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09-AAER-1A	
DATE	June 12 2009
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June 12, 2009

California Energy Commission
Dockets Office, MS-4
Re: Docket No. 09-AAER-1A
1516 Ninth Street
Sacramento, CA 95814-5512

Dear Commissioners:

RE: 2009 Irrigation Equipment Performance Standards and Labeling Requirements Scope

Thank you for the opportunity to provide comment on the Commission's scope proceeding. The East Bay Municipal Utility District (EBMUD) has a long track record in helping customers upgrade their irrigation systems with more efficient technology and employ best management practices. Since 2003 EBMUD has been actively promoting self-adjusting irrigation controllers by providing financial incentives to hundreds of customers. EBMUD staff has gained extensive first hand experience helping customers program traditional irrigation controllers and fine-tune their self-adjusting controllers after installation. EBMUD staff includes certified irrigation designers, certified landscape auditors and licensed landscape architects. Our staff has participated in the development of the original and revised Model Water Efficient Landscape Ordinance, the AB 2717 Landscape Task Force and the Irrigation Association SWAT technical committee. EBMUD was the lead agency for Northern California in the Proposition 13 funded Evaluation of California Weather-Based "SMART" Irrigation Controller Programs, the final report of which became available on May 20, 2009. It is the largest multi-agency, multi-controller study to date.

EBMUD supports product rating and labeling to assist state water purveyors in directing funds to conservation and efficiency programs. Product testing and labeling will reduce customer demand for water by encouraging the development, purchase, and use of water efficient products. A product labeling program will provide a benchmark for manufacturers to achieve and help water agencies develop cost effective incentive programs.

Based on EBMUD program implementation experience and study reports, it is premature to issue state-wide standards that mandate that only "smart" controllers be sold in California starting in 2012. Specifically, EBMUD finds that:

1. The water-saving results from self-adjusting irrigation controllers under *controlled* circumstances have been mixed. Under uncontrolled circumstances use of smart controllers *could* result in increased water use for the consumer at an increased cost for the product. In the Evaluation of California Weather-Based "SMART" Irrigation Controller Programs, 42% of controllers in the study showed an increase in water use.



2. Additional data collection and analysis is needed to determine how these products apply water at different time scales, i.e. how they balance changes to frequency and duration of irrigation events. EBMUD has applied for grant funding to pursue this type of research.
3. Smart controller products require users to program and fine tune the settings in ways that many consumers are unfamiliar with. EBMUD's direct experience with customers and the outcome of the statewide study referenced above suggest that the user interface can be problematic, even for those products with sophisticated "scheduling engines". California should not mandate the use of products that are not market-ready for all customer types.
4. There is no guarantee that installed "smart" controllers will not be used as conventional controllers by not maintaining connections with on-site weather stations or wireless data subscription.
5. Many consumers can use conventional controllers to great effect by utilizing standard features and making occasional seasonal adjustments, without having to purchase a more expensive product that will make those adjustments automatically.

Based on these findings, please consider the following recommendations for the CEC's standards and labeling process:

- The Commission could create two sets of standards or tiers: one for "smart" or self-adjusting controllers, and a separate set of standards for "conventional" controllers. Only products that meet the standards for "smart" controllers will be able to carry the label that is developed for those products. Standards for "smart" controllers should be based on third party testing protocols developed by SmartWater Application Technology (SWAT) modified with minimum performance standards.

Or,

- The Commission could create standards that define a suite of ways that an irrigation controller can reduce water usage. For example, controllers could be required to have one or more of the following features: automatic adjustments based on weather, cycle/soak settings to reduce run-off, or add-on moisture sensors with a common-wire interrupt.

Thank you, again, for the opportunity to comment on the scope of efficient irrigation product interrupt.

Thank you, again, for the opportunity to comment on the scope of efficient irrigation product standards and for your consideration of these suggestions. If you have any questions, please contact me at (510) 287-1675.

Sincerely,

A handwritten signature in black ink that reads "Charles M. Boleby" with "for R. Harris" written below it.

RICHARD W. HARRIS
Manager of Water Conservation