential information by the utility for purposes of delivery. The building owner and utility shall not have any liability for any use or disclosure of aggregated usage information delivered in keeping with the bill's requirements.
  - b. For all other covered buildings, the utility shall deliver aggregated energy usage data for all utility customers in a given building for each of the prior 12 month, at a monthly level unless otherwise specified by

CEC, only if the accountholder provides written or electronic consent to the building owner or operator.

- 10) Authorizes CEC to specify additional information a utility must deliver to allow an owner or operator of a covered building to complete energy use benchmarking.
- 11) Declares the building owner and utility shall not have liability for any use or disclosure by others of usage information delivered as required by this bill.
- 12) Directs CEC to adopt regulations governing the delivery to CEC of benchmarking results, which are distinct from aggregate energy usage data, and for the public disclosure of the benchmarking results, and authorizes CEC, in adopting the regulations, to make a number of determinations, including additional covered buildings not subject to the public disclosure requirement and categories of data that are protected from release under existing laws.
- 13) States that CEC's regulations governing delivery and public disclosure of benchmarking results shall not require an owner of a building with 16 or fewer residential utility accounts to collect or deliver usage information to the CEC for public disclosure.
- 14) States that the reasonable cost of an IOU to deliver information as required by this bill are recoverable in rates.
- 15) States that the reasonable costs of a local publicly owned utility in disclosing electrical usage data pursuant to this bill may be considered "cost-effective demand-side management services to promote energy efficiency and energy conservation" and thereby reimbursable by the utility's general fund.

*Regarding energy efficiency measures for existing buildings:*

- 16) Requires the CPUC, by September 1, 2016, to authorize an IOU to provide incentives for the cost of energy efficiency programs based on all estimated energy savings, including energy savings from bringing existing buildings into compliance with mandatory energy efficiency codes for existing buildings issued by the CEC, and authorizes an IOU to recover the costs in rates. States that the energy efficiency measures described above may include savings and reductions from measures to conform a building with existing energy efficiency regulation, as well as certain operational, behavioral, and retrocommissioning activities.

- 17) States that the CPUC may adjust the energy efficiency procurement targets to reflect energy efficiency savings achieved in meeting or exceeding mandatory energy efficiency codes for existing buildings.
- 18) Authorizes the IOUs, effective January 1, 2016, to provide the financial incentives and assistance described above for “high opportunity projects or programs.”

### **Background I – CEC’s IEPR**

*CEC assessments and forecast: expanded authority.* Statute requires CEC to prepare a biennial integrated energy policy report, known as the IEPR, that contains an assessment and forecast of major energy trends and issues facing the state's electricity, natural gas and transportation fuel sectors. Statute directs the CEC to use the IEPR assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure reliable, secure, and diverse energy supplies, enhance the state's economy and protect public health and safety.

Statute provides CEC with broad authority to require the submission of various types of information to enable it to perform the assessments and forecasts that comprise the IEPR. Statute specifically authorizes CEC to require submission of demand forecasts, resource plans, market assessments, and related outlooks. This bill expands the specific types of information CEC may compel entities to provide it to include individual customer historic electric or gas service usage, or both, and individual customer historic billing data, in a format and level of granularity specified by the commission. This bill also expands the CEC IEPR responsibilities to include the development and evaluation of energy policies and programs. Finally, this bill directs CEC to maintain reasonable policies and procedures to protect customer information from unauthorized disclosure.

### **Background II – Energy Usage Benchmarking and Public Disclosure**

*Death to benchmarking. Long live benchmarking.* Benchmarking compares the energy consumption per square foot of floor space for comparable classes of buildings. It is a tool for understanding the relative energy efficiency of buildings.

Under current law, CEC administers the Nonresidential Building Energy Use Program, a benchmarking and public disclosure program more commonly known as the AB 1103 program. Under this program, an owner or operator of a large commercial building must disclose energy consumption data to a prospective buyer, lessee or lender. IOUs are required to maintain and disclose the necessary data for the rankings by uploading it to the US EPA’s ENERGY STAR Portfolio Manager.

