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October 26, 2017

Sharon Frey
U.S. Environmental Protection Agency
William Jefferson Clinton Building
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Subject: ENERGY STAR[®] Pool Pumps Version 2 and Version 3 Draft 1 Specification

Dear Ms. Frey:

This letter comprises the comments of the Pacific Gas and Electric Company (PG&E), Southern California Gas Company (SoCalGas[®]), San Diego Gas and Electric (SDG&E), and Southern California Edison (SCE) in response to the ENERGY STAR[®] Pool Pumps Version 2 and Version 3 Draft 1 Specification released on September 28, 2017.

The signatories of this letter, collectively referred to herein as the California Investor Owned Utilities (CA IOUs), represent some of the largest utility companies in the Western United States, serving over 35 million customers. As energy companies, we understand the potential of the ENERGY STAR program to cut costs and reduce consumption while maintaining or increasing consumer utility of the products. We have a responsibility to our customers to advocate for sensible test procedures, specifications, and voluntary certifications that accurately reflect the climate and conditions of our respective service areas to maximize the positive effects of these efforts.

We appreciate this opportunity to provide the following comments about this Draft Specification on pool pumps. The CA IOUs have been involved with pool energy efficiency for over 15 years. We have developed and implemented various pool efficiency rebate programs, and in 2004, proposed and supported the adoption of the first in the nation appliance standards for pool pump motors in California. These standards included a test and list requirement for pool pumps to enable the reporting of Energy Factor, a metric developed by the CA IOUs that is now used by the ENERGY STAR program. In 2008, we were also successful in advocating for building code language that required energy efficient equipment, plumbing, and design on all newly constructed pools in California. Some, or all of these standards have been adopted in Arizona, Washington, Florida, and Connecticut. Given our extensive experience with this product category, and the large number of pools in California, we have a vested interest in ensuring successful ENERGY STAR specifications are developed nationally.

In September of 2015, the Department of Energy (DOE) initiated a formal working group to negotiate standards for dedicated-purpose pool pumps (DPPPs). The CA IOUs participated as members of the working group which led to a final term sheet of test procedure and standards recommendations to DOE on July 29, 2016. Subsequently, DOE published a Direct Final Rule on January 18, 2017. These new DPPP standards apply to self-priming pool pumps, non-self-priming pool pumps, pressure cleaner booster pumps, and integral pool pumps, and will take effect nationally on July 19, 2021.

We believe that an updated voluntary ENERGY STAR specification is an integral part of facilitating widespread energy efficiency. We encourage the U.S. Environmental Protection Agency (EPA) to

continue developing an ENERGY STAR specification that differentiates the most efficient products while delivering reliable performance, and conveying information to consumers about the product that is accurate and representative. The requirements arising from the specification are helpful for consumers seeking the most efficient products, and the utility-sponsored programs that leverage the ENERGY STAR distinction to identify and incentivize efficient products. In support of EPA’s revision efforts, we offer the following comments for consideration.

1. The CA IOUs recommend EPA align the ENERGY STAR Version 2 specification with the DOE standard for large self-priming pool pumps.

The CA IOUs commend EPA for proposing two new ENERGY STAR specifications (Version 2 and Version 3) for self-priming pool pumps. We support the draft Version 2 specification EPA has proposed for self-priming pumps smaller than 0.711 hydraulic horsepower (HHP). However, we do recommend EPA align the draft Version 2 efficiency level with the DOE standard for self-priming pool pumps larger than or equal to 0.711 HHP. This recommendation is denoted by the black arrows in Figure 1 below. For these larger self-priming pool pumps, this recommendation will, in effect, create an early adoption efficiency level to prime the market for the DOE standard, which takes effect in 2021. Additionally, all variable speed self-priming pool pumps (based on DOE’s modeled weighted energy factor (WEF) data¹) currently meet the DOE standard, thus we don’t believe it’s necessary for EPA to set an efficiency level below the DOE standard to take effect July 19, 2021.

