**AHRI Response/Notes to Austin Energy**

**April 7, 2022**

**REPI-138-21**

**Revise as follows:**

**R408.2.3 (N1108.2.3) Reduced energy use in service water-heating option. The hot water system shall meet one of the following efficiencies:**

1. **~~Greater than or equal to 0.82 UEF EF fossil fuel service water-heating system~~.**

Gas-fired Storage Water Heaters

Uniform Energy Factor (UEF) ≤ 55 gallons Medium Draw Pattern UEF ≥ 0.64

 High Draw Pattern UEF ≥ 0.68

> 55 gallons Medium Draw Pattern UEF ≥ 0.78

 High Draw Pattern UEF ≥ 0.80

First-Hour Rating FHR ≥ 51 gallons per hour

1. Gas-Fired Instantaneous water-heater: UEF ≥ 0.87
2. **~~Greater than or equal to 2.0 UEF EF electric service water-heating system.~~**

Electric Water Heaters
Uniform Energy Factor (UEF) Integrated HPWH UEF ≥ 3.30

Integrated HPWH, 120 Volt / 15 Amp Circuit UEF ≥ 2.20

Split-system HPWH UEF ≥ 2.20

First-Hour Rating FHR ≥ 45 gallons per hour

1. **~~Greater than or equal to 0.4 solar fraction solar water-heating system~~.**

Solar Water Heaters
Solar Uniform Energy Factor (SUEF) SUEF ≥ 3.00 for electric backup
 SUEF ≥ 1.80 for gas backup

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**AHRI notes to Austin Energy (04/07/22)**

We agree with adding information regarding instantaneous water heaters. However, we feel that it should be under our proposed item number 1 as it makes it clear in the proposal.

If you remove our item number 1, you are removing some types of water heaters. Additionally, you should maintain the DOE Energy Star terms for alignment. This will be clear for the industry.

You may be reverting to a lower spec with your item #2.

Your item number #3 has an incorrect term. It should be SUEF vs SEF.

We are noting the most recent Energy Star document for your review.

<https://www.energystar.gov/sites/default/files/asset/document/ENERGY%20STAR%20Version%204.0%20Water%20Heaters%20Final%20Specification%20and%20Partner%20Commitments-March2022.pdf>