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MEMO

Date: September 1, 2009
To: Board of Directors
From: Philipp Degens, Evaluation Manager
Kim Crossman , Sr. Industrial Sector Manager
Subject: Staff Response to the 2007 Impact and 2008-2009 Process Evaluation of the Production Efficiency Program

The Production Efficiency (PE) program is now in its seventh year of operation. The evaluation covers a period of significant program changes. The most significant change was the transition of program management from the Program Management Contractor to an internal team of three permanent Energy Trust staff. The program has also widened its scope of services with the adoption of three pilots focusing on O&M and a vendor-oriented Small Industrial Initiative. The pool of Project Development Coordinators (PDCs) has also been expanded and their areas of geographic coverage and industrial specialization have also been adjusted. Smaller changes have included the addition of gas efficiency offerings and the development and adoption of technical study guidelines.

The program-predicted savings for custom measures was on average close to those verified. The exceptions were the four wastewater projects that came on-line in 2007, where only a small fraction of the savings could be verified. The program has been aware of issues in this sector and since 2008 has had a half-time wastewater specialist to provide project oversight. If this sector is not included, the average program realization rate is 98%.

One major area of concern is the megaproject that represents 45% of the expected program savings. The savings could not be verified as a site visit could not be scheduled. There are many reasons for this (change in ownership, short-term plant shutdown, the plant becoming a self director). The inability to verify the savings will delay finalizing the evaluation. Energy Trust has instituted steps to reduce this type of event for megaprojects by requiring megaprojects to include evaluation plans that will specify monitoring and verification plans for these projects that will begin after final site verification. Instituting monitoring and verification plans for other large projects that make up a significant portion of the programs will also be considered.

The impact of the economy on savings was also an issue for the evaluation. Short term changes in plant operations were viewed as such and savings were estimated for normal operating conditions. In the few cases where it was unclear if and when the plant would resume normal operations, the midpoint of current and normal operating savings was used to incorporate this uncertainty. Energy Trust also plans on addressing the issue of savings persistence by performing a study of the prevalence of plant closures among participating plants.

Free ridership estimates increased in 2007 and 2008 (28% and 25%) over 2006 (20%). With the majority of participants indicating that corporate policies played a roll in their decision (80%) and that energy efficiency features were common for the application (78%), a high level of free ridership is not unexpected. Unfortunately no specific trend could be identified in these estimates to provide guidance in program redesign. To help provide more robust estimates Energy Trust has implemented a pilot to obtain information on participant investment decisions closer to the time of project completion and from a larger sample of participants. This should provide more timely information to the program with sufficient detail to support program design decisions. With program goals being set using net savings estimates, the higher free rider rates pose a significant challenge in meeting increasing program goals and drive up program levelized costs.

The program continues to garner a high level of participant satisfaction and all survey respondents stated that they would participate in the program again. Over half of the respondents also indicated that they had installed additional energy efficiency measures that had not received program incentives. Nearly a third of these indicated that the program had a high level of influence on this decision.

Project study guidelines have been instituted and are reviewed on a regular basis and the program plans on more clearly communicating Energy Trust's need to verify savings to ensure greater participation in future evaluations. Energy Trust continues to streamline and simplify data collection and program paperwork to facilitate participation. Program staff are also engaged in recruiting and mentoring vendors and contractors to expand the ATAC and vendor pool.

With an initiative focused on the smaller industrial customers, two pilots focused on O&M, one pilot aimed at plant-level energy management and one pilot focused on gas efficiency, the program now provides services to a broad spectrum of the industrial sector. These new services combined with an existing set of services that are well attuned with the needs of the nonparticipant population and a base of satisfied participants should provide the program with a stream of projects well into the future.