

**Before the
UNITED STATES FEDERAL TRADE COMMISSION
Washington, D.C. 20580**

In the Matter of

Rule Concerning Disclosures)	
Regarding Energy Consumption and)	
Water Use of Certain Home Appliances)	
and Other Products Required Under)	
the Energy Policy and Conservation)	16 CFR Part 305
Act [“Appliance Labeling Rule”];)	
Advance Notice of Proposed Rulemaking)	
)	
Consumer Electronics Labeling)	
Project No. P094201)	

**COMMENTS OF THE
CONSUMER ELECTRONICS ASSOCIATION**

Introduction

The Consumer Electronics Association (CEA) is the preeminent trade association promoting growth in the \$172 billion U.S. consumer electronics industry. CEA represents more than 2,200 corporate members involved in the design, development, manufacturing, distribution, sale and integration of audio, video, in-vehicle electronics, wireless and landline communications, information technology, home networking, multimedia and accessory products, as well as related services that are sold through consumer channels.

CEA and its members have a significant interest in the Federal Trade Commission’s development and promulgation of energy use disclosure requirements for consumer electronics, including televisions, personal computers, cable or satellite set-top boxes, stand-alone digital video recorders, and personal computer monitors, pursuant to Section 325 of the Energy Independence and Security Act of 2007 (EISA 2007). CEA is active in several areas related to power consumption and energy efficiency in consumer electronics, including public policy, research and analysis, industry standards development, and consumer education. CEA supports energy use disclosures and welcomes the opportunity to provide input during this proceeding. CEA believes that energy use disclosures are complementary to the U.S. Environmental Protection Agency’s ENERGY STAR program and recognizes that FTC will work closely with EPA as indicated in EISA 2007.

Responses to Questions and Issues for Comment

A. Televisions

1. Need for Labeling:

- a. Would labeling or other energy disclosures for televisions “assist consumers in making purchasing decisions”? Why or why not?

Before investing government and industry resources to develop, promulgate and administer energy use disclosures for televisions as well as other consumer electronics, there should be evidence to show that the buying judgments of a substantial majority of consumers would be affected by the availability of energy use information on products. If credible research demonstrates this for televisions and other consumer electronics, then, as outlined in these comments, there are other important considerations to take into account. In this regard, FTC should consider whether to commission its own study.

At a more general level, CEA’s research shows consumers’ awareness and consideration of energy use has likely increased in recent years due to several factors including the cost of energy. That would suggest that additional information about energy use would be of interest to consumers. Two findings from a recent CEA consumer research study help to illustrate current consumer sentiment:¹

- Seventy-five percent of consumers express concern/great concern over the potential for rising home energy costs. In the past 12 months, 76% of consumers report taking some action to reduce the amount of energy consumed in their home.
- To help combat rising energy costs within the home, energy efficiency is being factored into purchase decisions and ranks as the second biggest reason for purchasing a new appliance (39%). Consumers are now beginning to associate energy efficient consumer electronics products with the ENERGY STAR® label and are seeking out those products in the purchasing process.

With regard to televisions, an earlier CEA consumer research study² found that 89 percent of consumers surveyed ranked energy efficiency as a top consideration for their next television purchase, although price and features remain most influential in actual purchasing decisions, as illustrated below.³

