

## BEFORE THE CALIFORNIA ENERGY COMMISSION

In the matter of

Preparation of the --  
*Draft Phase II Home Energy Rating  
System Program Regulations*

Docket No. 08-HERS-1

### EMERSON ENVIRONMENTAL'S COMMENTS ON CALIFORNIA HOME ENERGY RATING SYSTEM PROGRAM

|                            |             |
|----------------------------|-------------|
| <b>DOCKET</b><br>08-HERS-1 |             |
| <b>DATE</b>                | MAY 20 2008 |
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#### Comments:

I appreciated the opportunity to listen, via webcast, to the Staff Workshop on the California Home Energy Rating System Program, Phase II Regulations Development. I have a few suggestions.

**Program Name:** While those involved in Whole House inspections and modifications may understand the term to describe a holistic approach to building performance, the average homeowner has no familiarity with this term. As a result, the average homeowner may consider the term "Whole House Home Energy Rating" to be awkward and duplicative. I recommend streamlining the phrase to "Whole House Energy Rating."

**Greenhouse Gas Emission Calculations:** Water-related energy use consumes 19% of the California's electricity and 30% of its natural gas.<sup>1</sup> While some of this is on-site use, such as natural gas used for water heating in the home, a substantial amount of energy is expended pumping, shipping, pressurizing, and treating domestic water. I recommend that the off-site greenhouse gas emissions related to the home's water use be included in the greenhouse gas emissions calculations for the rating.

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<sup>1</sup> California Energy Commission, "California's Water-Energy Relationship" at 1, 8 (Nov. 2005) (2001 data).

**Exclusion of Pool and Spa from Rating:** Because pools and spas use such a large amount of energy and water at many homes, I do not consider it appropriate to exclude them from a home's rating. Where there are two substantially similar homes, one with a pool and spa and another without, and where the home with the pool and spa use substantially more energy than the home without, they should not be given the same energy rating.

**Exclusion of Out-Buildings from Rating:** As with pools and spas, it strikes me as inappropriate to give two otherwise-identical houses the same home energy rating if one has an air-conditioned Cabana with AV equipment and the other does not. I recommend the inclusion of all energy uses in the home energy rating, whether such use is within or outside the home, with the only exclusion being motorized vehicles.

**Seal Before You Insulate:** Any recommendation to add additional insulation to an attic area should be paired with a recommendation to seal the air barrier between the home and the attic.

**Geographic Variability of Installation Costs:** In evaluating the cost of, and cost-effectiveness of, efficiency upgrades, I recommend that the software account for geographic variability of installation costs. Here on the San Francisco Peninsula, costs for upgrades may be substantially higher than in some other areas.

**Appliances:** If I understand correctly, clothes washers are not anticipated to be evaluated for efficiency for the purpose of the rating or the upgrade recommendations. Although in some geographic areas washers may be considered portable, they should be added to the list of appliances to be evaluated.

I look forward to learning more about the HERS Phase II program as it progresses, and I hope that it will be a robust program providing useful and cost-effective information for homeowners and home buyers.

DATED: May 20, 2008

Respectfully Submitted,

By: /s/ Suzanne Henderson Emerson

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