



ENERGY STAR[®] Refrigerated Beverage Vending Machines

Version 4.0 Draft 2 Stakeholder Webinar
February 14, 2019





Agenda

- Welcome and Introductions
- Purpose of Revision
- Activities to Date
- Review of Changes Reflected in the Draft 2 Proposal
- General Discussion & Questions
- Timeline & Next Steps

Introductions

Presenters

Tanja Crk, U.S. EPA ENERGY STAR Program

Adam Spitz, ICF

Stephanie Johnson, U.S. Department of Energy

Facilitator

Cameron Alexander, ICF





Purpose of Revision



Purpose of Revision

- Amend terms and definitions to align with DOE's final rule
- Expand scope to include combination type machines
- Lower the Maximum Daily Energy Consumption (MDEC) levels (kWh/day)



Activities to Date



Refrigerated Beverage Vending Machine Version 4.0 Specification

- Version 4.0 Draft 1 Specification - September 10, 2018
- Draft 1 Webinar – September 25, 2018
- Version 4.0 Draft 2 Specification – December 27, 2018
- Draft 2 Webinar – February 14, 2019
- **Draft 2 Comment Due Date – February 28**

Product Development Website:

https://www.energystar.gov/products/spec/vending_machines_specification_version_4_0_pd



Review of Changes Reflected in the Draft 2 Proposal



Draft 2 Definitions and Scope

- Definitions:
 - Food Vending Machines term replaced with Refrigerated Food Vending Machines
 - Definition remains unchanged
- Scope:
 - Food Vending Machines (Refrigerated Food Vending Machines)
 - Removed from scope



Approach for Determining V4 Proposed Levels

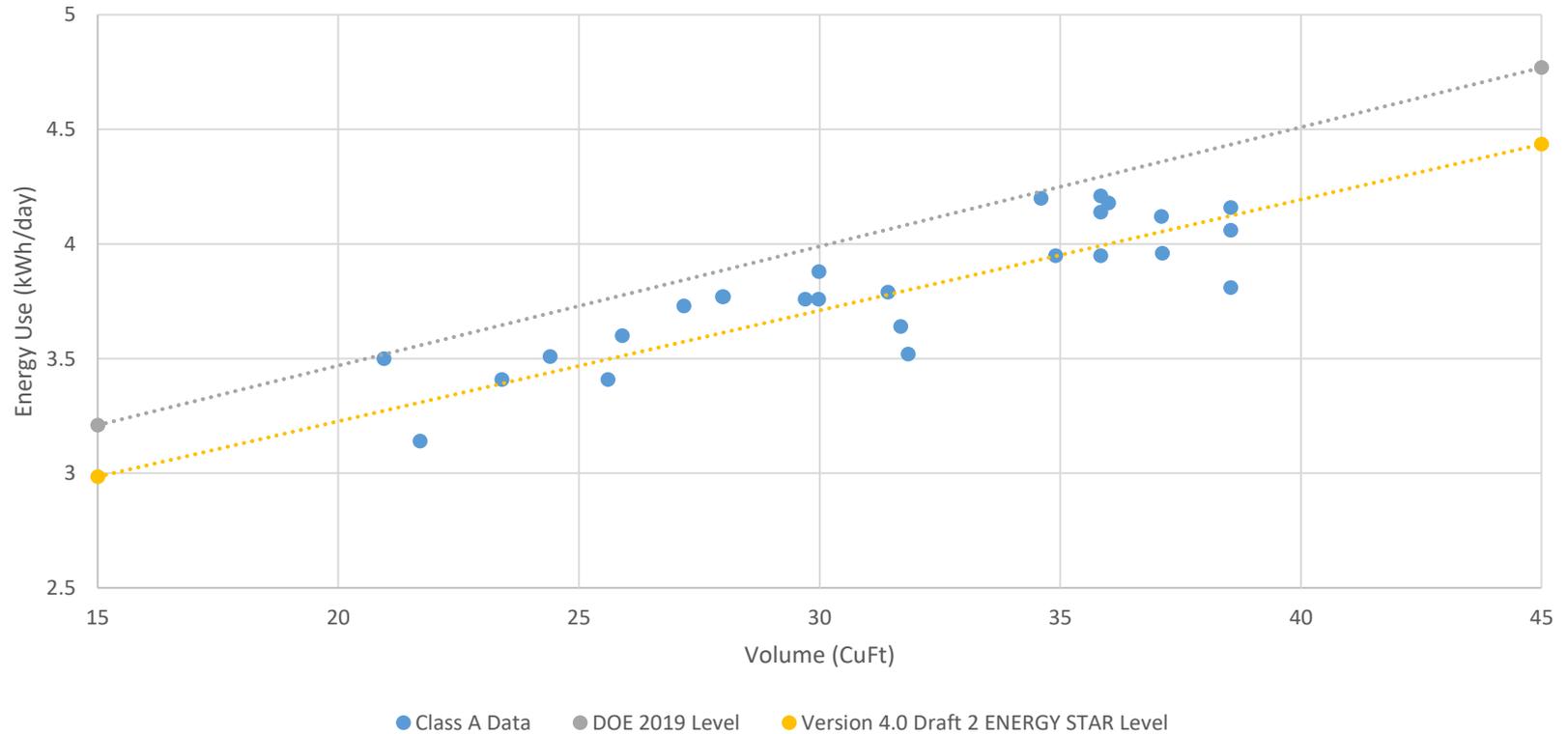
- **Building the Dataset**

- EPA developed a data set that is based on products that will meet the DOE 2019 levels
 - Energy performance data sources:
 - ENERGY STAR Product Finder and Department of Energy's Compliance Certification Database for Refrigerated Beverage Vending Machines
 - 48 unique models
 - Class A: 26 models
 - Class B: 22 models