This bill replaces the AB 1103 program with a new energy use benchmarking and public disclosure program. Under this new program, a utility must maintain energy usage data for all buildings to which it provides service for at least the most recent 12 complete calendar months. The utility would need to provide the benchmark data to a building owner or operator within four weeks of request, and the CEC would develop regulations to govern delivery of benchmark data to the commission and the public disclosure of such data. This bill includes language that states the intent of the Legislature that the CEC create a benchmarking and disclosure program through which owners of commercial and multifamily buildings 50,000 square feet and larger will better understand their energy consumption through standardized energy use metrics.

The CEC acknowledges that the AB 1103 program has been less than successful. It has delayed program implementation repeatedly. In justifying its most recent delay of the program, the CEC cited the following “substantial barriers” to program success<sup>1</sup>:

- Technical difficulties in the roll-out of the US EPA’s ENERGY STAR Portfolio Manager platform and software.
- Ambiguity about when public disclosure of energy usage data.
- Infrequency of public disclosure of energy usage data.
- Utilities and electric service providers requiring tenant consent before releasing required energy use data to building owners, causing delay and increasing transaction costs.
- Reported inability of smaller utilities to process necessary program information.
- Resistance to the requirements of program regulations.

The benchmarking program in this bill differs from the AB 1103 program in several significant ways that potentially improve the program. Specifically, this bill:

- Explicitly directs each utility to maintain energy use data for all buildings to which it provides service and to promptly provide the data to owners of covered buildings, upon request.
- Expands the benchmarking program to cover all commercial and residential buildings.
- Relieves owners of smaller buildings by focusing the benchmarking program on buildings larger than 50,000 square feet gross floor area (at

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<sup>1</sup> [http://www.energy.ca.gov/ab1103/notices/2014-07-22 Notice to Consider Adoption Emergency Regs 1682c and 11346-1 on July 22 2014.pdf](http://www.energy.ca.gov/ab1103/notices/2014-07-22%20Notice%20to%20Consider%20Adoption%20Emergency%20Regs%201682c%20and%2011346-1%20on%20July%2022%202014.pdf)

least, as expressed in this bill's intent language but, curiously, not in the codified sections of this bill).

- Allows CEC to specify in regulations when public disclosure of benchmarking results is to occur, thereby removing ambiguity about the timing of disclosure requirements.

*Privacy concerns.* Some entities, including the California Municipal Utilities Association (CMUA) and Northern California Power Association (NCPA), express concern with explicitly authorizing CEC to compel utilities and others to share individual energy use data, and at a format and level specified by CEC. These entities contend that customer energy usage data belongs to the customer and that the customer should decide who receives such data.

This bill includes numerous provisions to protect customer data. For example, in regards to CEC's energy industry assessments and forecasts, this bill requires utilities and others to share individual customer historic energy usage and billing data only with CEC, and this bill requires CEC to maintain reasonable policies and procedures to protect customer information from unauthorized disclosure.

This bill also seeks to prevent the release of customer usage data for benchmarking purposes. The bill requires utilities to release aggregate energy usage data only to the owner of a covered building upon request. This bill limits this reporting mandate to commercial buildings with three or more active utility accounts and residential buildings with five or more active utility accounts. In most conceivable cases, it would be somewhat difficult or impossible for a third party to glean much about an individual tenant's energy use by reference to the energy usage data provided to a building owner. This is because the data is, as mentioned, in the aggregate for all of a building's tenants and covering a year in twelve monthly increments, and the utility will not provide individual tenant energy usage data to the owner of a covered building without the tenant's permission. What's more, many building owners have access to the electric and gas meters of their tenants in any case.

