Tuesday, February 13, 2007

Part III

Federal Trade Commission

16 CFR Part 305
Appliance Labeling Rule; Proposed Rule
FEDERAL TRADE COMMISSION
16 CFR Part 305
[RIN 3084–AB03]

Appliance Labeling Rule

AGENCY: Federal Trade Commission ("FTC" or "Commission").

ACTION: Notice of proposed rulemaking; request for public comment.

SUMMARY: Section 137 of the Energy Policy Act of 2005 (Pub. L. 109–58) requires the Commission to conduct a rulemaking to examine the effectiveness of current energy efficiency labeling requirements for consumer products issued pursuant to the Energy Policy and Conservation Act. The Commission is seeking comments on proposed amendments to the existing labeling requirements.

DATES: Written comments must be received on or before April 16, 2007.

ADDRESSES: Interested parties are invited to submit written comments. Comments should refer to "Appliance Labeling Rule Amendment, RIN 311994" to facilitate the organization of comments. A comment filed in paper form should include this reference both in the text and on the envelope, and should be mailed or delivered, with two complete copies, to the following address: Federal Trade Commission/Office of the Secretary, Room H–135 (Annex A), 600 Pennsylvania Avenue, NW., Washington, DC 20580. Comments containing confidential material must be filed in paper form, and the first page of the document must be clearly labeled "Confidential" and must comply with Commission Rule 4.9(c).1 The FTC is requesting that any comment filed in paper form be sent by courier or overnight service, if possible, because postal mail in the Washington area and at the Commission is subject to delay due to heightened security precautions.

Comments filed in electronic form should be submitted by following the instructions on the web-based form at http://secure.commentworks.com/energyguide. To ensure that the Commission considers an electronic comment, you must file it on that web-based form. You also may visit http://www.regulations.gov to read this proposed Rule, and may file an electronic comment through that Web site. The Commission will consider all comments that regulations.gov forwards to it.

Comments on any proposed filing, recordkeeping, or disclosure requirements that are subject to paperwork burden review under the Paperwork Reduction Act should be submitted to: Office of Information and Regulatory Affairs, Office of Management and Budget, Attention: Desk Officer for Federal Trade Commission. Comments should be submitted via facsimile to (202) 395–6974 because U.S. postal mail at the Office of Management and Budget ("OMB") is subject to lengthy delays due to heightened security precautions.

The FTC Act and other laws that the Commission administers permit the collection of public comments to consider and use in this proceeding as appropriate. The Commission will consider all timely and responsive public comments that it receives, whether filed in paper or electronic form. Comments received will be available to the public on the FTC Web site, to the extent practicable, at http://www.ftc.gov. As a matter of discretion, the FTC makes every effort to remove home contact information for individuals from the public comments it receives before placing those comments on the FTC Web site. More information, including routine uses permitted by the Privacy Act, may be found in the FTC’s privacy policy, at http://www.ftc.gov/ftc/privacy.htm.


SUPPLEMENTARY INFORMATION:

Table of Contents
I. Introduction
II. Energy Policy and Conservation Act Labeling Requirements
III. FTC’s Appliance Labeling Rule
IV. Procedural History
V. FTC Consumer Research
VI. Section-by-Section Description of Proposed Amendments
VII. Discussion of Comments and Proposed Amendments
A. Effectiveness and Benefits of the Current Label
B. Alternative Label Designs
C. Requirements for Heating and Cooling Equipment
D. Refrigerator Categories
E. Revisions to Ranges of Comparability and Energy Price Information
F. Energy Descriptors
G. Placement of the EnergyGuide Label on Covered Products
H. Catalog Requirements

1 Any request for confidential treatment, including the factual and legal basis for the request, must accompany the comment and must identify the specific portions of the comment to be withheld from the public record. The request will be granted or denied by the Commission’s General Counsel, consistent with applicable law and the public interest. See Commission Rule 4.9(c), 16 CFR 4.9(c).

2 42 U.S.C. 6291 et seq.

3 42 U.S.C. 6294. For most appliance products, the Commission must prescribe labeling rules unless it determines that labeling is not technologically or economically feasible (42 U.S.C. 6294(a)(1)). The statute requires labels for central air conditioners, heat pumps, furnaces, and clothes washers unless the Commission finds that labeling is not technologically or economically feasible or is not likely to assist consumers in making purchasing decisions (42 U.S.C. 6294(a)(2)(A)). Pursuant to § 6294(a)(1), the Commission previously...
for appliances covered under EPCA must disclose the estimated annual operating cost of such products, as determined by the Department of Energy (DOE) test procedures (42 U.S.C. 6294(c)). The Commission, however, may require a different measure of energy consumption if DOE determines that the cost disclosure is not technologically feasible, or the Commission determines the cost disclosure is not likely to assist consumers in making purchasing decisions or is not economically feasible. Section 324(c) also requires that the label for appliances contain information about the range of estimated annual operating costs (or energy consumption) for covered products. The Commission may require the disclosure of energy information found on the label in any printed material displayed or distributed at the point of sale. In addition, the Commission may direct manufacturers to provide additional energy-related disclosures on the label (or information shipped with the product) including instructions for the maintenance, use, or repair of the covered product.

II. FTC’s Appliance Labeling Rule

The Commission’s Appliance Labeling Rule implements the requirements of EPCA by directing manufacturers to disclose energy information about major household appliances. This information enables consumers to compare the energy use or efficiency of competing models. When initially published in 1979, the Rule applied to eight appliance categories: Refrigerators, refrigerator-freezers, freezers, dishwashers, water heaters, clothes washers, room air conditioners, and furnaces. Subsequently, the Commission expanded the Rule’s coverage to include central air conditioners, heat pumps, fluorescent lamp ballasts, lighting products, pool heaters, and certain home maintenance, use, or repair of the covered product.

III. FTC’s Appliance Labeling Rule

The Commission’s Appliance Labeling Rule implements the requirements of EPCA by directing manufacturers to disclose energy information about major household appliances. This information enables consumers to compare the energy use or efficiency of competing models. When initially published in 1979, the Rule applied to eight appliance categories: Refrigerators, refrigerator-freezers, freezers, dishwashers, water heaters, clothes washers, room air conditioners, and furnaces. Subsequently, the Commission expanded the Rule’s coverage to include central air conditioners, heat pumps, fluorescent lamp ballasts, lighting products, pool heaters, and certain home maintenance, use, or repair of the covered product.

Under the Rule, manufacturers must disclose specific energy consumption or efficiency information about their appliances at the point of sale in the form of a yellow EnergyGuide label affixed to each unit. The information on the EnergyGuide label also must appear in catalogs from which covered products can be ordered. The Rule directs manufacturers to derive the information from standard DOE tests.

Required labels for appliances must also include a “range of comparability” (published by the Commission) that shows the highest and lowest energy consumption or efficiencies for all similar appliance models. These ranges of comparability are intended to help consumers determine how a specific model compares to others available in the market. Labels for most appliances also must provide the product’s estimated annual operating cost. Manufacturers calculate these costs using national average energy cost figures published by DOE. In addition to the required EnergyGuide labels, manufacturers of furnaces, central air conditioners, and heat pumps must provide energy information for their products in either fact sheets or an industry directory.

The Rule contains very specific requirements for the content and format of the EnergyGuide labels. Manufacturers must use the FTC yellow label with the EnergyGuide headline and must provide information in the format and type prescribed. Additionally, manufacturers cannot place any information on the label other than that specifically allowed by the Rule. In 2000, the Commission issued an exemption allowing manufacturers to include the “ENERGY STAR” logo on the EnergyGuide label for covered appliances (65 FR 17554 (Apr. 3, 2000)). ENERGY STAR, which is administered by the Environmental Protection Agency (EPA) and DOE, is a voluntary U.S. Government labeling program to identify and promote energy-efficient products.

The Commission’s Rule also contains certain reporting requirements which direct manufacturers for most covered products to file reports with the FTC both annually and when they begin manufacturing new models. These reports must contain the estimated annual energy consumption or energy efficiency ratings for the appliances derived from tests conducted pursuant to the DOE procedures (16 CFR 305.8(b)). Under section 305.10, the Commission publishes new ranges of comparability if an analysis of the new information indicates that the upper or lower limits of the ranges have changed by more than 15%. Otherwise, the Commission publishes a statement each year that the prior ranges remain in effect. Energy information submitted pursuant to these requirements is available on the Commission’s Web site at http://www.ftc.gov/appliances.

Finally, the Rule has different labeling requirements for non-appliance consumer products (16 CFR 305.11(d),(e), and (f)). For example, manufacturers of fluorescent lamp ballasts and certain tube-type fluorescent bulbs must disclose an encircled “E” on ballasts and on luminaires containing ballasts, as well as on packaging. The “E” signifies compliance with DOE minimum efficiency standards. Manufacturers of showerheads, faucets, toilets, and urinals must disclose water usage information on their products, packaging, and labeling. Manufacturers of certain incandescent bulbs, spot and flood bulbs, and screw-base compact fluorescent bulbs must disclose on their packaging light output in lumens, energy used in watts, voltage, average life, and number of bulbs. They also must explain how purchasers can select the most energy efficient bulb for their needs.

IV. Procedural History

The Commission initiated this proceeding on November 2, 2005 with the publication of an ANPR that sought comments on the effectiveness of the FTC’s energy labeling regulations for consumer products. (70 FR 66307 (Nov. 2, 2005)). The ANPR also announced the Commission would conduct its periodic regulatory review as part of this rulemaking. The Commission received 28 comments in response to the ANPR. Based on these comments, the Commission conducted a Public Workshop (“Workshop”) on May 3, 2006 to discuss a variety of issues associated with the labeling program, including: (1) Overall label design issues, (2) refrigerator comparability ranges, (3) labels for heating and cooling equipment, and (4) television labeling. After conducting the Workshop, the Commission received ten additional written comments.
On March 15, 2006, the Commission announced its plans to conduct consumer research on various label designs to examine the effectiveness of the current energy labeling requirements and to obtain information about alternatives (71 FR 13398). After the Workshop, the Commission published an additional notice containing details about its planned consumer research project, including drafts of the appliance labels that would be used in the project. (71 FR 36088). The Commission received eight comments in response to that June 23, 2006 notice.11

Based on all the comments, the Workshop, and consumer research conducted by the FTC staff (see below), we now propose various amendments to the Appliance Labeling Rule. We invite comments on these proposed changes.

V. FTC Consumer Research

The FTC staff conducted its consumer research in October 2006. The detailed results of the study and associated documents can be found at http://www.ftc.gov/appliances. The study results are also discussed in sections VII.A., VII.B., and VII.D. of this Notice. The FTC staff designed the research to provide information regarding consumer comprehension of various label designs and the perceived usefulness of various types of information related to energy use, energy efficiency, and operating costs. In drafting the changes proposed in this Notice, the FTC considered its consumer research results, the facts submitted in comments, and the broad range of policy and legal issues raised by commenters during the rulemaking proceeding.

In designing the consumer research, the FTC staff began with the findings and strategies of prior research and the comments received during the rulemaking proceeding. In 2002, the American Council for an Energy Efficient Environment (“ACEEE”) examined the efficacy of the EnergyGuide label as well as alternative formats and graphical elements.12 In addition, in response to the Commission’s 2005 ANPR, the Association of Home Appliance Manufacturers (“AHAM”) conducted research that also examined the current label and alternatives.13 Similar to ACEEE’s project, the FTC’s research included questions designed to understand how well consumers comprehend information presented in different labeling formats. Like the research conducted by AHAM, the FTC’s study involved an Internet panel. Although the FTC considered this prior work in developing its own research, the study addressed several issues not raised in the previous studies and tested a label design not addressed in detail by ACEEE or AHAM.

The FTC contracted with Harris Interactive, a consumer research firm that has substantial experience assessing consumer communications using the Internet and other alternative protocols. The study’s sample universe was made up of members of the contractor’s Internet panel. The panel consists of more than four million individuals recruited through a variety of convenience sampling procedures, rather than true probability sampling techniques. The sample for this research is therefore not nationally representative in the classic sense. However, the contractor has studied the relationship between samples from its Internet panel and samples collected using more traditional probability sampling techniques. Based on these studies, the contractor has developed procedures, including demographic weighting based on proprietary propensity scoring techniques, to minimize differences between the results of their Internet panel studies, and studies based on true probability samples of the nation. Although an Internet panel may not be not suitable for some types of research, the FTC staff expects the population of Internet users and the members of the Harris panel fairly well represent the population of major appliance purchasers.

The study yielded a sample of approximately 4,000 individuals who were at least 18 years old and likely or recent major appliance purchasers. In conducting this research, the contractor

11 Comments submitted in response to the June notice are available online at: http://www.ftc.gov/os/comments/applianceLabelingResearch/index.htm.
13 AHAM submitted its research results as part of its comments on the ANPR. See AHAM [#519870–00016] (available at http://www.ftc.gov/os/comments/applianceLabeling/519870-00016.htm).
14 The thresholds used to assign stars under the categorical system used in the study were published for comment at 71 FR 36088, 36091 (June 23, 2006).
15 The overall comparability range on the labels for this condition was, therefore, much greater than the other conditions, although the energy efficiency and cost range among the four products remained constant.
The study employed four different hypothetical refrigerator models and four different hypothetical dishwasher models.\textsuperscript{16} For example, one group of respondents viewed the current EnergyGuide label for four refrigerators and four dishwashers with different energy characteristics, whereas, a different group viewed a categorical version of the label for the same models. The order of the dishwasher sequence and the refrigerator sequence rotated, so that half of the respondents saw the dishwasher sequence first, while the other half saw the refrigerator sequence first.

Respondents answered a series of objective questions about the characteristics of the products described in the labels. The questionnaire directed respondents to rank the refrigerators in terms of annual operating costs, annual energy use, and energy efficiency. In addition, the study contained questions about cost, efficiency, and energy use differences, as well as questions about any differences in product quality communicated by the labels. Respondents in all cells answered questions about which model or models in the set qualified for ENERGY STAR and the location of the ENERGY STAR logo on the label. The questionnaire also asked respondents about their prior experience using EnergyGuide labels to assess how useful the current labels have been. Respondents answered general questions about the perceived usefulness of certain types of energy-related information to assess whether labels emphasizing that information (e.g., energy usage, categorical measures of efficiency, or operating costs) are likely to be particularly useful in real life settings.

\textsuperscript{16} The FTC published for comment the detailed attributes of all eight models, including their operating costs, electricity use, and star rankings in a June 23, 2006 Notice (71 FR 36808). All of the treatments contained information about operating costs and energy use for the appliance. However, the prominence of this information differed across treatments.

<table>
<thead>
<tr>
<th>Cell</th>
<th>Condition (label design)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cell 1</td>
<td>Current EnergyGuide Label.</td>
</tr>
<tr>
<td>Cell 2</td>
<td>Current EnergyGuide Label with ENERGY STAR logo.</td>
</tr>
<tr>
<td>Cell 3</td>
<td>Modified Version of Current Label.</td>
</tr>
<tr>
<td>Cell 4</td>
<td>Modified Version of Current Label with ENERGY STAR logo.</td>
</tr>
<tr>
<td>Cell 5</td>
<td>Categorical Label.</td>
</tr>
<tr>
<td>Cell 6</td>
<td>Categorical Label with ENERGY STAR logo.</td>
</tr>
<tr>
<td>Cell 7</td>
<td>Operating Cost Label.</td>
</tr>
<tr>
<td>Cell 8</td>
<td>Operating Cost Label with ENERGY STAR logo.</td>
</tr>
<tr>
<td>Cell 9</td>
<td>Pure Information (no recognizable label format, information formatted with equal font size).</td>
</tr>
<tr>
<td>Cell 10</td>
<td>Current EnergyGuide Label with Collapsed Refrigerator Categories for the refrigerator rotation and the Current Label for the dishwasher rotation.</td>
</tr>
</tbody>
</table>

After the study’s completion, Harris Interactive provided the FTC staff with data summaries.\textsuperscript{17} Harris also provided information regarding the statistical significance of the final results under the different label treatments.\textsuperscript{18} Throughout this Notice, “statistically significant” differences among labels are those found to be significant at the 10% level (or lower) (i.e., the 90% confidence level or higher).

VI. Section-by-Section Description of Proposed Amendments

The following are brief descriptions of the proposed amendments set out in this Notice. Section 305.2: To make section 305.2 more user friendly, the Proposed Rule would place the definitions in alphabetical order. It would also amend the definition of catalog to clarify that the term covers both paper and Internet-based catalogs. Finally, the definition of “range of energy efficiency ratings” would be eliminated.

\textsuperscript{17} The data were generated in two ways: weighted and unweighted. The weighted data is based on the contractor’s proprietary techniques to minimize the differences between questionnaire results from its Internet Panel and the questionnaire results from more traditional procedures. The results cited in this Notice are based on the weighted data. The FTC staff has compared the results for the weighted data with the unweighted data. Although there are some differences between the two approaches, the core findings discussed in this Notice are the same using both techniques.

\textsuperscript{18} The null hypothesis for this test of statistical significance is that there is no difference between label conditions in the proportion of respondents correctly answering a question. A 10% level of significance was set, using appropriate two-tail tests. Various T-tests were applied by Harris using Quantum software. Under this condition, the hypothesis of no difference between two label conditions is rejected if a two-tailed test indicates significance at the 10% level. One interpretation of this procedure is that if there really is no difference between two label conditions (i.e., the null hypothesis is true), then the odds are only one in ten of observing the difference produced by the data. Another interpretation is that the confidence level of the test is 90%. See Gilbert A. Churchill, Jr., Marketing Research Methodological Foundations (Fifth Edition), The Dryden Press, Chicago, 1991.

Section 305.3 Description of covered products: The Proposed Rule would amend the description of refrigerators and refrigerator freezers to make it consistent with DOE regulations.

Section 305.5 Determinations of estimated annual energy consumption, estimated annual operating cost, and energy efficiency rating, and of water use rate: The Proposed Rule would clarify that the Rule does not apply to covered appliances for which DOE has not issued test procedures.

Section 305.7 Determinations of capacity: Under the Proposed Rule, capacities for refrigerators and refrigerator-freezers would be determined for total refrigerated volume and adjusted total volume as determined by DOE regulations.\textsuperscript{19}

Section 305.8 Submission of data: The Proposed Rule would clarify that required reports for appliances include the brand name of the reported model if it is different from the name of the manufacturer.

Section 305.9 Representative average unit energy cost: Under the Proposed Rule, this section would be removed and reserved.

Section 305.10 Ranges of comparability information on required labels: The Proposed Rule would amend this section to direct the Commission to amend range of comparability and representative average energy cost information every five years.

Redesignation of sections 305.13, 305.14, 305.15, 305.16, 305.17, 305.18 and 305.19: The Proposed Rule would redesignate these sections as 305.19, 305.20, 305.21, 305.22, 305.23, 305.24 and 305.25, respectively.

Requirements for lighting and plumbing products (newly designated sections 305.15 and 305.16): Under the Proposed Rule, the labeling and marking requirements for lighting and plumbing products currently in section 305.11...
would be moved to redesignated sections 305.15 and 305.16, respectively. The Proposed Rule contains no substantive change to existing requirements for these products.

§ 305.11 Labeling for refrigerators, refrigerator-freezers, freezers, dishwashers, clothes washers, water heaters, room air conditioners, and pool heaters: The Proposed Rule would amend this section to require operating cost as the primary disclosure on the EnergyGuide label. The Proposed Rule would also require new language to clarify the scope of the comparison ranges for refrigerator products on the labels. The proposal would also modify and clarify requirements related to the label placement on covered products.

Sections 305.12 and 305.13 (newly designated) Marking requirements for heating and cooling equipment: The Proposed Rule would require manufacturers to mark permanently heating and cooling equipment (except water heaters) with energy efficiency information. The proposal would eliminate EnergyGuide labeling requirements for these products.

Section 305.14 (newly designated) Energy information disclosures for heating and cooling equipment: The Proposed Rule would streamline requirements related to the disclosure and distribution of consumer energy information for central air conditioners and furnaces.

Section 305.20 (newly designated) Paper catalogs and Web sites: The Proposed Rule would require the disclosure of annual estimated operating costs for these products in paper and Internet-based catalogs. Under the proposal, catalog sellers would no longer be required to provide range of comparability information.

Section 305.24 (newly designated) Exemptions: The exemption related to ENERGY STAR logos on EnergyGuide labels would be incorporated into section 305.11. Section 305.24 would be reserved.

Appendices: The Proposed Rule would amend the various appendices to §§ 305.11, 305.15, and 305.16. Section 305.24 (newly designated) would be moved to redesignated § 305.24. Section 305.20 (newly designated) would be moved to redesignated § 305.20.

VII. Discussion of Comments and Proposed Amendments

A. Effectiveness and Benefits of the Current Label

Issue and Comments: In the ANPR, the Commission asked a series of questions related to the effectiveness of the current EnergyGuide label. Many comments indicated that the current label provides consumer benefits. The responses reflected a consensus that the current program is useful. The Consortium for Energy Efficiency (CEE) (#519870–00018), for example, stated that “there is a strong belief among [CEE] members that the EnergyGuide label is an important tool to inform consumers of the efficiency of home appliances.”20 Similarly, General Electric (#519870–00027) noted that the label has successfully provided “comparative energy consumption information to consumers.” AHAM (#522148–00007) stated that the label provides “accurate, useful and comparative information.”

ACEEE (#519870–00021), however, reported that the current label has a “low level of use” and a “minimal impact on consumer, manufacturer, and contractor comparisons and choices.” ACEEE’s research found that most consumers were unable to identify the label or correctly select the label from a group of different label designs. While assessments of the current label’s effectiveness varied, most commenters agreed that there is much room for improvement in the label’s design.

