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<td><strong>Docket Number:</strong> 17-AAER-09</td>
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<td><strong>Project Title:</strong> Tub Spout Diverters</td>
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<td><strong>TN #:</strong> 222044</td>
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<td><strong>Document Title:</strong> PMI's Comments - CA IOU's Proposal for Tub Spout Diverters</td>
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<td><strong>Description:</strong> N/A</td>
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<td><strong>Filer:</strong> System</td>
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<td><strong>Organization:</strong> Plumbing Manufacturers International (PMI)/Matt Sigler</td>
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<td><strong>Submitter Role:</strong> Public</td>
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<td><strong>Submission Date:</strong> 12/22/2017 12:57:06 PM</td>
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PMI's Comments - CA IOU's Proposal for Tub Spout Diverters

Please refer to attached comment letter.

Additional submitted attachment is included below.
December 22, 2017

Jessica Lopez
California Energy Commission
Docket Unit, MS-4
1516 Ninth Street
Sacramento, CA 95814-5512

RE: DOCKET NO. 17-AAER-09 TUB SPOUT DIVERSERS – CALIFORNIA INVESTOR OWNED UTILITIES’ ANALYSIS OF STANDARDS PROPOSAL FOR TUB SPOUT DIVERSERS

Dear Ms. Lopez:

Plumbing Manufacturers International (PMI) appreciates this opportunity to provide additional comments to the California Energy Commission (CEC) as the association and its members continue to participate in the current pre-regulatory proceeding, Docket No. 17-AAER-09 Tub Spout Diversers. PMI is an international, U.S.-based trade association representing manufacturers that provide 90% of the plumbing products sold in the United States. We have made the promotion of water safety and efficiency a top priority and have included this in our mission statement.

Regarding the California Investor Owned Utilities’ (CA IOUs) standards proposal for tub spout diverters submitted on December 5th for Docket No. 17-AAER-09, PMI would like to share the following concerns:

- **CA IOU's test plan.** On November 3rd, PMI submitted a comment letter that outlined our concerns pertaining to the CA IOU’s tub spout diverter test plan. One of the main concerns raised was the fact that the testing protocol only focuses on lab results. The test plan does not call for the collection and measurement of field data to compare to the laboratory results and therefore the lab results should not be considered a representation of reality.

- **Definitions.** PMI agrees with the CA IOUs that the current definitions of “lift type,” “pull type,” “push type” and “turn type” should be removed from Title 20. However, on September 15th, PMI provided the following definitions to CEC that we believe better define diverters sold in the marketplace than what is being proposed by the CA IOUs:
  - “Mechanically activated automatic reset diverter (MAR)” – A diverter that utilizes a mechanism (e.g. spring) to return the flow of water to the primary outlet when the flow of water is shut off.
  - “Gravity activated automatic reset diverter (GAR)” – A diverter that utilizes gravity to return the flow of water to the primary outlet when the flow of water is shut off.

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1PMI’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.
• “Manual reset diverter (MR)” – A diverter that returns the flow of water to the primary outlet when activated by the user.

• **Leakage rates.** The CA IOUs are proposing a zero-leakage rate, both pre- and post-lifecycle, for all diverters. As PMI commented on September 15th, it is true that a mechanically activated automatic reset diverter (e.g. by way of a spring) does not typically require a small amount of leakage to occur for the diverter to function properly. However, for the most predominant and affordable type of tub spout diverters sold in the marketplace, a gravity activated automatic reset diverter (e.g. lift-type tub spout diverter) needs a small amount of leakage to function properly.

• **Potential marketplace impact.** The CA IOU proposed zero-leakage rate could negatively impact a consumer’s cost and choice when purchasing a diverter sold in the state.
  o As detailed in the CA IOU’s standards proposal, only 20 percent of automatic reset diverters currently meet a 0.00 leakage rate\(^2\). Even fewer may meet a 0.000 leakage rate as proposed in the CA IOU’s standards proposal\(^3\).
  o Under Section 5.5 (Cost-Effectiveness) of the CA IOU’s standards proposal, PMI questions the validity of the cost assumptions based on the small sample size of only 38 products considering the MAEDBS identifies 3,083 diverters\(^4\).
  o Based on assumptions made in Section 5.5 of the CA IOU’s standards proposal, it appears that a consumer would be forced to pay, on average, almost 30 percent more for a diverter to achieve the proposed efficiency levels. Therefore, PMI questions the cost effectiveness of what is being proposed.
  o CEC regulations require the certification of tub fillers with hand showers to be registered as tub spout diverters. Manufacturers of tub fillers with automatic reset diverters incorporating gravity designs will have to redesign diverters to incorporate springs for automatic reset or convert designs to manual reset to achieve the proposed 0.000 leakage rate. This will require costly design and tooling changes to existing CEC certified products.

• **Potential water savings.** PMI continues to question the focus of the CEC on tub spout diverters when real water savings could be achieved in more impactful ways. For example, per the Alliance for Water Efficiency and PMI study titled, “A Saturation Study of Non-Efficient Water Closets in Key States\(^5\),” California could save 99.2 - 174.7 million gallons of water per day or 36.2 – 63.7 billion gallons per year if all non-efficient residential water closets (defined as water closets having a rated flush volume greater than 1.6 gallons per flush) were replaced throughout the state. These savings greatly exceed the CA IOU’s proposed first-year statewide water savings of 43.03 million gallons per year if a zero-leakage rate for all diverters was adopted.

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• **Potential energy savings.** Based on 63.7 billion gallons of water being saved per year if all non-efficient residential water closets (as defined above) were replaced, California could save 308.82 Gigawatt hours per year (GWh/yr) in embedded electricity usage (63.7 \times 10^9 \text{ gal/yr} \times 4,848 \text{ kWh/Mgal}^6) without increasing product costs or diminishing consumer choice. This is 147,937% more energy savings than the theoretical savings from diverters indicated by the CA IOUs\(^7\).

• **Marking requirements.** PMI is very much opposed to manufacturers being required to add “automatic reset” or “manual reset” to their product packaging and literature. Such a requirement will do nothing more than possibly increase the cost of the product without providing any real benefits to the consumer.

PMI welcomes questions from the Commission about our concerns and comments regarding Docket No. 17-AAER-09. We look forward to working with the CEC during the rulemaking process to promote water efficiency that will produce safe, sanitary, efficient and reliable products.

Sincerely,

Matt Sigler  
Technical Director  
Plumbing Manufacturers International  
Office 847-217-7212  
msgler@safeplumbing.org

cc: PMI Board of Directors

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\(^6\) Codes and Standards Enhancement (CASE) Initiative for PY 2017: Title 20 Standards Development, Analysis of Standards Proposal for Tub Spout Diverters, Docket Number 17-AAER-09, California Investor Owned Utilities, December 5, 2017, Section 5.3.1 (Per Unit Water and Energy Savings Methodology), Table 4, pg. 18.

\(^7\) Codes and Standards Enhancement (CASE) Initiative for PY 2017: Title 20 Standards Development, Analysis of Standards Proposal for Tub Spout Diverters, Docket Number 17-AAER-09, California Investor Owned Utilities, December 5, 2017, Section 3 (Standards Proposal Overview), Table 2, pg. 11.