Similarly, this bill's provisions regarding public disclosure of benchmarking results seek to protect individual customer data. This bill prohibits the CEC from requiring the owner of a building with 16 or fewer residential utility accounts to collect or deliver energy usage information data to CEC for public disclosure. This bill also authorizes CEC to identify additional covered building types that are not subject to the public disclosure requirement. And the CEC is subject, as this bill notes, to the confidentiality and other requirements of the Public Records Act, Information Practices Act and other laws protecting privacy and confidentiality.

Despite these protections, it may be possible to learn something of an individual tenant based on aggregated customer energy usage. As an illustration, NCPA describes a large building with three commercial tenants, two of which are very small. Some of NCPA's member utilities report of industrial customers who are very protective of their industrial data. Such customers imagine a rival discerning business activity, such as an upcoming product release, based upon an increase in a building's aggregate energy use over the course of a month. Of course, statute prevents a building owner from disclosing such data to a third party. (See California Civil Code §1798.98.) However, such information might be quite valuable, and disclosure could happen, legal prohibition notwithstanding.

In addition, this bill explicitly authorizes CEC to require utilities to make covered building usage data aggregated at a sub-monthly level. Were the CEC to do so, such frequent interval energy usage data could be quite revealing indeed. And even the requirement that CEC maintain reasonable policies and procedures to protect customer information provides only so much comfort: no one, the CEC included, is immune to cyber theft, especially of the sophisticated kind.

*Drafting error?* According to the author, the current version of this bill includes a drafting error in Public Resources Code §25401.10 (d)(1): there should be a period after the word "commission;" however, this bill erroneously includes the words "for public disclosure" after the word "commission." The effect, if any, of inclusion of these three words is unclear. It seems, and the author reports his intent that, the addition of "for public disclosure" does not imply that the owner of a building with 16 or fewer utility accounts may be required to deliver usage information to the CEC if used for a purpose other than public disclosure. *In any case, the committee may wish to amend this bill as follows:*

Public Resources Code §25401.10(d)(1)

This subdivision shall not require the owner of a building with 16 or fewer residential utility accounts to collect or deliver usage information to the commission ~~for public disclosure~~.

*Many terms, few meanings?* This bill's benchmarking provisions seem to use different terms for the same concepts. For example, this bill uses the following similar terms:

- Aggregated customer information.
- Aggregated energy usage data.
- Aggregated energy usage.
- Aggregated usage information.
- Benchmarking of the energy use.
- Benchmarking results.

- Energy usage data.
- Usage data.

According to the author, the following groups of terms have equivalent meanings, as used in this bill:

- Aggregated customer information; aggregated energy usage data; aggregated energy usage; aggregated usage information.
- Benchmarking of the energy use; benchmarking results.
- Energy usage data; usage data.

*The committee may wish to amend this bill to make consistent use of these terms.*

