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STATE OF CALIFORNIA

Energy Resources Conservation And Development Commission

In the matter of,	)	**Docket No.:** 10-RADB-01
	)	**Order No. : 10-0728-3**
Informal Proceeding to Decertify Appliances Turbo Air, Inc., Commercial Refrigerators, Model Numbers TSR-23SD and TUR-28SD	)	ORDER DECERTIFYING APPLIANCES
	)	July 28, 2010

DECISION AND ORDER OF THE CALIFORNIA ENERGY COMMISSION AFTER CONSIDERATION OF THE PROPOSED DECISION OF THE EFFICIENCY COMMITTEE

On July 28, 2010, the California Energy Commission[1] held a public hearing, as part of its regularly scheduled business meeting, to consider the Proposed Decision, dated June 22, 2010, and attached hereto as "Exhibit A", of the Commission's Efficiency Committee in the above-captioned matter. To the extent reasonably possible, such consideration is required within 21 days of the filing of the Proposed Decision. (20 California Code of Regulations, Section 1236.)[2] The July 28 Business Meeting was the first available to consider this matter after the Committee made its decision.

The Efficiency Committee prepared the Proposed Decision following a properly noticed Informal Proceeding[3] held on April 26, 2010, for the purpose of removing Turbo Air, Inc., commercial refrigerator models, numbers TSR-23SD and TUR-28SD, from the Energy Commission's database of certified appliances (hereafter referred to as the "Appliance Database").[4] (Section 1606, subd. (c).) Commissioner Anthony Eggert is the Presiding Member and Commissioner Jeffrey D. Byron is the Associate Member of the Committee.

In the Proposed Decision, the Efficiency Committee recommended, among other things, finding that Turbo Air commercial refrigerator models, numbers TSR-23SD and TUR-28SD, do not meet the maximum daily energy consumption standard in kilowatt hours (kWh) for such appliances, manufactured between January 1, 2007, and January 1, 2010, found in Section 1605.3, subdivision (a)(5), Table A-9. Accordingly, the Executive Director shall remove these refrigerator models from the Energy Commission's Appliance Database, and such models may not henceforth be sold or offered for sale in California. (§ 1608, subd. (a)(4), (1), respectively.)

After considering the Proposed Decision and comments received at the public hearing (which were limited to the existing evidentiary record pursuant to 20 Cal. Code Regs., § 1236, subd. (b), the

[1] Also known as the State Energy Resources Conservation and Development Commission. See Pub. Resources Code, § 25200.
[2] Unless otherwise noted, all subsequent regulatory citations are to Title 20 of the Cal. Code Regs.
[3] The hearing was held pursuant to Government Code, sections 11445.10 – 11445.60, and § 1608, subd. (e)(2)(C).
[4] The Decision of the Efficiency Committee erroneously referred to the hearing date as April 29, 2010.

California Energy Commission hereby adopts the Proposed Decision, which is attached hereto and incorporated herein as Exhibit "A".

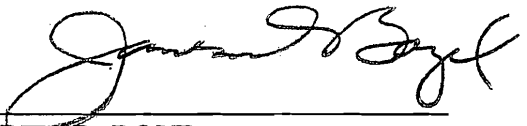
Pursuant to Government Code, section 11425.60, this decision, including the reasons therefore, is designated as a precedent decision.

IT IS SO ORDERED

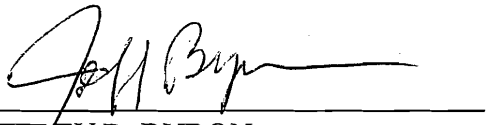
Date: July 28, 2010

STATE ENERGY RESOURCES
CONSERVATION AND
DEVELOPMENT COMMISSION

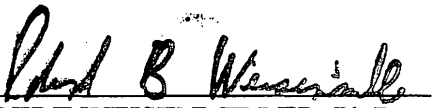
KAREN DOUGLAS
Chairman



JAMES D. BOYD
Vice Chair



JEFFREY D. BYRON
Commissioner



ROBERT WEISENMILLER, Ph.D.
Commissioner

ANTHONY EGGERT
Commissioner

Exhibit A

STATE OF CALIFORNIA

Energy Resources Conservation And Development Commission

In the matter of,	)	**Docket No.:** 10-RADB-01
Informal Proceeding to Decertify Appliances Turbo Air, Inc., Commercial Refrigerators, Model Numbers TSR-23SD and TUR-28SD	)	**Order No. :** [~~PROPOSED~~] DECISION OF THE EFFICIENCY COMMITTEE OF THE ENERGY COMMISSION TO DECERTIFY APPLIANCES
	)	June 22, 2010

I. Summary

Pursuant to Public Resources Code, section 25402, subd. (c), the California Energy Commission[1] establishes energy efficiency standards for appliances sold or offered for sale in California. Those standards are contained in the regulations promulgated in Article 4, Chapter 4, of Title 20 of the California Code of Regulations, section 1601 et seq. (collectively referred to hereafter as the "Appliance Efficiency Regulations").[2] Section 1606, subd. (c), creates a publicly-accessible electronic database (hereafter referred to as the "Appliance Database") for all appliances certified to the Commission as meeting the applicable efficiency standards. Section 1608, subdivisions (a)(1) and (4), prohibit the sale or offer for sale in California of an appliance that does not appear in the Appliance Database or does not comply with the efficiency standard applicable under Section 1605.3.

