

ENERGY STAR® Emerging Technology Award 2021 Draft Criteria Stakeholder Comments			
Topic	Stakeholder	Comment Summary	EPA & DOE Responses
Residential Induction Cooking Tops			
Criteria	Summary	Five stakeholders support the proposed Emerging Technology Award 2021 for Residential Induction Cooking Tops.	EPA appreciates these comments.
Test Procedure	Summary	<p>Five stakeholders support EPA's usage of the U.S. Department of Energy (DOE) test procedure, 10 CFR 430, Subpart B Appendix I – Cooking Products test method for conventional cooking tops, as published in January 2017.</p> <p>One stakeholder objected to EPA referencing a test procedure DOE has recently withdrawn stating, DOE withdrew the test procedure because it determined that it was not representative of energy use or efficiency during an average use cycle-and because it was overly burdensome to conduct.</p>	<p>EPA appreciates these comments. The DOE test procedure to be used for the Emerging Technology Award was developed for testing conventional cooking tops, which are a category of cooking products which are a household cooking appliance consisting of a horizontal surface containing one or more surface units that utilize a gas flame, electric resistance heating, or electric inductive heating. This includes any conventional cooking top component of a combined cooking product. DOE published this test procedure final rule in December 2016 (81 FR 91418). DOE withdrew the test procedure in August 2020 (85 FR 50757). Below is DOE's statement on using this test procedure for testing induction cooking tops.</p> <p>DOE's Statement: DOE's previous test procedure for conventional cooktops measured the performance of gas, electric coil, electric radiant, and electric induction cooktops using the water heating method. In establishing this test procedure, DOE considered all available data on both gas and electric cooktops.</p> <p>AHAM asserted in its petition that the test procedure may not have been representative, repeatable, or reproducible for gas cooktops. AHAM also claimed that DOE's testing was insufficient to evaluate repeatability and reproducibility of electric cooktops. (Comment #EERE-2018-TP-0004-0035, pp 7-8). DOE's data for induction cooktops in particular consistently exhibited low variability. DOE's data presented in the final rule establishing the water heating test procedure showed that, for four surface units on two different cooktops, coefficients of variation (COVs) for repeatability tests ranged from 0.6% to 2.0%. (See Table III.3 in 81 FR 91418). Additional testing that DOE conducted in response to AHAM's petition for withdrawal of the test procedure demonstrated COVs of 0.7% and 1.3% for repeatability tests on surface units for two different induction cooktops (See Table III.1 in 84 FR 39211). AHAM acknowledged after it submitted its petition for withdrawal that its repeatability data for electric cooktop testing is similar to DOE's. (Comment #EERE-2018-BT-TP-0038, p23). More specifically, AHAM stated that "AHAM's results are similar to DOE's results with regard to repeatability. Those coefficients of variation are relatively low." (Comment #EERE-2018-BT-0004-0035, p3).</p> <p>Furthermore, earlier in the rulemaking establishing the test procedure, DOE presented CECED round robin data for testing an induction cooktop at 12 laboratories using the water heating method on which the DOE test procedure was based. This round robin data demonstrated an average COV of 0.87%, suggesting good reproducibility. (See Table III.2 in 81 FR 57374). AHAM has stated that a COV of 2.3% represents an acceptable level of reproducibility. (Comment #EERE-2018-BT-TP-0004-0035, p28)</p>