### **Background III – Energy Efficiency of Existing Buildings**

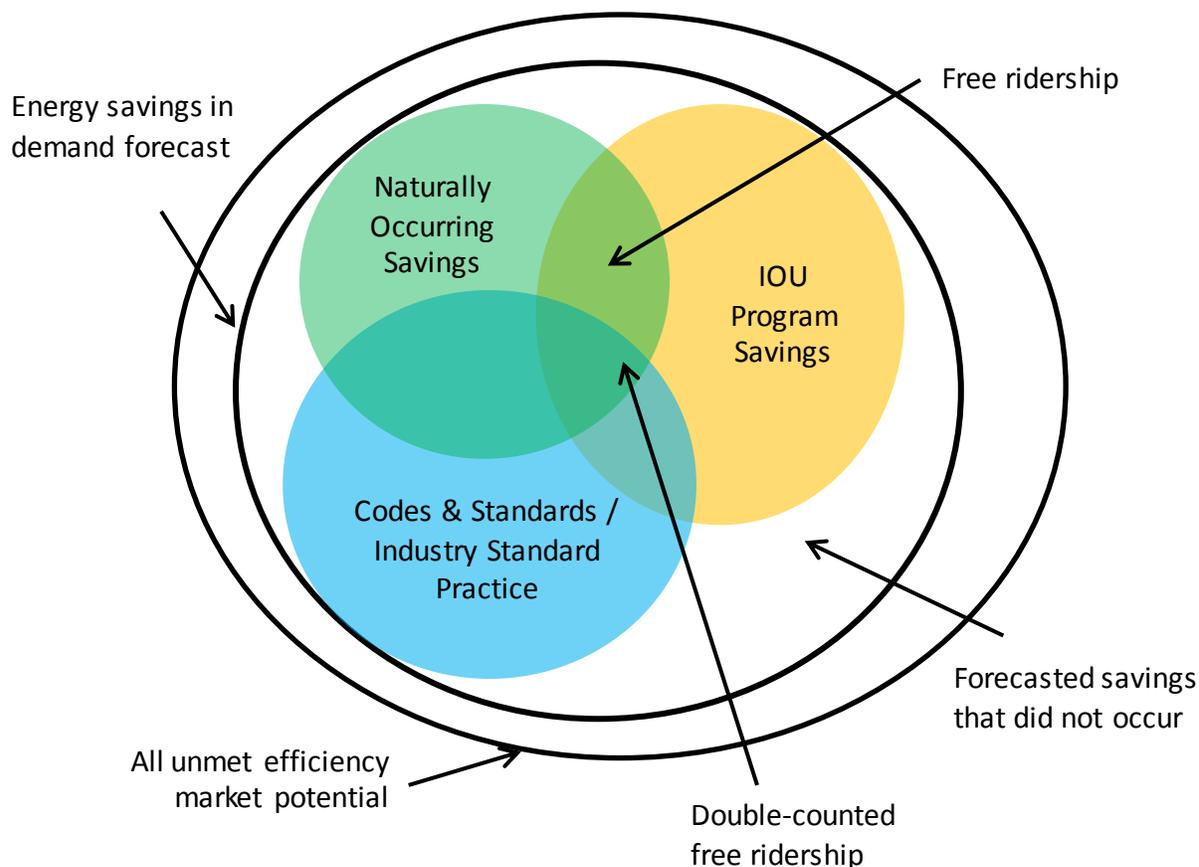
*Energy efficiency atop the load.* The “loading order” guides the state’s energy policies and decisions according to the following order of priority: (1) decreasing energy demand by increasing energy efficiency; (2) responding to energy demand by reducing energy usage during peak hours; (3) meeting new energy generation needs with renewable resources; and (4) meeting new energy generation needs with clean fossil-fueled generation. This policy has been adopted by the energy agencies – the CEC and CPUC – and its principles guide all energy programs.

Consistent with the loading order, statute requires both electrical and gas IOUs to meet unmet resource needs with all available energy efficiency and demand reduction that is cost-effective, reliable and feasible. The CPUC uses these criteria to establish energy efficiency targets for the IOUs. To achieve these targets, the IOUs (and, in some cases, community choice aggregators) administer energy efficiency programs with ratepayer funds approved by the CPUC. Currently funded at about \$1 billion per year, the programs include a portfolio of financial incentives, loans, and rebates for installing energy efficient appliances, lighting, windows, HVAC systems, whole-house retrofits, and sector-specific efforts.

*Setting the bar high.* According to existing CPUC rules, each IOU claims credit for energy savings from the portfolio of energy efficiency measures in its energy efficiency program. The CPUC evaluates the claimed energy savings and, after adjustment, authorizes financial rewards for the IOU.

The CPUC measures claimed savings against a baseline, which the CPUC generally defines as being comprised of three factors: (1) “naturally occurring savings,” (2) standard industry practice and (3) the CEC’s Title 24 energy efficiency standards for existing buildings. The CPUC sets the baseline at this level to avoid “free ridership,” that is, credit for energy savings that would have

occurred absent the IOUs' energy efficiency programs. Currently, the CPUC assumes that measures to bring an existing building into compliance with CEC's energy efficiency standards would have occurred absent the IOUs' energy efficiency programs. (See figure below.)