A few commenters urged the Commission to consider changes to the label in light of the policy goals of the EnergyGuide program. The nature of those goals, however, was a point of disagreement among commenters. For example, Whirlpool (#519870–00013) suggested that the current label be updated to improve its readability and effectiveness. A researcher (Payne #519870–00024) who worked on ACEEE’s study wrote that the “current Energy Guide is not as conveniently effective in providing consumers with information about the annual operating cost associated with a particular product, but is less effective in conveying the energy efficiency.” He explained that the label appears to encourage customers to choose higher efficiency products after comparing the annual operating costs between two options, but that the energy efficiency information is not effective at conveying this information. According to the comment, consumers generally consider a labeled product to be energy efficient, and the comparison graphic on the current label is poorly understood. Overall, however, he concluded that “the net benefit of the current label is positive because consumers do glean cost information and can make choices based on that information.”

The same commenter identified two specific problems with the current label. First, there is an inconsistency in the “directionality” of the comparison graphic. For some products such as refrigerators, the comparison range provides information about electricity use. On these labels, more efficient products fall on the left (lower) part of the range. Conversely, for other products, such as room air conditioners, the comparison range provides information about energy efficiency. On these labels, the more efficient products fall on the right (higher) part of the scale. In the commenter’s view, this can cause consumers to misinterpret the label. Second, he asserted that the division of some products, such as refrigerators, into multiple categories causes problems because the ranges are different for similar products (e.g., top mount and side-by-side refrigerator-freezers). (Payne #519870–00024).

In responding to the Commission’s questions about the effectiveness of the current label, several commenters addressed what they perceived to be the purpose of the FTC’s energy labeling program. There was some disagreement about the policy goals underlying the EnergyGuide label. According to some industry members, the FTC’s labeling program should provide useful information about the energy usage of home appliance products. (See, e.g., AHAM #522148–00007). Some commenters questioned whether the range the label should play in promoting energy savings and in creating incentives for market transformation. Whirlpool (#522148–00005), for example, pointed to DOE’s efficiency standards program and the ENERGY STAR program as the appropriate entities for energy efficiency promotion. It urged the FTC to focus instead on providing “meaningful, helpful information to consumers to assist them in the purchase decision” through “clear, fair, and unbiased” disclosures.

Other commenters believed that the effectiveness of the label also should be judged by its ability to encourage consumers to purchase high-efficiency products and its effectiveness in encouraging manufacturers to bring more high efficiency products to the marketplace. (See, e.g., ACEEE #519870–00021 and Payne #519870–00024). One such commenter explained that the Commission should consider whether the label “convinces and encourages consumers to purchase higher energy-efficient products” and encourages “manufacturers to produce
more energy efficient products.” (Payne #519870–00024). As ACEEE (#519870–00021) observed, amendments to EPCA set forth in the Energy Policy Act of 2005 direct the FTC to initiate a rulemaking to consider the effectiveness of the appliance labeling program “in assisting consumers in making purchasing decisions and improving energy efficiency.”

Discussion: In promulgating the Appliance Labeling Rule in 1979 (44 FR 66466 (Nov. 19, 1979)), the Commission provided the following statement: “The primary purpose of the Commission’s Rule is to encourage consumers to comparison-shop for energy-efficient household appliances. By mandating a uniform disclosure scheme for energy consumption information, the Rule will permit consumers to compare the energy efficiency of competing appliances and to weigh this attribute against other product features in making their purchasing decisions. If the labeling program works as expected, the availability of this new information should enhance consumer demand for appliances that save energy. In turn, competition should be generated among manufacturers to meet this demand by producing more energy-efficient appliances.” The Commission continues to believe that this statement accurately describes the role of the FTC’s energy labeling program. Specifically, the label serves two important purposes. First, the detailed operating cost and energy consumption information on the label allow consumers to compare the total cost of competing models. Second, the label aids consumers who are seeking to buy high-efficiency products that reduce energy use and thus help the environment.

In the Commission’s consumer research, several questions addressed the effectiveness of the label. These data suggest that consumers actually find the label much more useful than has been suggested by past research. Overall, the results indicate that the label exhibits a high level of recognition and usefulness as reported by the study’s participants. Over 85% of recent appliance purchasers who visited a retail showroom recalled seeing a label with energy characteristics. Of those respondents, 58% correctly recalled that the label was yellow with black letters. Fifty-nine percent of respondents who recalled seeing a label scored the usefulness of the label at a seven or higher on a scale of zero to ten.

B. Alternative Label Designs

Issue: The ANPR sought comments on whether the Commission should change the current design and format of the EnergyGuide label. During this proceeding, the Commission has considered several different label designs. In particular, we have sought comments on whether label information should be presented in the form of a “continuous” bar graph or a “categorical” design. Labels using a continuous design, such as the current EnergyGuide label, contain a bar graph, or similar item, that displays information on a continuous scale without discrete ranks or categories. Labels under a categorical approach employ discrete categories, using a stepped ranking system such as stars or letters to indicate relative energy use. The Commission considered whether to adopt a continuous-style label that displays operating costs as the primary energy efficiency descriptor.

A key feature of the current continuous-style label is that the range or scale is based on data for models available on the market. One end of the scale depicts the energy use of the most efficient model on the market while the other identifies the least efficient. For example, the bar graph on a label for a typical refrigerator category may have 539 kWh/yr (kilowatt-hours per year) on one end and 698 kWh/yr on the other. The ratings on a categorical label (e.g., stars or letters) generally depict the model’s energy efficiency as compared to minimum government efficiency standards. For example, a five star dish washer would have an efficiency rating that exceeded the minimum government standard by a certain percentage (e.g., 20%). In some countries, the energy label categories stem from a consistently applied algorithm (e.g., New Zealand and Australia). The framework behind the categorical label is fundamentally different from that used for the continuous-style label because the categorical range does not depict directly the energy use or efficiency of other products on the market. Instead, the categories (e.g., stars) correspond to thresholds defined by the agency administering the labeling program.

Comments: In 2002, ACEEE released a report summarizing its research on the EnergyGuide label’s efficacy and on alternative formats and graphical elements for the label. More recently, AHAM conducted research that also examined the current label and alternatives. The conclusions reached by AHAM and ACEEE are not in accord. The ACEEE report considered various categorical and continuous labels. Among other things, the report recommended the adoption of a categorical label based on a star system (e.g., one to five stars). According to ACEEE (#519870–00021), its research demonstrated a clear preference for the categorical star-based label that consumers found the “easiest to understand and most motivating.” On the other hand, AHAM (#519870–00016) indicated that its study found that consumers prefer and understand the continuous label design over the categorical.

Comments on the Categorical Design

Many comments focused on the continuous and categorical designs. Commenters were clearly split on their preference for one design over the other. In general, advocates of the categorical label argued that the design is easier for consumers to understand and would be more effective at promoting energy efficiency. (See, e.g., Payne #519870–00024 and ACEEE #519870–00021). ACEEE’s research indicated that a categorical label based on a star system “is more easily understood than the current label, thereby enabling shoppers to more quickly and easily compare the energy performance of multiple models.” ACEEE found in its research that consumers clearly preferred a categorical label, particularly one that employs a star-based rating system. ACEEE (#519870–00021) concluded that the star-based label was the easiest for

---

23 Question Q445 asked qualified respondents: “Using a scale from 0 to 10, where 0 is “not at all useful” and 10 is “extremely useful,” how useful was the energy label in your most recent [insert relevant appliance] purchase decision?”

24 It is possible that some respondents actually recalled seeing ENERGY STAR information instead of the EnergyGuide label. We note, however, that only 8% of respondents recalled that the label they saw in the store was blue and white (colors often used for the ENERGY STAR logo). Moreover, the ENERGY STAR logo does not display energy characteristics.

25 As part of the Workshop, the FTC sought comment on an alternative label design that compared a model’s energy efficiency to DOE minimum standards in the form of a percentage. See 71 FR 18023. Several workshop participants raised concerns that percentage information may be confusing to consumers, inadequately distinguish the energy efficiency of some products (such as water heaters), and create complications as DOE minimum standards change over time. Taking these comments into account, the June 2006 notice indicated that the FTC would not continue to consider such a design (71 FR at 36093).

26 Thorne and Egan, supra note 12.

27 AHAM, supra note 13.
consumers to understand and “most motivating.” The categorical label also is useful for a wide range of consumers, including those with limited literacy, difficulty reading English, and discomfort with numerical concepts. Comments also suggested that the categorical label provides a greater incentive for manufacturers to produce high-efficiency products because of market benefits associated with having the highest energy rating. (Payne #519870–00024). Several commenters also noted that many other countries, including those in the European Union, employ a categorical labeling system. (Payne #519870–00024 and ACEEE #519870–00021). According to NRDC (#519870–00025), these labels have “been extremely effective communication tools and have successfully moved consumers to purchase more energy efficient and cost effective models.”

Other comments raised a variety of concerns about the categorical approach. These concerns fell into five basic categories. First, some commenters warned that consumers would interpret the label’s categories (e.g., a five-star system) as indica of non-energy related factors such as product quality or performance.28 In fact, according to some comments, categorical labels in some other countries are intended to convey performance attributes of the product beyond the limited energy disclosures intended by the EnergyGuide label. (Alliance Laundry Systems #519870–00008 and Whirlpool #522148–00005).

Second, several commenters cautioned that the categorical label would cause confusion related to the ENERGY STAR program.29 For example, CEE (#519870–00018) raised concerns “about the potential friction between a categorical label (that implicitly directs consumers toward more stars) and the ENERGY STAR label (that directs consumers to look for the mark on efficient products).” EPA (#519870–00007), which runs the ENERGY STAR program along with DOE, wrote that a categorical label “could undermine the natural synergies between the EnergyGuide education effort and the ENERGY STAR program and prevent possible improvements to the current label.”

Third, several commenters suggested that the categorical label would mislead consumers by inflating or understating the difference between appliances by using arbitrary cut-offs. (See, e.g., Whirlpool #519870–00013). ARI suggested the label would “likely discourage incremental efficiency improvements unless the improvement is sufficient to qualify the product for the next star.” (ARI #519870–00010). Fourth, some commenters believed that the categorical system would require the FTC to make subjective judgments about thresholds for the various categories. (Whirlpool #522148–00005 and AHAM #522148–00007). According to Whirlpool #522148–00005, such decisions are “clearly beyond the scope of the current program and current expertise of the Commission.” AHAM (#522148–00007) indicated that, for some products such as dishwashers, the FTC would have to establish separate category ratings for models “that are essentially the same in energy efficiency.” It warned that the categorical label “overemphasizes very small differences in energy use simply for the sake of differentiation.” AHAM (#519870–00016) also warned that a categorical approach would change “the very nature of the label to one that would identify categories or groupings of products rather than” providing range information that allows consumers to make their own judgments among different products.

Fourth, many commenters noted that the implementation of a categorical system will require extensive technical analysis and protracted negotiations with stakeholders.30 ACEEE (#519870–00021) acknowledged that the effort would “entail significant up front implementation efforts” and suggested that the FTC convene a technical review group to advise the Commission on the appropriate category thresholds. AHAM (#522148–00007) and other industry members urged the FTC to retain the current style format. AHAM indicated that its own research demonstrates that consumers prefer the continuous style label because it provides “useful information that could be used to compare different models” and because the graphic format is clear, simple, and understandable.

28 See Whirlpool #522148–00005, Edison Electric Institute (EEI) #522148–00010, Gas Appliance Manufacturers Association (GAMA) #519870–00011, AHAM #519870–00016, and Air-Conditioning and Refrigeration Institute (ARI) #519870–00010. ACEEE’s comments stated that its research found that a star label did not imply quality or other requirements beyond energy consumption. (ACEEE #519870–00021).

29 See, Whirlpool #522148–00005, AHAM #519870–00016, EPA #519870–00007, and GAMA #519870–00011.


Comments on Operating Cost Label

A few comments urged the Commission to consider a continuous label design that prominently displays operating (i.e., energy) cost. Whirlpool #522148–00005 submitted a sample label featuring operating costs in large font. It suggested that such a label would be advantageous because it presented familiar information in a straightforward fashion. Similarly, Bosch explained that “it is of critical importance that the main attention grabber be the dollar value of the operating expense.” Bosch #522148–00003 stated that operating cost “is what people most want to know, and is the best value to use when comparison shopping.” At the Workshop, AHAM suggested that consumers really would like to know how much the appliance will “cost them to operate.” (Workshop Tr. at 124–125). While ACEEE’s research (#519870–00021) indicated that operating cost is considered one of the most important pieces of information on the label, it also found that consumers are interested in energy use. ACEEE’s comments, however, also stated that “[c]onsumers expressed little interest in replacing annual energy use with operating cost as the basis for the comparative graphic.”

Comments on Previous Research

Commenters also discussed prior research. Natural Resources Canada (NRCan) #519870–00020 provided an overview of that agency’s past efforts to
consider improvements to the Canadian EnerGuide label.\footnote{The Canadian EnerGuide label is similar to the U.S. EnergyGuide label.} In general, NRCAN’s work suggested that “the majority of people find the information on the EnerGuide labels useful to some extent in helping select the most energy efficient model appliance.” Its research, though, suggests consumers generally find labels with both kWh/yr and operational cost more useful than labels with kWh/yr alone. NRCAN considered the use of operating costs on its label, but concluded that “the disparity of electricity costs across Canada could not provide comparable information in the same manner as the kWh/yr.” In addition to considering operating costs, NRCAN explored the implementation of a categorical system, but found a star-based categorical label “did not test well with many consumers.” According to NRCAN, consumers raised concerns about the significance of differences among the categories.

In addition to NRCAN’s comments about its own research, several comments addressed the strengths and weaknesses of the ACEEE and AHAM research. Whirlpool (\#519870–00013) raised concerns about ACEEE’s mail intercept approach and also questioned the statistical significance of the results of a shopping experiment ACEEE conducted. AHAM (\#519870–00016) raised concerns that the ACEEE study was “non-scientific” and results driven at aiming to conclude that the “categorical-style label was the preference of consumers.” ACEEE (\#522148–00008) countered AHAM’s critiques in detail, explaining, among other things, that throughout the project, the research design was reviewed with numerous experts and found to be a strong and valid approach without bias towards any particular outcome. Furthermore, ACEEE voiced criticisms of AHAM’s approach arguing that, contrary to AHAM’s assertions, the study actually found “that the star-based label best expresses energy efficiency and does not mislead consumers with regard to product quality, performance, and reliability.” ACEEE also expressed concern that the AHAM study failed to test actual label comprehension, focusing instead on consumer preferences and self-reported ease of understanding.

Comments on ENERGY STAR and Alternative Label Designs

In 1992, the EPA introduced the voluntary ENERGY STAR program to promote energy-efficient products and thereby reduce greenhouse gas emissions. ENERGY STAR first covered labeling for computers and monitors. In 1996, EPA partnered with the U.S. Department of Energy. The ENERGY STAR label is now on major appliances, office equipment, lighting, home electronics, and more. Recognizing the importance of this program for consumers, the Commission in 2000 issued an exemption to the Appliance Labeling Rule that allows manufacturers to include the ENERGY STAR logo on the EnergyGuide label for covered appliances. (65 FR 17554 (Apr. 3, 2000); see also 16 CFR 305.19(a)). The exemption requires manufacturers to print an explanatory tag line next to the logo that states “ENERGY STAR A symbol of energy efficiency.” As part of EPACT 2005, Congress established a formal, statutory basis for the ENERGY STAR program. (See 42 U.S.C. 6294a).

Commenters raised several issues about the inclusion of ENERGY STAR information on the FTC’s EnergyGuide label. Some expressed concern about the impact a categorical labeling system may have on the ENERGY STAR program, while others took issue with the current placement of the ENERGY STAR logo on the FTC label. As discussed above, EPA (\#519870–00012) raised several concerns about the impact of the categorical label on its program. CEE (\#519870–00018), which works extensively with utility companies on energy-efficiency programs, cautioned the FTC to avoid a course that could damage ENERGY STAR and warned of the “potential friction” between a categorical label and ENERGY STAR. AHAM (\#519870–00016) was more direct. According to that industry group, the adoption of a categorical label, with its identification of super-efficient categories, would create a “rival program to ENERGY STAR.” The two programs service distinct purposes in AHAM’s view. The FTC label assists consumers “in understanding the long-term cost implications of purchasing a particular product,” while the ENERGY STAR program “has been specifically identified by the Congress to ‘identify and promote energy-efficient products’ for consumers.”\footnote{Quoting section 131 of EPACT 2005.}

On the other hand, ACEEE’s research found that consumers “easily distinguished the ENERGY STAR from the categorical rating scheme.” In addition, ACEEE concluded that the two programs have a mutually reinforcing relationship because consumers recognize ENERGY STAR as an endorsement that the model has met specific standards, while the categorical rating “provides a comparison scale for energy use among different models.” According to another commenter involved in ACEEE’s research, no “consumer comprehension issues were found when consumers were shown a categorical stars system combined with an ENERGY STAR logo.” (Payne \#519870–00024). This commenter, however, explained at the Workshop that “we probably need much more detailed research to understand the questions of how the Energy Guide label and the ENERGY STAR label interact.” (Workshop Tr. at 101 (Payne)).

In addition to concerns about the impact of a categorical system on ENERGY STAR, commenters suggested improving the placement of the ENERGY STAR logo (or symbol) on the EnergyGuide label regardless of overall label design. Most commenters who addressed this issue suggested that the logo appear on the lower, right corner of the EnergyGuide label instead of above the comparability range, as currently required.\footnote{EPA (\#519870–00020)) explained that the bottom location “showcases” the logo and that manufacturers believe the location provides more prominence to the symbol. EPA (\#519870–00007) suggested that the explanatory text required for the logo be shortened because the words “ENERGY STAR” have now been incorporated into the logo.}

Discussion: The Commission has reviewed the comments raised by the commenters and the results of the FTC’s own research. Based on this review, as discussed further below, we propose replacing the existing label design with one that features estimated annual operating costs as the primary disclosure. The proposed label’s comparison range would disclose energy cost information in dollars per year. The label would continue to provide consumers with information about the product’s energy use (in kWh/year), but as a secondary disclosure. The Commission is also seeking comment on a variation of the cost label design that would provide a cost estimate over a period of years instead of annually.

The results of the FTC research yielded several general conclusions about the performance of the four label designs under consideration (i.e., the current energy use label, a modified version of the current energy use label, the categorical label, and the operating cost label). First, respondents performed well in the objective tasks of identifying and ranking operating costs (in dollars) and energy use (in kilowatt-hours) for...
all label designs, suggesting that any of the designs should help consumers compare operating costs and energy use. The categorical label, however, was somewhat more effective for some objective tasks, particularly when compared to the modified version of the current energy use label. Second, the categorical label, which was the only label to include the term “energy efficient,” was generally more effective at aiding respondents in ranking products by energy efficiency than the labels more prominently featuring operating costs or energy use. Third, respondents viewing the categorical design were much more likely than respondents viewing other designs to identify models as ENERGY STAR-qualified when none of the models viewed contained ENERGY STAR logos. Fourth, the results suggest that respondents viewing the categorical labels were somewhat more likely to misidentify quality differences between models than those respondents viewing other label designs. Fifth, the research indicated that the categorical label had a substantially greater impact on respondents’ reported willingness to pay for differences in energy performance between models. Finally, the study suggested that the respondents in all label conditions have a preference for the communication of energy characteristics in the form of operating costs over either electricity usage or a five-star categorical scale.

Identification of Operating Costs, Energy Use, and Energy Efficiency Ranking

In general, the research results for all label designs indicated that most respondents had little trouble identifying the correct operating cost and electricity use of a single model. In most cases, at least 80% of the respondents consistently answered such questions correctly regardless of label design. Although no single label design consistently outperformed all others on questions asking respondents to identify operating cost and energy use, some patterns emerged. For questions involving operating costs, the FTC staff found that the modified continuous label (Cell 3) performed worse than the other labels (Cell 1, Cell 5, and Cell 7) in seven out of twelve head-to-head comparisons of response results involving labels without the ENERGY STAR logo. When the same cost questions were asked for labels bearing the ENERGY STAR logo, however, the results identified no statistically significant differences. In addition, there were no statistically significant differences between the operating cost labels and the categorical labels for this sequence of operating costs questions, whether or not the ENERGY STAR logo was included.

Similar patterns emerged for the sequence of questions about energy use. Once again, the modified current label (Cell 3) performed worse than the operating cost design and the categorical design. In addition, there were no statistically significant differences in the percentage of correct responses between the categorical labels and the operating cost labels.

The ranking task results suggested that a very high percentage of respondents could rank the models correctly by operating costs and electricity use. At least 79% of respondents viewing each label design could rank correctly the models by operating costs and at least 65% of respondents viewing each label design could rank correctly the models by energy use. The categorical labels tended to outperform other designs on the ranking tasks, particularly the current label and the modified current label. The study indicated that the categorical label outperformed the other designs in seven out of twenty-four response comparisons for questions related to operating costs. Most of these statistically significant differences (six of the seven) involved comparisons of the categorical label to the current label or the modified current label. Only one of these seven differences involved a comparison of the categorical label result to the operating cost label.

Respondents who viewed the modified current label without the ENERGY STAR logo (Cell 3) had significantly fewer correct responses to three out of four questions about energy use than the respondents who viewed the categorical label (Cell 5) or the operating cost label (Cell 7). The questionnaire included three ranking questions: Q615 (operating costs), Q626 (energy use), and Q640 (energy efficiency). For example, Q615 asked: “Please rank these refrigerators according to their typical yearly operating costs, starting with the least expensive to operate and then moving to the second most expensive to operate, and then the third most expensive to operate.” The structure of all three ranking questions was the same. The order of the ranking questions was rotated to prevent order bias.

