



California Energy Commission

**DOCKETED**

**14-AAER-01**

TN 73371

**JUL 11 2014**

July 11, 2014

**Harinder Singh and Tuan Ngo**

California Energy Commission

1516 Ninth Street

Sacramento, CA 95814-5512

**RE: The investor-owned utilities' (IOU's) Tier Proposal – CEC Docket No.14-AAER-1, 2012-2013 Appliance Efficiency Rulemaking Water Appliances**

Plumbing Manufacturers International (PMI) is an international, U.S.-based trade association representing 90% of U. S. plumbing products sold in the United States. It has made the promotion of water efficiency and safety a top priority and has included it in its mission statement<sup>1</sup>. PMI's members are industry leaders in producing safe, reliable and innovative water efficient plumbing technologies and have supported water efficiency legislation and codes in California, as well as the voluntary US EPA WaterSense program.

In response to the tiers proposed by the IOUs in regards to CEC Docket No.14-AAER-1, PMI does not support this proposal for the following reasons:

- The CEC staff recommendations have been supported, as demonstrated during the comment period, by those who are experts within the plumbing industry (ex: code and standard developers, certification bodies, engineers, utilities, manufacturers, building industry, etc.)
- The tiered alternative is no different than the original except for added phased in implementation dates.
- The projections reported by the IOUs and their representatives are merely hypothetical; no studies support the alleged reductions.
- The estimated savings calculations are poorly constructed and do not, for example, account for increased wait time for hot water due to reduction in flow rates.
- Increasing MaP scores will not equate to substantial reductions in water consumption for water closets, but instead will decrease bowl cleanliness, resulting in double flushing. This is an engineering fact.

PMI recommends that prior to any future recommendations to change flow rates or other performance metrics beyond current CAL Green levels (which are in line with EPA WaterSense specifications), it is imperative that the proper research be conducted in the form of audited field studies that are vetted through industry stakeholders, and not based solely on mathematical computations of anticipated savings. Only in this recommended approach can we fully understand the scope and impact from large-scale reductions on plumbing systems within residential and commercial structures and how public welfare may be assured.

---

<sup>1</sup>PMI's Mission: To promote the water efficiency, health, safety, quality and environmental sustainability of plumbing products while maximizing consumer choice and value in a fair and open marketplace. To provide a forum for the exchange of information and industry education. To represent openly the members' interests and advocate for sound environmental and public health policies in the regulatory/legislative processes. To enhance the plumbing industry's growth and expansion.

Furthermore, PMI believes that true water efficiency and conservation can only be achieved by encouraging California consumers to replace their inefficient fixtures with WaterSense products. In fact, the Pacific Institute and NRDC, in a recent article titled: "Urban Water Conservation and Efficiency Potential in California; page 4, stated the following in regards to toilets that captures, in part, what PMI believes:

*"Staying with our toilet example, data indicate that an average Californian flushes 4.8 times per day, and that the average flush volume is 2.8 gallons per flush. **Upgrading an old, inefficient toilet to a 1.28-gallon-per-flush model would save 7.3 gallons per person per day. Multiplying this by the average population over the study period (36 million people) gives us a potential savings of 260 million gallons per day, or 0.29 million acre-feet per year.**"*

In closing, PMI would recommend that the CEC turn its focus from new installations until that time when research has proven that lower performance metrics, such as reduced flow rates and flush volumes below current CAL Green specifications, can be achieved without jeopardizing public health and safety, and instead turn its focus to retrofits where real water savings can be achieved. PMI would welcome such an approach by the CEC, and would be more than willing to work with the Commission and others in implementing such a strategy.

Sincerely,



Matt Sigler  
Technical Director  
Plumbing Manufacturers International  
Office 847-217-7212  
[msigler@pmihome.org](mailto:msigler@pmihome.org)

**PMI MEMBERS INCLUDE:**

\*American Standard Brands, Inc. \*Bradley Corporation \*BrassCraft Mfg. Co. \*Chase Brass & Copper Company \*CSA International  
\*Delta Faucet Company \*Dornbracht Americas \*Duravit USA \*Fisher Manufacturing Company \*Fluidmaster, Inc. \*Hansgrohe, Inc. \*HOLDRITE  
\*InSinkErator \*International Association of Plumbing and Mechanical Officials \*International Code Council Evaluation Service \*Kohler Company  
\*KWC America, Inc. \*Lavelle Industries \*LSP Products \*Moen Incorporated \*Mueller Brass Company \*NEOPERL, Inc. \*NSF International \*Pfister  
\*Reed Construction Data \*Sloan Valve Company \*Speakman Company \*Symmons Industries Inc. \*T & S Brass and Bronze Works, Inc. \*TOTO USA  
\*VitrA USA \*Water Pik \*WCM Industries, Inc.