Turbo Air, Inc., manufactures commercial refrigerators and other appliances subject to the Energy Commission's efficiency standards. It has come to the attention of the Energy Commission that two of Turbo Air, Inc.'s commercial refrigerator models, numbers TSR-23SD and TUR-28SD (collectively referred to hereafter at times as the "Turbo Air Refrigerators"), may not meet the applicable efficiency standards in Section 1605.3, subdivision (a)(5), Table A-9. For the foregoing reasons, the Efficiency Committee hereby recommends that the Energy Commission find that, based on the evidence herein, that the Turbo Air Refrigerators do not meet the applicable efficiency standards, and direct the Executive Director to remove these Turbo Air Refrigerators from the Appliance Database, so that henceforth they may not be sold or offered for sale in California.

II. Procedural Posture

On April 29, 2010, pursuant to Gov. Code, sections 11445.10 – 11445.60, and Sections 1230, et seq., and 1608, subd. (e)(2)(C), the Efficiency Committee of the Energy Commission held a

[1] Also known as the State Energy Resources Conservation and Development Commission. See Pub. Resources Code, § 25200.

[2] Unless otherwise noted, all subsequent regulatory references are to Title 20 of the Cal. Code of Regs.

properly noticed hearing to determine whether to remove the Turbo Air Refrigerators from the Appliance Database.

This proposed decision was prepared more than 21 days following the hearing, as required by Section 1235, owing to delays associated with attempts to obtain a transcript of this hearing, which ultimately proved unsuccessful due to technical limitations with the format of the recording of the hearing. A partial transcript was not obtained until June 8, 2010. There is no evidence in the record that this delay has prejudiced Turbo Air, Inc.

III. The Undisputed Facts

A. The Energy Commission's Investigation

Turbo Air, Inc., has not disputed the following essential facts. The maximum daily energy consumption standard in kilowatt hours ("kWh") for reach-in commercial refrigerators, manufactured between January 1, 2007, and January 1, 2010, sold or offered for sale in California is found in Section 1605.3, subdivision (a)(5), Table A-9, and is defined by this formula: 0.10 x measured volume in cubic feet (V) + 2.04.

In December of 2009, Staff, pursuant to delegation from the Executive Director, directed the testing of three models of reach-in commercial refrigerators manufactured by Turbo Air, Inc. This testing was performed by BR Laboratories, Inc. (hereinafter "BR Labs") using the procedures specified in Section 1604, subd. (a)(2), Table A-2, for commercial refrigerators. The results of this testing were as follows:

Model #	Month/Year Manufactured	Measured volume (Cu Ft)	Tested Daily Energy Use (kWh per day)	Maximum energy consumption	Pass / Fail
TSR-23SD	July 2008	19.3	5.105	3.97	Fail
TSR-49SD	July 2009	44.0	5.179	6.44	Pass
TUR-28SD	June 2009	7.0	3.612	2.74	Fail

(Test Report of Turbo Air Commercial Refrigerator, Automatic Defrost, Model No. TSR-23SD, Serial No. DR23307063, December 2009; Test Report of Turbo Air Commercial Undercounter Refrigerator, Automatic Defrost, Model No. TUR-28SD, Serial No. U200406036, December 2009.)

Staff informed Turbo Air of these test results by letter dated December 29, 2009, and instructed BR Labs to conduct a second test on second units of the Turbo Air Refrigerators at issue here, models

TSR-23SD and TUR-28SD. Those tests were done in February of 2010, and the results are reflected below:

Model #	Month/Year Manufactured	Measured volume (Cu Ft)	Tested Daily Energy Use (kWh per day)	Maximum energy consumption	Pass / Fail
TSR-23SD	May 2009	19.3	3.132	3.97	Pass
TUR-28SD	June 2009	7.0	3.465	2.74	Fail

(Test Report of Turbo Air Commercial Refrigerator, Automatic Defrost, Model No. TSR-23SD, Serial No. BM2R405003, February 2010; Test Report of Turbo Air Commercial Undercounter Refrigerator, Automatic Defrost, Model No. TUR-28SD, Serial No. U200406028, February 2010.)

