



## **NRDC Comments on FTC's 3/11/2010 Proposed Rule for Labeling Consumer Electronics**

### **Submitted by:**

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On behalf of the Natural Resources Defense Council and our more than 1.2 million members and on-line activists, we respectfully submit these comments on FTC's rulemaking concerning future energy use labels for consumer electronics products. Consumer electronics are one of the fastest growing sources of electricity use in the home and commonly represent 10 to 20% of a home's total annual electricity use. In addition, the individual annual energy consumption of many of these products is quite considerable, frequently several hundred kWh/yr, and there is often a wide spread in the energy use and efficiency of similar sized models. To help consumers make more informed decisions about the energy use and operating costs of the products they are consuming, the FTC should promptly add TVs and other consumer electronics to their program in accordance with the authority they were granted by the 2007 federal energy bill (EISA- Energy Independence and Security Act).

Below we provide detailed comments on TVs and the other products under consideration by the FTC including monitors, cable and satellite set top boxes, computers and video game consoles.

### **TELEVISIONS**

We have thoroughly reviewed the FTC's March 11, 2010 proposed rule that would require new TVs to include energy use labels at the point of sale and want to commend the FTC for its work done to date. Below we provide feedback on the various outstanding issues related to implementation of the labeling program which include: a) location, size and layout of the label; b) labeling requirements for retail and manufacturer websites; c) how to segment the market into TV screen size bins; d) test methods; and e) schedule.

## **Label Location, Size and Layout**

We agree with FTC's determination that the label must be affixed directly to the TV and that posting the information only on the internet, as initially proposed by the Consumer Electronics Association (CEA), is insufficient. There is no substitute for having the information on a model's energy use available next to the model at retail, where the vast majority of TVs continue to be sold. We concur with FTC's finding that no further research is needed on this point and that such research would only delay this rulemaking.

Regarding FTC's question on page 17 on the specific position and how the label should be affixed to the TV, we provide the following input:

- The guiding principle for FTC's rules should be for the information to be easily viewed and readable by the shopper while they are in front of the TV. Having the label only viewable from the back of the TV, for example next to the product nameplate, is unacceptable as it would deny the shopper with easy access to this information while they are making their purchasing decision.
- Flexible hangtags that can swing or easily rotate at retail would interfere with the consumer's ability to easily read the material on the label and should not be allowed.
- Provided the information on the label is clearly legible when the TV is on at retail, we do not have a clear preference on the use of cling vs adhesive labels. To the extent there are concerns raised by stakeholders on this, we encourage the FTC to reach out to companies like 3M who have extensive experience with adhesives and labels that are easy to remove and able to withstand elevated temperatures.

We also encourage FTC to review its requirements on the minimum label size and fonts. For small TVs, the TV is often on display on a shelf right in front of the consumer. In this case, the relatively small dimensions of FTC's proposed labels, which only require the label to be 1.5 by 3.5 inches (e.g., half the height of an index card), should be adequate. For larger TVs, say 32 inches and above, the user is often looking at a wall of TVs and may be several feet away from the TV they are considering buying and the content of the label may not be readable.

Below we show a common retail format that is used by many of the high sales volume TV retailers, such as Best Buy and Wal-Mart.

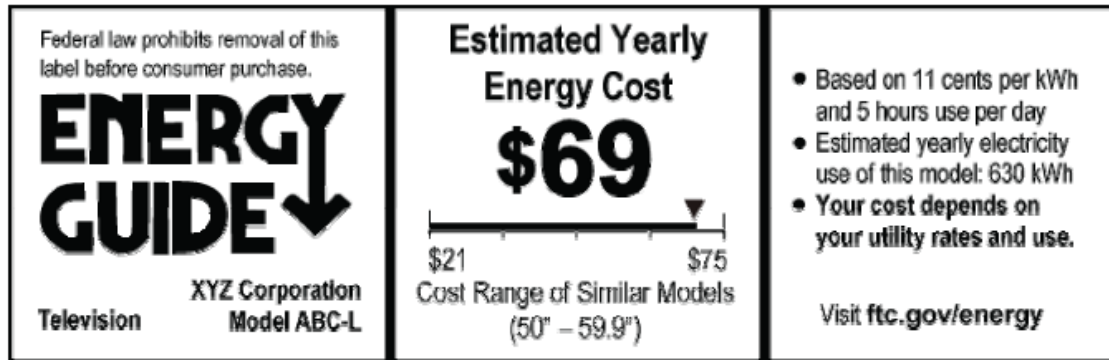


One will first notice that the consumer is located a few feet away from the screen laterally. This is because packaged product may be stored on the ground and also to ensure the viewer has some distance from the screen to enhance their viewing experience. In addition, the top TV may be 10 or more feet off the ground. Together these distances make it unlikely that the consumer will be able to read most of the content contained on the Energy Guide label as currently configured.