For refrigerators and dishwashers, the FTC staff analysis examined differences among each of the four main labels without ENERGY STAR information (six comparisons for each product) and differences among the four main labels with ENERGY STAR information (six comparisons for each product). For questions involving comparative energy efficiency, the categorical label performed better than the other label designs. For example, 82% of respondents viewing the categorical label (with the ENERGY STAR logo) correctly ranked refrigerators by energy efficiency whereas 72% did so for the current label, 69% for the modified version of the energy use label, and 71% for the operating cost label.

The Categorical Label

The results of the FTC research suggest that, while the categorical label can provide important benefits under the tested conditions, it presents some significant concerns. First, respondents were much more likely to exhibit confusion in identifying ENERGY STAR products when using the categorical label. Absent the ENERGY STAR logo, there was no way for respondents to identify correctly ENERGY STAR-qualified models without guesswork. Nevertheless, when shown categorical dishwasher labels without ENERGY STAR logos, 43% of the respondents indicated that they could tell whether any of the four labels were ENERGY STAR products. In groups viewing the other three label designs under the same conditions, a substantially smaller percentage of respondents indicated that they could determine whether products qualified for the ENERGY STAR program (14% for the current label (Cell 1), 16% for the modified energy use label (Cell 3), and 11% for the operating cost label (Cell 7)).

Additionally, when asked to identify ENERGY STAR-qualified models, a substantial number of respondents viewing the categorical design without the ENERGY STAR logo (Cell 5) identified the lower efficiency, non-ENERGY STAR models in the study as ENERGY STAR models. Specifically, 19% of the respondents in Cell 5 identified the “three-star” dishwasher (Model J) as ENERGY STAR-qualified.
and 16% identified the ‘‘one-star’’ dishwasher (Model M) as being ENERGY STAR-qualified. By contrast, for those viewing the operating cost label (Cell 7), only 4% of respondents identified dishwasher Model J as ENERGY STAR-qualified and only 3% identified dishwasher Model M as qualified.41

A substantial percentage of respondents who viewed the categorical label (39% for dishwashers) indicated that five stars (Model K) equated to an ENERGY STAR product even though there was no ENERGY STAR logo on the label.42 While this assumption was correct in the context of the refrigerator or dishwasher labels used in the study, we are concerned that this tendency to guess could lead to inaccurate conclusions for some labeled products, such as water heaters, that are not covered under the ENERGY STAR program. Moreover, respondents’ guesswork in interpreting the categorical label suggests that such a label system could cause significant confusion where FTC categories fail to align neatly with ENERGY STAR levels. We note that EPA raised concerns about the feasibility of aligning categorical rankings to ENERGY STAR criteria for all covered products. (Workshop Tr. at 97–98).

The study results also indicated that the categorical label caused more confusion than other designs with regard to the identification of the actual ENERGY STAR logo on the label itself. The questionnaire asked certain respondents to identify the information on the label signaling that the appliance qualified for the ENERGY STAR program.43 In cells containing the ENERGY STAR logo, well over 90% of the qualified respondents viewing the current, modified current, and operating cost labels correctly identified the logo on the ENERGY STAR models (Models K and L) whereas only about 80%44 of the qualified respondents viewing the categorical label with the ENERGY STAR logo correctly identified that logo on the labels. These results further support the conclusion that the categorical label is more likely to create confusion regarding ENERGY STAR than the other label designs.

The study also examined possible confusion about the effect of the label designs on perceptions of overall product quality.45 On average, across all ten label conditions, a little over 70% of the respondents correctly understood that the label information did not include data on overall product quality. Respondents who viewed the categorical labels were less likely to answer the overall product quality question correctly than respondents who viewed the operating cost label or the modified current label.46 This tendency for the categorical label to suggest quality was greatest when the label design was coupled with the ENERGY STAR logo.47 For example, the research indicated that 24% of the respondents viewing the refrigerator categorical style labels (Cell 6) indicated quality differences among the models. Respondents viewing other label designs under the same conditions indicated lower levels of confusion on this issue: 16% for the current label, 13% for the modified energy use label, and 14% for the operating cost label.48 These differences, though not large, are statistically significant at the 5% significance level and add to the concerns with the categorical label.

We also note that a significantly larger percentage of respondents who viewed the categorical label were willing to pay for energy performance differences compared to those respondents who viewed the other designs.49 Specifically, 70% of respondents viewing a pair of dishwasher models with the categorical label (Cell 5) indicated a willingness to pay more for one model over another. Only about 45% of the respondents viewing the other three label designs under similar conditions (without the ENERGY STAR logo) indicated that they were willing to pay more for one model over the other.50 The differences in willingness-to-pay across label designs when the ENERGY STAR logo was included on the label were also substantial, but not as pronounced (e.g., for dishwashers, 75% for the categorical design, 54% for the current label, 58% for the modified label, and 54% for the operating cost label).

These willingness-to-pay results suggest that the categorical label may be more effective at motivating consumers to purchase higher efficiency products than the other designs. However, it is difficult to predict the extent to which self-reported intentions to pay more would translate into actual behavior in the marketplace. The results also suggest that a categorical EnergyGuide

44 The specific results for the categorical label were: 81% Model L refrigerator, 77% Model K refrigerator, 83% Model L dishwasher, and 79% Model K dishwasher. The difference between the categorical labels and other labels is statistically significant at the 5% significance level in 12 out of 12 head-to-head comparisons.

45 The willingness-to-pay series of questions began with Q700: ‘‘Now we would like to ask you some questions about how you would value the [refrigerators/dishwashers]. These two [refrigerators/dishwashers] are the same in all respects, except that one uses more energy than the other. They have the same performance, durability, features, capacity and workmanship, are made by the same manufacturer, and sold in the same store.’’ Then, respondents were asked: ‘‘Would you be willing to pay more for one of these two models?’’ Respondents who answered ‘‘Yes’’ were then asked Q707: ‘‘Which model would you be willing to pay more for?’’ Those who select a model were then asked: ‘‘How much more would you be willing to pay for this [refrigerator/dishwasher]?’’ Finally, respondents were asked Q715: ‘‘Why do you say that? Please give as much detail as possible.’’

48 In addition, those respondents viewing the categorical label who perceived quality differences were much more likely to identify the highest efficiency model (Model K) as the highest quality model than respondents in other cells whose labels identifying the highest quality model were more evenly distributed across the four models.
label may serve a promotional function similar to the existing ENERGY STAR program. As the research suggests, however, the categorical label may actually have negative effects on the ENERGY STAR program, potentially creating substantial confusion and, in a significant number of cases, leading consumers to identify low-efficiency products as ENERGY STAR-qualified.

We believe the EnergyGuide label should complement, not detract from, the ENERGY STAR program. The combination of the FTC label and ENERGY STAR program appears to provide a sound framework for conveying energy information to consumers and promoting energy efficiency. The FTC label displays detailed energy information about all products regardless of energy efficiency. ENERGY STAR provides the U.S. Government’s imprimatur for high-efficiency products. This system, as a whole, provides a robust source of energy efficiency information to consumers.

In sum, we are not proposing a categorical label. The study suggests that there are benefits to the categorical label. It outperformed other labels on some objective performance tasks and appears to provide a good tool for allowing consumers to rank competing models. With the exception of the energy efficiency ranking task, however, differences in performance between the categorical label and the operating cost label were fairly modest. Overall, the potential costs of the categorical label are likely to outweigh its potential benefits. We are concerned that the label design could confuse a significant number of consumers with regard to the well-established ENERGY STAR program and may tend to convey inaccurate product quality messages more often than other tested designs. These concerns outweigh the categorical design’s potential benefits. We request comment on the results of the FTC research with regard to the categorical label and the conclusions we have reached.

Proposed Operating Cost Label

After reviewing the results of the research and the comments submitted, the Commission is proposing to change the label design to require operating cost as the primary disclosure. Section 324(a) of EPCA directs the Commission to require annual operating costs on the label, unless the Commission determines that such disclosures are not likely to assist consumers in making purchasing decisions. (42 U.S.C. 6294(c)). The FTC’s consumer research clearly indicates that cost information is likely to assist consumers in making purchasing decisions. While all the designs considered comply with Section 324(a), and each has strengths and weaknesses, on balance, we believe the adoption of a design that presents cost as the primary disclosure best serves consumers in the current marketplace. Under the Proposed Rule, the operating cost design would be required for refrigerators, refrigerator-freezers, freezers, clothes washers, dishwashers, room air conditioners, pool heaters, and water heaters. A sample of the proposed label is included as Figure 1.

---

51 EPACT 2005 indicates that the purpose of the ENERGY STAR program is “to identify and promote energy-efficient products and buildings.” (42 U.S.C. 6294(a)).

52 We note that the study did not test conditions where two labels had the same number of stars, but different energy use and operating cost figures.

53 We request comment on the results of the FTC research with regard to the categorical label and the conclusions we have reached.

---

54 When the Commission first issued pool heater label requirements in 1994, the DOE test procedure did not contain a final procedure for measuring annual operating costs for these products. (See 10 CFR Part 430, Appendix P; and 59 FR 49556, 49558 (Sept. 28, 1994)). Since then, DOE has amended the procedure to allow manufacturers to calculate annual energy use and operating cost for pool heaters. (62 FR 26140 (May 12, 1997)). Accordingly, the Commission proposes to require the disclosure of estimated annual operating costs on pool heaters.

55 As discussed in section VII.C of this Notice, we are proposing to eliminate EnergyGuide labeling requirements for heating and cooling equipment (except water heaters). Therefore, the operating cost label would not apply to those products.
Estimated Yearly Operating Cost

$57

Cost range for models of similar capacity, with automatic defrost, side-mounted freezer, and through-the-door ice.

580 kWh

Estimated Yearly Electricity Use

Size, door attributes, and ice features affect energy use – so other refrigerators may have lower or higher operating costs. Your actual operating costs will depend on your local utility rates and how you use this refrigerator. The estimated operating cost is based on a 2006 national average cost of 9.81 cents per kWh for electricity.

For more information, visit www.ftc.gov/appliances.

Federal law prohibits removal of this label before consumer purchase.

FIGURE 1 - PROPOSED LABEL
(OPERATING COST LABEL)
This proposed label marks a return to the prominence of operating costs on the label. When the Commission first issued EnergyGuide label requirements, the Rule required operating costs as the primary disclosure (44 FR 66466 (Nov. 19, 1979)). In 1994, the Commission relegated cost information to a secondary disclosure (see 59 FR 34014 (July 1, 1994)). At the time, the Commission explained that when DOE changed its national average energy costs, corresponding changes in the label’s operating costs could result in inconsistent cost information on labels in the showroom. (58 FR 12827 (March 5, 1993)). As explained in more detail below, we believe this concern can be addressed by changing the frequency at which required average energy cost information is changed.

Our research indicated that respondents clearly identified operating costs as the preferred method for communicating energy performance in the marketplace. This preference was strong and consistent both in answers to open-ended questions at the beginning of the questionnaire and a series of closed-ended questions near the end. The contractor coded responses to the open-ended questions and grouped them into larger categories. Although the open-ended responses suggested a tendency for respondents to identify the information most prominently featured on the label they viewed as the “most useful” information, respondents tended to identify cost-related information as “most useful” more than other types of information regardless of which label they viewed. Across all label conditions, on average, 67% of respondents mentioned cost-related information when shown a refrigerator label, and 69% of respondents mentioned cost-related information when shown a dishwasher label. In contrast, roughly 40% of the respondents mentioned energy consumption, roughly 13% of respondents mentioned something about stars or an ENERGY STAR rating, and roughly 2% of respondents mentioned something about efficiency. The staff’s separate review of a subsample of responses confirmed the contractor’s finding that cost is mentioned most often as “most useful.”

The preference for operating cost information also emerged in an analysis of responses to a series of closed-ended questions asked toward the end of the questionnaire. For example, 40% of all respondents stated that operating cost was extremely useful (i.e., a 10 on a 0 to 10 scale). In addition, 80% of all respondents rated the usefulness of cost information a seven or greater rating on a scale of 0 to 10. By comparison, 28% of total respondents indicated that an energy use descriptor was extremely useful, and 67% of all respondents rated energy use a seven or greater on a 0 to 10 scale. Only 25% of total respondents found the five-star scale to be extremely useful and 64% rated the five-star scale a seven or greater on the same scale. Respondents who viewed the categorical label were more likely than those in other cells to assign high ratings to the five-star scale, giving the five-star system a mean score of 8.1 in the condition without the ENERGY STAR logo and 8.2 in the condition with the ENERGY STAR logo. Even for these respondents, however, the five-star system did not yield higher ratings than the operating cost measure. They gave the operating cost measure an average score of 8.4 in the condition without the ENERGY STAR logo and 8.5 in the condition with the ENERGY STAR logo.

In general, the operating cost design performed well on the objective tasks. For example, in head-to-head comparisons between the operating cost design and the categorical label design under the ENERGY STAR condition, there were no statistically significant differences in correct responses to questions about costs or energy use. The only statistically significant difference with the ENERGY STAR logo in place occurred in the energy efficiency ranking task. While the categorical label outperformed the operating cost label on some objective tasks, the differences in most cases were quite modest.

The research suggests that the operating cost disclosure provides a clear, understandable tool to allow consumers to compare the energy performance of different models. We expect that consumers find operating cost information most useful because it is familiar to them and provides a clear context from which they can gauge the energy efficiency differences of various appliances, and allows them to assess trade-offs between energy efficiency expenditures and other expenditures. An operating cost range also provides an energy efficiency descriptor that is consistent across appliance types, and addresses the “directionality” problem identified by comments (i.e., more efficient models are always lower on the range across appliance types).

We have two concerns, however, with the use of operating cost as the primary disclosure on a label. We seek comments on each. First, as discussed by the Commission in 1994, frequent changes to average energy cost figures used to calculate label disclosures could lead to inconsistent labels for models displayed in the showroom. To address this concern, the Proposed Rule would alter the frequency at which the FTC considers changing the national average energy cost information to once every five years. We believe that such a system would reduce compliance costs in addition to concerns about inconsistent label information. This issue is discussed further in section VII.E of this Notice.

Second, because the operating cost on the label is based on a national average, the energy cost used to calculate information on the label may not be the same as the energy cost paid by the consumer examining the product. Comments at the Workshop suggested that most consumers will understand average cost information means that their actual energy costs are likely to be different. (Workshop Tr. at 100–101; and 211). For example, one participant stated that “there are varying degrees to which an individual household relates to that annual operating cost and that annual kilowatt hour consumption, and

56 Respondents were first advised: “Imagine you were shopping for a [refrigerator/dishwasher] and this information was available. Please look at the information. You will be asked questions about [refrigerators/dishwashers] based on this information.” Respondents then viewed a single energy label and asked (Q515): “Would any of this information be useful to you in making your purchase decision?” Those who answered “Yes” were then asked (Q515) “Which parts of this information would be most useful to you? Please be as specific as possible.” When asked about the usefulness of information on the label early in the questionnaire, roughly 80% of respondents across all ten conditions, thought the information would be useful (84% for refrigerator purchases and 80% for dishwasher purchases).

57 For example, in the refrigerator condition, at least 40% of those who saw an operating cost label mentioned yearly operating costs, but only about 25% of those who viewed a categorical label mentioned operating cost. This tendency suggests that the information featured most prominently on the label will be important to consumers.

58 Question series 900 stated: “There are different ways to communicate the energy characteristics of an appliance. You can get * information on how much energy an appliance uses measured in kilowatt-hours, * information on the cost of operating an appliance for a year, measured in dollars, * energy efficiency ratings based on a five-star rating system. On a scale from 0 to 10, with 0 being not at all useful and 10 being extremely useful, please rate the usefulness of each type of information.” Answers were elicited for Energy Use in Kilowatt-hours (Q905), Operating Costs Measured in Dollars (Q910), and Energy Efficiency based on a Five-Star Scale (Q915); the ordering of the alternative measures in the statement text and questions was randomized.

59 The mean score for kilowatt-hours, operating costs, and energy efficiency were 7.4, 8.2, and 7.2 respectively.

60 Should energy costs change dramatically during the interim, the Commission would have the discretion to update the figures before the end of the five-year period.
61 The Proposed Rule would also eliminate the definition of “range of energy efficiency ratings” in section 305.2 because the term would no longer be used in the Rule.

62 The label would also contain an annual cost disclosure in the explanatory language at the bottom of the label.

63 The fact that respondents report “willingness-to-pay” figures greater than yearly operating costs across all treatments suggests that people may estimate cost savings over several years. Respondents who were willing to pay more for one appliance were asked (Q715) “Why do you say that. Please give as much detail as possible.” Preliminary analysis of these responses suggests that people often evaluate future savings based on their expected period of appliance use.
Estimated FIVE YEAR Operating Cost

$285

Cost range for models of similar capacity, with automatic defrost, side-mounted freezer, and through-the-door ice.

580 kWh
Estimated Yearly Electricity Use

Size, door attributes, and ice features affect energy use — so other refrigerators may have lower or higher operating costs. Your actual operating costs will depend on your local utility rates and how you use this refrigerator. The estimated operating cost is based on a 2006 national average cost of 9.81 cents per kWh for electricity. The five year operating cost is based on an annual cost of $57 and is neither discounted nor adjusted for inflation.

For more information, visit www.ftc.gov/appliances.

Federal law prohibits removal of this label before consumer purchase.

FIGURE 2 - ALTERNATIVE PROPOSAL
(OPERATING COST LABEL WITH FIVE-YEAR DISCLOSURE)
Proposed ENERGY STAR Placement

In response to comments, and consistent with the new designs tested in the research, the proposed amendments allow manufacturers to place the ENERGY STAR logo in the lower right-hand corner of the label for qualified products. Under this proposal, the logo may be up to one inch by one inch in size. Requirements related to the placement of the ENERGY STAR logo on the label are found in section 305.11(f)(12) of the Proposed Rule.

C. Requirements for Heating and Cooling Equipment

Issue: Currently, the Rule requires EnergyGuide labels on central air conditioners, heat pumps, furnaces, boilers, and water heaters. (16 CFR 305.11). Section 305.11 also requires manufacturers to provide energy information about most of these products in the form of fact sheets or industry directories. Additionally, retailers, including assemblers, who sell furnaces or central air conditioners to consumers must make available to consumers this energy information for the heating and cooling products they sell.64

These products generally do not appear in showrooms where consumers can compare labels on competing models.65 In its ANPR, the Commission, therefore, sought comment on whether the Rule should continue to require labeling for heating and cooling equipment. The Commission also asked whether there were alternatives to labeling that would more effectively communicate energy efficiency information to consumers with respect to these products.

To address these questions, it is important to begin with a consideration of the statutory requirements related to labeling these products. Under section 324(a)(2) of EPCA, the Commission may exclude central air conditioners, heat pumps, and furnaces from labeling requirements if it determines that labeling is not technically or economically feasible. (42 U.S.C. 6294(a)(1)). Section 6294(c) gives the Commission authority to require disclosures of energy information in printed material displayed or distributed at the point of sale. In addition, the Commission may direct manufacturers to provide additional energy-related disclosures in information shipped with or attached to the product, including instructions for the maintenance, use, or repair of the covered product. (42 U.S.C. 6294(c)(3)).

Comments: In response to the ANPR, several commenters expressed the belief that the Commission should discontinue labeling requirements for heating and cooling equipment. Both the Gas Appliance Manufacturers Association (GAMA) and the Air Conditioning and Refrigeration Institute (ARI) suggested that labels for heating and cooling equipment do not aid consumers because these products are not sold through showrooms or by other means that allow consumers to examine the label before purchase.66 Industry representatives at the Workshop indicated that these purchases are usually made through in-person contractor visits or over the telephone. Contractors often conduct an on-site analysis to determine the appropriate equipment for the dwelling. (Workshop Tr. at 164). In addition, a GAMA representative noted that manufacturers currently provide directories to the dealers who have them available for their customers. (Workshop Tr. at 178). GAMA, therefore, urged the FTC to eliminate the labeling requirement for furnaces, boilers, and water heaters.67 ARI made the same suggestion for central air conditioners and heat pumps. Finally, NRCan, in its written comments, described its voluntary program for heating and cooling products, which does not use labeling, but instead urges manufacturers to print efficiency ratings for their products in brochures.68

In comments submitted after the Workshop, EEI (#522148–00010) agreed that most consumers do not see the label on these products until after purchase.69 At the same time, it indicated that an “appliance label can provide a document that verifies what the consumer agreed to purchase, and may help provide documentation for a utility rebate program, a state tax deduction or credit, or federal tax credit.” ACEEE raised similar concerns about eliminating the EnergyGuide label from heating and cooling equipment. It suggested that the label information is useful even though most consumers do not see the EnergyGuide at the time of purchase. According to ACEEE, its research indicates that the label provides useful verification of the product’s efficiency upon installation and allows auditors and consumers purchasing an existing home to determine the energy efficiency of equipment installed by previous owners. ACEEE (#519870–00021), therefore, urged the FTC to consider additional means for providing label information to consumers.

Many commenters provided suggestions for improving the current requirements to make it more likely that consumers will receive energy information prior to purchase. Both ARI and GAMA urged the Commission to require the provision of energy information for heating and cooling products through existing industry databases that are available over the Internet. (Workshop Tr. at 161–162, 163–165). GAMA stated, “[If the FTC really wants to be relevant about this and really do an effective job with this, its focus ought to be on the modern, electronic means of communicating this information for products like this where the purchasing decision is made before you see the label.” (Workshop Tr. at 167).

