



**Report to the Legislature per AB 2404**

***CPUC's Embedded Energy in Water  
Conservation Pilot Programs***

**CALIFORNIA PUBLIC UTILITIES COMMISSION  
STAFF REPORT  
MARCH 2010**



# **Report to the California Legislature on the CPUC's Embedded Energy in Water Conservation Pilot Programs March 2010**

**This report is in response to the directive in AB 2404 that:**

*SEC.2. The Public Utilities Commission shall by March 31, 2010, report to the Legislature on the results of the pilot programs approved in Decision 07-12-050. The commission shall provide conclusions drawn from the pilot programs and make recommendations as to whether the electrical and gas corporations would or could achieve cost-effective energy efficiency improvements through water conservation programs.*

## **Background**

The California Public Utilities Commission (CPUC or Commission) issued Decision (D.) 07-12-050<sup>1</sup> in December 2007, approving \$6.4 million for pilot programs for the four largest investor owned energy utilities (IOUs)<sup>2</sup> through which they will develop partnerships with water agencies, undertake specific water conservation programs, and study the potential for energy efficiency savings achieved via embedded energy through water use-reduction measures.<sup>3</sup> The CPUC authorized the pilot programs and studies to begin in January 2008 with initial program designs and baseline studies, and actual pilot program implementation for a twelve-month period starting July 1, 2008. The Commission anticipates that the results of the pilot programs will inform later decisions about the incorporation of water conservation efforts in future energy efficiency program cycles.

## **Embedded Energy in Water Pilot Programs Status**

Table 1 shows the pilot programs that the CPUC approved in D.07-12-050. The IOUs started implementing the programs on July 1, 2008. The CPUC subsequently granted extension of the programs for six months on July 9, 2009<sup>4</sup> due to implementation that progressed more slowly than anticipated for a number of reasons, including the diversion of water agency resources in response to drought conditions throughout the state and

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<sup>1</sup> D.07-12-050, [http://docs.cpuc.ca.gov/PUBLISHED/FINAL\\_DECISION/76926.htm](http://docs.cpuc.ca.gov/PUBLISHED/FINAL_DECISION/76926.htm).

<sup>2</sup> These IOUs are Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E), Southern California Gas Company (SoCalGas), and Southern California Edison Company (SCE).

<sup>3</sup> In addition to this group of pilot programs, the Commission approved three statewide studies to further examine the relationship between energy and water in California. These studies are necessary to understand more accurately the relationship between water savings and the reduction of energy use, and the extent to which those reductions would vary for different water agencies. The three studies approved in D.07-12-050 began in October 2008, and will all be completed by October of this year.

<sup>4</sup> D.09-07-008, [http://docs.cpuc.ca.gov/PUBLISHED/FINAL\\_DECISION/104164.htm](http://docs.cpuc.ca.gov/PUBLISHED/FINAL_DECISION/104164.htm).

unforeseen economic challenges faced by participating customers. In accordance with the new schedule, implementation activities were completed by December 31, 2009.

**Table 1. Pilot Programs Approved in D.07-12-050**

<b>Utility</b>	<b>Program</b>
<b>SCE</b>	<b>Low Income Direct Install High Efficiency Toilet (HET) – Multi-family Express Water Efficiency Lake Arrowhead Water Conservation* Water Leakage</b>
<b>PG&amp;E</b>	<b>Large Commercial Customer Low Income Single Family HET Emerging Technologies in Water Utility Efficiency</b>
<b>SDG&amp;E</b>	<b>Managed Landscape Large Industrial Customer Audits Recycled Water</b>
<b>SoCalGas</b>	<b>CLAWA/EMWD Gas Pump Testing</b>

\* This pilot program was initially proposed as a partnership among SCE, SoCalGas, and the Lake Arrowhead Community Services District. The CPUC canceled this program upon request by the partnership in November 2008 (D.08-11-057).<sup>5</sup>

This 6-month program extension precluded the possibility of producing evaluation results in time for this report to the Legislature required by AB 2404. Evaluation, measurement and verification (EM&V) of the pilot programs is now underway under the oversight of the CPUC’s Energy Division. A draft evaluation report is expected in July 2010, and will be finalized shortly thereafter. Table 2 below presents Energy Division’s key evaluation dates.

**Table 2. Embedded Energy in Water Pilot Programs Evaluation Timeline**

<b>Activity</b>	<b>Schedule</b>
<b>Pilot Projects complete</b>	<b>December 2009</b>
<b>EM&amp;V fieldwork complete</b>	<b>March 2010</b>
<b>Draft final EM&amp;V report issued for comments</b>	<b>July 2010</b>
<b>Public vetting of draft EM&amp;V report</b>	<b>August 2010</b>
<b>Final EM&amp;V report finished</b>	<b>September 2010</b>

**Submittal of a Full Report**

The CPUC will submit a complete report in response to AB 2404 60 days after the final evaluation report is issued by the Energy Division as shown above. We anticipate that this will occur in September 2010 and that a full report in response to AB 2404 will be ready by November of this year.

<sup>5</sup> D.08-11-057, [http://docs.cpuc.ca.gov/WORD\\_PDF/FINAL\\_DECISION/94264.PDF](http://docs.cpuc.ca.gov/WORD_PDF/FINAL_DECISION/94264.PDF).