We also think the data slider on the label that conveys comparative operating costs of similar sized TVs should have much greater prominence. This slider bar is perhaps the most influential element of the Energy Guide and we believe it's critical for that portion of the label to be easily read by shoppers. Many consumers may not adequately process the annual energy use or the annual energy cost information to help calculate a product's total life cycle cost<sup>1</sup> (purchase price plus the cost to operate the TV over its 10 year or so lifetime). They may, however, be dissuaded from purchasing similar sized models that show up on the right hand side of the "Cost Range of Similar Model" scale as they recognize these are the most expensive to operate and are the least efficient model within that product category (e.g. TVs 37-40 inches). Alternately, a consumer may be more likely to buy the more efficient model as they recognize its operating cost falls on the left side of the scale.

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<sup>1</sup>Many TVs cost \$500 to well over \$1,000. The operating costs, which FTC continues to show as annual operating costs and not the lifetime operating costs as previously recommend by NRDC, are likely on the order of \$20 to \$50/yr for many TVs. This difference may be inconsequential for a consumer who is about to purchase a \$1,000 TV. A greater motivator for some consumers may be the information contained on the graphical "slider bar" that shows how a model performs relative to other similar sized models.



A consumer who is viewing a TV in the double stacked display described above would have a very hard time reading the scale from where they are standing. **We encourage FTC to work with its label designers to enhance the visibility of these elements. Options include increasing the height/thickness of the sliding bar and the size of the triangle that indicates the model's place on this scale.**

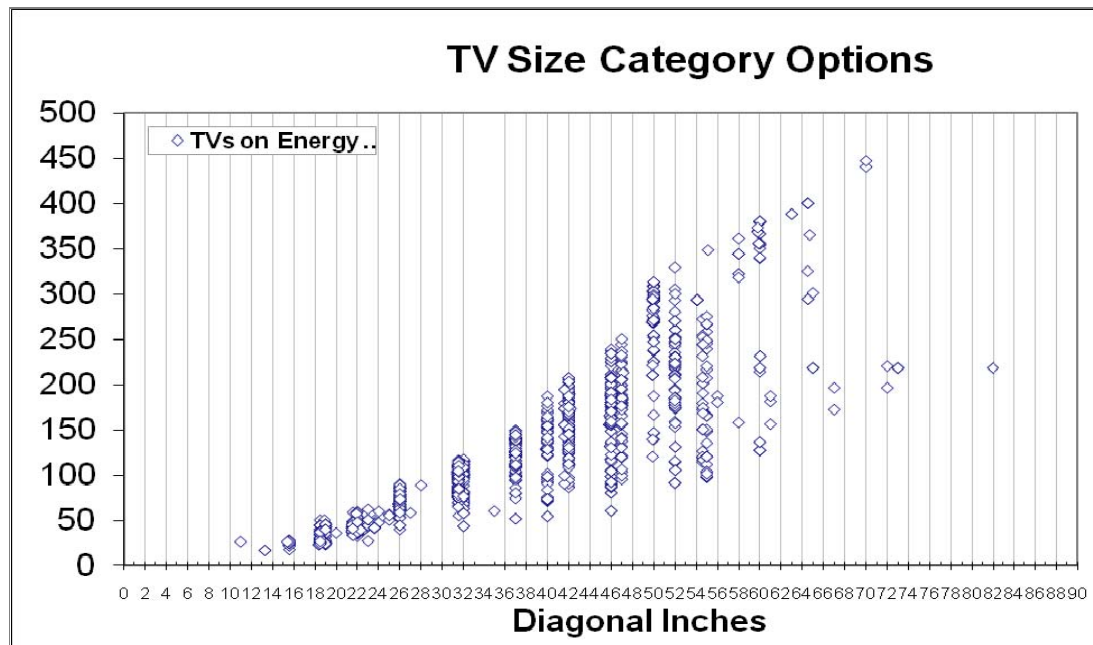
### **Label Content and Screen Size Bins**

