From: Dietz, Sidney
Sent: 6/29/2012 9:36:40 AM
To: Khosrowjah, Sepideh (sepideh.khosrowjah@cpuc.ca.gov) (sepideh.khosrowjah@cpuc.ca.gov)
Cc:
Bcc:
Subject: ESAP and EE cost-effectiveness numbers for furnaces and water heaters

Sepideh –

Here are a few numbers from our team around the issue of cost effectiveness and energy savings of the furnace and water heater measures for landlords. I've also included the CPUC's ranked list of measures for PG&E's ESAP.

I think the problem of having tenants being deprived of basic services in their units is an awful one, whether a central heating or cooling system is broken or just turned off by a landlord. And I hope that PG&E can be a part of the solution. I think we should confront the problem directly, though, with a program designed specifically for this situation – I think the numbers below show that trying to bend cost effectiveness or thinking about energy savings won't get us to a solution since our problem has to do with fairness, dignity, comfort, health, and safety. In fact, solving the problem won't save money or save energy since the problem is the under use of energy.

Let me know if you have any questions.

yours,

sid

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Comparison of Core Program and ESA Program cost-effectiveness results for furnaces and water heaters

The TRCs (Total Resource Costs) for furnace and water heater rebates in the core Energy Efficiency program are between 0.31 and 1.13 (as calculated by the Commission-approved E3 calculator for PG&E's 2013-14 EE Application), whereas the TRCs for these measures in the ESA program are zero given that there are no savings associated with replacements under this program (Impact Evaluation of the 2009 CA Low Income Energy Efficiency Program, Final Report. ECONorthwest. June 16, 2011).

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Table 1: TRC and PAC values for Furnace R&R / Water Heater R&R under Core and ESA

programs

		Core Programs		ESA	
		TRC	PAC	TRC	PAC
Furnace R&R	MF	0.64	1.06	0	0
	SF	0.77	1.30	0	0
Water heater R&R	MF	1.13	1.43	0	0
	SF	0.31	1.14	0	0

Note: Values are based on 2012 data for ESA and projected 2013-14 values for Core programs

With core EE programs, PG&E sets the rebate to cover a portion of the incremental cost of the efficient versus the inefficient similar appliance. The TRC reflects the full incremental cost for the efficient product, while the PAC test may be higher as it reflects only the IOU's portion of the incremental cost. If PG&E increased the rebate levels to cover significantly more than the incremental cost of the efficient products, as is done in the ESA program, the TRC and PAC results would decline significantly.

In the ESA program, as currently structured, the utility bears the full cost of the furnace or water heater repair or replacement, including labor and permitting, and both the PAC and TRC tests use this full cost of replacement. Additionally, the savings values in the ESA program are zero due to most units undergoing repairs and those that are replaced are only done to the existing standard (not "efficient," as under the core programs). After the repair/replacement, usage frequently increases for these ESA customers. This combination results in a TRC/PAC of zero for the ESA programs.

If we were to include the energy savings associated with providing efficient water heaters or furnaces in the ESA program, the TRC and PAC test results would still remain near zero due to the high cost of providing and installing these measures. Using the ESA program administration and full measure costs but assuming savings consistent with efficient equipment from the core program, PG&E would estimate a TRC of 0.10 for water heaters and 0.24 for furnaces. TRC and PAC test results can only be improved to the levels reflected in the core program by providing the modest level of rebates offered in the core program, rather than a significant subsidy.

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Here is a copy of the PG&E Measure Appendix from the PD, showing the relative ranking of the measures included in the ESA Program. Both furnaces (in Appendix H-1) and water heaters (in Appendix H-2) show 0 cost effectiveness in all three cost effectiveness tests run for the ESA Program: Utility Cost Test, Modified Participant test, and TRC.

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