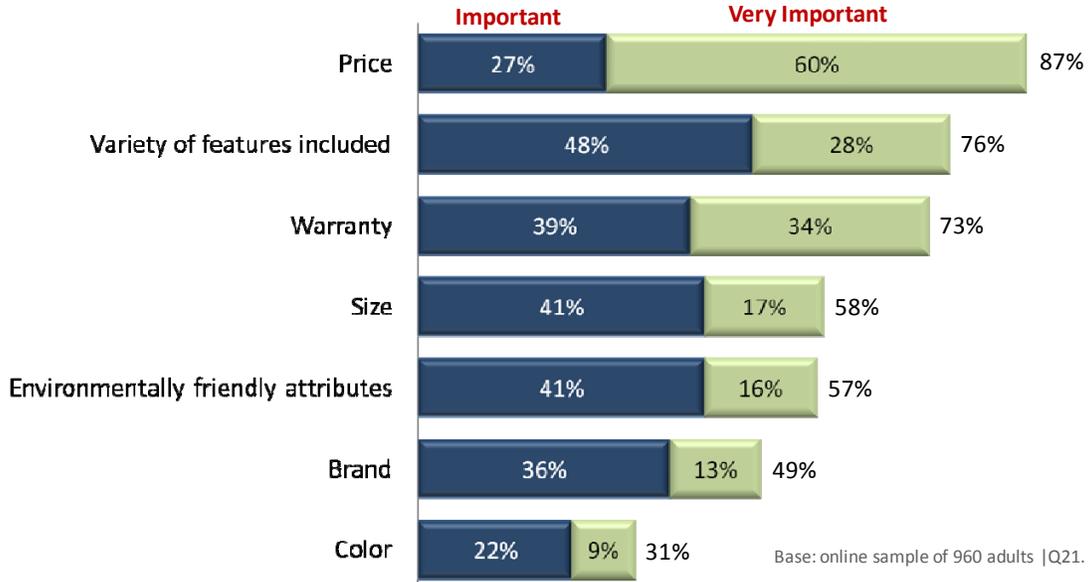
¹ *Home Technologies and Energy Efficiency: A Look At Behaviors, Issues and Solutions*, Consumer Electronics Association, April 2009.

² *5 Technology Trends to Watch*, Consumer Electronics Association, October 2008, p. 13.

³ *Going Green: An Examination of the Trend and What it Means to Consumers and the CE Industry*, Consumer Electronics Association, December 2008, p. 14.

Price/Features Most Influential in Purchase Decisions

Elements consumers say are important to their next CE purchase decision.



- b. Is there any evidence that labeling or energy disclosures for televisions would “not be technologically or economically feasible”? If so, please provide such information.

CEA is not aware of any such evidence that argues against providing energy use disclosures for televisions. In terms of implementing requirements for energy use disclosures, there are several considerations, of course, as suggested by FTC’s questions for public comment –which are addressed later in these comments. However, it is important to note that certain steps needed to be taken to pave the way for energy use disclosures for televisions. Standard ways of measuring the energy use of digital televisions were a necessary first step, as CEA commented during FTC’s previous review of energy labeling requirements in 2006. Until the completion of an industry test procedure, which is described later in these comments, statements about the energy use of televisions could not be adequately substantiated.

- c. What benefits, if any, would labeling or other energy disclosures provide for consumers and businesses (including small businesses)? What costs, if any, would such labeling or other energy disclosures impose on consumers and businesses (including small businesses)?

On the benefits side, energy use disclosures should be welcomed by consumers eager to have more information about the power consumption and operating cost of electronics they purchase. Providing such information would give consumers another point of

comparison as they consider various factors in their purchase decisions. It also would increase consumer awareness and understanding of the operating costs of a particular product, at least in terms of electricity cost and consumption.

Additionally, having such information available in the marketplace for all product categories identified in this rulemaking should further support the consumer electronics industry's successful competitive and market-oriented approaches to energy efficiency. In other words, while technological innovation and programs such as ENERGY STAR are the main drivers of energy efficiency advances in the consumer electronics industry, across-the-board requirements for energy use disclosures would be complementary as well as consumer- and market-oriented.

Obviously, there are costs for both government and industry in developing, implementing, administering and maintaining energy use disclosure requirements for consumer electronics. FTC should carefully consider cost impacts while determining how to best serve consumers and minimize the economic impacts on government, manufactures, retailers and distributors. CEA believes that cost-effective requirements for energy use disclosures for the product categories named in this proceeding can be established by focusing on simple disclosures of information and providing flexibility for implementation in the marketplace.

2. *Energy Use Data:* Is there data regarding energy use of televisions in the market? Is there data that shows a significant difference in the energy use of other models? What are the typical annual energy costs of each product?

