



ENERGY STAR[®] Commercial Coffee Brewers

Draft 1 Version 1.1 Webinar
March 1, 2018





Agenda

- Welcome & Introductions
- Drivers for update
- Draft 1 Version 1.1
 - Terms and Definitions
 - Normalized Heavy-Use-Brew Energy Rate Level
 - Additional Reporting Requirements
- General Discussion & Questions
- Timeline

Introductions

Kirsten Hesla

EPA

Adam Spitz

ICF





Version 1.1 Update



Drivers for the update:

- Refining and adding additional terms and definitions
- Revising the *Normalized Heavy-Use-Brew Energy Rate Level*
- Including additional reporting requirements
- Large purchasing organizations have demonstrated an interest in certified products
- Based on available data, various product designs and multiple manufacturers will be able to certify products
- Significant energy savings on a national basis can be achieved through addressing the active and idle mode energy use of commercial coffee brewers



Terms and Definitions

Proposed Changes

Replacement:

- **(Version 1.0)** Average Tank Temperature: The average temperature of the water held in the reservoir tank during ready-to-brew idle and energy save mode conditions.
- **(Version 1.1)** Internal Tank Water Temperature: The average temperature of the water held in the tank. Internal water tank temperature should be measured and recorded during the ready-to-brew idle mode, energy save mode (if applicable), and heavy-use brew tests. (This may also be referred to as the coffee preparation temperature.)



Terms and Definitions

Proposed Changes

Additions:

- Serving Temperature: The maximum temperature of the beverage delivered from a brewing machine, measured at the dispensing outlet. The serving temperature of the brewed coffee should be measured, post-extraction during the heavy-use brew test.
- Holding Temperature: The maximum internal temperature of the brewed coffee product as it collects in a serving vessel (i.e., an insulated carafe or glass coffee decanter). The coffee holding temperature should be measured by securing a thermocouple at the geometric center of the serving vessel.



Energy Performance Level

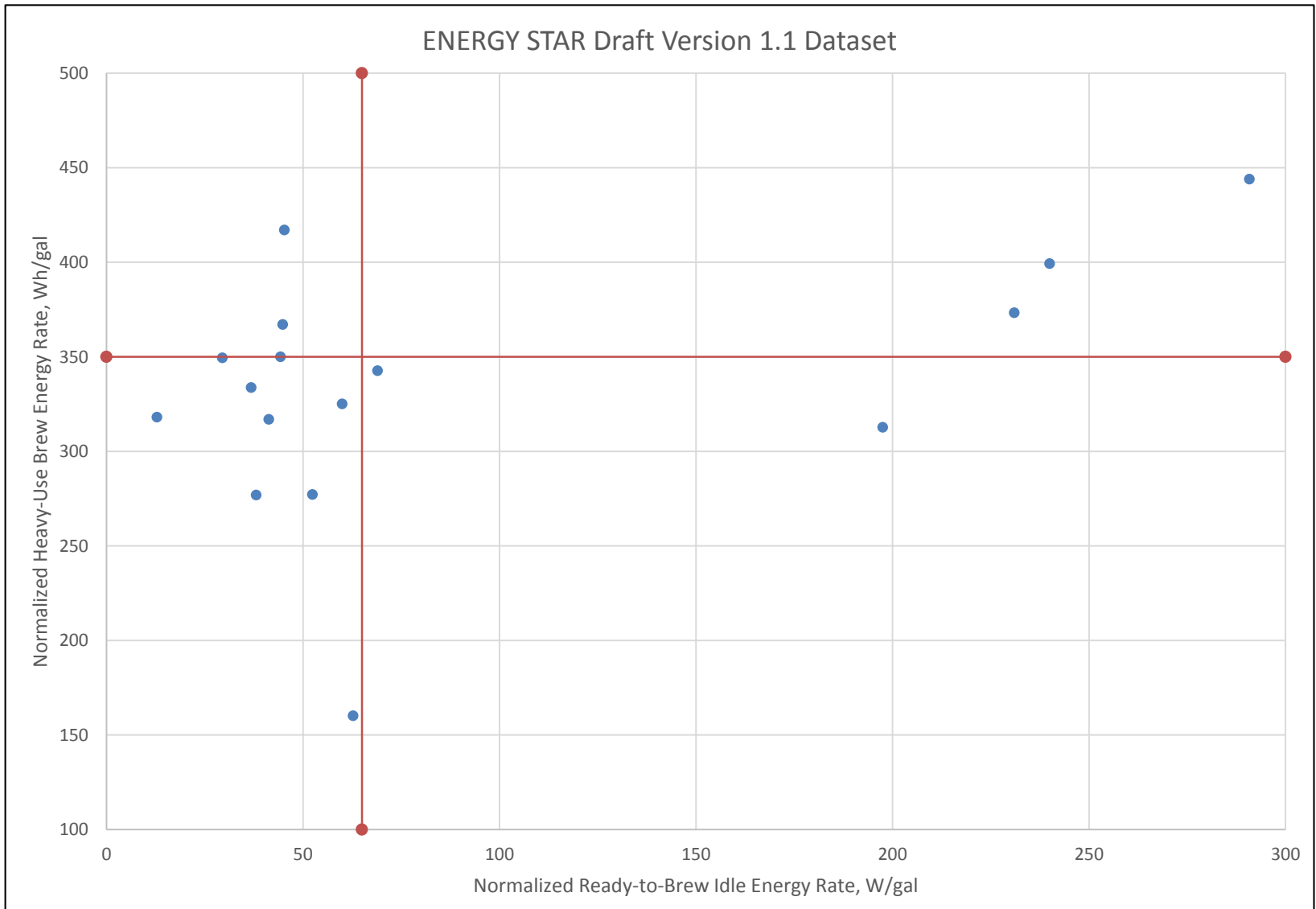
Proposed Change

Normalized Heavy-Use-Brew Energy Rate

- *(Version 1.0) ≤ 280 watt-hrs/gal*
- *(Version 1.1) ≤ 350 watt-hrs/gal*

Normalized Ready-to-Brew Idle Energy Rate – No change

- *(Version 1.0) ≤ 65 watts/gal*
- *(Version 1.1) ≤ 65 watts/gal*





Reporting Requirements

Proposed Additional Reporting Requirements

Additions:

- Internal water tank temperature during ready-to-use idle mode (average)
- Internal water tank temperature during heavy-use-brew test (average)
- Serving temperature during heavy-use-brew test (maximum)
- Holding temperature during heavy-use-brew test (maximum)



General Discussion & Questions



Timeline

- Data Assembly Effort Launch – Fall 2017
- Commercial Coffee Brewer Draft Version 1.1 Specification – February 22, 2018
- Draft Version 1.1 Webinar – March 1, 2018
- Draft Version 1.1 Comments Due – March 22, 2018
- Final Version 1.1 – Early April (Effective Immediately)



Contacts

Kirsten Hesla (EPA)
Hesla.Kirsten@epa.gov

Adam Spitz (ICF)
Adam.Spitz@icf.com

Questions and comments may also be directed to
CommercialCoffeeBrewers@energystar.gov

