

July 17, 2015

California Energy Commission - Docket Unit

Attn: Docket No. 12-HERS-1 1516 Ninth Street, MS-4 Sacramento, CA 95814-5512 docket@energy.ca.gov California Energy Commission

DOCKETED

12-HERS-01

TN # 76056

JUL 17 2015

RE: Informational Proceeding to Improve the HERS Program

Docket # 12-HERS-01

Presiding Commissioner: Andrew McAllister

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This letter comprises the comments of the Pacific Gas and Electric Company (PG&E) with respect to the July 9, 2015 Workshop.

Pacific Gas and Electric Company, incorporated in California in 1905, is one of the largest combination natural gas and electric utilities in the United States. Based in San Francisco, the company is a subsidiary of PG&E Corporation. There are approximately 20,000 employees who carry out Pacific Gas and Electric Company's primary business—the transmission and delivery of energy. The company provides natural gas and electric service to approximately 15 million people throughout a 70,000-square-mile service area in northern and central California. We understand the potential of appliance efficiency standards to cut costs and reduce consumption while maintaining or increasing consumer utility of the products. We have a responsibility to our customers to advocate for standards that accurately reflect the climate and conditions of our service territory, so as to maximize these positive effects.

We appreciate this opportunity to provide the following comments on this important issue. We look forward to supporting the CEC's work in the same manner as we support the Appliance Standards (Title 20) and the Building Energy Efficiency Standards (Title 24). The following observations and recommendations are from a high level. After the CEC has adopted guiding principles we will be working collaboratively with stakeholders to develop and implement a revised HERS.

**Alignment of Rating**: Alignment of the California Rating tool baseline with National/ RESNET assumptions must be carefully evaluated to avoid unintended consequences due to inconsistencies between IECC and Title 24, TDV source energy versus RESNET assumptions, and algorithms and assumptions that are not in sync between Title 24 and RESNET.

For instance, water heating rating assumptions vary substantially since RESNET uses the modified loads method. Other water usage assumptions of occupancy, distribution losses, and usage patterns are likely to be substantially different. With improvements being done to the Title 24 water heating simulation these differences will probably increase.

Since California has adopted Time Dependent Valuation of each hour of energy use, it is probable that RESNET benchmarking will prioritize different approaches to energy efficiency optimization. This could impact goals and implementation of new construction incentive programs.

Rating systems should exhibit stability over time to avoid gaming of methodologies, shopping for ratings by vintage, and the need to update ratings when a benchmark changes.

Asset Rating Methodology: Based on recent interviews of jurisdictions implementing or considering residential energy conservation ordinances for existing buildings, the cost of the present HERS II protocol is too expensive and cumbersome to introduce to the time of sale marketplace or date certain concepts. With whole house asset ratings costing approximately \$800, the Real Estate community quickly aligns to fight HERS II as the required score. In fact, Berkeley does not use HERS II and has selected DOE Home Energy Score (HES) as the simpler initial rating. CEC should consider a step wise asset rating process that retains consistency but embraces a simpler Asset Rating as a "triage test" that can be conducted by an extra 20-30 minutes of time by a Home Inspector or Rater. Such a simple score would then be used to prioritize ordinance implementation and incentive applicability. Examples of the "Triage Test" type asset rating would be HES (modified for California), simple snapshot scores, or other "HomeEco" style qualitative analysis methods.

If the Triage Test Asset Rating yields feedback that an "Investment Grade" rating (such as HERS II with upgrades) is justifiable, then advanced HERS II could be completed for Energy Efficient Mortgage, or Home Upgrade incentive approval. Incentive programs could have both a prescriptive approach based on the "Triage Test" versus a performance approach based on HERS II.

Oversight of Assessment Tools: Assessment tools should match the needs of the tool user while adhering to basic accuracy, consumer protection, transparence, and logic models. Therefore, the role of the CEC should include oversight of tools in the marketplace with the goal to protect consumers, but not constrain innovative marketing approaches that might include ongoing sub-metering, diagnostics, smart meter data, and behavioral feedback.

Thank you for considering these comments.

Sincerely,

Marshall B. Hunt

Reach Code Program Manager

Codes and Standards

May 5.

Pacific Gas and Electric Company