Data regarding the energy use of televisions exists. The most current information on television power consumption is the database established by EPA's ENERGY STAR program, which is available online and updated periodically.⁴ The ENERGY STAR database covers ENERGY STAR-qualified television models. There has been rapid and successful market penetration of the current ENERGY STAR "Tier 1" specification for televisions, which became effective on November 1, 2008, and the ENERGY STAR database currently lists several hundred television models. CEA believes that this represents a majority of models on the market.

Regarding energy use more broadly, CEA commissioned a major study which examines the energy use of consumer electronics, including televisions, in the context of residential electricity consumption. This study is available online.⁵

Regarding typical annual energy costs for televisions, the EPA's online consumer resource page for ENERGY STAR and televisions until recently included a "savings calculator" in the form of a spreadsheet template. As explained in that document, the savings calculator was developed by the EPA and the U.S. Department of Energy and was "provided for estimating purposes only" and also noted "actual energy savings may

⁴ http://downloads.energystar.gov/bi/qplist/tv_prod_list.xls

⁵ http://www.ce.org/PDF/Energy_Consumption_by_CE_in_U.S._Residences_-_Revised_December_2007.pdf

vary based on use and other factors.” This calculator provided a means to estimate the annual and lifecycle costs and savings for an ENERGY STAR-qualified television versus a conventional model based on several variables, including electricity rate, screen size, usage and product cost. Although this calculator is apparently no longer available on the ENERGY STAR site, it was a relatively comprehensive and current resource.

3. *Reports, Studies, or Research:* Do any recent reports, studies, or research provide data relevant to energy use, operating costs, and labeling for televisions in the United States or other countries? If so, please provide such reports, studies, or research.

As noted above, the CEA-commissioned study of consumer electronics and energy use is available.⁶

4. *Test Procedures:* If the Commission were to require labeling, should the Commission require the use of Section 11 of “IEC 62087, Ed. 2.0: Methods of Measurement for the Power Consumption of Audio, Video and Related Equipment” and “IEC 62301, Ed. 1.0: Household Electrical Appliances - Measurement of Standby Power” as adopted by ENERGY STAR for television labeling purposes? What are the advantages and disadvantages to adopting the ENERGY STAR procedures?

First, in response to this question, CEA emphasizes that EISA 2007 requires energy use disclosures but does not predispose physical labeling as an outcome.

As FTC recognizes, fundamentally important to making energy use disclosures is having an appropriate standard for measuring power consumption in the given product. For televisions, the international standard, IEC 62087-2008(E), which was published by the International Electrotechnical Commission (IEC) on September 9, 2008, is the appropriate test procedure for measuring on-mode power consumption. Likewise, IEC 62301 Ed. 1.0 is the appropriate standard test procedure for the measurement of standby power in televisions. IEC 62087-2008(E) and IEC 62301 Ed. 1.0 should be recognized and adopted by FTC in the context of requirements for energy use disclosures for televisions.

On a related note, CEA recognizes that the U.S. Department of Energy has an official but outdated test procedure for measuring power consumption in televisions. Last year, CEA petitioned DOE pursuant to 5 U.S.C. Section 553(e) and 42 U.S.C. Section 6293(b)(2) to amend the Code of Federal Regulations, 10 C.F.R. Part 430, Subpart B, Appendix H, to replace operating power consumption measurement (Po) with IEC 62087:2008(E) Section 11 using the dynamic broadcast-content input signal.

- a. *Usage Rates:* To derive annual operating cost figures for potential disclosures, the Rule must require standard usage assumptions for televisions (e.g., 5 hours per day). EPA’s Eligibility Criteria (Section 3) uses annual power consumption estimates on a daily usage pattern of 5 hours in “On Mode” and 19 hours in “standby.” If the FTC were to require labeling or other

⁶ Ibid.

energy disclosures, should the FTC adopt EPA's usage patterns? What are the advantages and disadvantages to adopting such usage patterns?