ARI explained that consumers can now obtain an ARI certificate for their equipment directly from its online directory. This certificate provides information about a product such as the model number, the name of the manufacturer, the product’s efficiency, and capacity. This information allows consumers to compare what they are buying with what a contractor is telling them. (Workshop Tr. at 166). ARI indicated that it might be possible to add operating cost information as well. EEI (#522148–00010) suggested that the FTC work with home builders and

64 Retailers, including assemblers, who negotiate or make sales at a place other than their regular places of business must show the information to their customers and let them read the information before they agree to purchase the product. (See § 305.11(b)(1)(ii)).

65 See, e.g., 44 FR at 66470 (Nov. 19, 1979) (“The majority of furnaces are purchased either in the consumer’s home or as part of the consumer’s purchase of a home. As a result, few consumers have an opportunity to see a display model before the furnace is installed.”).

66 GAMA (#519870–00011, and ARI #519870–00010).

67 GAMA explained that consumers sometimes purchase replacement residential water heaters from retail outlets, but, as often as not, they obtain them through contractors.

68 GAMA also argued that the recent DOE standards have significantly reduced the differences in energy use of storage water heaters on the market therefore reducing the need for labeling of these products. (GAMA #519870–00011).

69 NRCan #519870–00020.
HVAC contractors to create “certified fact sheets” that provide efficiency information to consumers when they are deciding to install a new system. EEI indicated that the certified fact sheet could be based on information downloaded from the ARI or GAMA Web sites, and be available for use by all home builders and HVAC contractors. It could incorporate information shown on the current appliance labels as well.

In addition to issues related to central air conditioners and furnaces, commenters raised a number of issues involving water heaters.70 Bosch (#522148–00003) urged the Commission to use the same scales of comparability for instantaneous water heaters and tank water heaters. Bosch commented that a “water heater is a water heater in terms of meeting the needs of the consumer, and yet having different scales for storage tanks than for tankless muddles the message of efficiency. If the goal is to steer consumers toward energy efficient appliances, then I would recommend that the Federal Trade Commission use the same scale for all water heaters.” When this issue was discussed at the Workshop, a GAMA representative suggested that several issues would need to be explored before addressing this issue because, for example, tank and tankless water heaters use different capacity measurements. Until such capacity issues can be resolved, he suggested that the FTC should not combine the two products in the same range. (Workshop Tr. at 193). Other participants also suggested that the ranges should not be combined at this time. (Workshop Tr. at 193 and 195). Finally, one commenter (Flanders Precisionnaire #519870–00003) suggested that EnergyGuide labels on heating and cooling equipment include a footnote indicating that conditions restricting airflow will immediately and perhaps significantly reduce energy efficiency below the levels stated on the label.

Discussion: The Commission has reviewed the comments and proposes to amend the current Rule to discontinue the EnergyGuide labeling requirements for furnaces, boilers, central air conditioners, and heat pumps. In lieu of a labeling requirement, the Proposed Rule would require manufacturers to mark their units permanently with certain energy information. In addition, the Commission proposes to amend the fact sheet and directory requirements in the Rule to streamline and improve existing requirements and provide manufacturers and contractors with different options, such as online sources, for providing energy information. The Rule would continue to require EnergyGuide labeling for water heaters.

As the comments indicate, there is very little evidence that the EnergyGuide labels currently affixed to heating and cooling equipment generally assist consumers in their purchasing decisions. The comments suggest that, in most cases, consumers buy these products through contractors. There is no evidence that these products are widely sold in a showroom or similar setting, where a comparative energy label would provide significant benefits. Instead, it appears that fact sheets and directories provide better vehicles for providing consumers with energy information before purchase. Unlike labels affixed to the products themselves, consumers can obtain fact sheets and directory information through retailers (including installers) and review the energy performance of competing products as they are making their decisions.

As several commenters observed, however, the information on labels appears to provide a benefit to consumers in both their use of existing heating and cooling equipment and their purchase of replacement products. For example, labels that remain on installed equipment may be useful to consumers when they are gauging their household energy use and considering new equipment purchases. It may also provide information to allow the consumer to confirm that the model they ordered is the model that has been installed by the contractor. Labels also can help energy auditors seeking to determine the energy characteristics of installed equipment.

Labeling does not appear to be the best vehicle for yielding these benefits because the stickers can easily be removed. Instead, a permanent nameplate appears to be a more effective tool to provide such information, and possibly less costly to industry members. EPCA authorizes the Commission to require manufacturers to attach to the product additional information related to energy consumption if that information would “assist consumers in making purchasing decisions or in using the product and such requirements would not be unduly burdensome to manufacturers.” (42 U.S.C. 6294(c)(5)). Accordingly, the Commission proposes requiring that manufacturers permanently mark their heating and cooling equipment with the product’s model number and energy efficiency rating in lieu of labeling the products. This information could be placed on the product’s nameplate or other convenient location.71

We expect that such a marking requirement would involve minimal burden to industry. The California Energy Commission already requires that these products be marked with model number and efficiency information. (See, 20 C.C.R. § 1607). As a result, it is likely that the FTC marking requirement would not create any additional burden for most manufacturers. In addition, the nameplates for these types of products provide an existing location to place such information. We expect that the addition of energy rating information would involve a small incremental burden. We seek comments on this marking proposal. In particular, we request that commenters address whether additional information should be required and the burdens such a proposal would impose.

Finally, because we are proposing to eliminate the label, we are not proposing to require information about restricted airflow on labels as suggested by one comment. Manufacturers may provide such information in their marketing material and instruction manuals as long as such information is substantiated. We seek comment on whether such disclosures should be mandatory.

The Commission is also proposing to amend the fact sheet requirements for these products to provide more flexibility to sellers, ensuring consumers have access to energy information. Under section 305.14 of the Proposed Rule, therefore, manufacturers would have the flexibility to provide this energy information about their products to distributors and retailers through fact sheets, directories, or product brochures. In addition, manufacturers could choose to make the information available electronically. In turn, the Rule would continue to require retailers (including assemblers) to make this information available to customers. They could make the information available in any manner, as long as customers are likely to notice the information. For example, the information could be provided in a display, where customers can take copies. It could be kept in a binder or made available electronically at a

71 The proposed marking requirements are in section 305.12 and 305.13 of the Proposed Rule. Under the Proposed Rule, the marking “must be permanent, legible, and placed on the outside surface of the product.” To be “legible,” the information must be easily viewed by a person examining the surface of the product.
counter or service desk, with a sign telling customers where the information can be found. Retailers, including assemblers, who negotiate or make sales at a place other than their regular places of business would have to show the required information to their customers, just as required under the current Rule. If the information is Internet-based, retailers (and assemblers) would have the option to provide customers with instructions to access the information online.

Under the Proposed Rule, the fact sheet-related information provided would be a simplified version of that currently required by the Rule. The manufacturer information would include: (1) The name of manufacturer or private labeler; (2) the trade (brand) name; (3) model number(s); (4) capacity determined in accordance with section 305.7; (5) energy efficiency rating as determined in accordance with section 305.5; (6) a statement that the energy efficiency ratings are based on U.S. Government standard tests; and (7) for central air conditioners, the information about efficiency ratings for specific condenser/coil combinations or, alternatively, for the “most common” condenser-evaporator coil combinations, as currently required by the Rule. We seek comments on all aspects of this proposal, including whether these disclosures are appropriate, and whether manufacturers and retailers should have the option to provide this information to customers through the Internet in lieu of showing them paper fact sheets or directories.

The Commission is not proposing to require information about operating costs for these products. Operating costs for heating and cooling equipment are highly dependent on regional conditions. Although the current DOE test procedures provide instructions for calculating operating costs in several different regions, the calculations can be difficult to perform for the average consumer. In addition, we are not proposing to require range information for these disclosures. Range information is likely to be of reduced value to consumers in the context of industry directories and online databases where data for comparative models is readily available. It is unclear how separate range information can be incorporated into catalogs in a way that is beneficial to the average consumer. We seek comments on this proposal.

We note that using a uniform national average energy cost may be more useful to consumers than the multi-region cost information currently required in the Rule. As an alternative to the proposed elimination of cost information for these products, the Rule could require manufacturers to provide a single estimated operating cost for their models based on national average figures for cooling/heating loads and for energy costs (e.g., heating/cooling loads based on Region IV as delineated in 10 CFR Part 430, Subpt. B, Appendix M). This information could be accompanied by an explanation that the cost information represents a national average and that individual costs will vary based on usage and location. We ask for comments on such an annual cost disclosure. Comments should address whether such a change would be feasible for manufacturers, technically appropriate, and useful for consumers.

Finally, the comments indicated that some water heaters are sold in retail stores where consumers can examine and compare the product labels. Accordingly, we do not propose to eliminate EnergyGuide labeling requirements for these products nor do we propose to require permanent marking. In addition, we do not propose to change the ranges of comparability for these products to combine information for tank and tankless water heaters. Comments provided to the Commission suggest the merger of this range information is not currently feasible because storage and instantaneous models are rated using different test sequences. We note that the proposed operating cost label will allow consumers to compare energy cost across different water heater types.

D. Refrigerator Categories

Issue: During this proceeding, the Commission has explored whether the range categories for refrigerators should be combined to include models with different door configurations and features. The current labeling requirements designate separate comparability ranges for various refrigerator sub-categories (or styles) such as side-by-side door configurations or models with top-mounted freezers. This allows consumers easily to compare the energy use of similarly configured refrigerators, but not the energy use of models across subcategories. Consumers, however, can employ the energy use and operating cost information to compare the product’s energy performance to other refrigerators in the showroom regardless of configuration.

Some refrigerator configurations are generally less efficient than others. For example, top-mounted freezer models generally use less electricity than comparably sized side-by-side models. As a result, the range information on a particular side-by-side refrigerator label may compare favorably to other side-by-sides, but fail to show that the model uses significantly more energy than an average refrigerator with a top-mounted freezer. To address this concern, the FTC sought comments on whether the refrigerator labels should present comparability information for all refrigerators regardless of configurations.

Comments: Consumers Union (#519870–00017) indicated that the current system for labeling refrigerators is deeply flawed. It stated that “consumers trying to select a refrigerator based on energy efficiency must be able to compare across categories, instead of within the current very narrowly defined subclasses.” In particular Consumers Union suggested that “the EnergyGuide label show the energy use of the appliance in kWh/yr, as currently done, but that the label also compare the energy used by the appliance to the most energy consumption allowed by law for any refrigerator of comparable internal volumes—indeed of style.” In its view, this approach would inform consumers that certain product configurations use less energy than others. At the Workshop, a participant from Consumers Union described that organization’s approach, which focuses on the volume of the product and not the configuration. The Consumers Union representative raised concerns about the fact that ENERGY STAR levels are different for various product configurations stating: “You do not want to have an ENERGY STAR model that uses more energy than a similarly sized and split refrigerator that does not get an ENERGY STAR.” (Workshop Tr. at 134).

Other commenters raised similar concerns, urging the Commission to consider using the same classification category for most refrigerator models. ACEEE (#519870–00021) wrote that products “offering the same service should be compared on the same label regardless of differences in technology or design to avoid consumer confusion and diminished credibility of the label.” ACEEE comments noted that the FTC amended the Appliance Rule in the past to include comparison of top-loading and front-loading washers on the same label. At the Workshop, an ACEEE representative explained: “for those consumers who are interested in looking for the most efficient product in their size category or that want to do a

\footnote{The current Rule does not require cost information on EnergyGuide labels for heating and cooling equipment.}
comparison across class, combining them will allow them to do that cross-class comparison, which is otherwise very difficult to do.” (Workshop Tr. at 139). Another commenter at the Workshop suggested that the use of multiple categories for refrigerators may confuse consumers, particularly where ENERGY STAR models in one class use more electricity than non-ENERGY STAR models in another class. (Workshop Tr. at 146).

Other commenters cautioned against changes to the current ranges for refrigerators. AHAM (#522148–00007) indicated that its “research shows when consumers enter a retail establishment to purchase a refrigerator product, their first criteria is product configuration.” In its view, “consumers have already decided on the desired configuration prior to stepping into a retail outlet.” According to AHAM, an amendment that merged the different categories of products “would run counter to marketplace and consumer purchase drivers” and would diminish the efficacy of the label. At the Workshop, an AHAM representative indicated that information currently on the label, such as operating costs, already permits consumers to make comparisons across different refrigerator configurations. (Workshop Tr. at 142–143). EEI (#522148–00010) agreed, stating that the current system allows for an “apples to apples” comparison of products, such as side-by-side refrigerators. EEI suggested that consumers may be confused by comparisons of models that have different energy efficiency requirements or sizes.

Whirlpool (#522148–00005) indicated that refrigerator labels should continue to be unique by configuration: “Configuration (top freezer vs. bottom freezer vs. side-by-side) is a primary determinant in the purchase decision along with physical size of the unit. Before the consumer even begins the shopping process, they will identify any size constraints and consider which configuration unit they want.” Whirlpool also stated that its proprietary market research over the past five years repeatedly indicates that size, internal configuration, and features are major considerations when shopping.

Whirlpool noted that the current label classification is consistent with those used under DOE’s energy efficiency standards that reflect the inherent differences in efficiency resulting from the physical design of the product. Whirlpool believes it would be confusing for consumers to combine all configurations of refrigerators within a cubic foot range.

Discussion: The Commission is not proposing to change the current range categories for refrigerators. We recognize that requiring more inclusive ranges may help consumers to compare energy use across model configurations. Such an approach, however, runs counter to the system used by DOE and by the ENERGY STAR rating system. In some cases, the combination of refrigerator ranges could place ENERGY STAR designated models lower on the label range than non-ENERGY STAR models. This could cause consumer confusion in the short run and may cause confusion about the ENERGY STAR designation. Accordingly, the Commission does not believe that a change in the current range system would provide significant benefits for consumers and may create confusion.

Although we do not plan to change the range categories for these products, it may be useful to provide consumers with additional information to help them understand that different door and ice service configurations can affect energy consumption. Accordingly, the Commission proposes to change the ranges for refrigerator-freezers. At this time, we are not aware that there are a significant number of these models on the market. Accordingly, we are not proposing to amend the categories to take these models into account. However, we are seeking comment on whether the number of such models is likely to increase significantly. If so, we ask how the categories in the Rule should take these models into account, if at all (e.g., should an existing category be expanded).

E. Revisions to Ranges of Comparability and Energy Price Information

Issue: The EnergyGuide label must contain a range of comparability that shows the highest and lowest energy consumption or efficiencies for all similar appliance models. EPCA does not specify when the Commission must change the ranges, but states it cannot do so “more often than annually.” (42 U.S.C. 6296(c)). The Commission’s regulations indicate that the FTC will revise ranges annually, if the upper or lower limit on the range for a product changes by 15% or more. (16 CFR 305.10). For some products, the Commission has changed the applicable ranges several times over the last few years, for others less frequently. When the Commission makes these changes, manufacturers must amend their labels to reflect the new ranges and update the fuel costs on the labels using new national average fuel costs, published annually by DOE. Accordingly, the average fuel costs used on the label are tied to the year in which the ranges were last amended.

Range changes can cause the labels on different models in the same showroom to display inconsistent information because the models on display may have been manufactured at different times. This potential confusion is exacerbated by frequent range changes.
Frequent range revisions also impose burdens on manufacturers who must expend resources to change their product labels. The ANPR contained a series of questions about these issues, including whether the FTC should change the frequency at which it examines the ranges.

Comments: Several commenters suggested that the Commission consider uniform changes to range and fuel price information on a consistent schedule. AHAM (AHAM #519870–00021) indicated that the current Rule requirements result in inconsistent energy rates used to calculate information across appliance types (e.g., dishwashers compared to refrigerators). Under the current system this can happen where the ranges for particular appliances do not change over a long period of time. In such a case, the Rule directs manufacturers to continue to base their operating costs estimates on energy prices that may have been published by DOE five or even ten years previously. AHAM, therefore, recommended that “the same average fuel rates be used on all appliances, and that they be uniformly changed every two to three years.” In its view, this would “avoid the use of rates that are too old, keep all appliances using the same rates, and allow sufficient time for manufacturers to plan inventory of labels accordingly.” (Workshop Tr. at 133). Alliance Laundry Systems (#519870–00008) concurred with AHAM’s recommendation, but suggested that the Commission continue to consider changes to the comparability ranges annually. Artcraft (#519870–00004) recommended that the Commission make revisions more often than annually because significant changes are occurring in the market all the time.

Discussion: Over the past decade, the frequency of range amendments has varied by appliance type. Ranges for some products, such as dishwashers, have changed several times while ranges for other products, like room air conditioners and water heaters, have changed less frequently. Frequent changes to the range and cost information can exacerbate the problem of inconsistent information on comparable models sitting side-by-side in a showroom. We are concerned that the consumer benefit from frequent updates to range and cost information may be outweighed by the detriment caused by this inconsistent information in the showroom.

There also may be confusion caused by the use of inconsistent energy price information across appliance categories. For example, at this time, the operating cost on dishwasher labels is based on the 2004 average electricity cost of 8.60¢ per kilowatt-hour, whereas the cost on refrigerator labels is based on the 2005 figures of 9.06¢ per kilowatt-hour.

Given these concerns, the Commission proposes to amend section 305.10 to change the frequency with which it alters range and national average energy price information to once every five years. Under the amendment, the Commission would change automatically both the range information and the underlying cost information to reflect the most recent data once every five years. This approach will minimize problems associated with inconsistent cost and range information on showroom models, and make energy cost information uniform across appliance categories. If energy costs or range information change substantially within the five-year period, the Commission can consider amendments in the interim through rulemaking. We seek comments on this five-year schedule for updating cost and range information. Among other things, we ask that commenters address whether a five-year cycle is appropriate, whether there are other ways to minimize confusion caused by updates to the energy cost information on labels, and whether there is a typical length of time that individual display models remain on showroom floors.75

F. Energy Descriptors

Issue: The ANPR sought comment on whether the Commission should change any of the EnergyGuide’s current energy descriptors. For example, the notice sought comment on whether the clothes washer label should disclose the model’s efficiency rating using the measure currently required by DOE (the “Modified Energy Factor” or “MEF”) instead of the product’s annual energy consumption.

Comments: Several commenters responded that the Commission should not change current descriptors.76


back of the label. We are seeking comments on this proposal, particularly whether hang tags should be allowed on the exterior surface of products.

We note that the insertion of the label in a plastic bag along with other instructions or marketing material does not meet the current or proposed requirements because it is neither an adhesive label nor a hang tag. In addition, this practice could obscure the label from view particularly if it is layered under other material such as manuals or warranties.

**H. Catalog Requirements**

**Issue and Comments:** Section 305.14 of the Rule currently requires that any manufacturer, distributor, retailer, or private labeler who advertises a covered product in a catalog, including a Web site that qualifies as a catalog, disclose the product’s capacity, energy use (or efficiency) and range of comparability information. No comments addressed the current requirements.

**Discussion:** The Proposed Rule would redesignate section 305.14 as 305.20 and amend the section to require disclosures of estimated annual operating costs for refrigerators, refrigerator-freezers, freezers, clothes washers, dishwashers, room air conditioners, and water heaters. This change would make the catalog requirements consistent with the changes proposed for the EnergyGuide label. The Proposed Rule would continue to require the disclosure of energy efficiency rating information for central air conditioners and furnaces.

The Proposed Rule also would require disclosure of the range of water use related to each water-using appliance. Consumers viewing catalogs are likely to see information for a much larger number of models than consumers in a showroom. Thus, catalog shoppers do not have the same need for market ranges. In addition, because the range information in the catalogs cannot always be presented in the same form as they appear on the label, it may cause confusion or fail to provide significant benefit to consumers. While the benefits may be small, the burden of providing this information may be significant. The burdens often fall on retailers who are not producing and labeling the products themselves. For these reasons, we propose to eliminate the range information from the catalog requirements. We seek comments on this proposal.

Finally, the Proposed Rule also contains several changes to the catalog disclosure requirements in section 305.2(m) and newly designated section 305.20 to clarify that Internet-based catalogs must also provide these disclosures. The Commission promulgated these provisions before the advent of the Internet. The proposed amendments will ensure that Web-based catalog sellers understand that they must meet the Rule’s disclosure requirements. The Commission seeks comments on these changes to the catalog requirements.

**I. Fuel Cycle Energy Consumption**

**Issue and Comments:** The American Gas Association (AGA) (#519870–00014) urged the Commission to include information on the label about “energy consumption over the full fuel cycle” in addition to information currently provided. AGA indicated that without this information, the label does not allow consumers to “make truly informed choices” and provides information that is incomplete and misleading.

**Discussion:** AGA raised similar comments in an earlier Commission proceeding on the EnergyGuide label. (65 FR 17554, 17559 (Apr. 3, 2000)). The statute, however, contains a relevant restriction on the type of information the Commission can require. Under section 324(c)(1)(A) of EPCA (42 U.S.C. 6294(c)(1)(A)), the Commission must derive the energy consumption information required on the label from DOE’s test procedures. These procedures measure end-use energy only and not the type of energy consumption described in AGA’s comment. Accordingly, the Commission is not proposing to add the type of information suggested by AGA.

**J. Clothes Washer Labels**

**Issue and Discussion:** In 2003, the Commission published amendments requiring a special headline on clothes washer labels indicating that the product had been tested under the 2004 DOE test procedure (68 FR 35458 [June 18, 2003]). The FTC added this headline at the request of industry members because the results of the 2004 DOE test differed significantly from the previous test. Although the explanatory language served a good purpose at the time, we believe that its continued presence on the label will lose its value over time and could even confuse consumers as the years pass. As the 2004 date becomes more distant, the headline may suggest that the label or the product itself is old, or even obsolete. Given the proposed changes to the overall label design, we believe the current proceeding provides a convenient opportunity to eliminate this language. Accordingly, the Commission proposes amending 305.11 by discontinuing this explanatory language on the clothes washer label.

