Before the Committee on Energy and Commerce
Subcommittee on Energy and Air Quality
United States House of Representatives

"Long-standing Problems with DOE's Program for Setting Efficiency Standards Continue to Result in Forgone Energy Savings"

Statement of Douglas K. Johnson
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Introduction

Chairman Boucher, Ranking Member Hastert, and Members of the Committee:

My name is Doug Johnson and I am Senior Director, Technology Policy and International Affairs for the Consumer Electronics Association (CEA). CEA is the principal U.S. trade association of the $155 billion consumer electronics industry. CEA's more than 2,100 members are involved in the design, development, manufacturing, distribution and integration of audio, video, in-vehicle electronics, wireless and landline communication, information technology, home networking, multimedia and accessory products, as well as related services that are sold through consumer channels. CEA's members include large and small manufacturers as well as many of the leading retailers. CEA also produces the nation's largest annual trade event, the International CES. We commend the Subcommittee for holding this hearing on the important issue of energy efficiency and appreciate the opportunity to provide the views of our membership.

The consumer electronics industry designs, makes and sells products and services that enable people to stay connected, informed and entertained. Innovation, complemented by voluntary programs and initiatives, is the primary driver of energy efficiency in the electronics industry. In order to meet consumer expectations, our products must use electricity efficiently and effectively. This is essential to minimize heat generation, the prime enemy of component performance and longevity. Using electricity efficiency also is essential to minimizing costs associated with design and components, such as heat sinks. Beyond design, there also are major industry trends which naturally drive, support and sustain the increasing energy efficiency of electronics. These trends include convergence, miniaturization, portability and the transition from analog to digital technology.

CEA's members are committed to energy efficiency and conservation.

For many years, the consumer electronics industry has worked cooperatively with government agencies in pursuit of successful voluntary, market-oriented programs and initiatives, such as Energy Star, which highlight and support energy efficient product design and purchasing. More recently, the consumer electronics manufacturers have focused on new industry-led standards at the national, regional and international levels that relate to and uphold energy efficiency. Together, these voluntary initiatives have transformed the market and delivered more energy efficient electronics to consumers and businesses.

As the consumer electronics industry's principle trade group, CEA has taken a comprehensive, multi-faceted approach to addressing energy efficiency for our industry sector. Specifically:

1. CEA conducts research and analysis to ensure that policy makers and the public have accurate information.

Many estimates of consumer electronics energy consumption have relied upon data developed in the late 1990s. Yet, consumer electronics products have changed dramatically over the last decade, as have their energy consumption characteristics, particularly due to technological change and innovation but also due to the success of the Energy Star program. To provide better data to policy makers, CEA commissioned a recently completed independent analysis of consumer electronics energy use that covered all significant energy-using product categories in our industry. This landmark study provides a more refined assessment than prior studies, particularly for product usage, and also helps to counter inaccurate claims about consumer electronics energy use which have clouded many policy debates and news reports. The full report, titled "Energy Consumption by Consumer Electronics in U.S. Residences," is available on CEA's website at www.ce.org/energy. Among the findings are the following:

- Excluding digital televisions (DTVs), residential consumer electronics consume 11% of residential electricity and 4% of total U.S. electricity;
- Annual residential consumer electronics electricity consumption equals 147 TWh, excluding DTVs;

- There has been dramatic growth in the installed base of products, especially PCs, computer monitors, set-top boxes and DVD players;
- Active-mode power consumption varies with device type and has increased for TVs and PCs but decreased for computer monitors;
- With the exception of set-top boxes, standby power consumption has generally decreased, a testament to the effectiveness of the Energy Star program.

As indicated, the only significant category excluded from this study is digital televisions. The existing standard for measuring TV energy consumption in on-mode is outdated and inappropriate for measuring power consumption for today's digital televisions. To address this issue, an international industry standards development committee involving a wide variety of private and public sector stakeholders recently completed the draft of a new standard that will provide a fair measurement of TV energy use across all types of DTV displays. As planned, CEA has begun a project to collect TV power consumption data using the new international draft standard so that CEA's overall energy use study can be updated this spring. The DTV data also will be provided to support the Energy Star program, which is revising its specification for televisions.