We concur with FTC's decision to require information on the annual energy operating costs (\$/yr) and to provide annual energy use along with a comparison of similar sized TVs. We also agree with FTC that such comparisons should be technology neutral and that separate categories are not warranted for various TV technologies such as plasma or LCDs as they provide the same general functionality. As we commented previously, we agree with FTC's duty cycle proposal to use the same one as ENERGY STAR -- 5 hours on and 19 hours standby. If new data on operating hours becomes available, FTC should consider updating the duty cycle used for calculating a TV's yearly energy cost. We also agree with basing the yearly operating cost on a single national cost of electricity (cents per kWh) as FTC does with other products in its program. We recommend that FTC should review national average utility rates on an annual basis and commit to revising the labeling programs requirements when the rates change by 10% or more from the prior level established by FTC.

FTC's labeling program has a long history of providing consumers with a way to easily compare the energy use and operating cost of similar sized models. Simply providing a single value for annual energy use or operating cost without any basis for comparison is less impactful. We support FTC's decision to segment the TV market into categories based on the viewable screen size, using the TV's diagonal in inches, as a means to help consumers make comparisons.<sup>2</sup>

<sup>2</sup> NRDC remains strongly committed to FTC's adoption of a categorical labelling system that ranks models on a 1 to 5 star basis or some equivalent system, to indicate a product's energy efficiency. Similar systems are in place throughout Europe, China, Australia and as well as many developing countries and have been very effective at motivating manufacturers to produce the models with the highest rating and from producing those with the lowest ratings.

In order to better understand the distribution of TVs available on the market, we created the figure below from data on ENERGY STAR 3.0 qualified TVs. This plot demonstrates the large spread in TV on mode power use, expressed in Watts, for similar sized TVs and the prevalence of specific screen sizes.



This data should be used to inform FTC’s process for selecting screen size bins for use in its label. The bins should be selected around similarly sized TVs and not be too wide as this encourages potential gaming of the system whereby a manufacturer might increase the size of their TV by a small amount in order to move up to the next bin of larger TVs where they may compare much more favorably. We recommend FTC consider adopting the following bin sizes (all values are measurable screen diagonal in inches):

- 0 – 10
- 10.1 – 15
- 15.1 – 20
- 20.1 – 25
- 25.1 – 30
- 30.1 – 35
- 35.1 – 39
- 39.1 – 44
- 44.1 – 49
- 49.1 – 53
- 53.1 – 59
- 59.1 – 65
- 65.1 – 75
- > 75.1

## **Internet Energy Guide Labeling Requirements**

As several stakeholders have pointed out during the April 16, 2010 FTC meeting and in their prior written comments, many consumers go to the web to perform research prior to purchasing a new TV. In addition, roughly 10% of all TVs are currently purchased via the internet. It is therefore critically important for consumers to be able to easily access the yellow ENERGY GUIDE label and its content when visiting a retailer's<sup>3</sup> or manufacturer's website.

Today most retailer and manufacturer internet sites do not include information on a TV's annual energy use or operating cost. In some cases, the on and/or standby power use may be posted but require the user to click through several screens before accessing this data. We recommend FTC require inclusion of an electronic version of the ENERGY GUIDE label to be prominently displayed on retailer and manufacturer websites. We have reviewed the websites of retailers such as Best Buy, Sears and Amazon and they sometimes include a yellow icon of the ENERGY GUIDE logo, in particular for appliances such as refrigerators and washing machines.

To ensure the Energy Guide label is sufficiently prominent on websites, we recommend FTC add to its regulations text covering the following:

- Require all retail and product manufacturers to include the yellow Energy Guide icon on their websites and a link with text equivalent to "Click for Energy Guide."
- Upon clicking on the Energy Guide icon or text based link, an up to date, model specific Energy Guide label would appear in its entirety.
- The Energy Guide icon and link must appear on the first screen the user sees when accessing information about purchasing that product. Ideally it would be located in close proximity to the pricing information. The user should not have to scroll down to subsequent pages or have to search for this information on sub tabs such as the product specification tab.


