Department of Energy
Washington, DC 20585

June 12, 2013

VIA EMAIL

Ms. Mariah Steele
ENERGY STAR Program
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Room 62023
Washington, DC 20460

Dear Ms. Steele:

The U.S. Department of Energy ("DOE") selected a Fisher & Paykel Appliances ("F&P") residential clothes washer, model WA42T26GW1, for testing as part of DOE's ENERGY STAR® Verification Testing Program. On March 18, 2013, DOE notified F&P that DOE testing showed the model did not meet the ENERGY STAR requirement for water factor ("WF")[1] or modified energy factor ("MEF").[2]

F&P replied to DOE on April 16, 2013, making two claims. First, F&P argued that DOE had improperly tested the warm wash cycles on the relevant units because the tested model has a "uniformly distributed warm wash temperature selection," as defined in section 1.17 of Appendix J1 to 10 C.F.R. Part 430, Subpart B ("Appendix J1"), and thus the "warm wash" data points should have been calculated as the numerical average of the cold and hot wash data points. F&P attached materials that confirmed, to DOE's satisfaction, that the three warm wash temperatures on the tested model are in fact uniformly distributed. Thus, DOE revised its test reports[3] to indicate the correct values for WF and MEF, which are as follows:

Serial Number	MEF (ft^3/kWh/cycle)	WF (gallons/cycle)
USG434168	1.99	6.7
UEG491170	1.98	6.7
UEG491166	2.02	6.6
UEG478043	2.01	6.6

Based on these revised calculations, DOE's test data do *not* indicate that the relevant model fails to meet the ENERGY STAR specification for MEF.[4] The WF, however, remains the same.

[1] WF is a measure of water consumption and is expressed in terms of gallons per cycle (gallons/cycle).
[2] MEF is a measure of energy efficiency and is expressed in terms of cubic feet per kilowatt-hour per cycle (ft^3/kWh/cycle).
[3] Because the issue here only related to calculations – not measured values, DOE did not need to re-test the relevant units.
[4] Based on DOE's test data, however, it appears that F&P may have improperly rated this model. In CCMS # 19009, F&P certified individual model WA42T26* as having an MEF of 2.07.

In its response, F&P also claimed that DOE failed to test in accordance with section 3.2.3.2.2 of Appendix J1, which provides instructions relevant to clothes washers with user adjustable adaptive water fill control systems, and instead tested in accordance with section 3.2.3.2.1, applicable to clothes washers with *non*-user adjustable adaptive water fill control systems. F&P wrote that it saw "no evidence in the [test] report that [section 3.2.3.2.2] was applied," and that "[c]omparing the water consumptions for some of the cycles indicates that it was not."

DOE is aware that model WA42T26GW1 features a user adjustable adaptive water fill control system, and thus tested in accordance with section 3.2.3.2.2. Section 3.2.3.2.2 requires that parties conduct four tests in the following manners:

(1) With the maximum test load and with the adaptive water fill control system set in the setting that will give the most energy intensive result,
(2) With the minimum test load and with the adaptive water fill control system set in the setting that will give the least energy intensive result,
(3) With the average test load and with the adaptive water fill control system set in the setting that will give the most energy intensive result for the given test load, and
(4) With the average test load and with the adaptive water fill control system set in the setting that will give the least energy intensive result for the given test load.

In DOE's test reports, the relevant minimum load size data was the result of testing using the setting that gives the least energy intensive result. The relevant maximum load size data was the result of testing using the setting that gives the most energy intensive result. Finally, DOE tested the average load size using both the least and most energy intensive settings, and then calculated the average of these two results. The relevant average is calculated in the "Addendum" tab of the test reports, and then carries over to the "Test Data Inputs" tab in the "Average Load Size" section.

Based on DOE's test results, DOE has determined that F&P model WA42T26GW1 does not meet the ENERGY STAR requirement for WF. Accordingly, DOE is referring this matter to the Environmental Protection Agency, the brand manager for ENERGY STAR.

Please feel free to contact me at laura.barhydt@hq.doe.gov should you require any further information.

Sincerely,

/S/

Laura L. Barhydt
Assistant General Counsel
for Enforcement

Cc: Richard Bollard, Standards & Approvals Manager, Fisher & Paykel Appliances
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