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**BEFORE THE UNITED STATES
DEPARTMENT OF ENERGY**

IN THE MATTER OF ENERGY
CONSERVATION: PROPOSED
DETERMINATION OF COMPUTER AND
BATTERY BACKUP SYSTEMS AS A
COVERED CONSUMER PRODUCT

Docket EERE-2013-BT-DET-0035-0012

RIN No. 1904-AD04

**COMMENTS OF THE TELECOMMUNICATIONS INDUSTRY ASSOCIATION
REGARDING THE PROPOSED DETERMINATION OF COMPUTER AND BATTERY
BACKUP SYSTEMS AS A COVERED CONSUMER PRODUCT UNDER PART A OF
TITLE III OF THE ENERGY POLICY AND CONSERVATION ACT (EPCA)**

I. INTRODUCTION

The Telecommunications Industry Association (TIA) appreciates the opportunity to provide comments in response to the Proposed Determination of Computer and Battery Backup Systems as a Covered Consumer Product (“Proposed Determination”).¹ TIA represents hundreds of information and communications technology (ICT) manufacturer, vendor, and supplier companies in standards, government affairs and market intelligence. TIA’s member companies’ products and services empower communications in every industry and market, including healthcare, education, security, public safety, transportation, energy, government, the military, and entertainment. TIA’s members produce the equipment and solutions that make up

¹ See U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Proposed Determination of Computer and Battery Backup Systems as a Covered Consumer Product, 79 Fed. Reg. 11345-11350 (Feb. 28, 2014), available at www.gpo.gov/fdsys/pkg/FR-2014-02-28/html/2014-04423.htm.

our Nation's rapidly evolving communications networks and are affected by a number of issues in the Proposed Determination.

A major function of TIA is the writing and maintenance of voluntary industry standards and specifications, as well as the formulation of technical positions for presentation on behalf of the United States in certain international standards fora. TIA is accredited by the American National Standards Institute (ANSI) to develop voluntary industry standards for a wide variety of telecommunications products and sponsors more than 70 standards formulating committees. These committees are made up of over 1,000 volunteer participants, including representatives from manufacturers of telecommunications equipment, service providers and end-users, including the government. The member companies and other stakeholders participating in the efforts of these committees and sub-groups have produced more than 3,000 standards and technical papers that are used by companies and governments to produce interoperable products around the world. From this experience, TIA continues to witness firsthand the technological innovation in the ICT sector enabled by the use of voluntary industry standards as opposed to mandated regulations. The flexibility provided by voluntary standards is of particular importance in the ICT sector as technologies in the sector continue to rapidly evolve and transfer and consolidate functionalities in different parts of the network.

In the Proposed Determination, the DOE proposes to cover computers, servers and battery backup systems as a single covered product under the category "computer and battery backup systems." TIA and our members share the DOE's goal to improve the energy efficiency of ICT products. TIA does not believe that an EPCA regulatory approach is well-suited or capable of improving the energy efficiency of ICT equipment contemplated in the Proposed Determination. In response to the Proposed Determination, TIA offers recommendations on how

to proceed on the following issues: 1) Definition of computer and battery backup systems; 2) Whether classifying computer systems as a covered product is necessary or appropriate to carry out the purposes of EPCA; 3) Scope of this proposed determination; and 4) Role of voluntary energy efficiency measures.

II. DISCUSSION

1. THE PROPOSED DEFINITION OF COMPUTER AND BATTERY BACKUP SYSTEMS IS OVERLY BROAD AND SHOULD EXCLUDE MOBILE DEVICES SUCH AS LAPTOP/NOTEBOOK/ NETBOOK COMPUTERS, SMARTPHONES AND TABLETS

The Proposed Determination proposes the following definition of computer and battery backup systems: “A consumer product whose primary function is to perform logical operations and process data, or equipment whose primary function is to maintain continuity of load power for such products in case of input power failure.”²

The DOE recognizes that the revised definition further broadens the scope of the covered product to “allow DOE to account for shifts in energy use between products, and also help to ensure that the covered product remains relevant as technology trends in computer systems advance.”³ In other words, the Proposed Determination is proposing regulation of a broad, undefined category of products acknowledging an inability to know where energy use will be taking place or what individual products will be included within the definition of the covered product in the future. The undefined scope of the definition as well as the justification for using it illustrates why an EPCA approach cannot be effectively applied to a product category as diverse and rapidly evolving as ICT equipment. In previous comments to the DOE on the

² See U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Proposed Determination of Computer and Battery Backup Systems as a Covered Consumer Product, 79 Fed. Reg. 11345-11350 (Feb. 28, 2014), available at www.gpo.gov/fdsys/pkg/FR-2014-02-28/html/2014-04423.htm.