The mean of the two tests for the Turbo Air Refrigerators were calculated, and the results are reflected below, as well as the energy consumption reported by Turbo Air (as tested by BR Labs at Turbo Air's direction) in its certification pursuant to Section 1606:

Model#	Mean of tested daily energy use	Maximum energy consumption	Pass / Fail	Energy use as certified by Turbo Air[3]	
TSR-23SD	4.1185	3.97	FAIL	3.58	12/16/2002
TUR-28SD	3.5385	2.74	FAIL	1.46	1/9/2003

(Appliance Database available at http://www.appliances.energy.ca.gov; Test Report on "Turbo Air" Commercial Refrigerator, Automatic Defrost, Model No. TSR-23SD, Serial No. BC2R0185, December 2002; Test Report on "Turbo Air" Commercial Refrigerator, Automatic Defrost, Model No. TUR-28SD, Serial No. UR20128035, December 2002.)

By letter dated March 25, 2010, Turbo Air was informed of the results of the second test and calculated mean, and that a proceeding would be commenced to remove the Turbo Air Refrigerators from the Energy Commission's Appliance Database.

B. The Hearing

On April 29, 2010, the Efficiency Committee of the Energy Commission held a properly noticed hearing for the purpose of removing the Turbo Air Refrigerators from the Appliance Database. Commissioner Anthony Eggert is the Presiding Member and Commissioner Jeffrey D. Byron is the Associate Member of the Committee.

[3] Date indicated is the date the model was added to the Appliance Database.

Ms. Tovah Ealey, Program Manager, Appliance Standards Enforcement, Appliance and Process Energy Office, and Mr. Dennis Beck, Senior Staff Counsel, Office the Chief Counsel, appeared on behalf of the Executive Director of the Energy Commission (collectively referred to hereafter as "Staff"). Staff called as a witness Mr. Bodh R. Subherwal, P.E., President and Technical Manager, BR Laboratories, Inc. (collectively referred to hereafter as "BR Labs"), who appeared telephonically.

Mr. Michael Andrus, Executive Vice President, Sales and Marketing, Mr. Dan Cho, General Manager, and Mr. Nelson Lee, Warranty Service Manager, appeared on behalf of Turbo Air (collectively referred to hereafter as "Turbo Air"). Turbo Air submitted a 9-page presentation for consideration.

Mr. Jim Rothstein and Mr. Clifford Waniewski made public comments at the hearing.

At the hearing, Staff described its aforementioned investigation. In addition, Mr. Suberwahl described the extensive experience of BR Labs in testing appliances to meet the standards established by the Appliance Efficiency Regulations, both for the Energy Commission and on behalf of numerous manufacturers, including Turbo Air. Mr. Suberwahl also described the process by which BR Labs obtained and tested the Turbo Air Refrigerators in compliance with the requirements of the Appliance Efficiency Regulations and the applicable test procedure.

Turbo Air presented information regarding its product development, manufacturing and testing processes. Turbo Air suggested that the different test results could have been caused by a variety of factors, including that the particular units tested were defective, or that the efficiencies had changed following modification of the design of the Turbo Air Refrigerators.

Turbo Air had changed the design of TUR-28SD in February of 2008 in two respects:

1. changing the inner liner material from ABS plastic to stainless steel, and;
2. changing the condenser motor and fan blades from a two-piece motor with 3.9 inch diameter blades to a one-piece motor with 6.9 inch diameter blades.

Turbo Air asserted that the change in liner material did not affect the efficiency of the unit. However, the new condenser fan motor and blades increased the energy consumption from 12 watts ("W") to 43 W, as well as the rate of heat exchange, and thus the energy consumption of the units.

Turbo Air had also changed the digital control setting on the compressor of TSR-23SD to have a total of two sensors on each unit.

However, Turbo Air explicitly denied that it was contesting whether the proper tests had been performed to determine the energy consumption of the Turbo Air Refrigerators or the validity of the test results on which this action is based.

IV. The Turbo Air Refrigerators Do Not Meet the Efficiency Standards

A. Standard of Review

An agency's interpretation of a regulation it is charged with enforcing is entitled to great weight, unless it is clearly erroneous or unauthorized. (*Overaa Construction v. California Occupational Safety and Health Appeals Board* (2007) 147 Cal.App.4th 235, 244-245.)

B. The Appliance Efficiency Regulations

For reach-in commercial refrigerators, manufactured between January 1, 2007, and January 1, 2010, like the Turbo Air Refrigerators at issue here, the Appliance Efficiency Regulations limit the maximum daily energy consumption, in kilowatt hours ("kWh"). This standard is expressed as the following formula: 0.10 x the measured volume of the refrigerator in cubic feet (V) + 2.04. (Section 1605.3, subdivision (a)(5), Table A-9.)