ENERGY STAR Refrigerated Beverage Vending Machines Levels: Class A

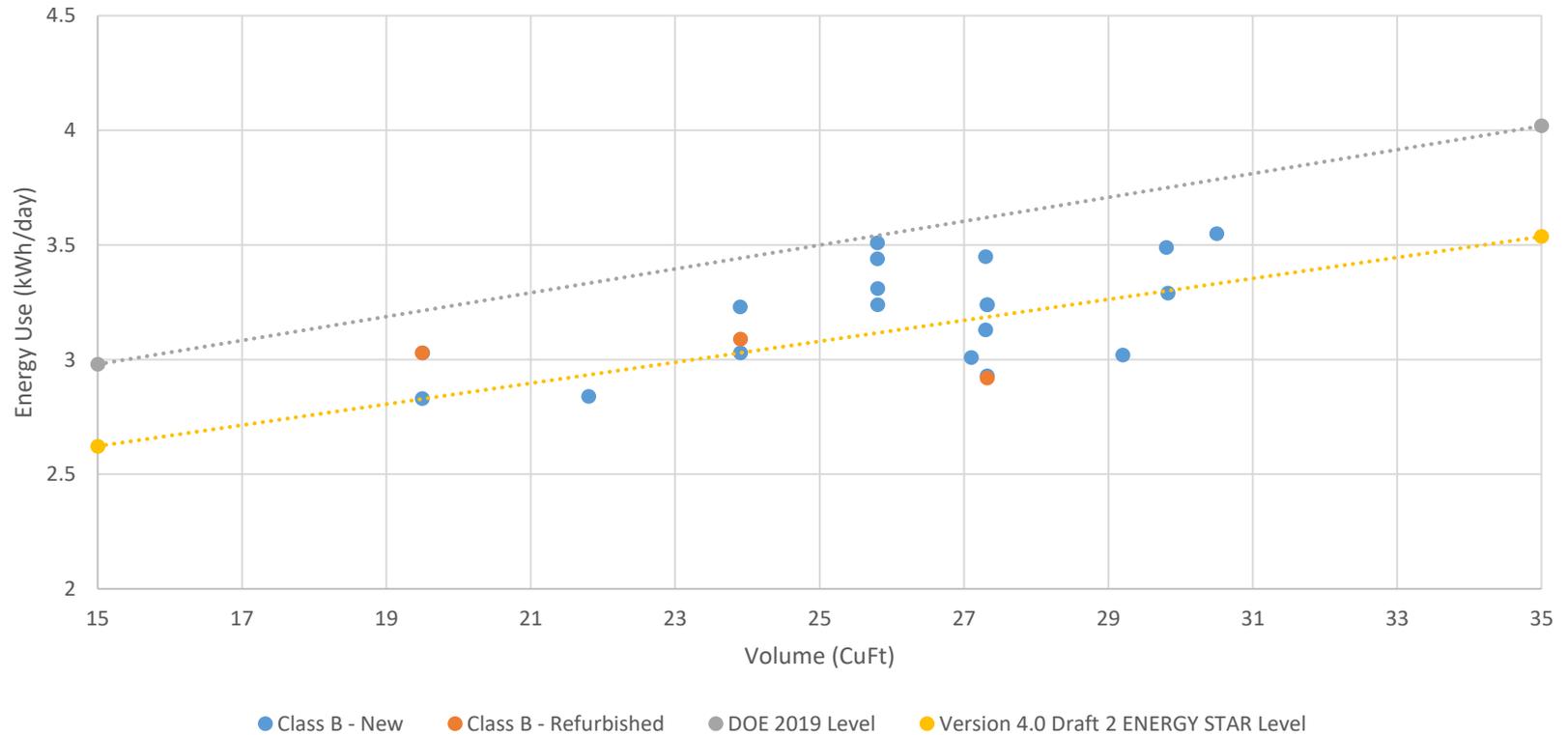
Class A Data





ENERGY STAR Refrigerated Beverage Vending Machines Levels: Class B

Class B Data





Draft 2 MDEC Levels

- Maximum Daily Energy Consumption (MDEC) Levels:
 - Amended the MDEC levels for Class A and Class B machines
 - Class A and Combination A (reduced from 10% to 7% beyond DOE)
 - Class B and Combination B (reduced from 15% to 12% beyond DOE)



Draft 2 Eligibility Criteria

Maximum Daily Energy Consumption (MDEC): To certify for ENERGY STAR, refrigerated beverage vending machines shall consume equal to or less than the MDEC values, in kWh/day, obtained using the equations below:

- Class A – New and Rebuilt Machines: $0.04836V + 2.2599$
- Class B – New and Rebuilt Machines: $0.04576V + 1.936$
- Combination A – New and Rebuilt Machines: $0.07998V + 2.4738$
- Combination B - New and Rebuilt Machines: $0.09768V + 1.7952$

- And -

(1) Refrigeration low power mode, (2) accessory low power mode, or (3) whole machine low power state.



General Discussion and Questions



Next Steps and Timeline

- Stakeholder comments on Draft 2 due February 28, 2019
 - Send to vendingmachines@energystar.gov
(Moderated by Zenia Montero)
- EPA anticipates this specification to be finalized in Q1 2019
- Version 4.0 specification effective date approximately 9 months after final specification published



Contacts

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