

**PACIFIC GAS AND ELECTRIC COMPANY,
SAN DIEGO GAS AND ELECTRIC COMPANY, AND
SOUTHERN CALIFORNIA GAS COMPANY
Energy Efficiency OIR Post-2008
Rulemaking 09-11-014
Data Response**

PG&E Data Request No.:	ED_038-01-05		
PG&E File Name:	EnergyEfficiencyOIR-Post-2008_DR_ED_038-Q01-Q5		
Request Date:	April 3, 2011		
Date Sent:	April 11, 2011	Requesting Party:	Energy Division
PG&E Witness:		Requester:	Simon Baker

Per our meeting last Wednesday, here are the questions I am looking for answers for from the IOUs in Relation to SB 454:

QUESTION 1

What percent of the state's total targeted contractor jobs, and equipment + appliance sales go through utility rebate programs*? (*includes statewide, third-party, utility local programs, local government partnerships, and LIEE programs)

ANSWER 1

The IOUs do not have comprehensive data on the state's total targeted contractor jobs or what percent go through utility rebate programs. The Contractor State License Board (CSLB) has authority over contractors and may have this information. In addition, the IOUs do not have comprehensive data on equipment and appliance sales in California. This data is often considered proprietary information that is not publicly available. Therefore, the IOU's cannot estimate what percent of all contracted jobs and/or appliance occur through utility rebate programs.

Given that the IOUs do not have comprehensive data on the state's total targeted contractor jobs, the IOUs contacted CSLB in an attempt to determine what, if any, aggregated information is available from the State. CSLB informed the IOUs that it does not collect statewide data regarding the permit issuances. In investigating potential other sources of data, the IOUs discovered that the U.S. Census Bureau collects information concerning building permits. Both annual and monthly reports are available by county through the following web site. The IOUs do not make any representations as to the accuracy or completeness of the data that may be available, but do note it is a potential source of additional information available to Energy Division.
<http://censtats.census.gov/bldg/bldgprmt.shtml>

QUESTION 2

For contractors, how much does a typical permit cost, and what is the range of costs across jurisdictions? Please provide (a) the fully "loaded cost" and (b) breakdown of component cost.

ANSWER 2

The IOUs do not have detailed data regarding permitting costs for all energy efficiency measures. There are approximately 500 jurisdictions in California, each with its own permitting requirements and related costs for different energy efficiency measures. Based on consultation with several HVAC contractors, the IOUs provide the following estimates.

- Mechanical permit costs for residential HVAC installations range from a low of \$38 to a high of \$410 each.
- Some jurisdictions require that an electrical permit be pulled along with the mechanical permit, which could add another \$50 to this cost.
- "Loaded costs", defined as incidental costs associated with pulling the permit (e.g., standing in line at the permit office, value of time expended waiting for an inspector, etc.), can range from \$300 to \$500 (and may also vary by jurisdiction).
- Another non-permit cost that impacts the customer is required when a job is included in a sample group that requires a HERS rating. Customer costs for a HERS rating are typically \$300 to \$750.

Based on this reported information, the total cost to the customer for permitting and compliance can exceed \$1,500 in some cases.

Permitting for commercial installations can be more complex. These requirements and costs vary by project, and are affected by structural and electrical requirements and other tangential compliance costs such as design review, crane permits, and others.

The CSLB website provides additional information on permitting requirements, identifies the numerous code requirements in various jurisdictions, and includes links to town, city and county building departments, each with their own policies. Permit fees are not available on the CSLB website and must be obtained by calling the applicable permitting department.

QUESTION 3

How does this permit cost compare to the size of the "typical" utility incentive?

ANSWER 3

As discussed above, California building permit costs vary widely depending on the county and jurisdiction, as well as the scope of work. Utility rebates and incentives also vary depending on the type of products and/or services selected by customers. While there is no “typical” utility rebate or incentive amount, by way of example, HVAC incentives range from \$50 for room air conditioners to \$2000 for the quality installation of high-efficiency residential central air conditioners and heat pumps. Commercial equipment is currently incentivized through the manufacturers and distributors.

QUESTION 4

What is being done by the CEC, CSLB, and/or others to secure full permit (or certification) compliance?

ANSWER 4

The IOUs do not have information to provide an exhaustive list of all such efforts. At a high level, the CEC is responsible for compliance and certification in the State and provides education on requirements and standards through online training and in-person presentations. The CEC and CSLB, as a result of the collaboration with members of the Western HVAC Performance Alliances’ Compliance Committee, have made some standard permit forms easier to use, which presumably would help to improve permit compliance. The CSLB has authority over contractors and others to ensure proper licensing in the State; they respond to complaints and may perform inspections.

While it is not the role of the IOUs to enforce compliance, the IOUs actively contribute to the development of a culture of compliance in California through participation in the statewide Codes & Standards Program, and through support of the broad stakeholder effort of the Western HVAC Performance Alliance (WHPA), which includes the CEC and CSLB, and others.

The primary purpose of the Codes & Standards’ Compliance Enhancement Program (CEP) is to increase the number of customers complying with energy efficiency standards through delivery of the following services:

- Providing training and support to building officials;
- Developing and testing process improvement tools while collaborating with California Building Officials (CALBO), International Code Council (ICC) and the CEC to conduct outreach and encourage other jurisdictions to adopt these tools;
- Collaborating with the CEC, CALBO and California Association of Building Energy Consultants (CABEC) to increase the stringency of the Title 24 Certified Energy test, initiate a certification process for Title 24 consultants, and encourage California Department of Consumer Affairs (CSLB) to encourage compliance with HVAC permitting requirements to its members; and
- Working with experts and entities to simplify and expedite the permitting and compliance processes such as increase the availability of online permitting

resources and promote consistency of requirements and documentation across all jurisdictions.

The IOUs have also worked in collaboration with the Energy Division, Office of the Attorney General, the California Energy Commission, and the Contractor State License Board to promote a culture of compliance in California through the following efforts, and have recently agreed to do the following:

- Post a statement on IOU websites explaining that under California law, models of certain types of appliances, (for example, refrigerators, dishwashers and clothes washers and others,) must be certified with the California Energy Commission before being sold or offered for sale in the state. This statement will include a link to the CEC's database.
- Proactively communicate with retailers the state's requirement that only CEC-approved products be sold. In instances where the IOUs provide specific model information to retailers, the IOUs first verify that any such models are in the CEC's database prior to providing this information to retailers.
- Post a customer education piece called "Guide for Heating Ventilating and Air Conditioning (HVAC) Systems," which explains why quality installation matters, the benefits of hiring a licensed contractor and the quality assurance that comes through obtaining a permit.
- Add a check box to their rebate applications for HVAC equipment requiring the customer to certify that they have used a licensed contractor as appropriate and followed applicable permitting requirements for their installation.

QUESTION 5

Are studies or information sources available to affirm or refute claims that obtaining building permits and having installations done by licensed contractor's results in energy savings? What studies are they and what did they conclude?

ANSWER 5

The IOU EM&V teams have researched CALMAC and other sources, but have not been able to identify any studies that confirm or refute claims that compliance with permitting requirements or the use of a licensed contractor may result in greater energy savings. The IOUs also note the difficulty of performing this type of study, as it would require a customer to self-report non-compliance with laws. It would also be difficult to determine what, if any, perceived energy saving differences would be attributable solely to the permitting aspect of the installation.