**K. Plumbing Issues**

**Issue and Comment:** The Appliance Labeling Rule contains marking and package disclosure requirements for certain plumbing products such as toilets, showerheads, and faucets (see 16 CFR 305.11(f)). EPA’s Municipal Support Division (#519870–00012) suggested several changes to the labeling requirements for these products. EPA staff indicated that its own informal survey of retail packaging “revealed that on many plumbing products the [required disclosure] is obscured either through extremely small type fonts or lost amongst other information.” To address these concerns, EPA suggested that the rule require the prominent placement of the information on the package, a minimum font size (e.g., 16 point or greater), and the identification of a range of water use for similar products.

**Discussion:** As with all required disclosures, the labeling for plumbing products must be clear and conspicuous so that consumers can easily find and read the relevant information. Accessible placement of the information not only allows building code officials and other professionals to determine a product’s water use rate, but also facilitates consumers’ ability to comparison shop for efficient products. EPA’s comments appear to identify compliance problems, not defects with existing requirements. We are reluctant to impose additional requirements on all manufacturers to address the failure of a few manufacturers to comply with the Rule. If problems persist and can be traced to defects in the current requirements, the Commission may consider revisiting this issue and

---

78 EPCA indicates that catalogs must “contain all information required to be displayed on the label, except as otherwise provided by the rule of the Commission.” (42 U.S.C. 6296(a)).

79 We note that the required information should appear on each page that lists the covered product. (See § 305.21(a)).
promulgating more prescriptive disclosure requirements.

Additionally, the Commission is not proposing to require the inclusion of water use range information on packaging. The statute does provide a mechanism for the Commission to establish a format for manufacturers to use in making claims involving costs or the range of costs of plumbing products. The Commission discussed this issue in detail in issuing its initial labeling rules for plumbing products and decided to defer prescribing requirements on this issue. (58 FR 54955, 54961 (Oct. 25, 1993)). At this time, the Commission has no evidence that the inclusion of a water use range on packaging would provide a significant benefit to consumers. In addition, such changes would likely require manufacturers to change existing packaging and update packaging in the future. We see no compelling need to issue new requirements at this time but seek comments on this issue.\(^{81}\)

One commenter, the California Urban Water Conservation Council (#19870–00015), suggested that labels for toilets indicate whether the product is a High Efficiency Toiler (HET). According to the commenter, a HET functions at a maximum flush volume of 20 percent less than the current national standard of 1.6 gallons per flush (equal to a maximum of 1.28 gallons per flush). EPCA, however, directs that the Commission issue labeling rules for water closets that are consistent with the marking and labeling requirements of ASME A112.19.2M. While the inclusion of HET information is not inconsistent with ASME requirements, we see no need to direct manufacturers to provide this information when companies appear to have a clear incentive to provide this high-efficiency information on their own. Manufacturers may advertise the efficiency of their plumbing products through marking, separate labeling, or otherwise as long as the product has been tested under the applicable DOE procedures and the representations fairly disclose the results of such testing (see 42 U.S.C. 6293(c)). Accordingly, the Commission is not proposing any amendments.

L. Television Labeling

Issue: Section 324(a) of EPCA requires labels for televisions unless the Commission determines that labeling is not technologically or economically feasible. (42 U.S.C. 6294(a)). In 1979, the Commission determined that labeling for televisions was not economically feasible; there was little variation in the annual energy costs of competing television models and such costs were a small fraction of the purchase price. The Commission, therefore, believed it was unlikely that labels for televisions would promote industry efforts to increase energy efficiency, or provide benefits to consumers. (44 FR 66466, 66468 (Nov. 19, 1979)). As part of the May Workshop, the FTC sought comment on whether the Rule now should require television labeling.

Comments: Several commenters urged that the Commission revisit its 1979 decision. According to the Natural Resources Defense Council (NRDC),\(^{82}\) there are now many “large-screen” digital televisions on the market that use 500 or more kilowatt-hours per year, as much energy as many new refrigerators. NRDC asserted that, in some cases, consumers will pay several hundred dollars in electricity costs for their televisions over the lifetime of the product. NRDC’s comments also indicated that there is now a large variation in active mode power use among similarly-sized televisions. In its view, there is no reliable, model-specific, source of energy-use information for new televisions. CEE also urged the Commission to consider labeling for televisions stating that “new technologies and larger sizes of televisions that are currently offered on the market argue for their inclusion within the scope of the Appliance Labeling Rule.” CEE noted that according to 2001 DOE estimates “99 percent of all homes have at least one television, with 35 percent having two, 22 percent having three, and 10 percent having four televisions.” The DOE data also indicate that over a third of households had “large-screen” televisions. CEE believes that televisions warrant EnergyGuide labels because they are “large energy users and their energy use has increased over recent years.” CEE recommended a label that would allow comparisons across model types and technologies (e.g., plasma, LCD, and CRT).

Other commenters questioned the need and feasibility of television labeling. The Consumer Electronics Association (CEA) noted that televisions are much more energy efficient than they were several decades ago. According to CEA, the energy consumption of a typical 20-inch color television has decreased dramatically in the last several decades (from 450 watts in the 1960s to less than 100 watts in 1995). CEA also argued that technological innovation, not government programs, have driven these energy efficiency improvements. One Workshop participant, Christopher Payne, however, suggested that the overall improvement in energy performance of consumer electronics, though admirable, is not really relevant to the question of labeling if there is a broad range of energy usage among various models.\(^{85}\)

Several commenters also expressed concerns about the usage estimates that would be employed to determine annual energy use or operating costs. CEA (#522148–00009) stated that “consumer use varies significantly with high tech products, which typically contain multiple features and functions that are used in many ways. Consequently, determining an average usage pattern is very challenging.” EEE (#522148–00010) noted that the “energy usage pattern of televisions is directly related to the number of sets and occupants per household” and that the test procedure should take into account the diversity factor of usage. One Workshop participant, David Kline of JVC, cautioned against using a “one size fits all” approach for consumer usage estimates. (Workshop Tr. at 206).

In contrast, another commenter suggested that the precise usage estimate is not as important as ensuring consumers receive comparative information about energy use over a given time period. (Workshop Tr. at 210). At the Workshop, a representative of the Collaborative Labeling and Appliance Standards Program indicated that research demonstrates that consumers are capable of understanding and gauging information about average use on labels. (Workshop Tr. at 211–212).

To label products consistently, manufacturers must have a reliable test procedure to generate energy consumption information about their products. According to CEA (#522148–00009), current DOE test procedures were intended for black-and-white analog televisions and “are entirely inappropriate for measuring the energy use of digital televisions.” NRDC’s comments (#519870–00025) also indicated that the DOE “test method is

\(^{81}\) Under EPCA, however, manufacturers may elect to include such information on their products. (42 U.S.C. 6294(c)(6)).

\(^{82}\) NRDC (#519870–00025).

\(^{83}\) At the Workshop, one participant suggested that the average 42-inch plasma televisions draws 334 watts, with a minimum draw of 201 watts and a maximum draw of 520 watts. Workshop Tr. at 198.

\(^{84}\) CEE (#519870–00018).

\(^{85}\) Mr. Payne also indicated that it is not necessary to have a minimum efficiency standard to require labeling for these products. (Workshop Tr. at 208–209).
grosely outdated” because it was designed for black and white, tube-based televisions. CEE (#522148–00006), which supports the development of an energy label for televisions, also acknowledged that the current federal test procedure for television is not applicable to today’s technology, but noted that there is an ongoing industry effort to establish a new procedure. According to CEA, the consumer electronics industry is developing a standard test method as part of an initiative hosted by the International Electrotechnical Commission (IEC). EEI (#522148–00010) stated that the FTC would need to wait for a new DOE test procedure before adding a label for televisions. EEI suggested, however, that DOE “may not be able to revise the test procedure for television sets in the near future, due to their current workload.”

CEE urged that “the test procedure development should be finalized in advance of this rulemaking, a timeline that enables the FTC’s active consideration of this issue.” Until the development of such a standard method, CEA questioned whether the need for television labeling could be adequately assessed. At the Workshop, Douglas Johnson of CEA suggested that energy consumption estimates offered during the meeting were “relatively useless” without a standard means of measurement. (Workshop Tr. at 199). In addition, CEA’s comment concluded that the FTC should not pursue a labeling program for digital televisions given the lack of an acceptable test procedure for digital televisions and the success of voluntary initiatives.

Some comments suggested that the Commission leave the issue of television energy use labeling to the ENERGY STAR program. CEA (#522148–00009) argued that the ENERGY STAR “program creates a competitive incentive for energy savings without compromising industry innovation or consumer choice.” It noted that widespread use of the voluntary program “promotes energy efficiency and has resulted in significant energy savings and reduced greenhouse gas emissions.” EEI (#522148–00010) suggested that the FTC consider working with EPA and DOE to revise the use of the ENERGY STAR labeling for television sets. At the Workshop, an NRDC representative recognized the importance of ENERGY STAR, but suggested “it is not enough here” because ENERGY STAR only identifies the top 25% of the market and, in the absence of a Guide label, consumers would not be able to determine the energy consumption of models within the balance of the market. (Workshop Tr. at 229–231).

Discussion: The information provided by commenters suggests that energy labeling for televisions may assist consumers in making purchasing decisions. This information also indicates that many televisions on the market use as much, or more, electricity than products currently labeled under the Rule. In addition, several commenters indicated that there is a significant range of energy use among similar products on the market. The energy consumption characteristics of televisions, therefore, appear to be significantly different than when the Commission decided to forgo labeling in the 1970s. Based on these comments, we believe this issue deserves serious consideration.

At the same time, the record indicates that current DOE test procedures are inadequate to test most televisions currently on the market. Because the energy information for a FTC television label must still come from test procedures prescribed by DOE (see 42 U.S.C. 6294(c)), the Commission cannot proceed until the DOE test is revised. At such time, the Commission can consider whether the attributes of televisions on the market warrant energy labeling. We invite further comments on this issue.

M. Miscellaneous Amendments and Issues

The Commission is proposing several minor substantive and formatting amendments to improve the current Rule. These include the reorganization of some sections, a new requirement related to refrigerator reporting, and the elimination of obsolete or incorrect references in the Rule. Commenters raised several additional issues that are also discussed in this section.

Alphabetize Definitions and Update Definition of Refrigerators and Refrigerator Freezers: To make the Rule more user-friendly, the Commission is proposing to alphabetize the list of definitions in §305.3 and the descriptions of covered products in §305.4. We also are proposing to amend the definition of “refrigerators and refrigerator freezers” at §305.3(a) so that it is consistent with DOE’s current definition (10 CFR 430.2).

Adjusted Volume Information for Refrigerators: The Rule currently does not require refrigerator and freezer manufacturers to submit the adjusted volume of their models to the FTC. Adjusted volume data is essential for determining whether a refrigerator or freezer meets DOE minimum efficiency standards, and thus whether it should be considered in updating range information for refrigerator labels. Absent adjusted volume data, the FTC staff has had difficulty determining whether submitted models are compliant with DOE standards. The staff must make such compliance determinations to exclude obsolete models from its range calculations.

The Proposed Rule therefore would require refrigerator, refrigerator-freezer, and freezer manufacturers to report the adjusted volume of their models along with the information currently required by the Rule. The Commission proposes to require this information in data submissions by amending §305.7(a)(b) and §305.8. We do not expect that this will be a significant burden because this information should be readily available to manufacturers as it is already necessary for determining compliance with DOE conservation standards.

Brand Name Reporting: The Commission is proposing to amend §305.8 to clarify that manufacturers must report both the manufacturer name and the brand name (different from the manufacturer) of their models. This information helps the FTC staff and the public identify appliances in the data submitted by manufacturers.

Reorganization of Section 305.11: The Commission proposes to break section 305.11 into several sections organized by product category to make it easier for manufacturers to identify the requirements applicable to their products. The new proposed sections are: §305.11 Labeling for refrigerators, refrigerator-freezers, freezers, dishwashers, clothes washers, water heaters, room air conditioners, and pool heaters; §305.12 Marking Requirements for Central Air Conditioners and Heat Pumps; §305.13 Marking Requirements for furnaces; §305.14 Energy Information Disclosures for Heating and Cooling Equipment; §305.15 Labeling Requirements for Lighting Products; and §305.16 Labeling and Marking Requirements for Plumbing Products.

Applicability of DOE Test Procedures: The Commission proposes to amend section 305.5 to clarify that the Rule does not apply to covered appliance products for which DOE does not have a test procedure. The Rule already contains such information in the descriptions of certain covered products in section 305.3 (e.g., water heaters and pool heaters). This proposed amendment explicitly would apply the same sentence to all applicable appliance products listed in section 303.5(a).

Elimination of Appendix K: The Commission proposes to eliminate the suggested reporting format in Appendix K. Most manufacturers submit data via
The proposed amendments would require manufacturers of products with the EnergyGuide label to change their labels to the new design. Under the current Rule, manufacturers routinely change labels to reflect new range and cost data. The new label design will require a one-time drafting change for the manufacturers. The Commission estimates that this one time change will take 40 hours per manufacturer. The Commission further estimates that there are approximately 300 manufacturers of affected covered products. Therefore, the proposed label design change would result in a one-time burden of 12,000 hours (300 manufacturers × 40 hours). In calculating the associated labor cost estimate, the Commission assumes that the label design change will be implemented by clerical workers at an hourly wage rate of $14.59 per hour based on Bureau of Labor Statistics information. Thus, the Commission estimates that the proposed label design change would result in a one-time labor cost of approximately $175,080 (12,000 hours × $14.59 per hour).

The proposal to eliminate labels for heating and cooling equipment will significantly reduce the burden for manufacturers of those products. While there will be additional burden in marking their products with efficiency rating information, this burden is likely to be offset by the elimination of the labeling requirements.

As discussed above, the Commission anticipates that the provision of adjusted volume information for refrigerators will not result in a significant burden increase because this information should be readily available to manufacturers as it is necessary to determine compliance with DOE conservation standards. Accordingly, the Commission has not made an adjustment to its previous burden estimate due to this de minimis increase in reporting of the data already required by the Rule.

The proposed Rule would also require retailers who sell through catalogs to disclose information about annual operating cost information instead of the annual energy consumption information for certain products and provide an explanatory statement in the catalog similar to that which appears on the label. It would also eliminate the requirement for catalog sellers to list the range of comparability information. The Commission’s previous estimate of the Rule’s burden on catalog sellers (including Internet sellers) has assumed conservatively that catalog sellers must enter their catalog product into the catalog each year. (See 69 FR 64289, 64293 (Nov. 4, 2004)). The proposed Rule changes would not alter that assumption because the amendments would require a one-time change of all products in affected catalogs. This one-time change is consistent with previous burden estimates. Accordingly, the Commission does not believe any change is required to the existing burden estimates for catalog sellers.

The Commission invites comments that will enable it to: (1) Evaluate whether the proposed collections of information are necessary for the proper performance of the functions of the Commission, including whether the information will have practical utility; (2) evaluate the accuracy of the Commission’s estimate of the burden of the proposed collections of information, including the validity of the methodology and assumptions used; (3) enhance the quality, utility, and clarity of the information to be collected; and (4) minimize the burden of the collections of information on those who must comply, including through the use of appropriate automated, electronic, mechanical, or other technological techniques or other forms of information technology.

Comments on any proposed filing, recordkeeping, or disclosure requirements that are subject to paperwork burden review under the Paperwork Reduction Act should additionally be submitted to: Office of Information and Regulatory Affairs, Office of Management and Budget. Attention: Desk Officer for Federal Trade Commission. Comments should be submitted via facsimile to (202) 395-6974 because U.S. postal mail at the OMB is subject to lengthy delays due to heightened security precautions.

IX. Regulatory Flexibility Act

The Regulatory Flexibility Act ("RFA"), 5 U.S.C. 601–612, requires that the Commission provide an Initial Regulatory Flexibility Analysis ("IRFA") with a proposed Rule and a Final Regulatory Flexibility Analysis ("FRFA"), if any, with the final Rule, unless the Commission certifies that the Rule will not have a significant economic impact on a substantial number of small entities. See 5 U.S.C. 603–605.

The Commission does not anticipate that the proposed Rule will have a significant economic impact on a substantial number of small entities. The Commission recognizes that some of the affected manufacturers may qualify as small businesses under the relevant thresholds. We do not expect that the economic impact of implementing the design change will be significant. The Commission plans to
provide manufacturers with ample time to implement this new design. The Commission estimates that these new requirements will apply to about 300 product manufacturers and an additional 150 online and paper catalog sellers of covered products. Out of these companies, the Commission expects that approximately 300 qualify as small businesses. In addition, the Commission does not expect that the requirements specified in the Proposed Rule will have a significant impact on these entities. Accordingly, this document serves as notice to the Small Business Administration of the FTC’s certification of no effect. To ensure the accuracy of this certification, however, the Commission requests comment on whether the proposed Rule will have a significant impact on a substantial number of small entities, including specific information on the number of entities that would be covered by the proposed Rule, the number of these companies that are “small entities,” and the average annual burden for each entity. Although the Commission certifies under the RFA that the Rule proposed in this notice would not, if promulgated, have a significant impact on a substantial number of small entities, the Commission has determined, nonetheless, that it is appropriate to publish an IRFA in order to inquire into the impact of the proposed Rule on small entities. Therefore, the Commission has prepared the following analysis:

A. Description of the Reasons That Action by the Agency Is Being Taken

Section 137 of the Energy Policy Act of 2005 (“EPACT 2005”) (Pub. L. 109–58) requires the Commission to conduct a rulemaking to consider the effectiveness of the consumer products labeling program.

B. Statement of the Objectives of, and Legal Basis for, the Proposed Rule

The objective of the proposed Rule is to improve the effectiveness of the current appliance labeling program. Section 137 of EPACT 2005 amends section 324 of EPCA to require the Commission to examine “the effectiveness of the consumer products labeling program in assisting consumers in making purchasing decisions and improving energy efficiency.”

C. Small Entities to Which the Proposed Rule Will Apply

Under the Small Business Size Standards issued by the Small Business Administration, refrigerator and laundry equipment manufacturers qualify as small businesses if they have fewer than 1,000 employees (for other household appliances the figure is 500 employees). Appliance retailers qualify as small businesses if their sales are less than $8.0 million annually. The Commission estimates that fewer than 300 entities subject to the Proposed Rule’s requirements qualify as small businesses. The Commission seeks comment and information with regard to the estimated number or nature of small business entities for which the proposed Rule would have a significant economic impact.

D. Projected Reporting, Recordkeeping and Other Compliance Requirements

The Commission recognizes that the proposed labeling rule will involve some increased drafting costs and reporting requirements for appliance manufacturers. As discussed in this notice, the increase reporting burden should be de minimis. The transition to the use of a new label design should represent a one-time cost that will not be substantial. The Commission does not expect that the labeling requirements will impose significant additional costs on catalog sellers. All of these burdens are discussed in section VIII. of this notice and there should be no difference in that burden as applied to small businesses. The Commission invites comment and information on these issues.

E. Duplicative, Overlapping, or Conflicting Federal Rules

The Commission has not identified any other federal statutes, rules, or policies that would duplicate, overlap, or conflict with the proposed Rule. The Commission invites comment and information on this issue.

F. Significant Alternatives to the Proposed Rule

The Commission seeks comment and information on the need, if any, for alternative compliance methods that, consistent with the statutory requirements, would reduce the economic impact of the rule on such small entities. As one alternative to reduce burden, the Commission could delay the Rule’s effective date to provide additional time for small business compliance. The Commission could also consider further reductions in the amount of information catalog sellers must provide. If the comments filed in response to this notice identify small entities that are affected by the Rule, as well as alternative methods of compliance that would reduce the economic impact of the Rule on such entities, the Commission will consider the feasibility of such alternatives and determine whether they should be incorporated into the final rule.

X. Additional Questions for Comment

All comments should be filed as prescribed in the ADDRESSES section above, and must be received on or before April 16, 2007. In addition to the questions and requests for comment found throughout this Notice, we also ask that commenters address the following questions: What costs or burdens, and any other impacts, would the proposed requirements impose, and on whom? What regulatory alternatives to the proposed requirements are available that would reduce the burdens of the proposed requirements? How would such alternatives affect the benefits provided by the proposed Rule?

XI. Proposed Rule Language

List of Subjects in 16 CFR Part 305

Advertising, Energy conservation, Household appliances, Labeling, Reporting and recordkeeping requirements.

For the reasons set out above, the Commission proposes the following amendments to 16 CFR Part 305:

PART 305—[AMENDED]

1. The authority citation for Part 305 continues to read as follows:

Authority: 42 U.S.C. 6294.

2. Section 305.2 is revised to read as follows:

§ 305.2 Definitions.

(a) Act means the Energy Policy and Conservation Act (Pub. L. 94–163), and amendments thereto.

(b) ANSI means the American National Standards Institute and, as used herein, is the prefix for national standards and codes adopted by ANSI.

(c) ASME means the American Society of Mechanical Engineers and, as used herein, is the prefix for national standards and codes adopted by ASME.

(d) Average lamp efficacy means the lamp efficacy readings taken over a statistically significant period of manufacture with the readings averaged over that period.

