

calculation does not include it at this time. As currently defined in the test procedure, the energy factor represents the amount of energy used during a cycle. Since standby power is energy consumed outside the wash cycle of a dishwasher, it is not a parameter in the energy factor calculation. Stakeholders supported this as an initial strategy. Both AHAM and CEE commented that they supported the proposal to include standby power in the EAOC and EAEU. However, they also voiced strong support for including standby power in the energy factor whenever in the future the energy efficiency standard for dishwashers is revised. (AHAM No. 33 at 4; CEE No. 35 at 1)

E. New Definitions

The Department presented nine new definitions in the September 2002 NOPR (67 FR 56242), all of which elicited comments. The change in the definition for “standby mode” was discussed in the previous section. This section addresses all other definitions.

Non-Soil-Sensing Dishwasher and Soil-Sensing Dishwasher

For this test procedure, the Department developed definitions for two types of dishwashers: non-soil-sensing dishwasher and soil-sensing dishwasher. The designation of dishwasher type determines whether a dishwasher will be tested with clean or soiled dishes. The two definitions use the ability or lack of ability to adjust automatically any energy consuming aspect of a wash cycle based on the soil load of the dishes as the determinant for distinguishing dishwasher type.

AHAM questioned the wording of these proposed definitions and recommended that the Department change the more general phrase of “wash cycle” to “normal wash cycle,” since the test procedure only tests the normal cycle. (Public Hearing Tr. p. 88) However, in order to provide a clear definition for the purposes of classification, DOE believes that a dishwasher should be classified as a soil-sensing dishwasher if it can sense soils and respond to that information, regardless of the cycle type. Using the more narrow specification of “normal cycle” in the definition could provide an incentive for manufacturers to have a separate button activating the use of a soil sensor so that the normal cycle would operate as a non-soil-sensing dishwasher. This cycle configuration would enable a dishwasher to be tested on the normal cycle with clean dishes, thus avoiding the more difficult and costly test method using soils. For these reasons, DOE is retaining the original

definitions with the more general reference to “wash cycle” and is not adding the word “normal” to sections 1.5 and 1.12.

Sensor Response

In the September 2002 NOPR, the Department proposed a set of six definitions to characterize the energy consumption test cycles that would result when soil-sensing dishwashers were tested with the three levels of soil used in the test procedure in sections 1.9, 1.10, 1.11, 1.15, 1.16, 1.17, and 1.18. AHAM recommended that the Department change this entire set of soil-sensing cycle definitions, suggesting that the word “response” replace the word “cycle.” It believes that the word “response” more accurately characterizes the way that a dishwasher will react to the varying soiled loads in the soil-sensing tests, since there is no actual button or setting which can initiate the cycle in the way that a traditional cycle can be selected by a dishwasher user. (AHAM No. 33 at 8)

The Department agrees that changing the word “cycle” to “response” would more accurately reflect the way a dishwasher is challenged to react to the heavy, medium, and light soil levels, and therefore DOE has adopted this change. However, by using the word “response” as part of the term to be defined, the Department believes that the later words in the proposed definitions, “that constitutes the response,” become redundant and should be eliminated. Thus, DOE has made conforming changes to the NOPR definitions set out in section 1 of this final rule. In addition, the Department has modified references to these terms throughout the test procedure to reflect the change, specifically in section 2.6.3 and its subsections, sections 5.1.2 and 5.2.2, and section 5.6.

F. Modifications To Improve the Clarity and Repeatability of the Test Procedure

Clarify the Definition of Water-Heating Dishwasher

Discussion at the October 22nd public hearing brought forth one issue that DOE had not raised in the September 2002 NOPR. CEE questioned the clarity of the existing definition of the normal cycle for water-heating dishwashers in section 1.19 of the regulations proposed in the NOPR, believing that the language as written offered a possible testing “loophole.” (Public Hearing Tr. p. 174) It was the intent of the definition, already in effect with the December 18, 2001, final rule, to require that all water-heating dishwashers heat water to 120

°F during testing. However, the wording of the definition using the phrase “may operate” did not seem to require it definitively. CEE suggested that under the current definition, one might interpret the requirement to allow the testing of a water-heating dishwasher using 50 °F water, instead of the 120 °F temperature, thereby reducing its apparent energy consumption. The CEE representative stated, “Our position is that it leaves too much wiggle room for someone to abuse that. * * * We would suggest that you require at least one cycle be heated to 120 degrees.” (Public Hearing Tr. p. 170)

Much discussion ensued at the hearing as stakeholders offered their interpretations of the definition. Whirlpool, for example, commented that a reading of the definition could be that the test procedure did not require a dishwasher that uses cold inlet, defined as nominal 50 °F, to heat at least one wash phase to 120 °F. (Public Hearing Tr. p. 173) The stakeholders at the hearing agreed that the intent of the definition was to require the necessary water-heating in at least one cycle, and several offered suggestions as to how the language might be clarified to make sure that the definition includes that requirement. AHAM and CEE submitted additional suggestions in written comments for revising the definitions. AHAM’s and CEE’s definitions proposed replacing the word “may” with the word “must.” (AHAM No. 33 at 9; CEE No. 35 at 2) After reviewing the suggested changes, the Department selected the wording submitted by AHAM for use in section 1.9 of this test procedure. The Department believes that AHAM’s proposed language most clearly states the requirement that all water-heating dishwashers must heat to at least 120 °F, regardless of the inlet temperature. The change in this definition represents a clarification of language to support the original intent of the test procedure, not a new definition.

OOE also questioned in written comments whether there is any justification for even providing the option of testing water heating dishwashers with 50 °F inlet temperature, since it would lengthen the dishwashing test cycle significantly. (OOE No. 36 at 5) Dropping the 50 °F testing option, however, was not discussed at the public hearing as part of the discussion to tighten the definition. Commenters’ concern focused on closing the testing loophole that may have existed within the definition of water-heating dishwashers for conducting 50-degree tests, and not on eliminating the 50-degree testing