Recently, some parties have complained that the CPUC-established baseline of energy efficiency measures prevents realization of additional, cost-effective energy savings. This is because the baseline prevents the IOUs from receiving ratepayer monies for encouraging energy-saving building measures that fall below CEC's energy efficiency building standards. In fact, Pacific Gas and Electric (PG&E) reports the results of two studies – both commissioned by PG&E and, as yet, not reviewed by an independent third party – that show that most potential cost-effective energy efficiency savings are represented by projects that are below the CEC's building code standards. PG&E, and others, contend that the state will not be able to attain the ambitious energy efficiency goals currently contemplated by the Legislature unless the CPUC credits the IOUs with the energy savings that result from below-code projects. Proponents additionally contend that the most cost-effective energy efficiency projects are those below the energy efficiency building standards.

*High opportunity projects or programs.* This bill authorizes IOUs, effective January 1, 2016, to provide financial incentives and other assistance for below-code high opportunity projects or programs. This bill directs the CPUC to provide expedited authorization of high opportunity projects and programs to apply the savings baseline provisions in subdivision. This bill, however, does not define or further describe high opportunity projects and programs.

### **Related Legislation**

AB 1094 (Williams, 2015) authorizes the CEC to analyze energy consumption of plug-in equipment and set energy efficiency targets and require the CPUC to work with the CEC to address electricity consumption by plug-in equipment. The bill was held in the Assembly Committee on Appropriations.

SB 350 (De León, 2015) enacts the *Clean Energy and Pollution Reduction Act of 2015*. The bill is currently under consideration by the Assembly Floor.

AB 531 (Saldana, Chapter 323, Statutes of 2009) gave the CEC authority to set a schedule for compliance with the requirements of AB 1103.

AB 1103 (Saldana, Chapter 533, Statutes of 2007) required electricity and gas utilities to maintain records of the energy consumption of all nonresidential buildings to which they provide service and to upload energy consumption data to US EPA ENERGY STAR Portfolio Manager upon authorization of a nonresidential building owner or operator. The bill also required the owner or operator of a nonresidential building to disclose the Portfolio Manager benchmarking data and ratings for the building for the most recent 12 months to a prospective buyer, lessee, or lender.

**FISCAL EFFECT:** Appropriation: No Fiscal Com.: Yes Local: No

### **SUPPORT:**

Bay Area Regional Energy Network  
Building Owners and Managers Association of California  
California Building Industry Association  
California Business Properties Association  
California Energy Efficiency Industry Council  
California Housing Partnership Corporation  
California State Association of Electrical Workers  
California State Council of Laborers  
California State Pipe Trades Council

Center for Sustainable Energy  
City of Berkeley Mayor, Tom Bates  
Coalition of California Utility Employees  
Commercial Real Estate Development Association  
EnerNOC, Inc.  
Institute of Heating & Air Conditioning Industries, Inc.  
Institute of Market Transformation  
International Council of Shopping Centers  
Mission:data Coalition  
National Association of Energy Service companies  
Natural Resources Defense Council  
Pacific Gas and Electric Company  
San Diego Gas & Electric Company  
Sempra Energy Utilities  
Southern California Edison  
Southern California Gas  
TechNet  
The Utility Reform Network  
Union of Concerned Scientists  
Western States Council of Sheet Metal Workers

**OPPOSITION:**

California Municipal Utilities Association

**ARGUMENTS IN SUPPORT:** The author and proponents contend the benchmarking program created by this bill will allow for better management of building energy efficiency. PG&E, Sempra Energy Utilities and Southern California Gas and Electric write in support of the energy efficiency components of this bill, contending the state will be unable to achieve its energy efficiency goals unless the IOUs are able to provide incentives and receive credit for projects to bring existing buildings up to the CEC's energy efficiency standards for existing buildings.

**ARGUMENTS IN OPPOSITION:** The CMUA expresses opposition to the benchmarking provisions of this bill, which CMUA describe as violating the customer's ownership right of energy use information.

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