Below we present a copy of the content for a Kenmore washing machine from Sears' website. The first image shown is the page the viewer sees when clicking on the product. While Sears does highlight the fact that the model is ENERGY STAR qualified there is no mention of the Energy Guide label on this first page. The user needs to scroll downwards and get to the product specification information in order to view includes the Energy Guide logo. This logo is included on the bottom of the second image and when the user clicks on this link, the Energy Guide shown on the third image appeared. While Sears' efforts in this area are laudable and superior to

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<sup>3</sup> Any TV retailer that maintains an online website would be covered by this requirement. This would include brick and mortar retailers such as Target who operate physical stores as well as websites, and online retailers such as Amazon.com.

many other retailers – who may not provide this information at all or require the user to find and click on the product specification tab before the Energy Guide logo is presented – it can be improved by having the Energy Guide logo appear on the first screen.

## Kenmore Washing Machine Ad



**Kenmore White 4.0 cu. ft. Front-Load Washing Machine (4027) ENERGY STAR®**

Sold by Sears | Sears Item# 02640272000 | Model# 40272

★★★★☆ Rating 3.5 (Based on 16 Written Reviews | [Create a Review](#))

Reg Price: ~~\$969.99~~  
Savings: \$145.50  
**\$824.49**

Mail-in rebate ([Details](#))

Earn \$8.24 in Rewards with Shop Your Way Rewards<sup>SM</sup>  
[Learn More](#)

Great offers, more savings with your Sears card. [Apply Now!](#)

**This product is eligible for Delivery or Store Pickup**  
☒ Delivery ☐ Store Pickup

[Add to Cart](#) [Save to List](#)

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[Kenmore Appliances](#)  
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### Product Description

Rated #1 by a Leading Consumer Magazine

Kenmore® introduces a powerful new high efficiency washer with Smart Wash Motion Technology. With this washer, you will have access to more convenience, more performance and more style. You can expect superior cleaning, capacity, conservation and clothes care. Plus, Kenmore® offers with three unique wash motions, making it possible to create new wash cycles that behave just the way they should to care for special fabrics



**ENERGY STAR® CEE, TIER 3** - Save money and energy with this Energy Star qualified washer. This washer is designed to consume less electricity saving money on utility bills

Cold Clean™ cycle uses the new wash motions and cold water to clean clothes as effectively as warm-water cycles, saving you even more energy and money



**NSF CERTIFIED Sanitize cycle** - you can take care of their families with the NSF® certified sanitize cycle which eliminates 99.9% of certain bacteria, and does it naturally without chemicals like bleach



**4.0 cu. ft. XL Capacity** effectively cleans 34 X-Large T-Shirts in a single load

**Express Wash** - Quickly wash a small load with the Express Wash cycle

**1,100 max RPM** - allows for greater water extraction and minimal drying times

**Stain Treat™ option** - virtually eliminates the need to pre-treat stains by tackling tough set-in messes



**Stackable** - Maximize use of limited laundry room space by stack this washer with the matching dryer

**Pedestals** Eliminate the need to bend down when loading and unloading the washer with the optional high drawer pedestals which raises the height of the washer



**Smart Wash Technology (4 Motions: Tumbling, Rolling, Scrubbing, Stepping)** - provides extra cleaning power and fabric care so everything from rugged workwear to denim to lingerie gets just the right amount of care

**Vibration Guard™ Technology** ensures a smooth, quiet performance with every load, in every level of the house

Direct Drive motor  
Internal water heater  
6 wash cycles / 6 wash options

- Dimensions: 39 in. H x 27 in. W x 30 in. D (183 lbs.)
- "Sold Separately" Matching Kenmore White Dryer - Item #: 9180272
- "Sold Separately" Matching Kenmore White 13.7 in. Pedestal for Kenmore Washer/Dryer - Item #: 51022
- "Sold Separately" Matching Kenmore White Stack Kit for Kenmore Washer/Dryer - Item #: 17002

This product is:



**ENERGY STAR Qualified**



**ENERGY GUIDE Rated**

First Available: November 03, 2009



## EnergyGuide Label: Kenmore Washing Machine



### Test Procedures

In its 3/11/2010 proposed rule the FTC summarized the status of the test methods used for measuring the energy use of new TVs in “on” and “standby” operating modes. In the absence of a federal DOE test method, the 2007 Energy Bill allows FTC to use adequate non-DOE test procedures if they exist. As the test procedures being used by ENERGY STAR are sufficiently robust and reproducible, we see no reason to further delay implementation of the FTC labeling program until the DOE has finalized its test procedure. (Note, most DOE processes can be quite time consuming and DOE has not issued a target date for completion of the test method.)

