

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460



OFFICE OF  
AIR AND RADIATION

March 2, 2015

Dear Pool Pump Brand Owner or Other Interested Party:

The U.S. Environmental Protection Agency (EPA) is pleased to share with you the attached Final Draft ENERGY STAR Connected Pool Pump Criteria. EPA and the U.S. Department of Energy (DOE) are also pleased to share the attached Final Draft ENERGY STAR Test Method to validate Demand Response capabilities. EPA and DOE would like to thank the many stakeholders who have invested time and effort over the past many months to contribute feedback that has informed this specification development process. Once finalized, these criteria and test method can be applied at the option of pool pump partners wishing to have their pool pump identified as having connected functionality on the ENERGY STAR qualified product list.

This draft incorporates input received from stakeholders in response to Draft 3 and discussions with individual stakeholders. Detailed explanations of changes are highlighted in note boxes in the draft specification. The comments received in response to Draft 3 are posted to the ENERGY STAR website at [www.energystar.gov/revisedspecs](http://www.energystar.gov/revisedspecs)

The Final Draft connected criteria include the following key changes from Draft 3:

1. **Peak Period Avoidance:** EPA has eliminated the requirement for peak period avoidance. As utilities' understanding of their needs has evolved, it has become clear that prescribing a uniform peak period is unnecessary and possibly counterproductive. EPA continues to recognize the opportunity for pumping schedules to be configured such that they minimize pumping in peak demand periods associated with the serving utility. As such, EPA intends to work with stakeholders to develop and publish best practice guidance that encourages consumers and pool installers to consult with their local utility to determine how best to minimize scheduled pumping during peak periods.
2. **Demand Response:** EPA has introduced a maximum response time requirement of 5 minutes, after extensive discussions with pool pump brand owners and with utilities. In addition, EPA has clarified that the requirement applies to Connected Pool Pump Systems (CPPS) that do not need to delay their response in order to avoid unsafe conditions or damage to auxiliary equipment. EPA has retained the allowance that pumps may delay or forgo their response in cases where safety would be impacted or equipment damaged.

There were additional ideas which EPA felt were valuable, and may consider for future revisions. This included mandating on site configurability for peak period avoidance as well as expanding the operational status requirements to include demand response availability. To do so will require an extensive discussion of exactly what would be required and how often. EPA anticipates that in the coming years, typical practices will develop as utilities and manufacturers work together to deploy solutions. EPA will follow market developments and look to a future revision for these elements.

#### Test Method

The DOE has developed a Final Draft ENERGY STAR Test Method to validate Demand Response capabilities. The Final Draft Test Method includes the following key changes from the Draft 2:

1. Demand Response Time: DOE has included language specifying how to measure the response time to determine compliance with the response time requirement included in the Final Draft connected criteria.
2. CPPS Setup: DOE has updated the setup requirements to allow CPPS that normally utilize a cloud-based system for communication with the utility to bypass the cloud system for the purposes of testing.

#### **Submittal of Written Comments**

Any additional comments on the Final Draft Connected Functionality Criteria and Test Method should be submitted via email by **March 13, 2015** to [poolpumps@energystar.gov](mailto:poolpumps@energystar.gov). All comments received will be posted to the ENERGY STAR Product Development Web site, unless the submitter specifically requests that his or her comments remain confidential.

The exchange of ideas and information between EPA, DOE, industry, and other interested parties is critical to the success of ENERGY STAR. Please feel free to contact me at (202) 343-9375 and [daken.abigail@epa.gov](mailto:daken.abigail@epa.gov) or Douglas Frazee, ICF International, at (443) 333-9267 and [douglas.frazee@icfi.com](mailto:douglas.frazee@icfi.com) with any questions or comment on the Draft specification. For questions relating to the test method, please contact Bryan Berringer at (202) 586-0371 or [bryan.berringer@ee.doe.gov](mailto:bryan.berringer@ee.doe.gov).

Sincerely,



Abigail Daken,  
Product Manager  
ENERGY STAR Program