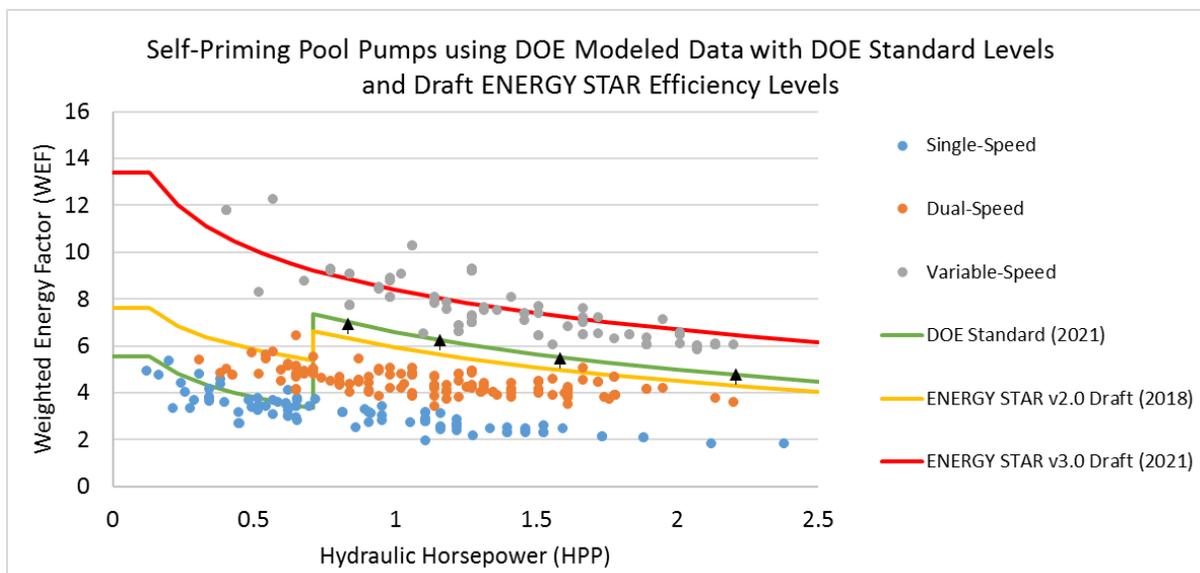


Figure 1: Self-Priming Pool Pump Standards and Efficiency Levels

The CA IOUs do support EPA’s proposed draft ENERGY STAR Version 3 energy efficiency level for all sizes of self-priming pool pumps, which is proposed to take effect at the same time as DOE’s standard on July 19, 2021. We believe this will create an incentive for manufacturers to build even more efficient self-priming pool pumps once DOE’s standard takes effect, providing further savings to customers.

¹ Self-Priming Pool Filter Pump Performance Database v2.0 <https://www.regulations.gov/document?D=EERE-2015-BT-STD-0008-0102>

2. The CA IOUs commend EPA for expanding the scope of pool pumps in the ENERGY STAR program to non-self-priming pool pumps and pressure cleaner booster pumps, and support the proposed energy efficiency levels.

The CA IOUs commend and support EPA for expanding the scope of pool pumps covered by ENERGY STAR. While there has been significant focus on self-priming pool pumps over the years, we believe that expanding the ENERGY STAR specification to pressure cleaner booster pumps and non-self-priming pool pumps will create new awareness of the energy efficiency of these products among pool service professionals and pool owners. The CA IOUs support the proposed Version 2 and Version 3 energy efficiency levels for both equipment classes.

Specifically, in California, ENERGY STAR certified pressure cleaner booster pumps will be especially useful where an estimated 60 percent of our state's 1.2 million in-ground pools have a pressure cleaner booster pump.²³ This ENERGY STAR certification, along with the ENERGY STAR certified non-self-priming pool pumps, may also enable further incentive program development in CA and nationwide.

3. The CA IOUs support EPA's inclusion of replacement pool pump motors in the draft ENERGY STAR specification.

The CA IOUs commend EPA for including replacement pool pump motors in the scope of the ENERGY STAR draft specification. When a pool pump fails, the point of failure is often associated with the motor as compared to the pump head. When this occurs some pool service professionals will replace the entire pump regardless, while others will do a "motor only" replacement. There are many factors which impact whether a pool service professional will perform a pump or "motor only" replacement, including cost, existing plumbing configuration, and the pool service professional's technical aptitude. To date, only self-priming pool pumps have benefited from the ENERGY STAR program, which in many cases has led pool service professionals to perform entire pool pump replacements due the availability of rebates dependent on the ENERGY STAR label. An equivalent ENERGY STAR certification for replacement pool pump motors will help level the playing field and expand energy savings across the country.

We do realize there is no established metric, test procedure, or national efficiency standard for replacement pool pump motors; however, the CA IOUs, efficiency advocates, and manufacturers are actively working to address this opportunity. We support EPA creating a placeholder within the ENERGY STAR Version 2 and Version 3 draft specification and look forward to making a recommendation to EPA on replacement pool pump motors for eventual inclusion in the ENERGY STAR program.

4. The CA IOUs encourage EPA to require DOE's freeze protection standards as part of the updated ENERGY STAR specification.

During the DOE DPPP working group, the CA IOUs supported some basic standards for freeze protection to ensure that significant amounts of energy were not wasted due to overly conservative freeze protection settings. Freeze protection turns on DPPPs at a given temperature for a certain duration to ensure that ice does not accumulate in the pump or the plumbing of the pool, which can lead to damage. After much discussion, a compromise agreement was formed that would allow DPPPs to be shipped with the freeze protection disabled, or would allow DPPPs to be shipped with certain default settings for temperature set points, run times, and motor speed. The DOE prescriptive freeze protection requirements are below. To

² http://www.calmac.org/publications/PGE_Mass_Market_Report_FINAL.pdf

³ <http://www.apsp.org/Portals/0/2016%20Website%20Changes/2015%20Industry%20Stats/2015%20Industry%20Stats.pdf>

meet the ENERGY STAR specification, the CA IOUs encourage the EPA to adopt these same freeze protection requirements for all pool pumps with freeze protection capabilities.

The pump must be shipped with freeze protection disabled or with the following default, user-adjustable settings:

- *The default dry-bulb air temperature setting is no greater than 40 °F;*
- *The default run time setting shall be no greater than 1 hour (before the temperature is rechecked); and*
- *The default motor speed shall not be more than 1/2 of the maximum available speed.*

In conclusion, we wish to reiterate our support to EPA for revising the ENERGY STAR Pool Pumps Specification and we encourage EPA to carefully consider our comments.

Sincerely,



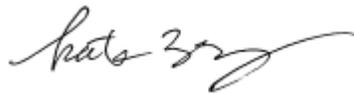
Patrick Eilert
Manager, Codes & Standards
Pacific Gas and Electric Company



Darren Hanway
Energy Efficiency Program Operations Manager
Southern California Gas Company



Michelle Thomas
Manager, Energy Codes & Standards and ZNE
Engineering Services
Southern California Edison



Kate Zeng
ETP/C&S/ZNE Manager
Customer Programs
San Diego Gas & Electric Company