California Energy Commission
DOCKETED
14-AAER-1
TN 73084
JUN 03 2014

June 2, 2014

California Energy Commission
Dockets Office, MS-4
Re: Docket No. 14-AAER-1
1516 Ninth Street
Sacramento, CA 95814-5512

Re: "Appliance Efficiency Pre-Rulemaking" - CEC Staff Analysis on Toilets, Urinals and Faucets

I, Martin Trim, of the American Society of Plumbing Engineers (ASPE) am writing to show support for our Society Board of Directors stated position that codes and regulations should not require any further reduction in the current maximum flow and flush volumes until adequate research of the impact on existing piping systems has been conducted. We urge the California Energy Commission to move forward with the proposed appliance efficiency regulations as proposed by CEC staff, and to reject the proposed revisions that have been submitted by IOU's on four specific issues related to dual flush toilets, toilets, urinals and lavatory faucets.

CEC staff has engaged in an extensive process with stakeholders, and it has developed significant new recommendations for toilets, urinals, faucets and replacement valves. The CEC staff recommendations would:
• Require that toilets use no more than 1.28 gallons per flush, replacing the current limit of 1.6 gallons per flush.
• Require that the current minimum toilet extraction requirement remain at 350 grams.
• Limit urinals to 0.5 gallons per flush, replacing the current standard of 1.0 gallons per flush.
• Limit lavatory faucets to 1.5 gallons per limit maximum, replacing the current limit of 2.2 gallons per minute.

We are greatly concerned with proposals from IOU's that the CEC go further and enact four unprecedented new statewide standards for toilets, urinals and faucets that would present a potential danger to public health and would cause significant consumer concerns.

These four proposals do not take into account the behavior of the typical consumer when using a plumbing fixture, and they fail to acknowledge the realities on the structure and operation of plumbing systems. In some cases, the proposals would also increase water usage.

Dual Flush Toilets – The proposed change from average flush volumes to maximum flush volumes would only work to ban innovation from the marketplace.

Toilets – The proposed increase in the minimum carry requirement to 600 grams per flush would not help the consumer, would encourage manufacturers to focus unduly on solids and not sufficiently on other attributes like cleaning the bowl, and would result in products that are less effective in meeting consumer needs, not more effective.

Urinals – The proposed 87.5% reduction in maximum urinal flush volume would restrict fixture compatibility with plumbing systems. 0.125 gallons per flush urinals are not proven to be effective in all installation situations and could pose risk in drain line carry.

Lavatory Faucets – The proposed decrease in maximum flow rates would increase sediment buildup within the trap and drain lines, thereby resulting in an increase in clogged lavatories. There would also be increased wait time for hot water and increased time in washing hands - increasing water usage.

We urge the CEC to consider the systemic aspects of plumbing and the serious unintended consequences that can result when regulations are adopted and put into place. Please move forward with only the CEC staff recommendations on these four issues.

Relative to **Docket No. 14-AAER-1, "Appliance Efficiency Pre-Rulemaking"** - CEC Staff Analysis on Toilets, Urinals and Faucets, ASPE respectfully submits our position of support for the CEC recommendations and against the IOU proposals as displayed in the below table of comments. As well, I stand in support of other Plumbing Industry Associations expressing like comments.

Sincerely,

Martin Trim, PE, CPD, GPD, LEED® AP