In addition to the energy use analysis, CEA commissioned another study, to be completed this spring, which examines the energy-saving and emissions-reducing benefits of using consumer electronics products for teleworking and e-commerce. We would be glad to provide the results of our study to this committee and other interested parties.

2. CEA has been a leader in developing industry standards supporting energy efficiency.

In addition to the U.S Department of Energy (DOE) standards setting process, the industry standards setting process provides another stakeholder forum for developing standards relevant to energy efficiency. CEA, an American National Standards Institute-accredited standards development organization, has developed two voluntary industry standards related to energy use in set-top boxes. As noted earlier, CEA and its members also have supported the development of a new international industry standard for measuring power consumption for today's digital televisions, as the current decades-old standard is inappropriate for today's DTVs.

3. CEA informs consumers about the energy use of consumer electronics.

CEA believes that our industry has a responsibility to inform consumers about the energy use of their products. This year, CEA launched a new consumer education initiative built on myGreenElectronics.org, a comprehensive resource focused on the energy-conscious and environmentally responsible use of consumer electronics at all phases of a product's life cycle. The energy efficiency portion of the site presents common-sense consumer tips for saving energy with electronics. Additionally, on Earth Day last month, CEA added an energy-use calculator to myGreenElectronics.org which allows consumers to calculate and understand, in terms of watts and dollars, how much is required on average to power their electronic products. Finally, the website includes a tool that enables consumers to search for products for which energy efficiency is a selling point.

4. CEA showcases and promotes energy-efficient products.

CEA has used the International CES trade show as a platform to highlight the importance of energy efficiency and conservation, including displays of energy efficient products and technologies; conference sessions on energy efficiency and public policy; and an eco-design award for environmentally-friendly products.

In addition, CEA, in partnership with the Information Technology Industry Council, will host an energy efficiency product technology demonstration on Capitol Hill on May 16th which promises to be interesting and informative, and we welcome your attendance.

Achievement of energy savings and efficiency in the consumer electronics industry occurs independently of DOE process.

The market for consumer electronics is dynamic, highly competitive and characterized by rapid innovation, significant time-to-market pressures, rapid rates of market penetration, and rapid transition from one technology to another. Consumer electronics products are vastly different by design, function, consumer use and performance than the residential, industrial and commercial appliances and electro-mechanical equipment that have been subject to the DOE standards and rulemaking process. Unlike residential, industrial and commercial appliances, which tend to be designed for a single purpose, consumer electronics typically offer several features and functions and are used in at least three ways that distinguish them from appliances. First, people use consumer electronics to communicate with one another; they also use consumer electronics for entertainment; and, finally, people use consumer electronics to receive and store information.

In light of these characteristics and considerations, the best public policy for encouraging and supporting energy efficiency in the consumer electronics industry is the Energy Star program. This government-industry partnership program provides the necessary flexibility, market-orientation, competitive incentive and consumer recognition that support energy efficiency for our dynamic industry. Most importantly, Energy Star has a long and established track record of success.

Voluntary, consumer-oriented programs such as Energy Star are working and have resulted in significant energy savings and reduced greenhouse gas emissions.

The consumer electronics industry is a strong supporter of the voluntary, market-driven and national approach to saving energy represented by the federal Energy Star program (www.energystar.gov). This successful government-industry effort, which benefits from strong participation by manufacturers, captures a broad range of consumer electronics and creates a competitive incentive for energy savings. The Energy Star program, coupled with the natural trends toward energy efficiency in electronics design, provides consumers with the products and features they demand, along with a logo recognized by almost two-thirds of consumers.