(e) Ballast efficacy factor means the relative light output divided by the power input of a fluorescent lamp ballast, as measured under test conditions specified in American National Standards Institute (“ANSI”) standard C92.2–1984, or as may be prescribed by the Secretary of Energy. Copies of ANSI standard C92.2–1984 may be obtained from the American National Standards Institute, 11 West 42nd St., New York, NY 10036.
(f) **Base** for lamps means the portion of the lamp which screws into the socket.

(g) **Bulb shape** means the shape of the lamp, especially the glass portion.

(h) **Catalog** means printed material, including material disseminated over the Internet, which contains the terms of sale, retail price, and instructions for ordering, from which a retail consumer can order a covered product.

(i) **Color rendering index or CRI** for lamps means the measure of the degree of color shift objects undergo when illuminated by a light source as compared with the color of those same objects when illuminated by a reference source of comparable color temperature.

(j) **Commission** means the Federal Trade Commission.

(k) **Consumer product** means any article (other than an automobile, as “automobile” is defined in 15 U.S.C. 2001(11) [sec. 501(1) of the Motor Vehicle Information and Cost Savings Act]) of a type—

(1) Which in operation consumes, or is designed to consume, energy or, with respect to showerheads, faucets, water closets, and urinals, water; and

(2) Which, to any significant extent, is distributed in commerce for personal or commercial use or consumption by individuals.

Without regard to whether such article or such type is in fact distributed in commerce for personal use or consumption by an individual, except that such term includes fluorescent lamp ballasts, general service fluorescent lamps, medium base compact fluorescent lamps, general service incandescent lamps (including incandescent reflector lamps), showerheads, faucets, water closets, and urinals distributed in commerce for personal or commercial use or consumption.

(l) **Consumer appliance product** means any of the following consumer products, excluding those products designed solely for use in recreational vehicles and other mobile equipment:

(1) Refrigerators, refrigerator-freezers, and freezers that can be operated by alternating current electricity, excluding—

(i) Any type designed to be used without doors; and

(ii) Any type which does not include a compressor and condenser unit as an integral part of the cabinet assembly.

(2) Dishwashers.

(3) Water heaters.

(4) Room air conditioners.

(5) Clothes washers.

(6) Clothes dryers.

(7) Central air conditioners and central heating conditioning heat pumps.

(8) Furnaces.

(9) Direct heating equipment.

(10) Pool heaters.

(11) Kitchen ranges and ovens.

(12) Television sets.

(13) Fluorescent lamp ballasts.

(14) General service fluorescent lamps.

(15) Medium base compact fluorescent lamps.

(16) General service incandescent lamps, including incandescent reflector lamps.

(17) Showerheads.

(18) Faucets.

(19) Water closets.

(20) Urinals.

(21) Any other type of consumer product that the Department of Energy classifies as a covered product under section 322(b) of the Act (42 U.S.C. 6292).

(m) **Correlated color temperature** for lamps means the absolute temperature of a blackbody whose chromaticity most nearly resembles that of the light source.

(n) **Covered product** means any consumer product or consumer appliance product described in §305.3 of this part.

(o) **Distributor** means a person (other than a manufacturer or retailer) to whom a consumer appliance product is delivered or sold for purposes of distribution in commerce.

(p) **Energy efficiency rating** means the following product-specific energy usage descriptors: annual fuel utilization efficiency (AFUE) for furnaces; energy efficiency ratio (EER) for room air conditioners; seasonal energy efficiency ratio (SEER) for the cooling function of central air conditioners and heat pumps; heating seasonal performance factor (HSPF) for the heating function of heat pumps; and, thermal efficiency (TE) for pool heaters, as these descriptors are determined in accordance with tests prescribed under section 323 of the Act (42 U.S.C. 6293). These product-specific energy usage descriptors shall be used in satisfying all the requirements of this part.

(q) **Estimated annual energy consumption and estimated annual operating cost**—

(i) **Estimated annual energy consumption** means the energy or for products described in sections 305.3(n)(q) water that is likely to be consumed annually in representative use of a consumer product, as determined in accordance with tests prescribed under section 323 of the Act (42 U.S.C. 6293).

(ii) **Kilowatt-hour use per year, or kWh/yr.,** means estimated annual energy consumption expressed in kilowatt-hours of electricity.

(iii) **Therm use per year, or therms/yr.,** means estimated annual energy consumption expressed in therms of natural gas.

(iv) **Gallon use per year, or gallons/yr.,** means estimated annual energy consumption expressed in gallons of propane or No. 2 heating oil.

(v) **Estimated annual operating cost** means the aggregate retail cost of the energy that is likely to be consumed annually in representative use of a consumer product, as determined in accordance with tests prescribed under section 323 of the Act (42 U.S.C. 6293).

(w) **Operating cost** means the operating cost expressed in dollars, or cents per kilowatt-hour, or cents per therm.

(x) **Light output** for lamps means the total luminous flux (power) of a lamp in lumens.

(y) **Luminaire** means a complete lighting unit consisting of a fluorescent lamp or lamps, together with parts designed to distribute the light, to position and protect such lamps, and to connect such lamps to the power supply through the ballast.

(z) **Manufacturer** means any person who manufactures, produces, assembles, or imports a consumer appliance product. Assembly operations which are solely decorative are not included.

(aa) **New covered product, as used in §305.4, means a covered product the title of which has not passed to a purchaser who buys the product for purposes other than resale or leasing for a period in excess of one year.**
consumer appliance product which bears a private label.

(cc) **Range of comparability** means a group of models within a class of covered products, each model of which satisfies approximately the same consumer needs.

(dd) **Range of estimated annual energy cost** means the range of estimated annual energy cost per year of all models within a designated range of comparability.

(ee) **Retailer** means a person to whom a consumer appliance product is delivered or sold, if such delivery or sale is for purposes of sale or distribution in commerce to purchasers who buy such product for purposes other than resale. The term retailer includes purchasers of appliances who install such appliances in newly constructed or newly rehabilitated housing, or mobile homes, with the intent to sell the covered appliances as part of the sale of such housing or mobile homes.

(ff) **Water use** means the quantity of water flowing through a showerhead, faucet, water closet, or urinal at point of use, determined in accordance with test procedures under section 323 of the Act, 42 U.S.C. 6293.

(gg) **Wattage** for lamps means the total electrical power consumed by a lamp in watts, after an initial seasoning period and including, for fluorescent lamps, arc watts plus cathode watts.

3. In §305.3, paragraphs (a)(1), (d), and (r) are revised to read as follows:

§305.3 Description of covered products.

(a) * * * (1) **Electric refrigerator** means a cabinet designed for the refrigerated storage of food at temperatures above 32 [deg] F and below 39 [deg] F, configured for general refrigerated food storage, 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 [deg] F, but does not provide a separate low temperature compartment designed for the freezing and storage of food at temperatures below 8 [deg]F.

(d) **Water heater** means a product which utilizes oil, gas, or electricity to heat potable water for use outside the heater upon demand, including—

(1) Storage type units which heat and store water at a thermostatically controlled temperature, including gas storage water heaters with an input of 75,000 Btu per hour or less, oil storage water heaters with an input of 105,000 Btu per hour or less, and electric storage water heaters with an input of 12 kilowatts or less;

(2) Instantaneous type units which heat water but contain no more than one gallon of water per 4,000 Btu per hour of input, including gas instantaneous water heaters with an input of 200,000 Btu per hour or less, oil instantaneous water heaters with an input of 210,000 Btu per hour or less, and electric instantaneous water heaters with an input of 12 kilowatts or less; and

(3) **Heat pump type units,** with a maximum current rating of 24 amperes at a voltage no greater than 250 volts, which are products designed to transfer thermal energy from one temperature level to a higher temperature level for the purpose of heating water, including all ancillary equipment such as fans, storage tanks, pumps, or controls necessary for the device to perform its function.

(r) **Pool heater** means an appliance designed for heating nonpotable water contained at atmospheric pressure, including heating water in swimming pools, spas, hot tubs and similar applications.

4. In §305.5, paragraph (a) is revised to read as follows:

§305.5 Determinations of estimated annual energy consumption, estimated annual operating cost, and energy efficiency rating, and of water use rate.

(a) Procedures for determining the estimated annual energy consumption, the estimated annual operating costs, the energy efficiency ratings, and the efficacy factors of the following covered products are those located in 10 CFR part 430, subpart B. For the following list of covered products, the requirements of this part apply only to products for which the Department of Energy has adopted and published test procedures for measuring energy usage.

(1) Refrigerators and refrigerator-freezers

§430.23(a).

(2) Freezers

§430.23(b).

(3) Dishwashers

§430.23(c).

(4) Water heaters

§430.23(e).

(5) Room air conditioners

§430.23(f).

(6) Clothes washers

§430.23(j).

(7) Central air conditioners and heat pumps

§430.23(n).

(8) Furnaces

§430.23(n).

(9) Pool Heaters

§430.23(p).

(10) Fluorescent lamp ballasts

§430.23(q).

5. Section 305.7 (a) and (b) are revised to read as follows:

§305.7 Determinations of capacity.

(a) Refrigerators and refrigerator-freezers. The capacity shall be the total refrigerated volume (VT) and the adjusted total volume (AV) in cubic feet, rounded to the nearest one-tenth of a cubic foot, as determined according to appendix A1 to 10 CFR part 430, subpart B.

(b) Freezers. The capacity shall be the total refrigerated volume (VT) and the adjusted total volume (AV) in cubic feet, rounded to the nearest one-tenth of a cubic foot, as determined according to appendix B1 to 10 CFR part 430, subpart B.

6. In §305.8, paragraph (a)(1) is revised to read as follows:

§305.8 Submission of data.

(a)(1) Each manufacturer of a covered product (except manufacturers of fluorescent lamp ballasts, showerheads, faucets, water closets, urinals, general service fluorescent lamps, medium base compact fluorescent lamps, or general service incandescent lamps including incandescent reflector lamps) shall submit annually to the Commission a report listing the estimated annual energy consumption (for refrigerators, refrigerator-freezers, freezers, clothes washers, dishwashers and water heaters) or the energy efficiency rating (for room air conditioners, central air conditioners, heat pumps, furnaces, and pool heaters) for each basic model in current production, determined according to §305.5 and statistically verified according to §305.6. The report must also list, for each basic model in current production: the manufacturer name, the brand name (if different from the manufacturer’s name), the model numbers for each basic model; the total energy consumption, determined in accordance with §305.5, used to calculate the estimated annual energy consumption or energy efficiency rating; the number of tests performed; and its capacity, determined in accordance with §305.7. For those models that use more than one energy source or more than one cycle, each separate amount of energy consumption, measured in accordance with §305.5, shall be listed in the report. Starting serial numbers or other numbers identifying the date of manufacture of covered products shall be submitted whenever a new basic model is introduced on the market.

§305.9 [Removed and Reserved]

7. Section 305.9 is removed and reserved.

8. Section 305.10 is revised to read as follows:
§ 305.10 Ranges of Comparability Information on the Required Labels.

(a) Range of Estimated Annual Operating Cost. The range of estimated annual operating costs for each covered product (except fluorescent lamp ballasts, lamps, central air conditioners, heat pumps, furnaces, showerheads, faucets, water closets or urinals) shall be taken from the appropriate appendix to this rule in effect at the time the labels are affixed to the product. The Commission shall publish revised ranges every five years beginning in 2012 in the Federal Register. When the ranges are revised, all information disseminated after 90 days following the publication of the revision shall conform to the revised ranges. Products that have been labeled prior to the effective date of a modification under this section need not be relabeled.

(b) Representative average unit energy cost. The National Average Representative Unit Cost to be used on labels is as defined in § 305.11 of this Part are listed in Appendix H to this Part. The Commission shall publish revised National Average Representative Unit Cost figures every five years beginning in 2012 in the Federal Register. When the cost figures are revised, all information disseminated after 90 days following the publication of the revision shall conform to the new cost figure.

(c) Operating Costs Outside Current Range. When the estimated annual operating cost of a given model of a covered product falls outside the limits of the current range for that product, which could result from the introduction of a new or changed model, the manufacturer shall:

(1) Omit placement of such product on the scale, and

(2) Add the sentence below, as appropriate, in the space just below the scale, as follows:

The estimated annual operating cost of this model was not available at the time the range was published.

§§ 305.13, 305.14, 305.15, 305.16, 305.17, 305.18, and 305.19 [Redesignated as 305.19, 305.20, 305.21, 305.22, 305.23, 305.24 and 305.25]

9. Sections 305.13, 305.14, 305.15, 305.16, 305.17, 305.18 and 305.19 are redesignated as 305.19, 305.20, 305.21, 305.22, 305.23, 305.24 and 305.25 respectively.

10. Section 305.15 is added to read as follows:

§ 305.15 Labeling Requirements for Lighting Products.

(a) Fluorescent Lamp Ballasts and Luminaires—(1) Contents. Fluorescent lamp ballasts that are “covered products,” as defined in § 305.2(n), and to which standards are applicable under section 325 of the Act, shall be marked conspicuously, in color-contrasting ink, with a capital letter “E” printed within a circle. Packaging for such fluorescent lamp ballasts, as well as packaging for luminaires into which they are incorporated, shall also be marked conspicuously with a capital letter “E” printed within a circle. For purposes of this section, the encircled capital letter “E” will be deemed “conspicuous,” in terms of size, if it is as large as either the manufacturer’s name or another logo, such as the “UL,” “CBM” or “ETL” logos, whichever is larger, that appears on the fluorescent lamp ballast, the packaging for such ballast or the packaging for the luminaire into which the covered ballast is incorporated, whichever is applicable for purpose of labeling.

(1) Product Labeling. The encircled capital letter “E” on fluorescent lamp ballasts must appear conspicuously, in color-contrasting ink, (i.e., in a color that contrasts with the background on which the encircled capital letter “E” is placed) on the surface that is normally labeled. It may be printed on the label that normally appears on the fluorescent lamp ballast, printed on a separate label, or stamped indelibly on the surface of the fluorescent lamp ballast.

(2) Package Labeling. For purposes of labeling under this section, packaging for such fluorescent lamp ballasts and the luminaires into which they are incorporated consists of the plastic shrink-wrap, or “shrink-wrap,” covering pallet loads of fluorescent lamp ballasts or luminaires as well as any containers in which such fluorescent lamp ballasts or the luminaires into which they are incorporated are marketed individually or in small numbers. The encircled capital letter “E” on packages containing fluorescent lamp ballasts or the luminaires into which they are incorporated must appear conspicuously, in color-contrasting ink, on the surface of the package on which printing or a label normally appears. If the package contains printing on more than one surface, the label must appear on the surface on which the product inside the package is described. The encircled capital letter “E” may be printed on the surface of the package, printed on a label containing other information, printed on a separate label, or indelibly stamped on the surface of the package. In the case of pallet loads containing fluorescent lamp ballasts or the luminaires into which they are incorporated, the encircled capital letter “E” must appear conspicuously, in color-contrasting ink, on the plastic shrink-wrap, unless clear plastic shrink-wrap is used and the encircled capital letter “E” is legible underneath this packaging. The encircled capital letter “E” must also appear conspicuously on any documentation that would normally accompany such a pallet load. The encircled capital letter “E” may appear on a label affixed to the sheeting or may be indelibly stamped on the sheeting. It may be printed on the documentation, printed on a separate label that is affixed to the documentation or indelibly stamped on the documentation.

(b) Lamps—(1)(i) Any covered product that is a compact fluorescent lamp or general service incandescent lamp (including an incandescent reflector lamp) shall be labeled clearly and conspicuously on the product’s principal display panel with the following information:

(A) The number of lamps included in the package, if more than one;

(B) The design voltage of each lamp included in the package, if other than 120 volts;

(C) The light output of each lamp included in the package, expressed in average initial lumens;

(D) The electrical power consumed (energy used) by each lamp included in the package, expressed in average initial wattage;

(E) The life of each lamp included in the package, expressed in hours.

(ii) The light output, energy usage and life ratings of any covered product that is a medium base compact fluorescent lamp or general service incandescent lamp (including an incandescent reflector lamp), shall appear in that order and with equal clarity and conspicuousness on the product’s principal display panel. The light output, energy usage and life ratings shall be disclosed in terms of “lumens,” “watts” and “hours” respectively, with the lumens, watts and hours rating numbers each appearing in the same type style and size and with the words “lumens,” “watts” and “hours” each appearing in the same type style and size. The words “light output,” “energy used” and “life” shall precede and have the same conspicuousness as both the rating numbers and the words “lumens,” “watts” and “hours,” except that the letters of the words “lumens,” “watts” and “hours” shall be approximately 50% of the sizes of those used for the words “light output,” “energy used” and “life” respectively.

(iii) The light output, energy usage and life ratings of any covered product that is a medium base compact fluorescent lamp or general service
incandescent lamp (including an incandescent reflector lamp), shall be measured at 120 volts, regardless of the lamp’s design voltage. If a lamp’s design voltage is 125 volts or 130 volts, the disclosures of the wattage, light output and life ratings shall in each instance be:

(A) At 120 volts and followed by the phrase “at 120 volts.” In such case, the labels for such lamps also may disclose the lamp’s wattage, light output and life at the design voltage (e.g., “Light Output 1710 Lumens at 125 volts”); or

(B) At the design voltage and followed by the phrase “at (125 volts/130 volts)” if the ratings at 120 volts are disclosed clearly and conspicuously on another panel of the package, and if all panels of the package that contain a claimed light output, wattage or life clearly and conspicuously identify the lamp as “(125 volt/130 volt),” and if the principal display panel clearly and conspicuously discloses the following statement:

This product is designed for (125/130) volts. When used on the normal line voltage of 120 volts, the light output and energy efficiency are noticeably reduced. See (side/back) panel for 120 volt ratings.

(iv) For any covered product that is an incandescent reflector lamp, the required disclosure of light output shall be given for the lamp’s total forward lumens.

(v) For any covered product that is a compact fluorescent lamp, the required light output disclosure shall be measured at a base-up position; but, if the manufacturer or private labeler has reason to believe that the light output at a base-down position would be more than 5% different, the label also shall disclose the light output at the base-down position or, if no test data for the base-down position exist, the fact that at a base-down position the light output might be more than 5% less.

(vi) For any covered product that is a compact fluorescent lamp or a general service incandescent lamp (including an incandescent reflector lamp), there shall be clearly and conspicuously disclosed on the principal display panel the following statement:

To save energy costs, find the bulbs with the (beam spread and) light output you need, then choose the one with the lowest watts.”

(vii) For any covered product that is a general service incandescent lamp and operates with multiple filaments, the principal display panel shall disclose clearly and conspicuously, in the manner required by paragraph (b)(1)(i)–(iii) and (vi) of this section, the lamp’s wattage and light output at each of the lamp’s levels of light output and the lamp’s life measured on the basis of the filament that fails first.

(2) Any covered product that is a general service fluorescent lamp or an incandescent reflector lamp shall be labeled clearly and conspicuously with a capital letter “E” printed within a circle and followed by an asterisk. The label shall also clearly and conspicuously disclose, either in close proximity to that asterisk or elsewhere on the label, the following statement:

“(The encircled “E”) means this bulb meets Federal minimum efficiency standards.”

(i) If the statement is not disclosed on the principal display panel, the asterisk shall be followed by the following statement:

See [Back, Top, Side] panel for details.

(ii) For purposes of this paragraph (b), the encircled capital letter “E” shall be clearly and conspicuously disclosed in color-contrasting ink on the label of any covered product that is a general service fluorescent lamp and will be deemed “conspicuous,” in terms of size, if it appears in typeface at least as large as either the manufacturer’s name or logo or another logo disclosed on the label, such as the “UL” or “ETL” logos, whichever is larger.

(3)(i) A manufacturer or private labeler who distributes general service fluorescent lamps, compact fluorescent lamps, or general service incandescent lamps (including incandescent reflector lamps) without labels attached to the lamps or without labels on individual retail-sale packaging for one or more lamps may meet the disclosure requirements of paragraphs (b)(1) and (b)(2) of this section by making the required disclosures, in the manner and form required by those paragraphs, on the bulk shipping cartons that are to be used to display the lamps for retail sale.

(ii) Instead of labeling any covered product that is a general service fluorescent lamp with the encircled “E” and with the statement described in paragraph (b)(2) of this section, a manufacturer or private labeler who would not otherwise put a label on such a lamp may meet the disclosure requirements of that paragraph by permanently marking the lamp clearly and conspicuously with the encircled “E”.

(4) Any manufacturer or private labeler who makes any representation on a label of any covered product that is a general service fluorescent lamp, medium base compact fluorescent lamp, or general service incandescent lamp (including an incandescent reflector lamp), regarding the cost of operation of such lamp shall clearly and conspicuously disclose in close proximity to such representation the assumptions upon which it is based, including, e.g., purchase price, unit cost of electricity, hours of use, patterns of use.

(5) Any cartons in which any covered products that are general service fluorescent lamps, medium base compact fluorescent lamps, or general service incandescent lamps (including incandescent reflector lamps), are shipped within the United States or imported into the United States shall disclose clearly and conspicuously the following statement:

These lamps comply with Federal energy efficiency labeling requirements.

11. Section 305.16 is added to read as follows:

§305.16 Labeling and Marking Requirements for Plumbing Products.

(a) Showerheads and Faucets.

Showerheads and faucets shall be marked and labeled as follows:

(1) Each showerhead and flow restricting or controlling spout end device shall bear a permanent legible marking indicating the flow rate, expressed in gallons per minute (gpm) or gallons per cycle (gpc), and the flow rate value shall be the actual flow rate or the maximum flow rate specified by the standards established in subsection (j) of section 325 of the Act, 42 U.S.C. 6295(j). Except where impractical due to the size of the fitting, each flow rate disclosure shall also be given in liters per minute (L/min) or liters per cycle (L/cycle). For purposes of this section, the marking indicating the flow rate will be deemed “legible,” in terms of placement, if it is located in close proximity to the manufacturer’s identification marking.