We recommend FTC adopt a two phased approach for test procedures:

1. Adopt the test procedures currently used by ENERGY STAR. ENERGY STAR utilizes the test procedures developed by the International Electrotechnical Commission (IEC) with a few modifications. The modifications EPA made provide specific direction to the tester on what images to display and how to set up the TV during testing (e.g., out of the box settings vs. making a selection from a forced set up menu). The TV industry was heavily involved in developing the IEC test procedure and was an active participant in the development of the modifications ratified by ENERGY STAR. Manufacturers already routinely test the energy consumption of their new TVs in accordance with these requirements and therefore should be able to easily meet the 6 month lead time provided by FTC before the labeling requirements go into effect.



During the April 16<sup>th</sup> meeting, CEA asked FTC to consider using their test method, CEA 2037, for measuring on mode power use for TVs. We recommend against adoption of the CEA test method as it was developed without sufficient input from non-industry stakeholders. In addition, the test method as drafted is overly restrictive in a few places. For example, it prevents the tester from measuring the power use in any user selectable mode other than the home/standard mode. We believe a test method should provide the ability for the TV to be tested in other modes, if desired. For example, data on the power consumed by a TV where an alternate setting such as retail, vivid, cinema, etc is selected may be of interest to other stakeholders and could inform future policies.

2. Convert to the test procedure being developed by DOE once it is finalized. We understand DOE has begun its efforts to develop its own test method. We expect them to rely heavily on the IEC test method and to make some tweaks to the testing procedure as it relates to testing conditions and settings, and how to best account for the energy use of TVs containing automatic brightness controls. We recommend FTC publish a requirement for manufacturers to shift to the new DOE test method six months after it is finalized. This will provide manufacturers and retailers sufficient time to retest their models and to update the content on their labels and websites, as needed.

Timing – As the FTC is likely to base its initial labeling program for TVs on an existing test procedure which is already in wide use by all manufacturers, we support FTC’s proposed effective date of six months after publication of its final rule. This will provide manufacturers and retailers with sufficient lead time to ensure the labels are posted at retail in accordance with the requirements. A longer period simply delays the potential energy, economic and environmental benefits provided by the labeling program.

## OTHER CONSUMER ELECTRONICS

Per EISA, the 2007 Federal Energy Bill, the FTC is required to develop product labels for a set of consumer electronics besides televisions as outlined below:

### **SEC. 325. ENERGY EFFICIENCY LABELING FOR CONSUMER ELECTRONIC PRODUCTS.**

(a) IN GENERAL.—Section 324(a) of the Energy Policy and Conservation Act (42 U.S.C. 6294(a)) (as amended by section 324(d)) is amended—

(1) in paragraph (2), by adding at the end the following:

“(I) LABELING REQUIREMENTS.—

“(i) IN GENERAL.—Subject to clauses (ii) through (iv), not later than 18 months after the date of issuance of applicable Department of Energy testing procedures,

the Commission, in consultation with the Secretary and the Administrator of the Environmental Protection Agency (acting through the Energy Star program), shall, by regulation, prescribe labeling or other disclosure requirements for the energy use of—

- “(I) televisions;
- “(II) personal computers;
- “(III) cable or satellite set-top boxes;
- “(IV) stand-alone digital video recorder boxes;
- and
- “(V) personal computer monitors.

FTC’s proposed rule merely asks for additional input on consumer electronics products other than TVs. Given the massive potential energy savings and economic and environmental benefits that could be achieved, we encourage FTC to accelerate its efforts beyond TVs. Below we provide our recommendations on how to proceed for each of the listed products as well as for video game consoles.

Personal Computer Monitors – We believe FTC should fast track adding computer monitors to its labeling program. While there is no federal test procedure for measuring the energy use of a computer monitor, ENERGY STAR has a widely used one. For a copy of the test method for monitors <30 and > 30 inches go to the respective links: [http://www.energystar.gov/ia/partners/prod\\_development/revisions/downloads/monitors/V5\\_Annex1.pdf](http://www.energystar.gov/ia/partners/prod_development/revisions/downloads/monitors/V5_Annex1.pdf), and [http://www.energystar.gov/ia/partners/prod\\_development/revisions/downloads/monitors/V5\\_Annex2.pdf](http://www.energystar.gov/ia/partners/prod_development/revisions/downloads/monitors/V5_Annex2.pdf).

