



1800 Larimer Street
Denver, CO 80202

March 3, 2021

US Environmental Protection Agency
Office of Air and Radiation
Washington D.C, 20460

Dear Abigail Daken:

Xcel Energy is pleased to submit comments on the ENERGY STAR® Program Requirements for Product Specification for Residential Water Heaters: Eligibility Criteria—Final Draft, Version 4.0.

Xcel Energy is a major U.S. electric and natural gas company, providing energy to over three million electric customers in Colorado, Michigan, Minnesota, New Mexico, North Dakota, South Dakota, Texas, and Wisconsin. Our comments below represent the interest of our water heater team.

Our comments on the Final Draft, Version 4.0 are as follows:

4)D.a. DR Communications Protocols

Xcel has committed to the CTA-2045-B standard, and supports requiring level B for this specification. Xcel also suggests CTA-2045 be only protocol allowed for the standard, to provide a unified front to the water heater industry.

4)D.d. Minimum Load Shift

Xcel supports the CWHP having control over the water heater setpoint instead of a set level of energy shift. Set levels of energy shift would alter the user experience as water heaters get more efficient. Also, tanks of different sizes are capable of storing different amounts of energy, so setpoint control allows us to maximize the benefit for our grid needs and our customers. Setpoint control is also easier for us to model in our technical assumptions.

4)D.f. DR Requests and Responses, Required Operational Mode Functionality table, row Load Up: Basic or Advanced

In the Response column sentence “For heat pump water heaters with resistive heating elements, the use of the elements should be avoided *as much as possible* to satisfy this request,” the phrase “*as much as possible*” is ambiguous, and makes it difficult for us to create technical assumptions for these events. We would prefer the ability to specify whether the electric resistance element should be used. In some cases it may be beneficial to load up on electric resistance, and in other cases it may not.

Thank you again, please let us know if you need additional information or clarification.

Sincerely,

David Podorson

David Podorson
Product Developer