³ See Id.

computer and server rulemakings, TIA commented on why ICT equipment remains too immature in terms of both technology and architecture for the development of test procedures with the intent to mandate energy use.⁴

As written, the proposed definition is excessively broad and could also be interpreted to include a wide range of ICT products not mentioned in the determination including mobile device technologies. While the Proposed Determination states that the DOE would consider consumer products, such as computers, servers, and UPSs to be within the scope of coverage, the definition itself could be read to include many consumer products not contemplated or justified under the DOE's authority under EPCA. Of specific concern, the proposed definition needs to be clarified and narrowed to ensure that mobile devices such as laptop/notebook/netbook computers, smartphones and tablets are not included in the same rulemaking. Market and consumer demand requires mobile devices to be designed to ensure power consumption is kept to a minimum to enhance battery life. For mobile devices, there is no technology available that industry is not already utilizing that a mandatory rulemaking would help accelerate to improve the energy efficiency of this product category. In terms of testing, computers and mobile devices such as smartphones and tablets cannot be included in the same rulemaking. Computers are typically measured entirely differently from a mobile device due to the nature of their operation, for example having many different power consumption states. Additionally, mobile devices will already be covered under the DOE Battery Charger System regulation, which would make another layer of regulation duplicative of an existing DOE regulation.

⁴ See TIA Comments Regarding the Proposed Determination of Computer Servers and Computers as a Covered Consumer Product Under Part A of Title III of EPCA (Sept 12, 2013), available at:

www.tiaonline.org/sites/default/files/pages/9-12-13%20TIA%20Comments%20DOE%20Proposed%20Determination%20Computer%20Servers.pdf.

See TIA Comments Regarding the Proposed Determination of Computers as a Covered Consumer Product under Part A of Title III of EPCA (Sept 12, 2013), available at: www.tiaonline.org/sites/default/files/pages/9-12-13%20TIA%20Comments%20DOE%20Computer%20Rulemaking.pdf.

TIA believes that the definition provided in the Proposed Determination is excessively broad. TIA also recommends that the DOE explicitly exclude mobile devices, such as laptops/netbooks/notebooks, smartphones and tablets from the proposed definition. Some suggestions for a proposed exclusion include: a device that is ultra-portable operated primarily on a battery, a device that has solely a wireless network connection and an internal battery, or a device that is infrequently connected to a power supply.

2. CLASSIFYING COMPUTER AND BATTERY BACKUP SYSTEMS AS A COVERED PRODUCT IS NOT NECESSARY OR APPROPRIATE TO CARRY OUT THE PURPOSES OF EPCA

The current ecosystem including market and consumer demand for energy efficient products, intense market competition, industry innovation and effective public/private voluntary energy efficiency programs has resulted in significant gains in the energy efficiency of computer systems and will continue to do so for the foreseeable future. For example, absent mandated government regulations, the energy efficiency of computers has doubled and is projected to continue to double every 1.5 years.⁵ More efficient next generation products continuously replace older, less efficient models and technologies. Government mandates that require industry to design to a mandated energy efficiency standard rather than consumer demand will upset this ecosystem and create unique U.S. regulations and standards that diverge from global standards and inhibit both innovation and economic growth.

