This final document represents the definitive view of the agency on the questions addressed and may be relied upon by the regulated industry and members of the public.

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**Guidance Type:** Definitions and Scope of Coverage, Test Procedures

<u>Category:</u> Residential Products **Product:** Refrigerators and Freezers

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**Q:** What types of refrigerated wine storage products and/or hybrid wine storage products (i.e., products combining wine storage, fresh food, and/or freezer compartments) are covered under DOE's regulations?

A: For the purpose of this guidance, a wine storage compartment is a compartment that is not designed to be capable of storage temperature less than 39 °F. At this time, wine storage products, defined for these purposes as refrigeration products comprised exclusively of wine storage compartments, are not covered under DOE's regulations. See 75 FR 78810 (December 16, 2010). DOE has received several inquiries about the applicability of DOE's definitions to hybrid products that combine wine storage compartments with fresh food and/or freezer compartments. Consequently, DOE is clarifying through this guidance that such hybrid products may fall within the current definitions of electric refrigerator¹ and electric refrigerator-freezer².

A wine storage compartment of any size added to what would otherwise be an *electric refrigerator* does not change the product's status as an *electric refrigerator* and does not exempt it from coverage. The same outcome applies for any *electric refrigerator-freezer* -- i.e. adding a wine cooler compartment to an *electric refrigerator-freezer* would not exempt that product's coverage as an *electric refrigerator-freezer*.

<sup>&</sup>lt;sup>1</sup> Electric refrigerator means a cabinet designed for the refrigerated storage of food, designed to be capable of achieving storage temperatures above 32 °F (0 °C) and below 39 °F (3.9 °C), and having a source of refrigeration requiring single phase, alternating current electric energy input only. An electric refrigerator may include a compartment for the freezing and storage of food at temperatures below 32°F (0 °C), but does not provide a separate low temperature compartment designed for the freezing and storage of food at temperatures below 8 °F (-13.3 °C). 10 CFR 430.2.

<sup>&</sup>lt;sup>2</sup> Electric refrigerator-freezer means a cabinet which consists of two or more compartments with at least one of the compartments designed for the refrigerated storage of food and designed to be capable of achieving storage temperatures above 32 °F (0 °C) and below 39 °F (3.9 °C), and with at least one of the compartments designed for the freezing and storage of food at temperatures below 8 °F (-13.3 °C) which may be adjusted by the user to a temperature of 0 °F (-17.8 °C) or below. The source of refrigeration requires single phase, alternating current electric energy input only. 10 CFR 430.2.

However, products that include a wine storage compartment but are otherwise freezers do not meet the *freezer*<sup>3</sup> definition if the wine storage compartment comprises a majority of the total storage volume of that product. As an example, the product addressed by the Liebherr waiver that recently terminated, which had over 50% of its volume dedicated as a wine cooler, is not a freezer under the current regulatory definition. See 75 FR 78810, 78817 (Dec. 16, 2010).

DOE recognizes the potential disparity in treatment among these hybrid products. As DOE indicated earlier during its related rulemaking activities for refrigeration products, the Department plans to engage in a future rulemaking to more comprehensively address these types of products. See 75 FR 29824, 29827 (May 27, 2010).

DOE notes that there are many different groups of wine storage, fresh food, and freezer compartments that could be combined in a given refrigeration product. The different types of compartments distinguished by the standards include the following:

- Freezer ("long-term"): a freezer compartment capable of 0 °F storage temperature. These compartments are typically found in refrigerator-freezers or freezers.
- Freezer ("short-term"): a freezer compartment larger than 0.5 cubic feet in volume capable of storage temperatures less than 32 °F but normally not less than 8 °F. These compartments are generally found in refrigerators other than all-refrigerators.
- Freezer ("ice only"): a freezer compartment of 0.5 cubic feet capacity or less capable of storage temperatures less than 32 °F but normally not less than 8 °F. These compartments may be found in all-refrigerators.
- Fresh food compartment: a compartment capable of storage temperatures less than 39 °F, generally not controllable to temperatures less than 32 °F.
- "Wine storage" compartment: a compartment not capable of 39 °F storage temperature that provides warmer temperatures than 39 °F. Generally such compartments are designed for storage of wine.

While DOE has not defined all of these terms in its regulations, DOE understands they are commonly used within the refrigeration industry (see, for example, product definitions for basic refrigerator and all-refrigerator in AHAM HRF-1-2008, sections 3.1.1 and 3.1.2) and is using them to provide additional clarity in this guidance document. In particular, these terms are helpful when mapping the basic models on the market today to DOE's regulatory definitions and product classes for determining scope of coverage.

Table 1 below shows several possible combinations of compartments that could be present in a refrigerated product. The table identifies the product definitions that apply to each distinct combination of compartments. For example, a product incorporating a "short term" freezer compartment and a fresh

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<sup>&</sup>lt;sup>3</sup> Freezer means a cabinet designed as a unit for the freezing and storage of food at temperatures of 0 °F. or below, and having a source of refrigeration requiring single phase, alternating current electric energy input only. 10 CFR 430.2.

food compartment (the fifth compartment combination identified below) is a refrigerator other than an all-refrigerator.

Table 1: Product Definitions Applicable to Different Compartment Combinations in a Product

		Compartment Types				
		Freezer	Freezer	Freezer	Fresh Food	"Wine
		("long	("short	("ice only")		Storage"
		term")	term")			
	COVERED PRODUCT COMBINATIONS					
Product Types	All-Refrigerator				✓	
					✓	✓
				✓	✓	
				✓	✓	✓
	Refrigerator other		✓		✓	
	than an All-		<b>√</b>		./	./
	Refrigerator		•		¥	•
	Refrigerator-Freezer	✓			✓	
		✓			✓	✓
	Freezer	✓				
	EXAMPLES OF CURRENTLY UNCOVERED PRODUCT COMBINATIONS					
	Wine Storage only					<b>✓</b>
	Wine Storage with	<b>√</b>				
	"long-term" freezer					•
	Wine Storage with		✓			
	"short term" freezer					•

Note: All-refrigerators with "ice-only" freezer compartments may have just one such compartment. DOE is not aware of the existence of such products with more than one "ice-only" freezer compartment and has not made a determination of the product type definition applicable for such a combination.

Some of the compartment combinations listed do not represent products that are covered under the regulatory definitions for refrigeration products. Three examples are set forth in the table above; namely, a product that has one or more wine storage compartments and two products that have only wine storage and freezer compartments.

DOE emphasizes that the "wine storage" compartment description as discussed herein applies only to compartments that are not "designed to be capable of achieving storage temperatures below 39 °F (3.9 °C)". 10 CFR Part 430.2. Hence, a compartment configured for wine storage or identified as a wine storage compartment in marketing literature that achieves temperatures below 39 °F (3.9 °C) is a fresh food compartment for the purposes of identifying the applicable product definition and determining scope of coverage with DOE's regulations. In addition, a compartment that is designed to be a fresh food compartment, but does not reach 39 °F (3.9 °C) or lower in an energy test in a 90 °F ambient temperature with controls set to the coldest position is still a fresh food compartment.

These FAQs may also be of interest: FAQ document on testing of hybrid and wine storage products, FAQ document on product classes of hybrid and wine storage products.