(2) Each showerhead and faucet shall bear a permanent legible marking to identify the manufacturer. This marking shall be the trade name, trademark, or other mark known to identify the manufacturer. Such marking shall be located where it can be seen after installation.

(3) Each showerhead and faucet shall be marked “A112.18.1M” to demonstrate compliance with the applicable ASME standard. The marking shall be by means of either a permanent mark on the product, a label on the product, or a tag attached to the product.

(4) The package for each showerhead and faucet shall disclose the manufacturer’s name and the model number.

(5) The package or any label attached to the package for each showerhead or faucet shall contain at least the
following: “A112.18.1M” and the flow rate expressed in gallons per minute (gpm) or gallons per cycle (gpc), and the flow rate value shall be the actual flow rate or the maximum flow rate specified by the standards established in subsection (j) of section 325 of the Act, 42 U.S.C. 6295(j). Each flow rate disclosure shall also be given in liters per minute (L/min) or liters per cycle (L/cycle).

(b) Water Closets and Urinals. Water closets and urinals shall be marked and labeled as follows:

(1) Each such fixture (and flushometer valve associated with such fixture) shall bear a permanent legible marking indicating the flow rate, expressed in gallons per flush (gpf), and the water use value shall be the actual water use or the maximum water use specified by the standards established in subsection (k) of section 325 of the Act, 42 U.S.C. 6295(k). Except where impractical due to the size of the fixture, each flow rate disclosure shall also be given in liters per flush (Lpf) or liters per cycle (L/cycle).

(c) Annual Operating Cost Claims for Covered Plumbing Products. Until such time as the Commission has prescribed a format and manner of display for labels conveying estimated annual operating costs of covered showerheads, faucets, water closets, and urinals or ranges of estimated annual operating costs for the types or classes of such plumbing products, the Act prohibits manufacturers from making such representations on the labels of such covered products. 42 U.S.C. 6294(c)(8). If, before the Commission has prescribed such a format and manner of display for labels of such products, a manufacturer elects to provide for any such product a label conveying such a claim, it shall submit the proposed claim to the Commission so that a format and manner of display for a label may be prescribed.

Section 305.11 is revised to read as follows:

§ 305.11 Labeling for refrigerators, refrigerator-freezers, freezers, dishwashers, clothes washers, water heaters, room air conditioners, and pool heaters.

(a) Layout. All energy labels for refrigerators, refrigerator-freezers, freezers, dishwashers, clothes washers, water heaters, pool heaters, and room air conditioners shall use one size, similar colors and typefaces with consistent positioning of headline, copy and charts to maintain uniformity for immediate consumer recognition and readability. Trim size dimensions for all labels shall be as follows: width must be between 5 ¼ inches and 5 ½ inches (13.34 cm. and 13.97 cm.); length must be between 7 inches (18.78 cm.) and 7% (19.34 cm.). Copy is to be set between 27 picas and 29 picas and copy page should be centered (right to left and top to bottom). Space is variable but should follow closely the prototype labels appearing at the end of this part illustrating the basis layout. All positioning, spacing, type sizes and line widths should be similar to and consistent with the prototype and sample labels in Appendix I.

(b) Type style and setting. The Arial type style shall be used exclusively on the label. Specific sizes and faces to be used are indicated on the prototype labels. No hyphenation should be used in setting headline or copy text. Positioning and spacing should follow the prototypes closely. Generally, text must be set flush left with two points leading except where otherwise indicated. See the prototype labels for specific directions.

(c) Colors. The basic colors of all labels covered by this section shall be process yellow or equivalent and process black. The label shall be printed full bleed process yellow. All type and graphics shall be print process black.

(d) Label Types—The labels must be affixed to the product in the form of an adhesive label or a hang tag.

(1) Adhesive labels. All adhesive labels should be applied so they can be easily removed without the use of tools or liquids, other than water, but should be applied with an adhesive with an adhesion capacity sufficient to prevent their dislodgment during normal handling throughout the chain of distribution to the retailer or consumer. The paper stock for pressure-sensitive or other adhesive labels shall have a basic weight of not less than 58 pounds per 500 sheets (25” × 38”) or equivalent, exclusive of the release liner and adhesive. A minimum peel adhesion capacity for the adhesive of 12 ounces per square inch is suggested, but not required if the adhesive can otherwise meet the above standard.

(2) Hang tags. Labels may be affixed to the product in the form of a hang tag using string or similar material. The paper stock for hang tags shall have a basic weight of not less than 110 pounds per 500 sheets (25½” × 30⅛”) index. When materials are used to attach the hang tags to appliance products, the materials shall be of sufficient strength to insure that if gradual pressure is applied to the hang tag by pulling it away from where it is affixed to the product, the hang tag will tear before the material used to affix the hang tag to the product breaks.

(e) Adhesive labels—Manufacturers shall affix adhesive labels to the covered products in such a position that it is easily read by a consumer examining the product. The label should be generally located on the upper-right-front corner of the product’s front exterior. However, some other prominent location may be used as long as the label will not become dislodged during normal handling throughout the chain of distribution to the retailer or consumer. The top of the label should not exceed 7⅜ inches from the base of taller products. The label can be displayed in the form of a flap tag adhered to the top of the appliance and bent (folded at 90°) to hang over the...
(2) Hang tags. A hang tag shall be affixed in such a position that it can be easily read by a consumer examining the product. A hang tag can be affixed in any position that meets this requirement as long as the label will not become dislodged during normal handling throughout the chain of distribution to the retailer or consumer. (i) Label Content for refrigerators, refrigerator-freezers, freezers, dishwashers, clothes washers, water heaters, room air conditioners, and pool heaters—(1) Headlines and texts, as illustrated in the Prototype Labels in Appendix I to this Part.

(2) Name of manufacturer or private labeler shall, in the case of a corporation, be deemed to be satisfied only by the actual corporate name, which may be preceded or followed by the name of the particular division of the corporation. In the case of an individual, partnership, or association, the name under which the business is conducted shall be used. Inclusion of the name of the manufacturer or private labeler is optional at the discretion of the manufacturer or private labeler.

(3) Model number(s) will be the designation given by the manufacturer or private labeler.

(4) Capacity or size is that determined in accordance with § 305.7. For refrigerators, refrigerator-freezers, and freezers, the capacity provided on the label shall be the model’s total refrigerated volume (VT) as determined in accordance with § 305.7.

(5) Estimated annual operating costs for refrigerators, refrigerator-freezers, freezers, clothes washers, dishwashers, room air conditioners, pool heaters, and water heaters are as determined in accordance with § 305.5 and Appendix H to this Part.

(6) Ranges of comparability for estimated annual operating costs, as applicable, are found in the appropriate appendices accompanying this part.

(7) For refrigerators, refrigerator-freezers, and freezers, the range of comparability, the following statements shall be placed immediately below the range as illustrated in the sample labels in Appendix I:

(i) For models covered under Appendix A1, the statement shall read: Range for models of similar capacity with Automatic Defrost.

(ii) For models covered under Appendix A2, the statement shall read: Range for models of similar capacity with Manual Defrost.

(iii) For models covered under Appendix A3, the statement shall read: Range for models of similar capacity with Partial Automatic Defrost.

(iv) For models covered under Appendix A4, the statement shall read: Range for models of similar capacity with Automatic Defrost, Top-Mounted Freezer, and without Through-the-door Ice.

(v) For models covered under Appendix A5, the statement shall read: Range for models of similar capacity with Automatic Defrost, Side-Mounted Freezer, and without Through-the-door Ice.

(vi) For models covered under Appendix A6, the statement shall read: Range for models of similar capacity with Automatic Defrost, Bottom-Mounted Freezer, and without Through-the-door Ice.

(vii) For models covered under Appendix A7, the statement shall read: Range for models of similar capacity with Automatic Defrost, Bottom-Mounted Freezer, and with Through-the-door Ice.

(viii) For models covered under Appendix A8, the statement shall read: Range for models of similar capacity with Automatic Defrost, Side-Mounted Freezer, and with Through-the-door Ice.

(ix) For models covered under Appendix B1, the statement shall read: Range for upright freezer models of similar capacity with Manual Defrost.

(x) For models covered under Appendix B3, the statement shall read: Range for chest and other freezer models of similar capacity.

(8) Placement of the labeled product on the scale shall be proportionate to the lowest and highest estimated annual operating costs.

(9) Labels must contain the model’s estimated annual energy consumption or energy efficiency rating as determined in accordance with § 305.5.

(10) Labels must contain a statement explaining information on the label as illustrated in the prototype labels in Appendix I.

(i) For refrigerators, refrigerator-freezers, and freezers, the statement will read as follows (fill in the blanks with the appropriate appliance name, the operating cost, the year, and the energy cost figures):

Size, door attributes, and ice features affect energy use—so other refrigerators/freezers may have lower or higher operating costs. Your actual operating costs will depend on your local utility rates and how you use this product. The estimated operating cost is based on a [Year] national average cost of [natural gas/oil] per therm and [electricity] per kWh for electricity and [natural gas/oil] per kWh, therm, or gallon for natural gas.

For more information, visit www.ftc.gov/appliances.

(iv) For pool heaters, the statement will read as follows (fill in the blanks with the appropriate appliance name, the operating cost, the year, and the energy cost figures):

The Thermal Efficiency (as expressed by a percent) is the measure of energy efficiency for pool heaters. Only pool heaters fueled by [natural gas/oil] 305.4 are used in this scale. Your actual operating costs will depend on your local utility rates and how you use this product. The estimated operating cost is based on a [Year] national average cost of [natural gas/oil] per therm and [electricity] per kWh, therm, or gallon for natural gas.

For more information, visit www.ftc.gov/appliances.

(11) The following statement shall appear at the bottom of the label: Federal law prohibits removal of this label before consumer purchase.

(12) No marks or information other than that specified in this part shall appear on or directly adjoining this label except that:

(i) A part or publication number identification may be included on this label, as desired by the manufacturer. If a manufacturer elects to use a part or publication number, it must appear in
the lower right-hand corner of the label and be set in 6-point type or smaller.

(ii) The energy use disclosure labels required by the governments of Canada or Mexico may appear directly adjoining this label, as desired by the manufacturer.

(iii) The manufacturer may include the ENERGY STAR logo on the bottom right corner of the label for qualified products. The logo must be no larger than 1 inch by 1 inch. Only manufacturers that have signed a Memorandum of Understanding with DOE or EPA may add the ENERGY STAR logo to labels on qualifying covered products; such manufacturers may add the ENERGY STAR logo to labels only on those covered products that are contemplated by the Memorandum of Understanding.

Section 305.12 is revised to read as follows:

§ 305.12 Marking Requirements for Central Air Conditioners and Heat Pumps.

(a) Central air conditioners and heat pumps covered by this part must be marked permanently with the model number, the Seasonal Energy Efficiency Ratio for the model’s cooling function, if applicable, and the Heating Seasonal Performance Factor (HSPF) for the model’s heating function, if applicable. The marking must be permanent, legible, and placed on the outside surface of the product.

(b) For the model’s cooling function, the seasonal energy efficiency ratio shall be determined in accordance with § 305.5. For the heating function, the heating seasonal performance factor shall be calculated for heating Region IV for the standardized design heating requirement nearest the capacity measured in the High Temperature Test in accordance with § 305.5. In addition, the energy efficiency rating(s) for split system condenser-evaporator coil combinations shall be either:

(1) The energy efficiency rating of the condenser-evaporator coil combination that is the particular manufacturer’s most commonly sold combination for that condenser model; or

(2) The energy efficiency rating of the actual condenser-evaporator coil combination comprising the system to which the label is to be attached.

Section 305.13 is added to read as follows:

§ 305.13 Marking Requirements for Furnaces.

(a) Furnaces (including boilers) covered by this part must be marked permanently with the model number, and the model’s Annual Fuel Utilization Efficiency (AFUE) determined in accordance with § 305.5. The marking must be permanent, legible, and placed on the outside surface of the product.

(b) Manufacturers of boilers shipped with more than one input nozzle to be installed in the field must mark such boilers with the AFUE of the system when it is set up with the nozzle that results in the lowest annual fuel utilization efficiency rating.

(c) Manufacturers that ship out boilers that may be set up as either steam or hot water units must mark the boilers with the AFUE rating derived by conducting the required test on the boiler as a hot water unit.

Section 305.14 is added to read as follows:

§ 305.14 Energy Information Disclosures for Heating and Cooling Equipment

(a) Required Information: Manufacturers of central air conditioners, heat pumps, and furnaces (including boilers) must provide energy information about the equipment they sell to distributors and retailers, including contractors. This information can be provided through means such as fact sheets, product brochures, and directories. All required information must be disclosed clearly and conspicuously. The information must include:

(1) Name of manufacturer or private labeler (in the case of a corporation, the name shall be deemed to be satisfied only by the actual corporate name, which may be preceded or followed by the name of the particular division of the corporation. In the case of an individual, partnership, or association, the name under which the business is conducted shall be used.)

(2) Trade name (if different from manufacturer);

(3) Model number(s) (given by the manufacturer or private labeler);

(4) Capacity or size as determined in accordance with § 305.7;

(5) Energy efficiency rating as determined in accordance with § 305.5.

(b) Distribution. (A) Manufacturers and private labelers must give distributors and retailers, including assemblers, the information covered under section 305.14(a) for the central air conditioners, heat pumps, and furnaces (including boilers) they sell to them. This information may be provided in paper or electronic form (including Internet-based access). Distributors must provide the information to their customers and let them read the fact information before they agree to purchase the product. If the information is Internet-based, it must contain a general disclosure that the energy costs and efficiency ratings are based on U.S. Government tests.

(B) Retailers, including assemblers, who sell furnaces (including boilers), central air conditioners, or heat pumps to consumers must have the required information for the furnaces and central air conditioners they sell. They must make the information available to their customers. The required information may be made available to customers in any manner, as long as customers are likely to notice them. For example, it can be available in a display, where customers can take copies of it. It can be kept in a binder or made available electronically at a counter or service desk, with a sign telling customers where the required information is.

(C) Retailers, including assemblers, who negotiate or make sales at a place other than their regular places of business must show the required information to their customers and let them read the fact information before they agree to purchase the product. If the information is Internet-based, it must contain a general disclosure that the energy costs and efficiency ratings are based on U.S. Government tests.
than their regular places of business, may choose to provide customers with instructions to access such information in lieu of showing them a paper version of the information. Retailers who choose to use the Internet for the required information, must let customers read such information before the customers agree to purchase the product.

16. In newly designated § 305.20, the heading and paragraph (a) are revised to read as follows:

§ 305.20 Paper Catalogs and Web sites.
(a) Any manufacturer, distributor, retailer, or private labeler who advertises in a catalog, a covered product (except fluorescent lamp ballasts, general service fluorescent lamps, medium base compact fluorescent lamps, general service incandescent lamps including incandescent reflector lamps, showerheads, faucets, water closets or urinals) shall include in such catalog the following information required to be disclosed on the label:
(1) The capacity of the model on each page that lists the covered product.
(2) The estimated annual operating costs for refrigerators, refrigerator-freezers, freezers, clothes washers, dishwashers, room air conditioners, pool heaters, and water heaters as determined in accordance with § 305.5 on each page that lists the covered product.
(3) A statement conspicuously placed in the catalog explaining the information as follows:

(j) For refrigerators, refrigerator-freezers, and freezers, the statement will read as follows (fill in the blanks with the appropriate appliance name, the operating cost, the year, and the energy cost figures):

Your actual operating costs will depend on your local utility rates and how you use this product. The estimated operating cost is based on a [Year] national average cost of [$___ per kWh, therm, or gallon] for electricity.
For more information, visit www.ftc.gov/applications.

(iv) For pool heaters, the statement will read as follows (fill in the blanks with the appropriate appliance name, the operating cost, the year, and the energy cost figures):

The Thermal Efficiency (as expressed by a percent) is the measure of energy efficiency for pool heaters. Only pool heaters fueled by [natural gas/oil] are used in this scale. Your actual operating costs will depend on your local utility rates and how you use this product. The estimated operating cost is based on a [Year] national average cost of [$___ per kWh, therm, or gallon] for [natural gas or oil].
For more information, visit www.ftc.gov/applications.

4. The energy efficiency ratings for central air conditioners and furnaces on each page that lists the covered product.

§ 305.25 Exemptions. [Removed and Reserved]

17. The text of newly designated § 305.25 is removed and reserved.

18. Appendix A1 to part 305 is revised to read as follows:

Appendix A1 to Part 305—Refrigerators With Automatic Defrost

---

Appendix A2 to Part 305—Refrigerators and Refrigerator-Freezers With Manual Defrost

---

RANGE INFORMATION

<table>
<thead>
<tr>
<th>Manufacturer's rated total refrigerated volume in cubic feet</th>
<th>Range of estimated annual operating costs (dollars/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Less than 2.5</td>
<td></td>
</tr>
<tr>
<td>2.5 to 4.4</td>
<td></td>
</tr>
<tr>
<td>4.5 to 6.4</td>
<td></td>
</tr>
<tr>
<td>6.5 to 8.4</td>
<td></td>
</tr>
<tr>
<td>8.5 to 10.4</td>
<td></td>
</tr>
<tr>
<td>10.5 to 12.4</td>
<td></td>
</tr>
<tr>
<td>12.5 to 14.4</td>
<td></td>
</tr>
<tr>
<td>14.5 to 16.4</td>
<td></td>
</tr>
<tr>
<td>16.5 and over</td>
<td></td>
</tr>
</tbody>
</table>

(*) No data submitted for units meeting the Department of Energy’s Energy Conservation Standards effective July 1, 2001.

19. Appendix A2 to part 305 is revised to read as follows:
## RANGE INFORMATION

<table>
<thead>
<tr>
<th>Manufacturer's rated total refrigerated volume in cubic feet</th>
<th>Range of estimated annual operating costs (dollars/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Less than 10.5</td>
<td></td>
</tr>
<tr>
<td>10.5 to 12.4</td>
<td></td>
</tr>
<tr>
<td>12.5 to 14.4</td>
<td></td>
</tr>
<tr>
<td>14.5 to 16.4</td>
<td></td>
</tr>
<tr>
<td>16.5 to 18.4</td>
<td></td>
</tr>
<tr>
<td>18.5 to 20.4</td>
<td></td>
</tr>
<tr>
<td>20.5 to 22.4</td>
<td></td>
</tr>
<tr>
<td>22.5 to 24.4</td>
<td></td>
</tr>
<tr>
<td>24.5 to 26.4</td>
<td></td>
</tr>
<tr>
<td>26.5 to 28.4</td>
<td></td>
</tr>
<tr>
<td>28.5 and over</td>
<td></td>
</tr>
</tbody>
</table>

(*) No data submitted for units meeting the Department of Energy’s Energy Conservation Standards effective July 1, 2001.

20. Appendix A3 to part 305 is revised to read as follows:

### Appendix A3 to Part 305—Refrigerator-Freezers With Partial Automatic Defrost

<table>
<thead>
<tr>
<th>Manufacturer's rated total refrigerated volume in cubic feet</th>
<th>Range of estimated annual operating costs (dollars/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Less than 10.5</td>
<td></td>
</tr>
<tr>
<td>10.5 to 12.4</td>
<td></td>
</tr>
<tr>
<td>12.5 to 14.4</td>
<td></td>
</tr>
<tr>
<td>14.5 to 16.4</td>
<td></td>
</tr>
<tr>
<td>16.5 to 18.4</td>
<td></td>
</tr>
<tr>
<td>18.5 to 20.4</td>
<td></td>
</tr>
<tr>
<td>20.5 to 22.4</td>
<td></td>
</tr>
<tr>
<td>22.5 to 24.4</td>
<td></td>
</tr>
<tr>
<td>24.5 to 26.4</td>
<td></td>
</tr>
<tr>
<td>26.5 to 28.4</td>
<td></td>
</tr>
<tr>
<td>28.5 and over</td>
<td></td>
</tr>
</tbody>
</table>

(*) No data submitted for units meeting the Department of Energy’s Energy Conservation Standards effective July 1, 2001.