CEA agrees that a standard usage assumption for televisions must be required and urges FTC to use the assumption of five hours per day, particularly given that this is based on market research⁷ and also given that EPA uses this same assumption in the ENERGY STAR program.

- b. *Other Test Procedure Issues:* Are there any issues not addressed by Section 11 of IEC 62087 that the Commission should address in a potential Rule? Are there any aspects of the ENERGY STAR criteria (not otherwise contained in IEC 62087 or IEC 62301) that the Commission should incorporate into its labeling requirements? In particular, ENERGY STAR (Section 4.E.2.) has specifications that go beyond the IEC test procedure regarding input signal levels, broadcast test materials, true power factor, testing at default factory settings, and automatic brightness control. Should the FTC adopt any of these particular EPA specifications in its requirements? If so, which ones and why? If not, which ones and why not?

Currently, EPA's ENERGY STAR test procedure which references IEC 62087-2008(E) and IEC 62301 Ed. 1.0 is the most comprehensive test procedure for televisions. Ongoing work in one of CEA's standards committees will result in a test procedure intended specifically to determine total power consumption of televisions.

- c. *Alternative Test Procedures:* Are there any other test procedures the Commission should adopt in lieu of the ENERGY STAR procedure? If so, please explain why the Commission should adopt such procedures. What are the advantages and disadvantages to adopting such alternative procedures?

CEA is developing a test procedure specifically for measuring the energy consumption of televisions. This test procedure will be in accordance with the IEC and ENERGY STAR test procedures but will provide additional details to assure that measurements are consistent and repeatable. CEA would request that FTC consider this standard, when completed, as an alternative to citing either the IEC or ENERGY STAR test procedures.

5. *Format, Content, and Placement:* If the Commission were to require labeling or other energy disclosures, how should it require manufacturers or other sellers to disclose such information? Should television labels follow the same "EnergyGuide" format, content, and placement requirements applicable to other covered showroom products such as refrigerators? What form should the label take (e.g., hang tag, adhesive label, static cling label)?

CEA believes that the key elements of an energy use disclosure for consumer electronics products, including televisions, are an estimated yearly operating cost figure, and an estimated yearly electricity use figure. Possible additional points of information or reference for energy use disclosures might include a notice about individual costs (e.g. "Your cost will depend on your utility rates and use"); a notice about the basis for electricity cost (e.g. "Estimated operating cost based on a 2007 national average

⁷ The assumption of five hours per day is based on research conducted by The Nielsen Company.

electricity cost of 10.65 cents per kWh”); and a source for further information (e.g. “For more information, visit www.ftc.gov”).

EISA 2007 provides FTC with needed flexibility in establishing energy use disclosure requirements for consumer electronics. This is important, given that the market for consumer electronics is dramatically different in terms of product, customer and distribution dynamics and trends as compared to the appliance categories currently addressed under the EnergyGuide program. CEA believes it is crucial to develop an understanding of consumer behavior, expectations and perceptions before determining the best way or ways to present energy use disclosure information to consumers for the electronics products covered by this proceeding. CEA also believes that simplicity in the energy use disclosure will be important.

- a. *Retailer Role:* What role should retailers have, if any, in providing these disclosures? Should retailers have a responsibility for the placement of disclosures in brick and mortar stores? If so, what should this responsibility be?

Again, before determining roles and channels for conveying energy use disclosure information, it is important to understand consumer behavior, expectations and perceptions relevant to selecting and purchasing televisions. Likewise, it also is important to understand the distribution and sales channels for televisions, which include large and small retailers, independent and specialty dealers and online retailers.

- b. *Internet Disclosures:* Should the Commission consider energy disclosure options that do not provide consumer information at the point of purchase in the form of a label or other in-store disclosures (e.g., Internet-only disclosures with no labeling on the product or product package)? If so, what should be the format, content, and placement of such disclosures? Should such Internet disclosures (and other catalog disclosures) be any different than those for other covered products under the Rule (such as refrigerators)?