Like other ICT equipment, computers, servers, and battery backup systems are complex and rapidly evolving. TIA appreciates the energy conservation program run by the DOE and recognizes the success of the program in achieving energy efficiency gains in a variety of

⁵ See Jonathan Koomey et al., *Implications of Historical Trends in the Electrical Efficiency of Computing*, 33 IEEE Annals of the History of Computing 3 (2011).

product categories. One reason for the success of the program has been the selection of product categories where the future of the technology and competing technologies are well understood, the pathway to efficiency gains is clear, and the functionality of the product is not in a state of flux. Refrigerator-freezers, air conditioners, water heaters, furnaces, washers and dryers, ovens, pool heaters, showerheads, faucets, urinals, etc. are examples of single function, mature products covered by EPCA where the product technology was in a phase where the DOE could set standards that are technically feasible and would not have negative unintended consequences for the innovation of future functionalities. Computer systems continue to be dynamic and are not well-suited for mandated standards.

TIA does not believe it is possible for the DOE to mandate energy efficiency standards for computer systems or other immature ICT equipment without stifling future innovation. The primary challenge with mandated standards for ICT equipment is the inability to anticipate future technology changes as ICT evolves rapidly and in unexpected ways. Because it is not possible to anticipate how information and communications technology will innovate and integrate moving forward, TIA strongly recommends against mandating efficiency standards for computer systems.

3. TIA AGREES THAT THE SCOPE OF THE PROPOSED DETERMINATION SHOULD BE NARROWED TO EXCLUDE COMMERCIAL PRODUCTS

In the Proposed Determination, DOE clarifies that the proposed scope of coverage for this rulemaking specific to servers relates only to consumer products. TIA agrees with this clarification. Commercial servers differ so dramatically in terms of features, characteristics, usage and distribution from servers sold to individuals for use in the home that they cannot be considered the same type of covered product. Interpreting the definition as broadly as would be

required to classify commercial servers as consumer products would provide virtually no limitation on DOE's authority to make determinations that commercial products are subject to regulation as consumer products under EPCA, which is clearly contrary to the legislative intent of EPCA that provides a clear distinction between commercial and consumer products. In addition to the regulation of commercial products being outside of DOE's regulatory authority, mandating a one size fits all energy use standard and associated level of performance for commercial equipment would have an extremely negative impact on both the energy efficiency and innovation of commercial equipment. TIA and our members are actively engaged with the ENERGY STAR program and other industry consortia to continually improve the energy efficiency of both consumer and commercial network equipment.

4. VOLUNTARY PUBLIC-PRIVATE PARTNERSHIPS FOCUSED ON DISCLOSURE OF ENERGY USE SUCH AS THE ENERGY STAR PROGRAM ARE THE MOST EFFECTIVE VEHICLE MOVING FORWARD FOR IMPROVING THE ENERGY EFFICIENCY OF COMPUTER AND BATTERY BACKUP SYSTEMS

As stated above, voluntary public-private partnerships such as the ENERGY STAR program have played an important role in encouraging industry adoption of energy efficient practices without impeding innovation of next generation products. TIA and our members have long been supporters of the ENERGY STAR program in a variety of product categories and commend the program as a successful partnership between the EPA, DOE and industry to recognize and reward innovation in energy efficiency. Industry is actively engaged with the ENERGY STAR program in developing leading energy efficiency standards for products contemplated by the DOE in this rulemaking, which provide disclosure of energy use. A voluntary approach educates buyers about the energy use profile of the products while allowing industry to continue to innovate new technology in the future. A mandated approach, focused on minimum standards

and without the flexibility provided by the ENERGY STAR Program, would not be able to achieve efficiency gains achievable through industry working with ENERGY STAR.

Specific to the ICT industry, the flexibility provided by the ENERGY STAR program and other voluntary public-private partnerships is critical for the product categories contemplated in this rulemaking as we continue to see innovation that far outpaces a regulatory rulemaking process. The set-top box voluntary agreement is an example of an effective approach to improve the energy efficiency of an ICT equipment product category while allowing industry the flexibility to innovate new products. TIA strongly recommends that DOE look to voluntary approaches and the ENERGY STAR program as vehicles for improving the efficiency of ICT equipment rather than mandating efficiency standards.

III. CONCLUSION

TIA appreciates the opportunity to provide input and looks forward to working with the Department of Energy and other stakeholders on these issues in the future.

Respectfully signed and submitted on April 15, 2014.

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