21. Appendix A4 to part 305 is revised to read as follows:

### Appendix A4 to Part 305—Refrigerator-Freezers With Automatic Defrost With Top-Mounted Freezer Without Through-the-Door Ice Service

<table>
<thead>
<tr>
<th>Manufacturer's rated total refrigerated volume in cubic feet</th>
<th>Range of estimated annual operating costs (dollars/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Less than 10.5</td>
<td></td>
</tr>
<tr>
<td>10.5 to 12.4</td>
<td></td>
</tr>
<tr>
<td>12.5 to 14.4</td>
<td></td>
</tr>
<tr>
<td>14.5 to 16.4</td>
<td></td>
</tr>
<tr>
<td>16.5 to 18.4</td>
<td></td>
</tr>
<tr>
<td>18.5 to 20.4</td>
<td></td>
</tr>
<tr>
<td>20.5 to 22.4</td>
<td></td>
</tr>
<tr>
<td>22.5 to 24.4</td>
<td></td>
</tr>
<tr>
<td>24.5 to 26.4</td>
<td></td>
</tr>
<tr>
<td>26.5 to 28.4</td>
<td></td>
</tr>
</tbody>
</table>
22. Appendix A5 to Part 305 is revised to read as follows:

Appendix A5 to Part 305—Refrigerator-Freezers With Automatic Defrost With Side-Mounted Freezer Without Through-the-Door Ice Service

**RANGE INFORMATION**

<table>
<thead>
<tr>
<th>Manufacturer’s rated total refrigerated volume in cubic feet</th>
<th>Range of estimated annual operating costs (dollars/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>28.5 and over</td>
<td>Low</td>
</tr>
<tr>
<td>(*) No data submitted for units meeting the Department of Energy’s Energy Conservation Standards effective July 1, 2001.</td>
<td></td>
</tr>
</tbody>
</table>

23. Appendix A6 to Part 305 is revised to read as follows:

Appendix A6 to Part 305—Refrigerator-Freezers With Automatic Defrost With Bottom-Mounted Freezer Without Through-The-Door Ice Service

**RANGE INFORMATION**

<table>
<thead>
<tr>
<th>Manufacturer’s rated total refrigerated volume in cubic feet</th>
<th>Range of estimated annual operating costs (dollars/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 10.5</td>
<td>Low</td>
</tr>
<tr>
<td>10.5 to 12.4</td>
<td>Low</td>
</tr>
<tr>
<td>12.5 to 14.4</td>
<td>Low</td>
</tr>
<tr>
<td>14.5 to 16.4</td>
<td>Low</td>
</tr>
<tr>
<td>16.5 to 18.4</td>
<td>Low</td>
</tr>
<tr>
<td>18.5 to 20.4</td>
<td>Low</td>
</tr>
<tr>
<td>20.5 to 22.4</td>
<td>Low</td>
</tr>
<tr>
<td>22.5 to 24.4</td>
<td>Low</td>
</tr>
<tr>
<td>24.5 to 26.4</td>
<td>Low</td>
</tr>
<tr>
<td>26.5 to 28.4</td>
<td>Low</td>
</tr>
<tr>
<td>28.5 and over</td>
<td>Low</td>
</tr>
<tr>
<td>(*) No data submitted for units meeting the Department of Energy’s Energy Conservation Standards effective July 1, 2001.</td>
<td></td>
</tr>
</tbody>
</table>

24. Appendix A7 to Part 305 is revised to read as follows:

Appendix A7 to Part 305—Refrigerator-Freezers With Automatic Defrost With Top-Mounted Freezer With Through-The-Door Ice Service Range Information
## RANGE INFORMATION

<table>
<thead>
<tr>
<th>Manufacturer's rated total refrigerated volume in cubic feet</th>
<th>Range of estimated annual operating costs (dollars/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Less than 10.5</td>
<td></td>
</tr>
<tr>
<td>10.5 to 12.4</td>
<td></td>
</tr>
<tr>
<td>12.5 to 14.4</td>
<td></td>
</tr>
<tr>
<td>14.5 to 16.4</td>
<td></td>
</tr>
<tr>
<td>16.5 to 18.4</td>
<td></td>
</tr>
<tr>
<td>18.5 to 20.4</td>
<td></td>
</tr>
<tr>
<td>20.5 to 22.4</td>
<td></td>
</tr>
<tr>
<td>22.5 to 24.4</td>
<td></td>
</tr>
<tr>
<td>24.5 to 26.4</td>
<td></td>
</tr>
<tr>
<td>26.5 to 28.4</td>
<td></td>
</tr>
<tr>
<td>28.5 and over</td>
<td></td>
</tr>
</tbody>
</table>

(*) No data submitted for units meeting the Department of Energy's Energy Conservation Standards effective July 1, 2001.

25. Appendix A8 to Part 305 is revised to read as follows:

**Appendix A8 to Part 305—Refrigerator-Freezers With Automatic Defrost With Side-Mounted Freezer With Through-the-Door Ice Service**

## RANGE INFORMATION

<table>
<thead>
<tr>
<th>Manufacturer's rated total refrigerated volume in cubic feet</th>
<th>Range of estimated annual operating costs (dollars/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Less than 10.5</td>
<td></td>
</tr>
<tr>
<td>10.5 to 12.4</td>
<td></td>
</tr>
<tr>
<td>12.5 to 14.4</td>
<td></td>
</tr>
<tr>
<td>14.5 to 16.4</td>
<td></td>
</tr>
<tr>
<td>16.5 to 18.4</td>
<td></td>
</tr>
<tr>
<td>18.5 to 20.4</td>
<td></td>
</tr>
<tr>
<td>20.5 to 22.4</td>
<td></td>
</tr>
<tr>
<td>22.5 to 24.4</td>
<td></td>
</tr>
<tr>
<td>24.5 to 26.4</td>
<td></td>
</tr>
<tr>
<td>26.5 to 28.4</td>
<td></td>
</tr>
<tr>
<td>28.5 and over</td>
<td></td>
</tr>
</tbody>
</table>

(*) No data submitted for units meeting the Department of Energy's Energy Conservation Standards effective July 1, 2001.

26. Appendix B1 to Part 305 is revised to read as follows:

**Appendix B1 to Part 305—Upright Freezers With Manual Defrost**

## RANGE INFORMATION

<table>
<thead>
<tr>
<th>Manufacturer's rated total refrigerated volume in cubic feet</th>
<th>Range of estimated annual operating costs (dollars/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Less than 5.5</td>
<td></td>
</tr>
<tr>
<td>5.5 to 7.4</td>
<td></td>
</tr>
<tr>
<td>7.5 to 9.4</td>
<td></td>
</tr>
<tr>
<td>9.5 to 11.4</td>
<td></td>
</tr>
<tr>
<td>11.5 to 13.4</td>
<td></td>
</tr>
<tr>
<td>13.5 to 15.4</td>
<td></td>
</tr>
<tr>
<td>15.5 to 17.4</td>
<td></td>
</tr>
<tr>
<td>17.5 to 19.4</td>
<td></td>
</tr>
<tr>
<td>19.5 to 21.4</td>
<td></td>
</tr>
<tr>
<td>21.5 to 23.4</td>
<td></td>
</tr>
<tr>
<td>23.5 to 25.4</td>
<td></td>
</tr>
<tr>
<td>25.5 to 27.4</td>
<td></td>
</tr>
<tr>
<td>27.5 to 29.4</td>
<td></td>
</tr>
</tbody>
</table>
### RANGE INFORMATION—Continued

<table>
<thead>
<tr>
<th>Manufacturer's rated total refrigerated volume in cubic feet</th>
<th>Range of estimated annual operating costs (dollars/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29.5 and over</td>
<td>Low</td>
</tr>
</tbody>
</table>

(*) No data submitted for units meeting the Department of Energy's Energy Conservation Standards effective July 1, 2001.

27. Appendix B2 to Part 305 is revised Appendix B2 to Part 305—Upright Freezers With Automatic Defrost

<table>
<thead>
<tr>
<th>Manufacturers' rated total refrigerated volume in cubic feet</th>
<th>Range of estimated annual operating costs (dollars/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Less than 5.5</td>
<td></td>
</tr>
<tr>
<td>5.5 to 7.4</td>
<td></td>
</tr>
<tr>
<td>7.5 to 9.4</td>
<td></td>
</tr>
<tr>
<td>9.5 to 11.4</td>
<td></td>
</tr>
<tr>
<td>11.5 to 13.4</td>
<td></td>
</tr>
<tr>
<td>13.5 to 15.4</td>
<td></td>
</tr>
<tr>
<td>15.5 to 17.4</td>
<td></td>
</tr>
<tr>
<td>17.5 to 19.4</td>
<td></td>
</tr>
<tr>
<td>19.5 to 21.4</td>
<td></td>
</tr>
<tr>
<td>21.5 to 23.4</td>
<td></td>
</tr>
<tr>
<td>23.5 to 25.4</td>
<td></td>
</tr>
<tr>
<td>25.5 to 27.4</td>
<td></td>
</tr>
<tr>
<td>27.5 to 29.4</td>
<td></td>
</tr>
<tr>
<td>29.5 and over</td>
<td></td>
</tr>
</tbody>
</table>

(*) No data submitted for units meeting the Department of Energy's Energy Conservation Standards effective July 1, 2001.

28. Appendix B3 to Part 305 is revised Appendix B3 to Part 305—Chest Freezers and All Other Freezers

<table>
<thead>
<tr>
<th>Manufacturers' rated total refrigerated volume in cubic feet</th>
<th>Range of estimated annual operating costs (dollars/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Less than 5.5</td>
<td></td>
</tr>
<tr>
<td>5.5 to 7.4</td>
<td></td>
</tr>
<tr>
<td>7.5 to 9.4</td>
<td></td>
</tr>
<tr>
<td>9.5 to 11.4</td>
<td></td>
</tr>
<tr>
<td>11.5 to 13.4</td>
<td></td>
</tr>
<tr>
<td>13.5 to 15.4</td>
<td></td>
</tr>
<tr>
<td>15.5 to 17.4</td>
<td></td>
</tr>
<tr>
<td>17.5 to 19.4</td>
<td></td>
</tr>
<tr>
<td>19.5 to 21.4</td>
<td></td>
</tr>
<tr>
<td>21.5 to 23.4</td>
<td></td>
</tr>
<tr>
<td>23.5 to 25.4</td>
<td></td>
</tr>
<tr>
<td>25.5 to 27.4</td>
<td></td>
</tr>
<tr>
<td>27.5 to 29.4</td>
<td></td>
</tr>
<tr>
<td>29.5 and over</td>
<td></td>
</tr>
</tbody>
</table>

(*) No data submitted for units meeting the Department of Energy's Energy Conservation Standards effective July 1, 2001.

29. Appendix C1 to Part 305 is revised Appendix C1 to Part 305—Compact Dishwashers

<table>
<thead>
<tr>
<th>制造商的每小时制冷总量（立方米）</th>
<th>年度运行成本估计范围（美元）</th>
</tr>
</thead>
<tbody>
<tr>
<td>29.5及以下</td>
<td>Low</td>
</tr>
</tbody>
</table>

(*) 没有数据提交给符合能源部的能源节约标准的单位，自2001年7月1日起有效。
RANGE INFORMATION

[“Compact” includes countertop dishwasher models with a capacity of fewer than eight (8) place settings. Place settings shall be in accordance with appendix C to 10 CFR part 430, subpart B. Load patterns shall conform to the operating normal for the model being tested.]

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Range of estimated annual operating costs (dollars/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compact</td>
<td></td>
</tr>
</tbody>
</table>

30. Appendix C2 to Part 305 is revised to read as follows:

Appendix C2 to Part 305—Standard Dishwashers

RANGE INFORMATION

[“Standard” includes dishwasher models with a capacity of eight (8) or more place settings. Place settings shall be in accordance with appendix C to 10 CFR part 430, subpart B. Load patterns shall conform to the operating normal for the model being tested.]

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Range of estimated annual operating costs (dollars/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compact</td>
<td></td>
</tr>
</tbody>
</table>

31. Appendices D1 through D5 to Part 305 are revised to read as follows:

Appendix D1 to Part 305—Water Heaters—Gas

RANGE INFORMATION

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Range of estimated annual operating costs (dollars/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Natural gas ($/year)</td>
</tr>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Less than 21</td>
<td>........................................</td>
</tr>
<tr>
<td>21 to 24</td>
<td>........................................</td>
</tr>
<tr>
<td>25 to 29</td>
<td>........................................</td>
</tr>
<tr>
<td>30 to 34</td>
<td>........................................</td>
</tr>
<tr>
<td>35 to 40</td>
<td>........................................</td>
</tr>
<tr>
<td>41 to 47</td>
<td>........................................</td>
</tr>
<tr>
<td>48 to 55</td>
<td>........................................</td>
</tr>
<tr>
<td>56 to 64</td>
<td>........................................</td>
</tr>
<tr>
<td>65 to 74</td>
<td>........................................</td>
</tr>
<tr>
<td>75 to 86</td>
<td>........................................</td>
</tr>
<tr>
<td>87 to 99</td>
<td>........................................</td>
</tr>
<tr>
<td>100 to 114</td>
<td>........................................</td>
</tr>
<tr>
<td>115 to 131</td>
<td>........................................</td>
</tr>
<tr>
<td>Over 131</td>
<td>........................................</td>
</tr>
</tbody>
</table>

*No data submitted.

Appendix D2 to Part 305—Water Heaters—Electric

RANGE INFORMATION

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Range of estimated annual operating costs (dollars/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Natural gas ($/year)</td>
</tr>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Less than 21</td>
<td>........................................</td>
</tr>
<tr>
<td>21 to 24</td>
<td>........................................</td>
</tr>
<tr>
<td>25 to 29</td>
<td>........................................</td>
</tr>
<tr>
<td>30 to 34</td>
<td>........................................</td>
</tr>
<tr>
<td>35 to 40</td>
<td>........................................</td>
</tr>
</tbody>
</table>
### Appendix D3 to Part 305—Water Heaters—Oil

**RANGE INFORMATION**

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Range of estimated annual operating costs (dollars/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First hour rating</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>41 to 47</td>
<td></td>
</tr>
<tr>
<td>48 to 55</td>
<td></td>
</tr>
<tr>
<td>56 to 64</td>
<td></td>
</tr>
<tr>
<td>65 to 74</td>
<td></td>
</tr>
<tr>
<td>75 to 86</td>
<td></td>
</tr>
<tr>
<td>87 to 99</td>
<td></td>
</tr>
<tr>
<td>100 to 114</td>
<td></td>
</tr>
<tr>
<td>115 to 131</td>
<td></td>
</tr>
<tr>
<td>Over 131</td>
<td></td>
</tr>
</tbody>
</table>

*No data submitted.*

### Appendix D4 to Part 305—Water Heaters—Instantaneous—Gas

**RANGE INFORMATION**

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Range of estimated annual operating costs (dollars/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First hour rating</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Natural gas ($/year)</td>
<td>Propane ($/year)</td>
</tr>
<tr>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Under 1.00</td>
<td></td>
</tr>
<tr>
<td>1.00 to 2.00</td>
<td></td>
</tr>
<tr>
<td>2.01 to 3.00</td>
<td></td>
</tr>
<tr>
<td>Over 3.00</td>
<td></td>
</tr>
</tbody>
</table>

*No data submitted.*

### Appendix D5 to Part 305—Water Heaters—Heat Pump

**RANGE INFORMATION**

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Range of estimated annual operating costs (dollars/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First hour rating</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Less than 21</td>
<td></td>
</tr>
<tr>
<td>21 to 24</td>
<td></td>
</tr>
<tr>
<td>25 to 29</td>
<td></td>
</tr>
<tr>
<td>30 to 34</td>
<td></td>
</tr>
</tbody>
</table>

*No data submitted.*
### Range Information—Continued

#### Capacity Range of Estimated Annual Operating Costs (dollars/year)

<table>
<thead>
<tr>
<th>First Hour Rating</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>35 to 40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41 to 47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>48 to 55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>56 to 64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>65 to 74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>75 to 86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>87 to 99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 to 114</td>
<td></td>
<td></td>
</tr>
<tr>
<td>115 to 131</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over 131</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*No data submitted.

32. Appendix E to Part 305 is revised to read as follows:

**Appendix E to Part 305—Room Air Conditioners**

#### Range Information

<table>
<thead>
<tr>
<th>Manufacturer's Rated Cooling Capacity in Btu's/yr</th>
<th>Range of Estimated Annual Operating Costs (dollars/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Reverse Cycle and with Louvered Sides:</td>
<td></td>
</tr>
<tr>
<td>Less than 6,000 Btu</td>
<td></td>
</tr>
<tr>
<td>6,000 to 7,999 Btu</td>
<td></td>
</tr>
<tr>
<td>8,000 to 13,999 Btu</td>
<td></td>
</tr>
<tr>
<td>14,000 to 19,999 Btu</td>
<td></td>
</tr>
<tr>
<td>20,000 and more Btu</td>
<td></td>
</tr>
<tr>
<td>Without Reverse Cycle and without Louvered Sides:</td>
<td></td>
</tr>
<tr>
<td>Less than 6,000 Btu</td>
<td></td>
</tr>
<tr>
<td>6,000 to 7,999 Btu</td>
<td></td>
</tr>
<tr>
<td>8,000 to 13,999 Btu</td>
<td></td>
</tr>
<tr>
<td>14,000 to 19,999 Btu</td>
<td></td>
</tr>
<tr>
<td>20,000 and more Btu</td>
<td></td>
</tr>
<tr>
<td>With Reverse Cycle and with Louvered Sides.</td>
<td></td>
</tr>
<tr>
<td>With Reverse Cycle, without Louvered Sides.</td>
<td></td>
</tr>
</tbody>
</table>

*No data submitted for units meeting Federal Minimum Efficiency Standards effective October 1, 2000.

33. Appendix F1 to Part 305 is revised to read as follows:

**Appendix F1 to Part 305—Standard Clothes Washers**

#### Range Information

[^“Standard” includes all household clothes washers with a tub capacity of 1.6 cu. ft. or more.]

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Range of Estimated Annual Operating Costs (dollars/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td></td>
</tr>
</tbody>
</table>

34. Appendix F2 to Part 305 is revised to read as follows:

**Appendix F2 to Part 305—Compact Clothes Washers**
RANGE INFORMATION

[“Compact” includes all household clothes washers with a tub capacity of less than 1.6 cu. ft.]

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Range of estimated annual operating costs (dollars/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compact</td>
<td></td>
</tr>
</tbody>
</table>

Appendices G1 through G8, H, and I to Part 305 [Removed]

35. Appendices G1 through G8, H, and I to Part 305 are removed.

Appendices J1 and J2 to Part 305 [Redesignated as G1 and G2]

36. Appendices J1 and J2 to Part 305 are redesignated as Appendices G1 and G2 and revised to read as follows:

RANGE INFORMATION

<table>
<thead>
<tr>
<th>Manufacturer’s rated heating capacities</th>
<th>Range of estimated annual operating costs (dollars/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Natural gas</td>
</tr>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>All capacities</td>
<td></td>
</tr>
</tbody>
</table>

Appendix G2 to Part 305—Pool Heaters—Oil

RANGE INFORMATION

<table>
<thead>
<tr>
<th>Manufacturer’s rated heating capacities</th>
<th>Range of estimated annual operating costs (dollars/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Natural gas</td>
</tr>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>All capacities</td>
<td></td>
</tr>
</tbody>
</table>

37. Appendix H to Part 305 is revised to read as follows:

Appendix H to Part 305—Representative Average Unit Energy Costs

This Table contains the representative unit energy costs that must be utilized to calculate operating cost disclosures required under sections 305.11, 305.14, and 305.20. This Table is based on information published by the U.S. Department of Energy in 2007.

Representative average unit costs of energy for five residential energy sources

<table>
<thead>
<tr>
<th>Type of energy</th>
<th>In commonly used terms</th>
<th>As required by DOE test procedure</th>
<th>Dollars per million Btu^1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity</td>
<td>$___/kWh^2 3</td>
<td>$___/kWh</td>
<td>$___</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>$___/therm^4</td>
<td>$___/Btu</td>
<td>$___</td>
</tr>
<tr>
<td>No. 2 heating oil</td>
<td>$___/gallon</td>
<td>$___/Btu</td>
<td>$___</td>
</tr>
<tr>
<td>Propane</td>
<td>$___/gallon^6,5</td>
<td>$___/Btu</td>
<td>$___</td>
</tr>
<tr>
<td>Kerosene</td>
<td>$___/gallon^7</td>
<td>$___/Btu</td>
<td>$___</td>
</tr>
</tbody>
</table>

^1 Btu stands for British thermal unit.
^2 kWh stands for kiloWatt hour.
^3 1 kWh = 3,412 Btu.
^4 1 therm = 100,000 Btu. Natural gas prices include taxes.
^5 MCF stands for 1,000 cubic feet.
^6 For the purposes of this table, 1 cubic foot of natural gas has an energy equivalence of 1,031 Btu.
^7 For the purposes of this table, 1 gallon of No. 2 heating oil has an energy equivalence of 138,690 Btu.
^8 For the purposes of this table, 1 gallon of liquid propane has an energy equivalence of 91,333 Btu.
^9 For the purposes of this table, 1 gallon of kerosene has an energy equivalence of 135,000 Btu.
38. Appendix L is redesignated as Appendix I.

39. Prototype label 1 and Sample labels 1 and 2 are revised and Prototype labels 2 through 5 and Sample labels 3 through 11 in newly designated Appendix I are removed to read as follows:

Appendix I to Part 305—Sample Labels

BILLING CODE 6750–01–P
**ENERGYGUIDE**

Refrigerator-Freezer
- Automatic Defrost
- Side-Mounted Freezer
- Through-the-Door Ice

XYZ Corporation
Model ABC-L
Capacity: 23 Cubic Feet

---

**Estimated Yearly Operating Cost**

$57

Cost range for models of similar capacity, with automatic defrost, side-mounted freezer, and through-the-door ice.

---

**580 kWh**

Estimated Yearly Electricity Use

Size, door attributes, and ice features affect energy use – so other refrigerators may have lower or higher operating costs. Your actual operating costs will depend on your local utility rates and how you use this refrigerator. The estimated operating cost is based on a 2006 national average cost of 9.81 cents per kWh for electricity.

For more information, visit www.ftc.gov/appliances.

Federal law prohibits removal of this label before consumer purchase.

---

SAMPLE LABEL 1
Estimated Yearly Operating Cost
(When used with an electric water heater)

$29

297 kWh
Estimated Yearly Electricity Use

$22
Estimated Yearly Operating Cost
(when used with a natural gas water heater)

Based on four loads a week. Your actual operating costs will depend on your local utility rates and how you use this dishwasher. The estimated operating cost is based on a 2006 national average cost of 9.81 cents per kWh for electricity and $1.42 per therm for natural gas. For more information, visit www.ftc.gov/appliances.

Federal law prohibits removal of this label before consumer purchase.

SAMPLE LABEL 2

By direction of the Commission.

Donald S. Clark,
Secretary.

[FR Doc. 07–613 Filed 2–12–07; 8:45 am]