The Appliance Efficiency Regulations also create the Appliance Database of all appliances that have been certified to the Energy Commission as meeting the applicable efficiency standards. (Section 1606, subd. (c).) This database is populated with certified data submitted to the Energy Commission by manufacturers or approved third-party test laboratories demonstrating that regulated appliances meet the standards in the Appliance Efficiency Regulations. (Sections 1606, subd. (a)(3), (c).) Manufacturers or approved third-party test laboratories follow specified test procedures to obtain the necessary data for certification, including for commercial refrigerators. (Sections 1603, 1604, subd. (a)(2).)

The Appliance Efficiency Regulations prohibit the sale or offer for sale in California of an appliance that does not appear in the Energy Commission's appliance database or does not comply with the applicable efficiency standard. (Section 1608, subd. (a)(1) and (4); Section 1605.3.) The Energy Commission may commence a complaint proceeding to remedy alleged violations of the Appliance Efficiency Regulations. (Section 1230, et seq.) If the Energy Commission finds that an appliance in the Appliance Database does not meet the applicable efficiency standard, it may direct the Executive Director of the Commission from the Appliance Database, pursuant to Section 1608, subd. (d)(2)(B).

C. The Turbo Air Refrigerators

The uncontroverted test results described above from BR Labs of two units of the Turbo Air Refrigerators establish that these commercial refrigerators do not meet the applicable energy consumption standards.

V. Decision

Since their inception in 1975, California's building and appliance efficiency programs have saved California's citizens billions in energy costs. (See *Energy Efficiency California's Highest-Priority Resource* (August 2006), p. 3, available at: ftp://ftp.cpuc.ca.gov/Egy_Efficiency/CalCleanEng-English-Aug2006.pdf.) The energy saved is equivalent to that produced to the output of 24 large power plants. (*Ibid.*, p. 12.) However, realizing the potential of these standards requires compliance, which in turn comes from the backstop provided by a fair but firm enforcement program. Enforcement deters violations and encourages the regulated community to plan for compliance from inception, when it is most cost-effective.

A strong enforcement posture furthers several other salutary goals. Enforcement and compliance promotes equity, by ensuring those who choose to comply with the standards do not suffer a disadvantage from those who do not. It also assures the public that it can rely on representations about efficiency, and will realize the benefit from promised reductions in energy and water use. They must be enforced as written.

The Appliance Efficiency Regulations establish bright line standards, and the undisputed test data speaks for itself. The Efficiency Committee recommends that the Energy Commission find that the Turbo Air Refrigerators use more energy than allowed by Section 1605.3, subdivision (a)(5), Table A-9. Model No. TSR-23SD, on average, uses 4.1185 kWh per day, above the standard of 3.97 kWh per day. Model No. TUR-28SD, on average, uses 3.5385 kWh per day, above the standard of 2.27 kWh per day.

Turbo Air's non-compliance is of its own making. Turbo Air modified key characteristics of the refrigerators in question, which appear to have changed the daily energy consumption of the models. However, Turbo Air failed to meet its obligation to submit updated information to the Energy Commission's Appliance Database. (Section 1606, subd. (a)(3)(D), Table X, subd. (e)(1).) The Energy Commission did not become aware of the modifications until Turbo Air submitted different energy consumption data to other public databases.

The Efficiency Committee appreciates Turbo Air's forthrightness in responding to the Commission's efforts to address this issue. Nevertheless, the Efficiency Committee must ensure

that the Appliance Efficiency Regulations are firmly enforced. The Committee looks forward to working with Turbo Air to bring its products into compliance with the Appliance Efficiency Regulations so that they may be sold and offered for sale here.

VI. Conclusion

For the foregoing reasons, the Efficiency Committee recommends that the Energy Commission find that the Turbo Air Refrigerators use more energy than allowed by Section 1605.3, subdivision (a)(5), Table A-9. Model No. TSR-23SD, on average, uses 4.1185 kWh per day, above the standard of 3.97 kWh per day. Model No. TUR-28SD, on average, uses 3.5385 kWh per day, above the standard of 2.27 kWh per day.

The Efficiency Committee further recommends that the Energy Commission direct the Executive Director of the Energy Commission to remove Turbo Air Commercial Refrigerators, Model Nos. TSR-23SD and TUR-28SD from the Appliance Database for failing to meet the applicable standards established by the Appliance Efficiency Regulations.

The Efficiency Committee further recommends that this decision should be without prejudice to Turbo Air's ability to redesign its products, apply new model numbers if necessary, demonstrate they meet the standards, and submit them for inclusion in the Appliance Database.

The Efficiency Committee further recommends that the Energy Commission's Order and the reasons therefore should be designated as precedential, pursuant to Government Code, section 11425.60.

Date: June 22, 2010

EFFICIENCY COMMITTEE OF THE
STATE ENERGY RESOURCES
CONSERVATION AND
DEVELOPMENT COMMISSION

ANTHONY EGGERT
Presiding Member
Commissioner

JEFFREY D. BYRON
Associate Member
Commissioner