

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



**OFFICE OF
AIR AND RADIATION**

May 19, 2016

Dear ENERGY STAR® Refrigerated Beverage Vending Machine Brand Owner or Other Interested Party:

With this letter, the U.S. Environmental Protection Agency (EPA) announces the Agency's intention to amend the current ENERGY STAR Version 3.1 Refrigerated Beverage Vending Machine specification to immediately adopt the U.S. Department of Energy (DOE) Appendix A test procedure (10 CFR Part 431 Subpart Q¹). At this time, EPA is also sharing a timeline for launching a revision to the ENERGY STAR Refrigerated Beverage Vending Machine Eligibility Criteria in response to the DOE Appendix B test procedure and minimum standards, which will take effect in 2019.

Amendments to Current ENERGY STAR Specification

As of January 27, 2016, DOE requires that manufacturer representations with regards to refrigerated beverage vending machine energy consumption be made using Appendix A. Based on discussions with DOE and manufacturers, EPA understands that the updates to the DOE test procedure put forth in Appendix A are clarifications to the existing test procedure and do not significantly impact the method in which machines are currently tested. As such, EPA is adopting Appendix A for purposes of ENERGY STAR certification and will update the test procedure reference as presented in Table 1, below:

Table 1: Test Standards for ENERGY STAR Qualification	
ENERGY STAR Requirement	Test Method Reference
MDEC	Appendix A to 10 CFR Part 431 Subpart Q, 10 CFR Part 431.294

Appendix A requires manufacturers to test machines without payment mechanisms installed and to then add 0.20 kWh/day to the measured daily energy consumption in order to account for payment mechanism energy consumption. For models certified using the DOE Appendix A test

¹ On July 31, 2015, DOE published its Final Rule on Test Procedures for Refrigerated Beverage Vending Machines, 80 FR 45758. According to the DOE Final Rule, manufacturer energy representations are required to reflect the use of the Appendix A test procedure 180 days after publication, or January 27, 2016.

procedure, EPA will align with the DOE test procedure and provide a 0.20 kWh/day allowance for payment mechanisms on to the energy consumption limits for purposes of ENERGY STAR certification.

The new Maximum Daily Energy Consumption (MDEC) allowance will be included in Section 3, as presented below:

3) **Qualification Criteria:**

- A. Maximum Daily Energy Consumption (MDEC): To qualify 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:
- a. Class A – New and Rebuilt Machines: $0.0523V + 2.432$
 - b. Class B – New and Rebuilt Machines: $0.0657V + 2.844$
 - c. Payment Mechanism Allowance – 0.20 kWh/day, to be added to MDEC using the calculations provided for Class A and Class B machines above, as applicable.

Where, V = is the representative value of refrigerated volume (ft³) of the BVM model, as calculated pursuant to 10 CFR 429.52(a)(3).

Per ENERGY STAR Program Requirements, CBs are expected to verify ENERGY STAR certified beverage vending machines using the same test procedure used to certify the model.

If you have any concerns regarding this amendment, please send comments to vendingmachines@energystar.gov by, **June 14, 2016**. **EPA will release the amended Version 3.2 specification shortly thereafter and it will be effective upon publication.**

Version 4.0 ENERGY STAR Specification Launch and Data Assembly

On January 8, 2016, DOE released new minimum standards, requiring compliance by January 8, 2019². Manufacturers must comply with the standards using the test procedure in Appendix B (10 CFR Part 431 Subpart Q). The amended DOE standards are equal to the current ENERGY STAR Class A Machine levels and more stringent than the current ENERGY STAR Class B Machine levels. As a result, EPA will evaluate whether there is an opportunity to revise the current specification levels so that ENERGY STAR continues to recognize the top performers and offer significant energy savings to end users once the new DOE standards take effect in 2019.

Based on an initial review, it appears that the new Appendix B test procedure will result in slightly different performance ratings for some machines compared to Appendix A. In evaluating the potential for a revised Version 4.0 specification, EPA will launch a data assembly

² 81 FR 1028

effort to better understand these impacts and to ensure that any proposal will be representative of high efficiency machine performance using the Appendix B test procedure. EPA expects to launch this effort in 2017. However, manufacturers are encouraged to provide data to EPA as it becomes available.

Provided below is an initial timeline for the Version 3.2 specification amendment and Version 4.0 specification revision efforts.

Date	Milestone
May 19, 2016	Version 3.2 specification amendment to incorporate Appendix A
June 14, 2016	Comment deadline on Version 3.2 specification amendment
June 27, 2016	Final Version 3.2 specification released
Q1, 2017	Launch of data assembly effort using Appendix B test procedure for Version 4.0 specification development
Q3, 2017	Draft 1 Version 4.0 specification released
Q1, 2018	Final Version 4.0 specification released
Fall 2018	Version 4.0 specification effective

I look forward to working with you to revise the ENERGY STAR Refrigerated Beverage Vending Machine specification. Please contact me at Hesla.Kirsten@epa.gov and (202) 564-2984 or Adam Spitz at Adam.Spitz@icfi.com and (916) 231-7685 with questions or concerns. For any questions pertaining to the DOE test procedures, contact Ashley Armstrong, DOE, at Ashley.Armstrong@ee.doe.gov or (202) 586-6590.

Sincerely,



Kirsten Hesla, Product Manager
ENERGY STAR Refrigerated Beverage Vending Machines