Energy Star is clearly the best policy approach to saving energy in the consumer electronics sector, and it has resulted in significant energy savings and reduced greenhouse gas emissions. As the U.S. Environmental Protection Agency's latest annual report on Energy Star indicates, the Energy Star program for consumer electronics and residential office equipment has saved 18.8 billion kWh of energy and avoided emissions

totaling 3.8 million metric tons of carbon equivalent. Also, according to EPA, consumer electronics accounted for 31 percent of energy saved by all residential products in the Energy Star program. In addition, consumer electronics including computers and monitors represent 55 percent or 1.1 billion of the two billion purchases of Energy Star products since 1992.

A patchwork of inconsistent state regulations is harmful to consumers and innovation.

There has been a significant increase in state legislative activity related to appliance efficiency standards, largely as a result of advocacy efforts in response to concerns about the DOE rulemaking process. Some state legislation has targeted product categories not addressed by the DOE efficiency standards process, including external power supplies. Also known as AC power adapters, these devices are used to power a wide range of commercial and consumer products and a wide variety of consumer electronics, including mobile phones, PDAs, laptop computers, monitors, digital cameras and camcorders.

The Energy Policy Act of 2005 directed DOE to establish a test procedure, hold a scoping workshop and conduct a determination analysis of energy conservation standards for battery chargers and external power supplies. This effort is now underway, but, to date, seven states already have enacted laws or promulgated regulations establishing an energy efficiency standard for external power supplies. The consumer electronics industry has been working to ensure harmonization among the regulatory approaches in these states. However, the potential exists for some of these states to alter their regulations and for

other states to adopt new and potentially different energy efficiency standards for external power supplies. This would result in a decentralized, divergent and economically inefficient approach to achieving energy efficiency for these devices.

Consumer electronics is a global industry with a global network of supply and distribution. The existence of multiple requirements across different states and regions creates design, manufacturing, and supply chain difficulties, harming efficiency and increasing the cost of final products for consumers.

CEA urges quick national action on external power supplies.

Whether by an expedited DOE process or by Congress directly legislating standards for external power supplies, CEA supports quick federal action on establishing a national energy efficiency standard for external power supplies. This is important not only to preempt future and potentially divergent state activity but also to facilitate harmonization regionally across North America and internationally.

Conclusion

In many ways, electronics are part of an energy savings solution. Many home networking products help save energy by providing increased control over home heating, cooling and lighting systems. Information technology and telecommunications products allow teleworking and remote access to information and entertainment content, both of which save fuel and reduce greenhouse gas emissions. In addition, electronics are key enabling

technologies that drive energy efficiency in various other industrial sectors such as automobiles and manufacturing.

This committee's focus on energy efficiency is important and necessary. As policy makers consider programs and policies that support the efficient use of energy, we urge Congress to support innovation and promote consumer-oriented initiatives like Energy Star which are the keys to energy efficiency achievements for the consumer electronics industry.

Thank you again for the opportunity to share CEA's position on this important public policy issue. I look forward to addressing any questions you may have.

One-page Summary

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CEA's members are committed to energy efficiency and conservation. Our recent initiatives include conducting research and analysis to ensure that policy makers and the public have accurate information; developing industry standards supporting energy efficiency; informing consumers about consumer electronics and energy use; and showcasing and promoting energy-efficient products.

Voluntary, consumer-oriented programs such as Energy Star are working and have resulted in significant energy savings and reduced greenhouse gas emissions. As the U.S. Environmental Protection Agency's latest annual report on Energy Star indicates, the Energy Star program for consumer electronics and residential office equipment has saved 18.8 billion kWh of energy and avoided emissions totaling 3.8 million metric tons of carbon equivalent.

A patchwork of inconsistent state regulations is harmful to consumers and innovation. Consumer electronics is a global industry with a global network of supply and distribution. The existence of multiple requirements across different states and regions creates design, manufacturing, and supply chain difficulties, harming efficiency and increasing the cost of final products for consumers.

For this reason, CEA supports quick federal action on establishing a national energy efficiency standard for external power supplies. This is important not only to preempt future and potentially divergent state activity but also to facilitate harmonization regionally across North America and internationally.