As FTC recognizes, energy use disclosures for consumer electronics could be conveyed to consumers using different methods, including online or Internet disclosures, in-store material, product packaging and product-related printed material. In determining the most appropriate method or methods, findings from consumer research particular to consumer electronics should be a foremost consideration along with feedback from stakeholders who distribute and sell consumer electronics. FTC also should weigh other factors, including the cost of one particular approach versus another; maintenance of the energy use disclosure over time; and environmental impacts relevant to providing the disclosure in one form versus another.

6. *Comparative Information:* What comparative information, if any, should the Rule require on labels or in other disclosures about the energy use of televisions?
 - a. Should the Commission require disclosure of a range of comparability similar to EnergyGuide labels for other covered products? If not, why not? If so, how should such comparative information be organized? Should the comparisons be made across model types or

technologies (e.g., LCD, plasma, screen resolutions, etc.)? Should the Commission limit comparative information to screen size (e.g., 1” to 20”, 21” to 29”, 30” to 39”, 40” to 49”, 50” to 59”, and 60” or more)? Should the Commission use some other approach for establishing such categories? If so, what approach? What would be the advantages and disadvantages to such an approach?

Energy use disclosures for televisions should not include comparative information for at least three reasons. There are many variables relevant to energy use to consider in the constantly-evolving television category, including display technology, screen size and picture quality. This could add unnecessary complexity to what otherwise should be a simple and straightforward energy use disclosure. In addition, there are a large number of television models on the market, and new models are constantly and frequently introduced. If comparative information were required, it would be difficult to both establish and maintain reasonable points of comparison for such information. Finally, there are already well-established resources for product comparisons of televisions by consumers, including consumer and trade publications and product reviews. Having energy use disclosure requirements for televisions will itself enable various publications and organizations to compare television models based on power consumption and cost of operation as well as other factors.

- b. Is there information available from which to develop approximate ranges for labeling purposes or should the Commission wait for manufacturers to test all their products and submit such data to the Commission?

As explained above, CEA believes that energy use disclosures for televisions should not include comparative information. Very recent data regarding the energy use of televisions does exist with EPA’s ENERGY STAR program, as explained earlier in these comments.

7. *Reporting Requirements:* What data, if any, should the Rule require manufacturers to submit to the FTC? Should the Commission use the data in developing ranges of comparability (e.g., ranges organized by screen size)?

As explained above, EPA’s ENERGY STAR program already provides model-specific data related to television energy use in a publicly-accessible database, which is available online and updated periodically.⁸

B. Other Consumer Electronics

1. Need for Energy Disclosures:

- a. Should the Commission require labeling or other energy disclosures for personal computers, personal computer monitors, cable or satellite set-top boxes, and stand-alone digital video recorder boxes? Would labeling or other energy disclosures “assist consumers in making purchasing decisions”? Is there any evidence that labeling or other energy disclosures for

⁸ http://downloads.energystar.gov/bi/qplist/tv_prod_list.xls

these products would “not be technologically or economically feasible” or “not likely to assist consumers in making purchasing decisions”?

Section 325 of EISA 2007 directs FTC to consider energy use disclosure requirements for personal computers, cable and satellite set-top boxes, stand-alone digital video recorders, and personal computer monitors in addition to televisions. To this end, it is important to recognize that the public policy objective is the disclosure of energy use information, rather than a specific outcome, such as labeling.

Before investing government and industry resources to develop, promulgate and administer energy use disclosures for consumer electronics, there should be evidence to show that the buying judgments of a substantial majority of consumers would be affected by the availability of energy use information on products. If credible research demonstrates this for the electronics identified above, then, as explained, there are additional market and category-specific considerations to take into account.

Under EISA 2007, CEA believes that FTC has the necessary flexibility to consider and develop requirements that are appropriate for the product categories identified. This will be important, as the way in which consumers research and acquire products in the five named categories in this rulemaking differs not only compared to products currently addressed under the EnergyGuide program, but also as compared one to another (e.g. televisions versus computers, or set-top boxes versus stand-alone DVRs). In all categories, it is important to consider consumer preferences, expectations and perceptions before determining specific requirements, and CEA welcomes the opportunity to provide informative consumer research.