If FTC wants to move quickly the label would simply state the power use in on mode, expressed in Watts and provide a means for comparing the power use of models of similar sizes. With a little more work FTC could in consultation with ENERGY STAR develop a duty cycle to convert the on, sleep and standby power levels to an annual energy use and cost. An ideal label would show different values for residential and commercial users as monitors used in commercial settings are on more hours per day. Using an analysis similar to the one provided earlier in this document for TVs, FTC could quickly develop a set of screen size bins to base its label upon.

Personal Computers – ENERGY STAR has an up to date specification for computers that includes laptops, desktops and all-in-one computers like the IMac. The ENERGY STAR specification includes detailed test procedures as well as a formula for calculating annual energy use, which EPA refers to as Total Energy Consumption or TEC. In addition EPA segments the market into four categories based on the computer’s capabilities. We think the EPA’s segmentation for desktop computers is appropriate but encourage FTC to segment the laptop market based on screen size, which is one of the most important criteria used by consumers when deciding what computer to buy, instead of the categories currently used by EPA. For more information on the test methods and TEC formula, go to: [http://www.energystar.gov/ia/partners/prod\\_development/revisions/downloads/computer/Version5.0\\_Computer\\_Spec.pdf](http://www.energystar.gov/ia/partners/prod_development/revisions/downloads/computer/Version5.0_Computer_Spec.pdf).

Cable/satellite set top boxes and stand alone DVRs (e.g., TiVo box) – This product category is somewhat unique as consumers today do not normally buy their set top box from retail. Instead they are provided the box by their service provider (boxes made and marketed by TiVo are the exception). In addition, the set top box energy use also depends upon which system the box is connected to. For example a Motorola cable set top box may produce different power readings when connected to Time Warner vs. Comcast. This variance is due to the fact that the service provider may choose to disable some of the power saving features in the box or may not have all the required software or hardware in their transmission system.

Despite these challenges, we believe it's critical for FTC to add set top boxes in the near future to its EnergyGuide program. **One of the main reasons to focus on this product category is that many of the STBs being deployed today are HD digital video recorders (DVRs) and many of them consume 150 – 200 kWh/yr, which in many cases is more annual energy than the a new 42 inch TV.** In addition, as currently designed, these products use near full power levels even when the user is not watching or recording a show.

With some follow-up conversations with ENERGY STAR we believe FTC should be able to develop a useful labeling system for this product category. For a first step, FTC could develop a simple energy disclosure that would show the products power use in “on” and “standby” modes when connected to a particular service provider. Availability of this information would hopefully drive competition in this market and shine a light on those models that are the least efficient. For example, few consumers are aware of the fact that their set top box consumes near full power when it is not in use. Interested customers could then contact their service provider and ask informed questions about the power use of the box they received and why they didn't receive a more efficient one.

Video Game Consoles – While not on the initial list of required products per the EISA legislation to be included in FTC's energy labeling program, FTC does have the authority to add other consumer products if the FTC determines such labeling is likely to assist consumers in making purchasing decisions. Due to their popularity (40% of homes have at least one video game console) and energy use, we encourage FTC to begin work to require labeling or other disclosures for video game consoles.

Today the amount of power used by the three leading video game consoles the Wii, PlayStation 3 (PS3) and Xbox 360 varies between 20 and 120 Watts for game play. In addition, these devices typically consume near full power when left on but not in use. An Xbox 360 or PS3 that is left on when not in use can consume roughly 1,000 kWh/yr, which is equivalent to the annual energy use of two new refrigerators.

The EPA is in the process of developing ENERGY STAR specifications and test methods for these devices. As there is not sufficient information on the hours of use and per cent of these devices that are not turned off, an initial label might simply include:

Game play power use – X Watts

Movie playback power use – Y Watts

Automatically power down when not in use? Yes/No

A “slider” can be shown for the game and movie play metrics to allow for easy comparison between models. ENERGY STAR and other stakeholders can provide FTC with input as it develops the labeling requirements for this category. Over time, labels for this product could transition to a more typical Energy Guide label that is based on annual energy costs.