



## Department of Energy

Washington, DC 20585

March 16, 2011

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

Dear Ms. Jones:

On September 27, 2010, the United States Department of Energy (DOE) notified Friedrich Air Conditioning Company (Friedrich) that DOE testing of one unit of Friedrich room air conditioner model SM18M30 as part of the ENERGY STAR Testing Pilot Program indicated that this unit exceeded allowable ENERGY STAR energy-efficiency requirements. DOE gave Friedrich until October 7, 2010, to request additional testing or have this matter referred to the United States Environmental Protection Agency (EPA) for disqualification from the ENERGY STAR program.

On October 7, 2010, Friedrich requested additional testing and, in accordance with the Pilot Program guidelines, DOE proceeded with Stage II testing. Stage II testing confirmed that model SM18M30 does not meet the ENERGY STAR requirements. On December 30, 2010, DOE notified Friedrich and asked it to provide evidence or explanation to rebut the test results. On January 18, 2011, Friedrich responded to DOE and raised the following issues.

First, Friedrich stated that the fin stamping oil it used on the evaporator coils had caused a drop in performance. Friedrich noted that on July 2010 it switched to more hydrophilic oil and suggested that additional run-in time would cleanse the coils. Friedrich requested that DOE spray the fin surfaces with 409 or Fantastik and then retest the units. Because a surface treatment is not included in the manufacturer instructions or the DOE test procedure, DOE does not believe it is appropriate to take this additional step prior to performing the efficiency test. As to run-in time, DOE instructed the test laboratory to run each unit for at least 24 hours prior to testing. Because neither the manufacturer instructions nor the DOE test procedure specifies a longer run-in period, DOE concludes that additional run-in time is not appropriate.


Second, Friedrich claimed that the DOE test should have followed ASHRAE Standard 16-1983 (RA99), which contains an allowance for adjusting the capacity of the unit (and thereby the measured EER), based on the barometric pressure conditions at the test laboratory. The DOE test procedure effective at the time of testing did not reference that standard or permit that allowance. Thus, DOE's test results are valid for the test procedure in effect at the time of the tests. Since then, however, DOE amended the test procedure to reference the ASHRAE standard and permit the barometric pressure allowance, 76 FR 1016-1017 (January 6, 2011). DOE



recognizes that, if this newly permitted adjustment were made, the test results would indicate that this model does satisfy the applicable ENERGY STAR specification.

Accordingly, DOE is referring this matter to EPA, the brand manager for ENERGY STAR, for appropriate action. Please feel free to contact Laura Barhydt of my staff at 202-287-5772 should you require any further information.

Sincerely,

A handwritten signature in black ink, appearing to read 'T. Lynch', with a horizontal line extending to the right.

Timothy G. Lynch  
Deputy General Counsel for  
Litigation and Enforcement

cc: Mr. W. Patrick Kendrick  
Friedrich Air Conditioning Co.  
[PKendrick@friedrich.com](mailto:PKendrick@friedrich.com)