For example, personal computers, along with monitors, are sold to consumers at retail stores and online. In many cases, consumers are able to customize their computer purchases by selecting components, including processors, memory and drives, that bear on the energy performance and operating cost of the finished product. In these cases, there is a multitude of possible configurations of a particular model of a personal computer, depending on the consumer’s selection of components. In requiring energy use disclosures for personal computers, where individually-configured products are common, CEA believes FTC should recognize the administrative complexity of specific disclosures and consider an approach that focuses on a basic or typical product configuration for a given model.

On the other hand, how consumers acquire set-top boxes depends on the type of service for which the set-top box is intended. For example, many set-top boxes for multichannel video programming distributors (MVPDs) are not sold at retail to consumers but rather provided to consumers by their MVPDs, which procure the boxes from manufacturers. With some MVPDs, consumers have the option to select set-top boxes with additional features, such as digital video recorders, which could bear on the energy use and operating cost of the set-top box. In addition, MVPDs often install software on the set-top boxes which determines functionality and performance. These software changes can significantly influence the energy consumption of the box and are beyond the box manufacturer’s control or knowledge. Finally, and relevant to FTC’s consideration of

methods for disclosure, MVPD set-top boxes are typically delivered to the consumer without packaging and without a manufacturer's product manual. These characteristics should be considered in determining what type of disclosure is appropriate and whether such disclosure assists consumers in making purchasing decisions.

- b. Are there any other consumer electronic products (i.e., beyond those listed above) that the Commission should consider for labeling or other energy disclosures? If so, which ones? Would labeling or other energy disclosures "assist consumers in making purchasing decisions"?

In addition to the products for which energy use disclosure requirements are mandated under EISA 2007, CEA recognizes that FTC, under its current authority, may consider promulgating requirements for additional consumer electronics products. CEA urges the FTC to take into account credible consumer research, as explained above, that examines whether the buying judgments of a substantial majority of consumers would be affected by the availability of energy use information on such products, and whether such information would be relevant in terms of energy use.

- c. What benefits, if any, would labeling or other energy disclosures for consumer electronics (i.e., any product identified in response to 1.a. or 1.b. immediately above) provide for consumers and businesses (including small businesses)? What costs would such labeling or other energy disclosures impose on consumers and businesses (including small businesses)?

Energy use disclosures would inform both consumers and businesses purchasing consumer electronics.

2. *Energy Use Data:* Is there data regarding energy use of consumer electronic products (i.e., any product identified in response to 1.a. or 1.b. above) in the market? If so, is there data that shows a significant difference in the energy use of other models? What are the annual energy costs of these products?
3. *Reports, Studies, or Research:* Do any recent reports, studies, or research provide data relevant to potential energy disclosures for consumer electronics products in the United States or other countries?

As noted above, the CEA-commissioned study of consumer electronics and energy use is available.⁹

4. *Test Procedures:* Are there existing adequate test procedures for consumer electronic products that could yield annual energy consumption estimates? If so, are such test procedures currently used by industry or in any government standards program? Would such test procedures be appropriate for the Commission to adopt for labeling purposes? Why or why not?

⁹ http://www.ce.org/PDF/Energy_Consumption_by_CE_in_U.S._Residences_-_Revised_December_2007.pdf

Based on an analysis last year by CEA's Technology and Standards staff and committees, industry and EPA-recognized test procedures exist for measuring power consumption in personal computers, personal computer monitors and set-top boxes. For stand-alone digital video recorders, there is currently no standard test procedure for measuring power consumption, and CEA is presently addressing this within its industry standards development process.

5. *Format, Content, and Placement:* If the Commission considers labeling or other energy disclosures for one or more of these products, what should be the format, content, and placement of such information? How do consumers purchase these products (e.g., in stores, online, etc.)? Should disclosures appear on the products themselves, on packaging, through other point of purchase material, or through some other means?

Some of the considerations relevant to methods of disclosure for these products are noted above in response to question B.1.a.

As with televisions, CEA believes that the key elements of an energy use disclosure for these additional consumer electronics products are an estimated yearly operating cost figure and an estimated yearly electricity use figure. Possible additional points of information or reference for energy use disclosures might include a notice about individual costs; a notice about the basis for electricity cost; and a source for further information. As stated earlier, it is crucial to develop an understanding of consumer behavior, expectations and perceptions before determining the best way or ways to present energy use disclosure information to consumers for the electronics products covered by this proceeding.

- a. *Retailer Role:* What role, if any, should retailers have in providing these disclosures? Should retailers have a responsibility for the placement of disclosures in brick and mortar stores? If so, what should this responsibility be?

As explained above, it is important to understand the distribution and sales channels for these additional consumer electronics products –particularly for computers and set-top boxes, where brick-and-mortar retailers may play a less significant or no role relative to other retail channels or entities such as service providers.

- b. *Internet Disclosures:* Should the Commission consider energy disclosure options that do not provide consumer information at the point of purchase in the form of a label or other in-store disclosure (e.g., Internet-only disclosures with no labeling on the product or product package)? Should such Internet disclosures (and other catalog disclosures) be any different than those for other covered products under the Rule (such as refrigerators)?

As FTC recognizes, energy use disclosures for consumer electronics could be conveyed to consumers using different methods, including online or Internet disclosures, in-store material, product packaging and product-related printed material. In determining the most appropriate method or methods, findings from consumer research particular to consumer electronics should be a foremost consideration. FTC also should weigh other

factors, including the cost of one particular approach versus another; maintenance of the energy use disclosure over time; and environmental impacts relevant to providing the disclosure in one form versus another.

- c. *Content:* If labeling or other energy disclosures should be required, what types of information should be included on such labels? Should labeling provide the same information as the EnergyGuide label (i.e., yearly operating costs, energy use, and comparative information)? Or should the label require something different or additional?

As stated in the response to question B.5., CEA believes that the key elements of an energy use disclosure for these additional consumer electronics products are an estimated yearly operating cost figure and an estimated yearly electricity use figure. Possible additional points of information or reference for energy use disclosures might include a notice about individual costs; a notice about the basis for electricity cost; and a source for further information. As stated earlier, it is crucial to develop an understanding of consumer behavior, expectations and perceptions before determining the best way or ways to present energy use disclosure information to consumers for the electronics products covered by this proceeding.

6. *Comparative Information:* What, if any, disclosures should the Rule require about other products on the market? If the Commission requires a label, should the label contain a range of comparability like other covered products with the EnergyGuide label? If not, why not? If so, how should such comparative information be organized? Should the comparisons be made across model types and technologies? Is there data available from which to develop approximate ranges for labeling purposes or should the Commission wait for manufacturers to test all their products and submit such data to the Commission?

As suggested in response to questions A.6. and A.6.a., energy use disclosures for consumer electronics should not include comparative information for at least three reasons. There are many variables relevant to energy use to consider in each of the categories covered by this proceeding. This could add unnecessary complexity to what otherwise should be a simple and straightforward energy use disclosure. In addition, in each of these product categories, there are a large number of models on the market, and new models are constantly and frequently introduced. If comparative information were required, it would be difficult to both establish and maintain points of comparison for such information. Finally, there are already well-established resources for product comparisons in the consumer electronics marketplace, such as consumer and trade publications and product reviews. A straightforward energy use disclosure for products covered in this rulemaking would enable various publications and organizations to compare television models based on power consumption and cost of operation as well as other factors.

7. *Reporting Requirements:* What data, if any, should the Rule require manufacturers to submit to the FTC?

As the EPA's ENERGY STAR program covers most categories of consumer electronics, there already is an established process for collecting data related to energy use.

Respectfully submitted,

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ASSOCIATION

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